

PLANNING NOTICE

An application has been received for a Permit under s.57 of the Land Use Planning Approvals Act 1993:

APPLICANT:	S Brown - PA\21\0166
PROPERTY ADDRESS:	12755 Highland Lakes Road GOLDEN VALLEY (CT: 34463/1)
DEVELOPMENT:	Single dwelling - setback, tree removal.

The application can be inspected until **Wednesday, 10 March 2021**, at www.meander.tas.gov.au or at the Council Office, 26 Lyall Street, Westbury (during normal office hours).

Written representations may be made during this time addressed to the General Manager, PO Box 102, Westbury 7303, or by email to planning@mvc.tas.gov.au. Please include a contact phone number. Please note any representations lodged will be available for public viewing.

If you have any questions about this application please do not hesitate to contact Council's Planning Department on 6393 5320.

Dated at Westbury on 20 February 2021.

John Jordan
GENERAL MANAGER

PROPOSED DWELLING
S. BROWN AND E. LORD
12755 HIGHLANDS LAKES ROAD
GOLDEN VALLEY 7304

Feature	
Property Address	12755 HIGHLAND LAKES RD GOLDEN VALLEY TAS 7304
Property ID	7465943 ✓
Title Reference	34463/1 ✓
Owner Name(s)	ELIZABETH HELEN JOHNS
Postal Address	12755 HIGHLAND LAKES RD GOLDEN VALLEY TAS 7304

DRAWING LIST

SHEET 1	COVER SHEET	
SHEET 2	SITE LOCATION	nts
SHEET 3	SITE PLAN	nts
SHEET 4	SITE PLAN (enlarged)	1:1000
SHEET 5	FLOOR PLAN	1:100
SHEET 6	ELEVATIONS	1:100
SHEET 7	CROSS SECTION	1:100
SHEET 8	CONSTRUCTION SECTION	1:20
SHEET 9	SETOUT PLAN	1:100
SHEET 10	PLUMBING PLAN	1:100
SHEET 11	WET AREA SEALING NOTES	
SHEET 12	WET AREA DETAILS	
SHEET 13	WET AREA DETAILS	
SHEET 14	ELECTRICAL PLAN	1:100
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SHEET 16	LIGHTING CALCULATOR	
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SHEET 18	ENERGY/WINDOWS PLAN	1:100
SHEET 19	WINDOWS SCHEDULE	1:100
SHEET 20	PERSPECTIVE VIEWS	
SHEET 21	BCA COMPLIANCE	
SHEET 22	BAL NOTES	

AREA	
DWELLING	251.69 sm
DECK	69 sm

PROPERTY AREA 20.47 ha

BUILDING CLASS - 1

BUSHFIRE RISK ASSESSMENT = NOT APPLICABLE
REFER TO REPORT No ----- BY ?

SITE CLASSIFICATION = S
REFER TO REPORT No GL20565Ab 13/10/2020

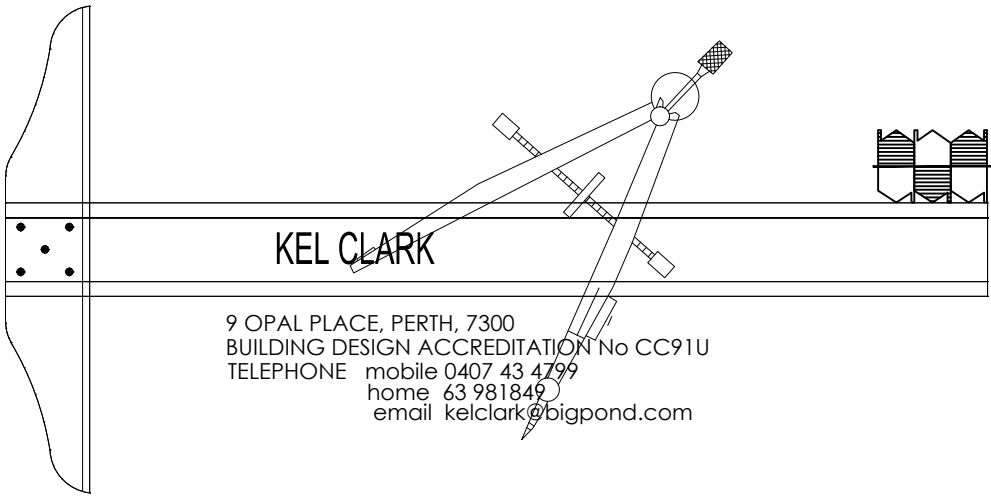
SITE ZONING - RURAL RESOURCE

CLIMATE ZONE = 7

DESIGN WIND SPEED = N3
REFER TO SITE CLASSIFICATION REPORT

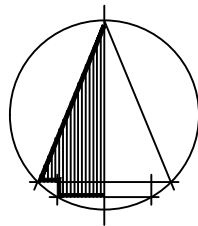
THERMAL PERFORMANCE = 6.0 STARS
REFER TO REPORT BY NRG EFFICIENT HOMES

PLANNING ISSUE





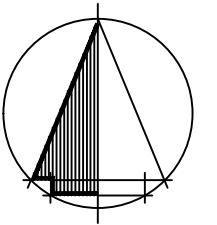
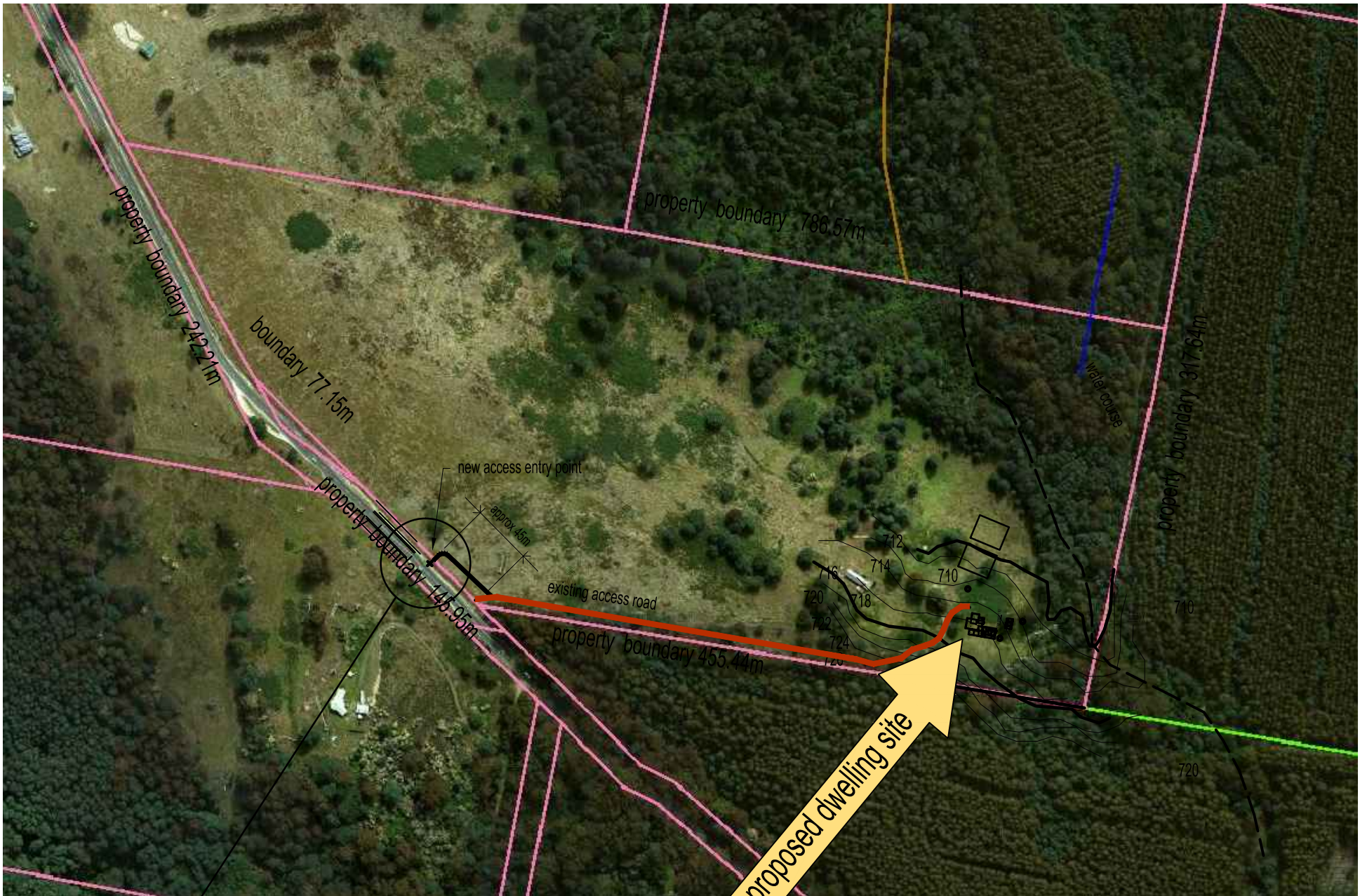
site location



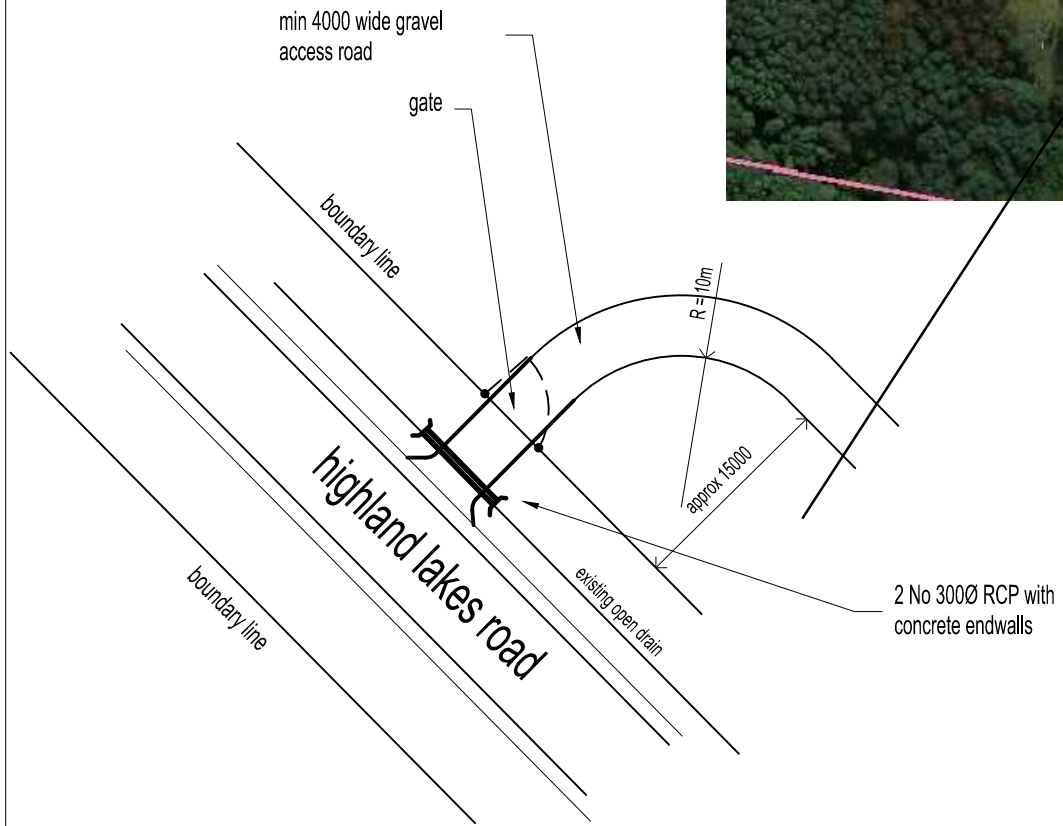
kel clark
Building designer
Accredited Building Practitioner No CC91
9 Opal Place, Perth, 7300
telephone: 6398 1849
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email: kelclark@bigpond.com

title S. BROWN & L. LORD
12755 HIGHLAND LAKES ROAD
GOLDEN VALLEY
PROPOSED DWELLING


scale	nts	date	nov 2020	drawing No	02
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property site plan

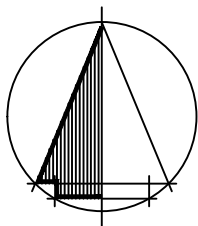


REVISION A, 27/01/2021 - ACCESS ROAD AND NEW ENTRY ONTO HIGHLAND LAKES ROAD ADDED

 kel clark Building designer Accredited Building Practitioner No CC91 9 Opal Place, Perth, 7300 telephone: 6398 1849 mobile: 0407 434799 email: kelclark@bigpond.com	title S. BROWN & L. LORD 12755 HIGHLAND LAKES ROAD GOLDEN VALLEY PROPOSED DWELLING		
	scale	date nov 2020	drawing No 03



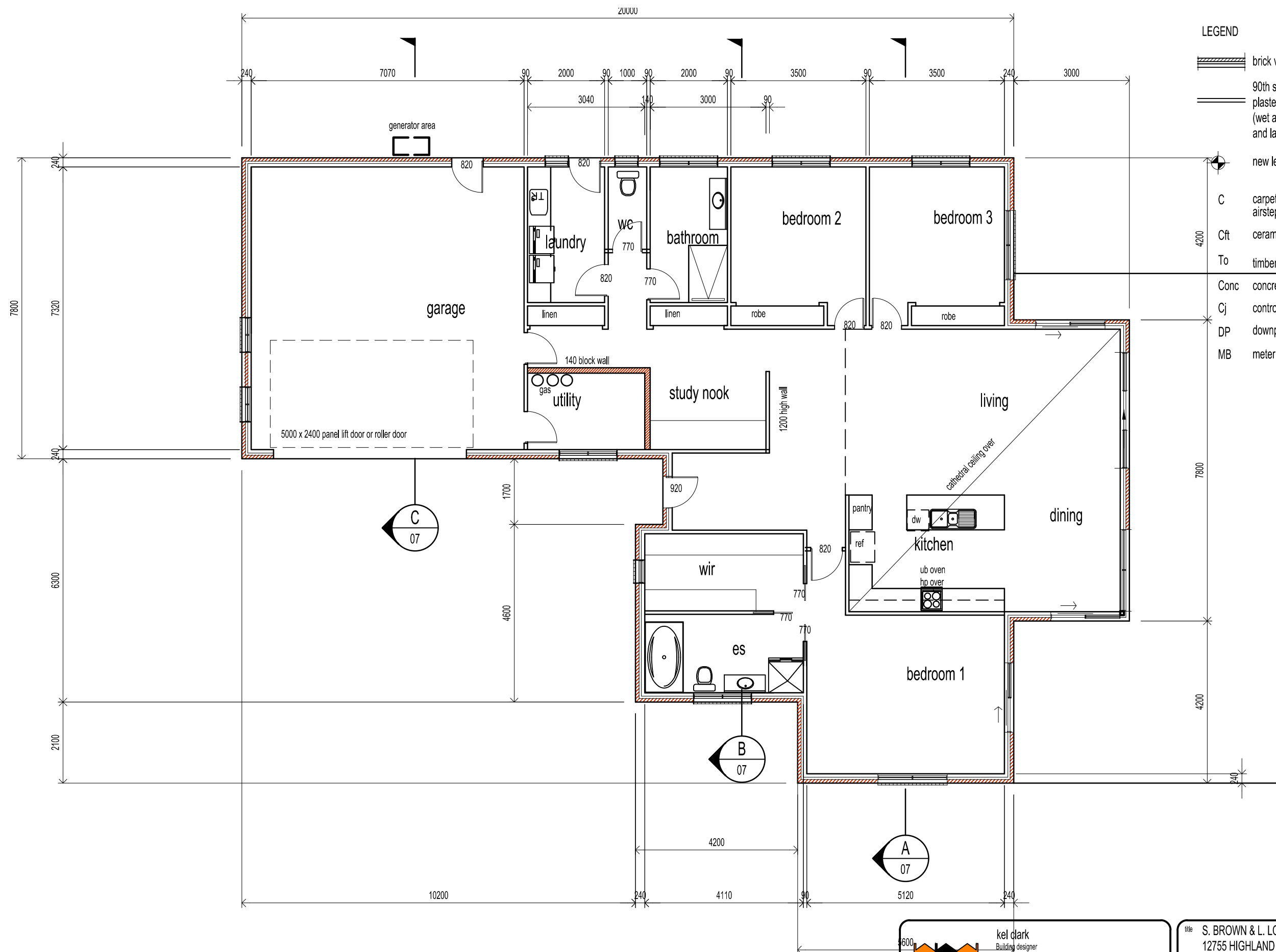
site plan new dwelling



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PROPOSED DWELLING

scale	1:1000	date	nov 2020	drawing No	04
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LEGEND

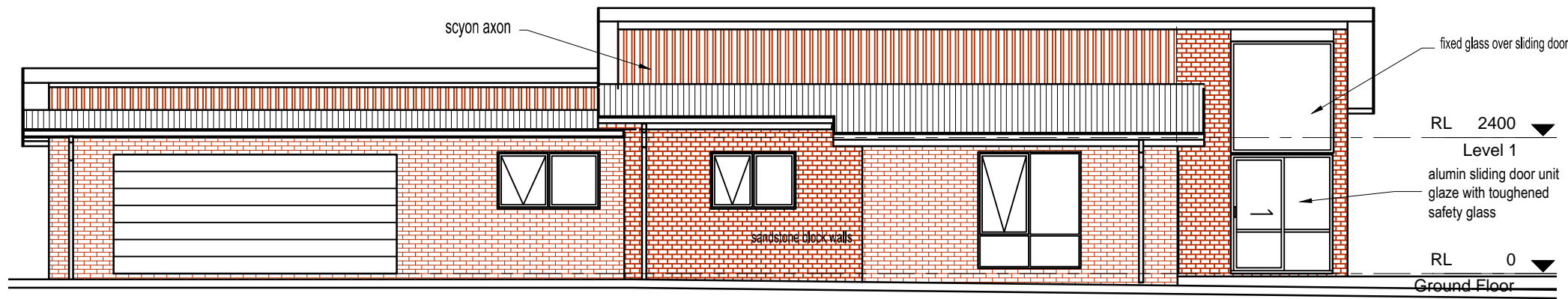
- brick veneer walls
- 90th stud walls with 10mm plasterboard lining throughout (wet areas plasterboard to bathrooms and laundry walls)
- new levels
- C carpet as selected by client with airstep stepmax or equiv foam underlay
- Cft ceramic floor tiles selected by client
- To timber overlay selected by client
- Conc concrete floor finish
- Cj control joint
- DP downpipe
- MB meter box

floor plan

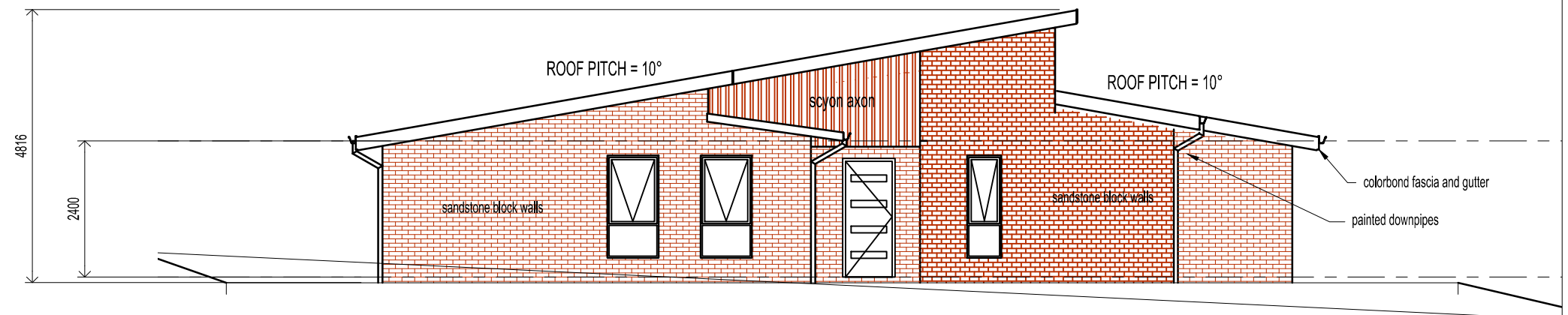
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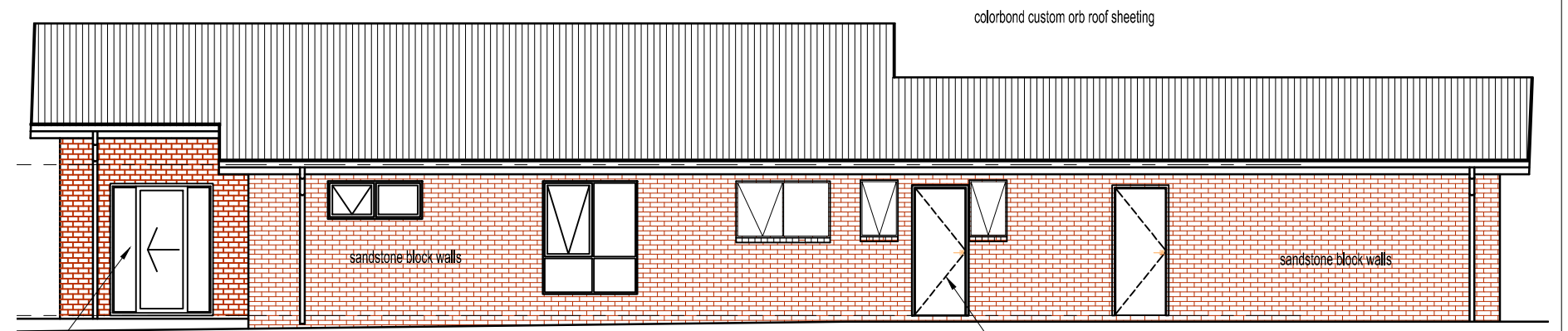
scale 1:100 date nov 2020 drawing No 05



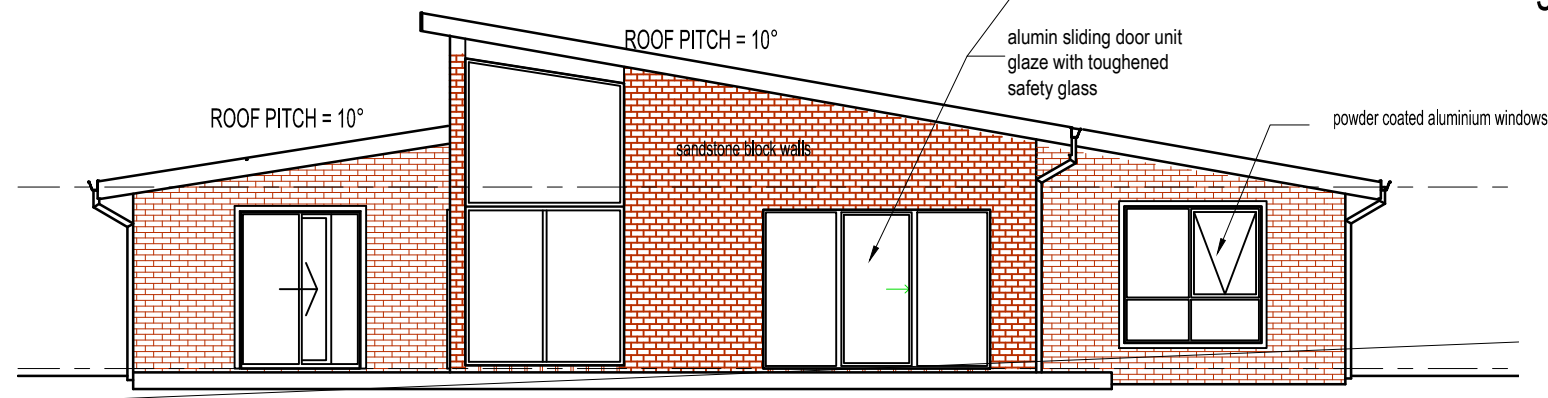
north elevation



east elevation



south elevation



west elevation

elevations



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scale 1:100 date nov 2020 drawing No 06

gutters:

install selected colorbond quad gutters or as nominated by the owner, lap gutters 75mm in the direction of flow, rivet & seal with an approved silicone sealant, valley gutters to be 450 wide colourbond steel to match roof. take 150mm under roof cladding and turn up on both sides. lap 150mm in direction of flow

downpipes:

downpipes to be dn90 pvc painted to match guttering. fix with wall brackets @ 1200cc beginning at downpipe elbow. maximum centres for gutters to be 12000 and located so as to comply with Part 3.5.2.5 of the BCA

slabs & footings

all concrete preparation including excavations & placement of reinforcement is to be seen & approved by council building inspector and/or engineer prior to pouring any concrete. refer to engineers drawings for footing & concrete slab details. refer to soil report for classification & site maintenance requirements.

fascia

colorbond preformed metal fascia and gutter installed in accordance with manufacturers instructions. colour to match the roof.

windows

coloured aluminium window frames awning winder sashes double glazing tas oak reveals and trims brick on edge external sills all fixings and flashing to manufacturers recommendations refer as 1288 & bca-2015

sheet roofing:

allow for selected colourbond custom orb sheeting over 75x38 f14 h/w purlins at 900 ccs & sisilation. lap at side 1.5 corrugations and turn up at high point. fix with matching self drilling screws with neoprene washers

cappings & flashings:

allow for preformed cappings & flashings necessary to ensure the integrity of the roof structure against water penetration. install flashings to roof vents, flues etc. alternatively use "dektilite" or similar fittings to roof penetrations

insulation

provide thermal insulation in accordance with the following

ceiling

R4.5 or greater bradford batts between ceiling joists

roof

anticon 60 blanket over battens

external walls

'tyvek' house wrap to external face
R2.5 glasswool batts between studs

certificate of compliance to be provided by the person engaged to install insulation to walls and ceiling and copy of same to be forwarded to the Building Surveyor.

eaves

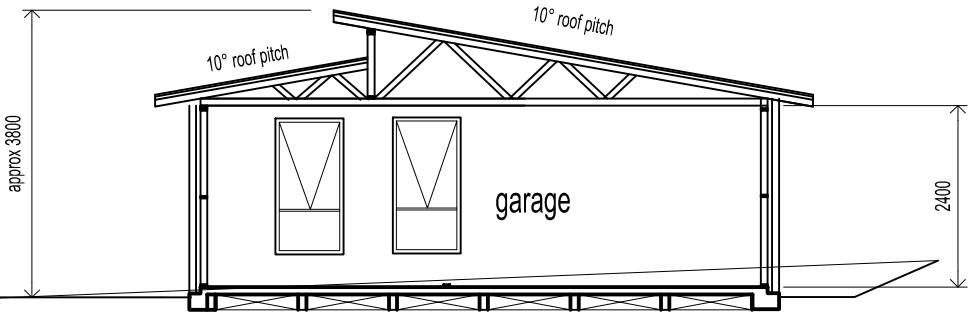
overhang roofs 450mm all round and line with flexboard sheeting

wet areas

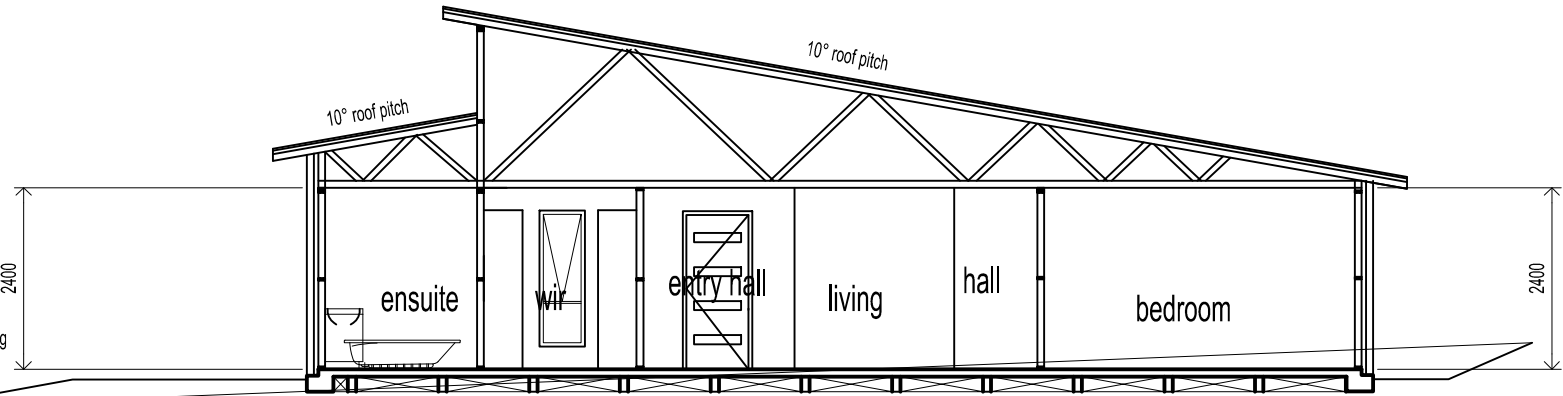
waterproofing of wet areas within the dwelling ie: showers, bathrooms waterproofed in accordance with bca part 3.8.1.1 to 3.8.1.27 inclusive and fig nos 3.8.1.5 to 3.8.1.16 inclusive. and table 3.8.1.1

CORROSION RESISTANCE

ALL EXTERNAL MATERIALS USED FOR THE CONSTRUCTION OF THIS DWELLING MUST MEET THE REQUIREMENTS OF AS4312 FOR ATMOSPHERIC CORROSIVITY ZONES IN AUSTRALIA AND THE REQUIREMENTS OF THE BCA 3.3.3.5 ALL MATERIALS USED ON THE EXTERIOR, BOTH STRUCTURAL AND NON STRUCTURAL MUST BE SUITABLE TO RESIST CORROSION FROM THE SURROUNDING ENVIROMENT ALL MATERIALS MUST BE SUITABLY COMPATIBLE TO MATERIALS THEY ADJOIN



SECTION C-05



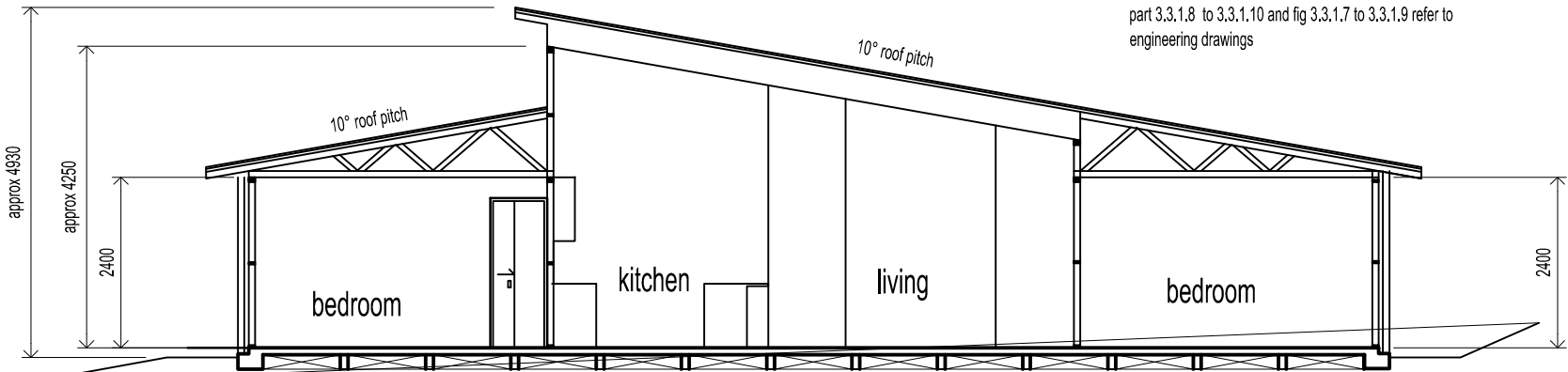
SECTION B-05

smoke alarms

clipsal lifesaver 755 ionisation smoke alarm 240v hardwired ceiling mounted with 9vDC alkaline battery backup to locations indicated on plan and in accordance with BCA part 3.7.2
all smoke allrms to be interconnected

articulation joints

provide articulated jointing to brickwork in accordance with BCA part 3.3.1.8 to 3.3.1.10 and fig 3.3.1.7 to 3.3.1.9 refer to engineering drawings



SECTION A-05

roof framing

custom orb or similar approved sheet roofing colorbond, colour to selection, over 70 x 35 MGP12 nailing battens at 600 crs and approved roof trusses installed strictly in accordance with manufacturers recommendations. fix trusses to top plates with trip-l-grip connectors. provide diagonal bracing fixed to top chords at a max angle of 30° to ridge. anchor strap bracing with 6 no 30x1.5 nails into double top plate. wind bracing to comply with NCC-2016

brickwork

selected clay brick veneer wall
over 90x35 f8 studs & 450ccs with 90x35 plates, allow for bracing to frame as required by the bca. brickwork to be stretcher bond with 10mm tooled mortar joints.
leave open perpends in brickwork above flashing, cavity fills and dpc at max 480ccs.
all flashings to be viscourse or equivalent.
install duragal lintels to brickwork openings above doors & windows as follows:

span	lintel	bearing
<950	75x10 bar	150
900-1200	75x75x8ea	150
1200-1500	90x90x8ea	150
1500-1800	100x75x8	150
1800-2400	125x75x10	230
2400-3000	150x90x10	230

wall framing

all timber framing generally is to comply with the requirements of AS1684 [residential timber framed construction] & the BCA code part 3.4.3

wall framing to be MGP10 radiata pine.

common studs - 90x35 @ 450 crs.

noggings - 90x35

open studs - 90x35

lintels to be lvl hyspan or equiv f17 hardwood

130x36 - up to 1200 span - sheet roof - 5100 rlw

150x36 - up to 1800 span - sheet roof - 5100 rlw

170x36 - up to 2400 span - sheet roof - 5100 rlw

where lintels are supporting girder truss or strutting beams refer to engineer for sizing

for spans greater than 2400 use lvl hyspan

refer to manufacturer span tables or structural engineer

top & bottom plates - 90x35

bracing to as 1684 & bca code

plaster

line walls and ceilings internally with 10mm plasterboard sheeting. scotia cornice moulding to ceiling junction with wall. plasterboard linings to wet areas to be "villaboard", w.r. board or other approved waterproof lining

section



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scale 1:200 date nov 2020 drawing No 07

insulation
provide thermal insulation
in accordance with the following

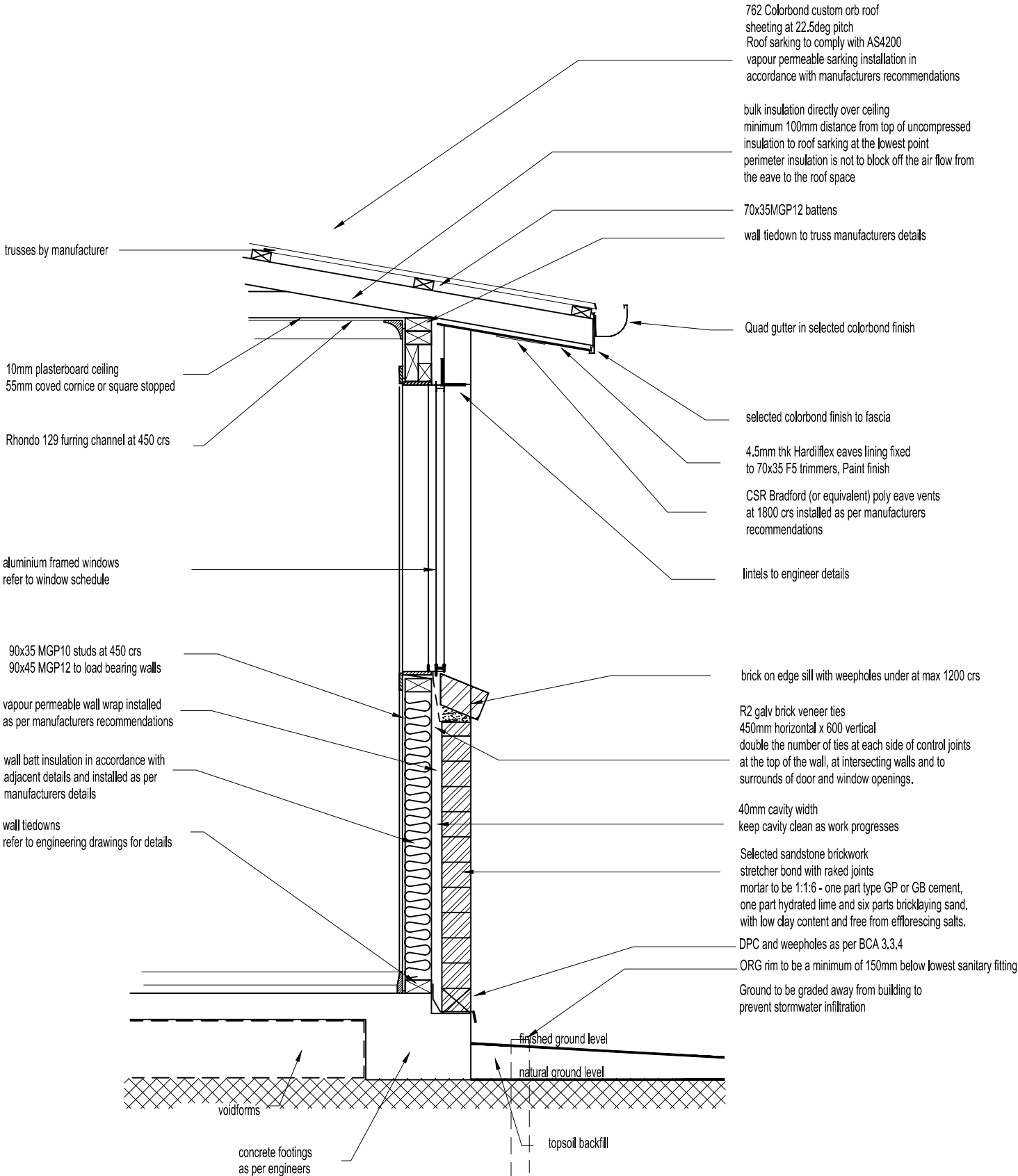
ceiling
R4.5 glasswool batts between ceiling joists

external walls
'tyvek' house wrap to external face
r2.5 glasswool batts between studs

roof
Bradford medium duty (55mm) anticon
blanket on birdwire over battens

certificate of compliance to be provided
by the person engaged to install insulation
to walls and ceiling and copy of same to
be forwarded to the Building Surveyor.

CONDENSATION IN BUILDINGS .
measures must be taken to avoid the accumulation of
condensation in the building and subsequent issues of
mildew, mould, fungus, dust mites, rotting of structural
timbers, water ponding & insulation soakage. .
At a minimum the following should be included .
All exhaust fans to be ducted directly to the outside air
and include a backdraft damper.
Kitchen range hoods also to be ducted to the outside air
Wall wrap must be 'vapour permeable' Roof sarking
must be 'vapour permeable'
Eaves vents must be used to create air movement
through the cavity.
Ridge ventilation must be included by breaching the
Roof sarking under the ridge or including a mechanical
roof ventilator.
Counter measures will be required where the structure
is in a bushfire zone.



section (trussed roof only)

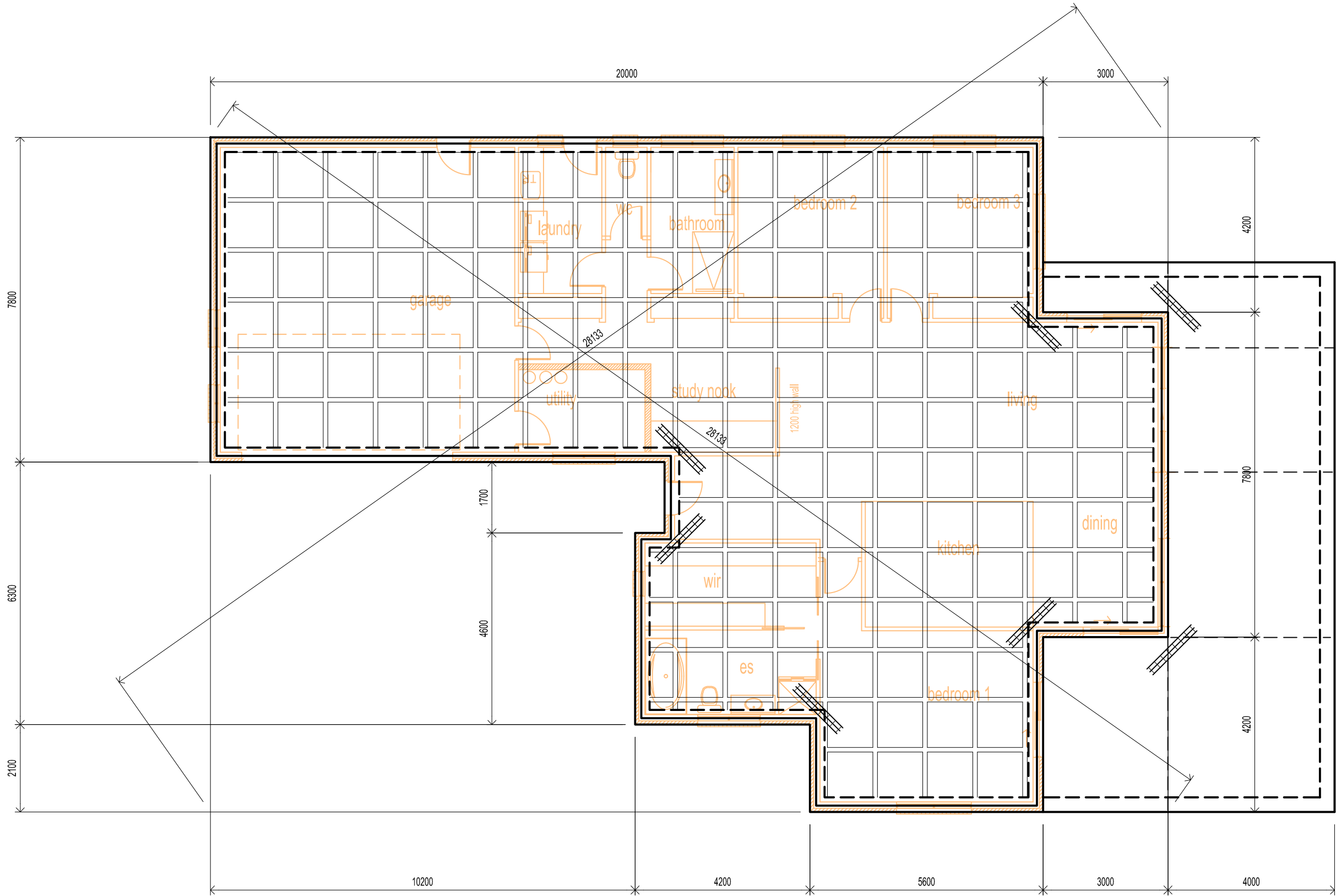


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1:100

title S. BROWN & L. LORD
12755 HIGHLAND LAKES ROAD
GOLDEN VALLEY
PROPOSED DWELLING

scale 1:200 date nov 2020 drawing No 08

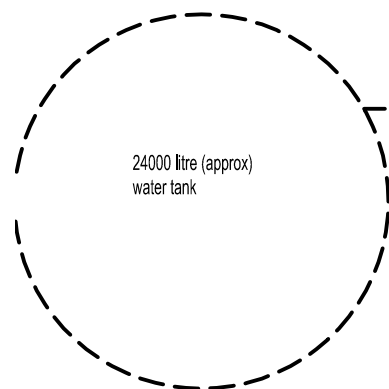


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scale 1:200 date nov 2020 drawing No 09

setout



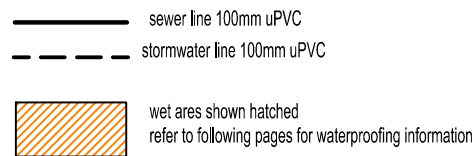
plumbing notes:
all drainage work shown is provisional only and is subject to amendment to comply with the requirements of the local authorities.
all work is to comply with the requirements of as/nzs 3500 & the tasmanian plumbing code. and must be carried out by a licenced tradesman only.

legend of diameters
trough = 50mm
sink = 50mm
bath = 40mm
basin = 40mm
shower = 50mm
wc = 100mm
sewer = 100mm dia. upvc
org overflow relief gully
ev vent
dp downpipe 90mm dia
stormwater = 100mm dia upvc

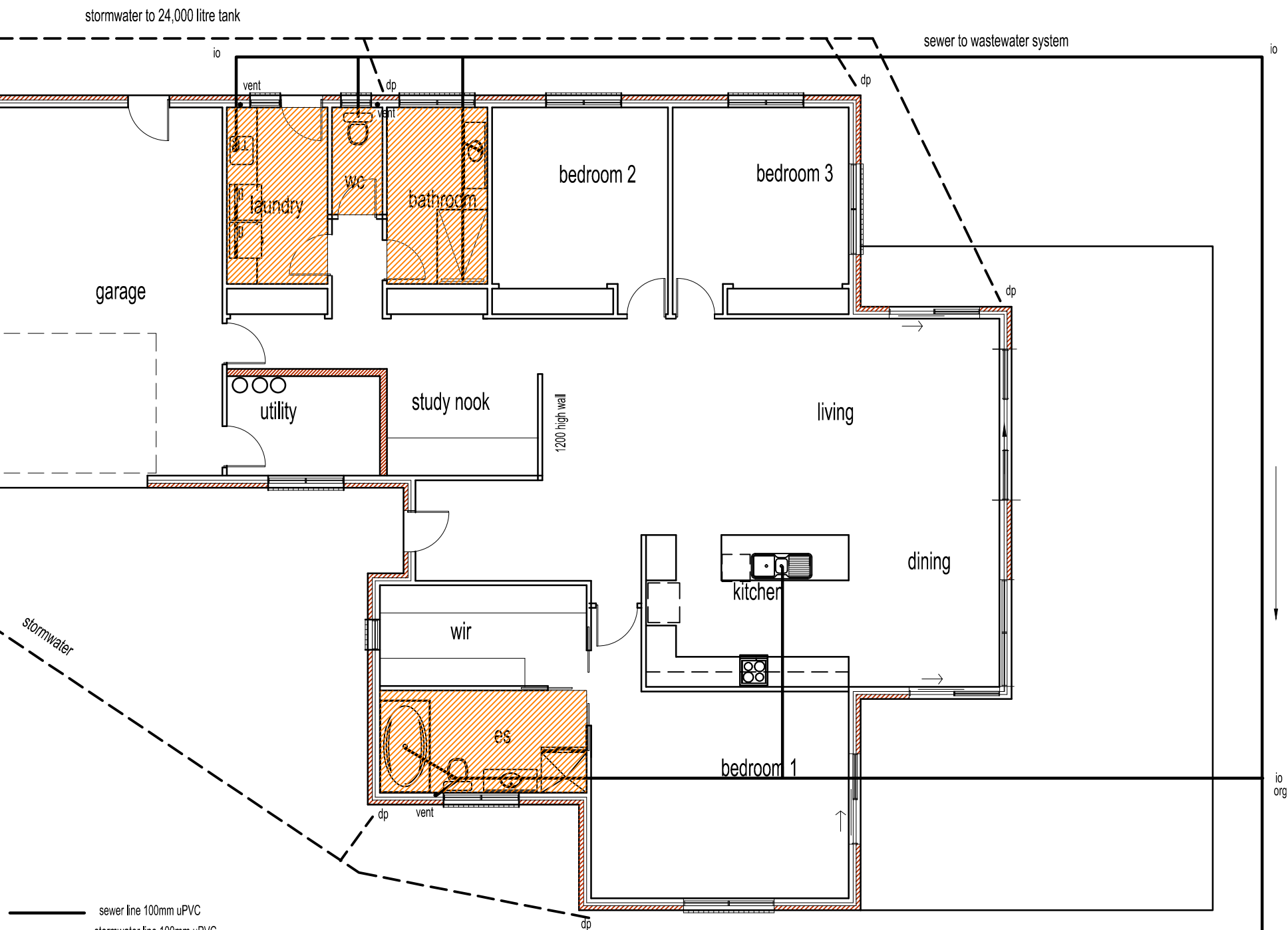
the installation of water pipe lines, installed with the product HIS 311 rehau, will require the main cold water line to be dn 25mm with dn 16mm branches & hot water main lines to be dn 20mm with dn 16mm branches to fixtures, all other products used are to comply with the requirements of as/nzs 3500.5.2000 & as/nzs 3500.1.2003


hot water installation shall deliver hot water to all sanitary fixtures used for personal hygiene at 50deg c, kitchen sink & laundry shall be 60deg c to comply with requirements of as/nzs 3500.5.2000 section 3.4

thermal insulation for heated water piping must:
a. be protected against the effects of weather and sunlight
b. be able to withstand the temperature within the piping
c. use thermal insulation in accordance with AS4859.1



install inspection openings at major bends for stormwater
provide surface drain to back of all bulk excavations to drain levelled pad prior to commencing footing excavations





kel clark

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title

S. BROWN & L. LORD
12755 HIGHLAND LAKES ROAD
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scale

1:200

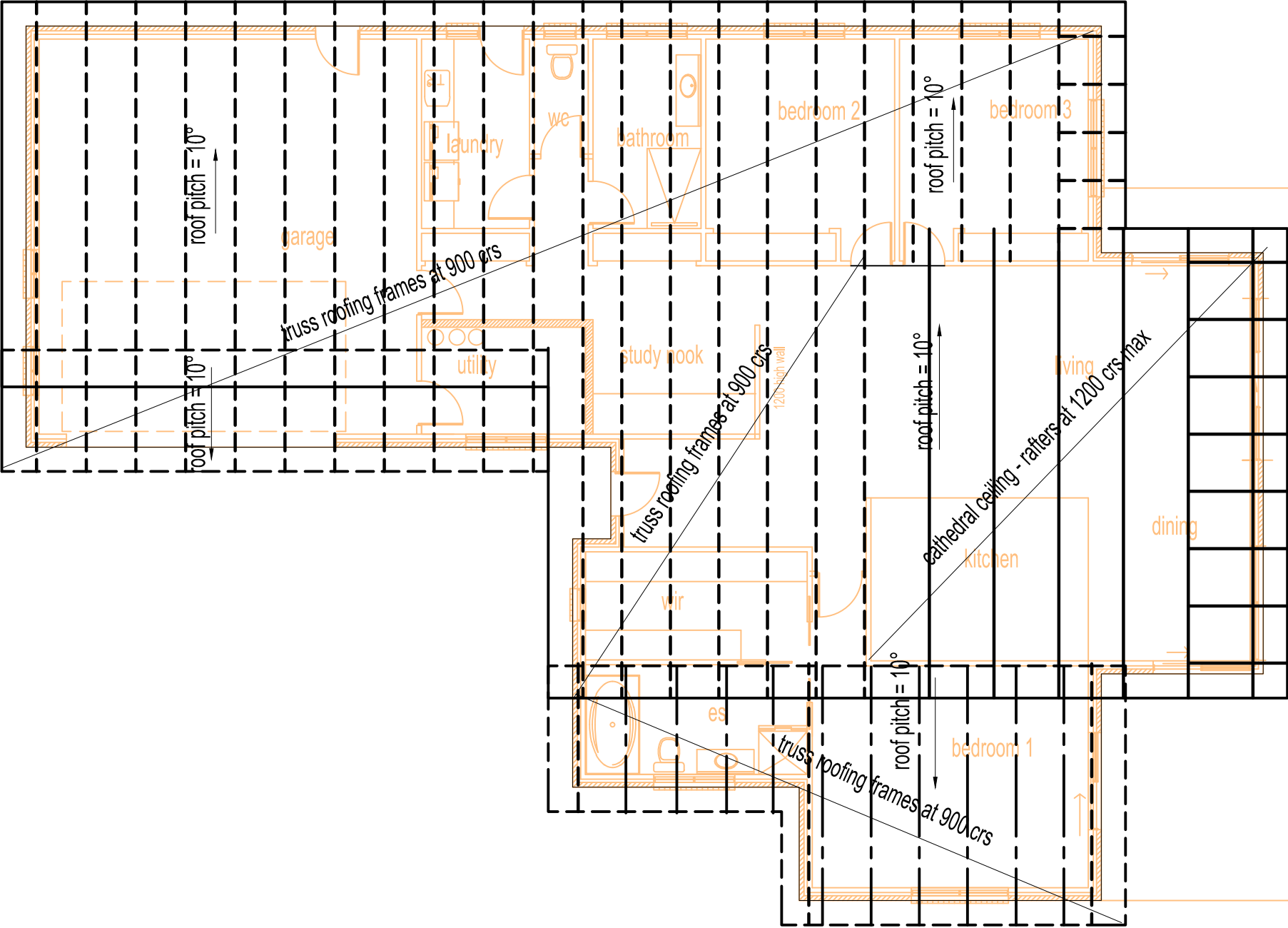
date

nov 2020

drawing No

10

plumbing



roof framing
custom orb or similar approved sheet roofing colorbond colour to selection, over 70 x 35 MGP12 nailing battens at 600 crs and approved roof framing installed strictly in accordance with manufacturers recommendations. fix roof framing to top plates with trip-4-grip connectors. provide diagonal bracing fixed to top chords at a max angle of 30° to ridge, anchor strap bracing with 6 no 30x1.5 nails into double top plate. wind bracing to comply with NCC-2016

downpipes:
downpipes to be dn90 pvc painted to match guttering, fix with wall brackets @ 1200cc beginning at downpipe elbow. maximum centres for gutters to be 12000 and located so as to comply with Part 3.5.2.5 of the BCA

fascia
colorbond preformed metal fascia and gutter installed in accordance with manufacturers instructions, colour to match the roof.

cappings & flashings:
allow for preformed cappings & flashings necessary to ensure the integrity of the roof structure against water penetration. install flashings to roof vents, flues etc. alternatively use "dektite" or similar fittings to roof penetrations

gutters:
install selected colorbond quad gutters or as nominated by the owner, lap gutters 75mm in the direction of flow, rivet & seal with an approved silicone sealant. valley gutters to be 450 wide colourbond steel to match roof. take 150mm under roof cladding and turn up on both sides, lap 150mm in direction of flow

sheet roofing
colorbond custom orb roof sheeting crest fixed at side laps and 3 fixings for internal spans and 5 fixings for end spans

NOTE
all roof, wall and floor tie down and bracing details to be to engineer drawings for all lintel details refer to engineer drawings

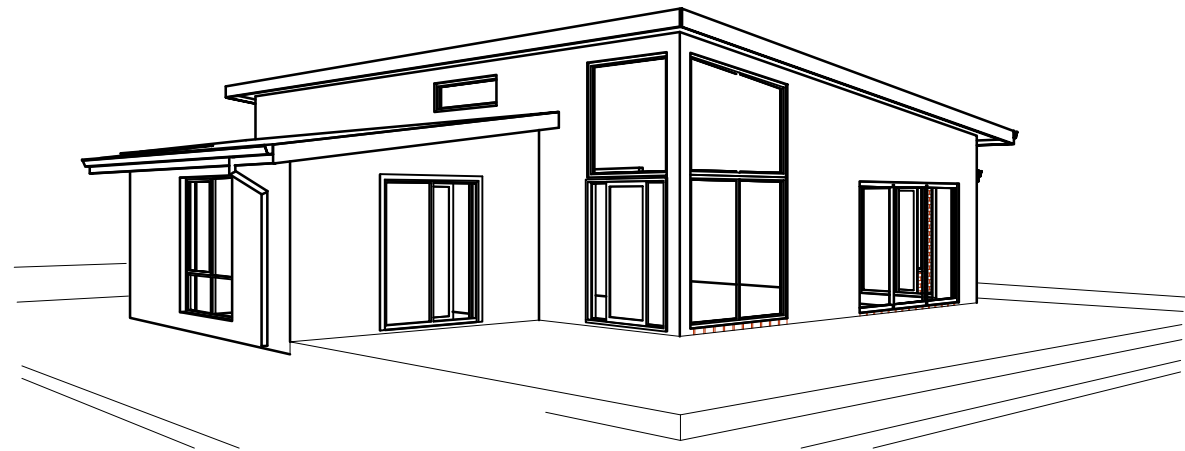
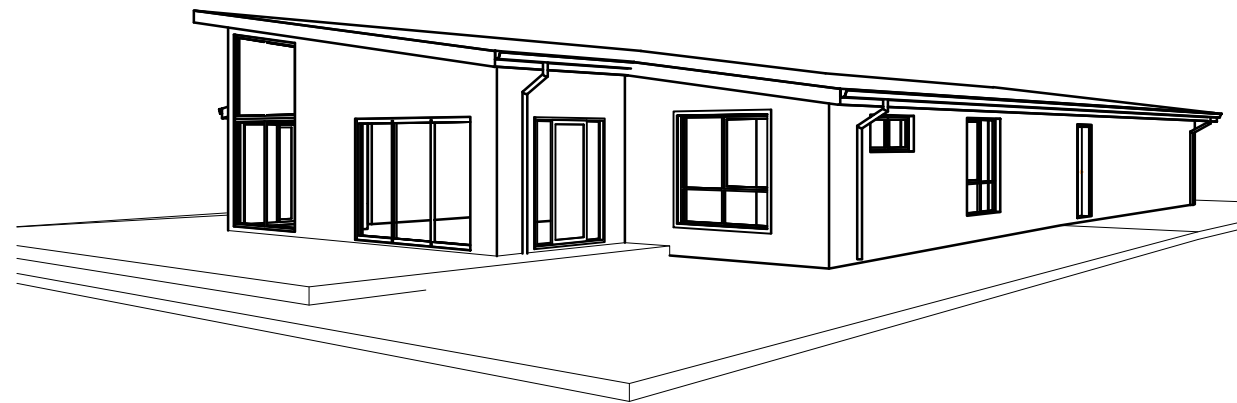
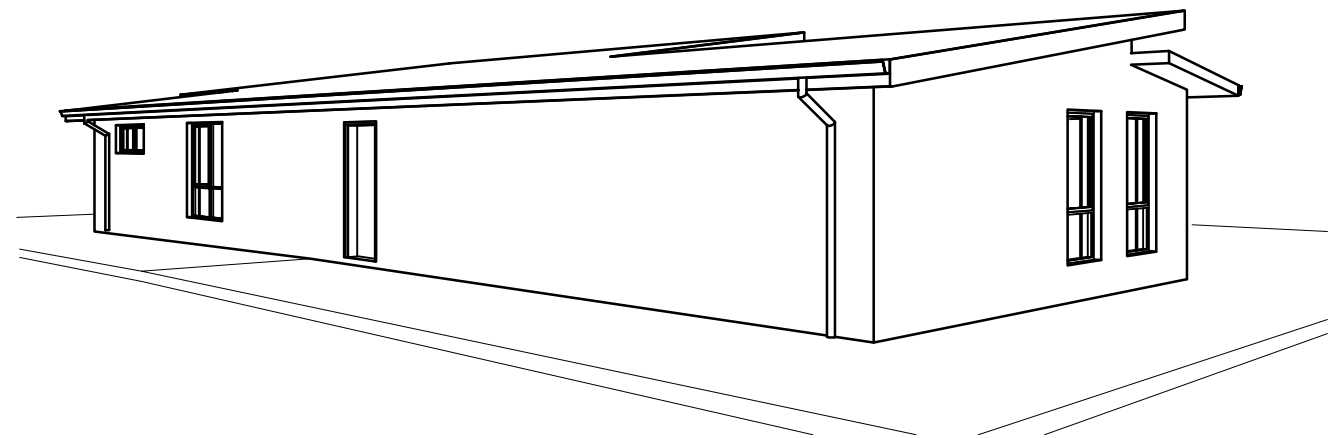
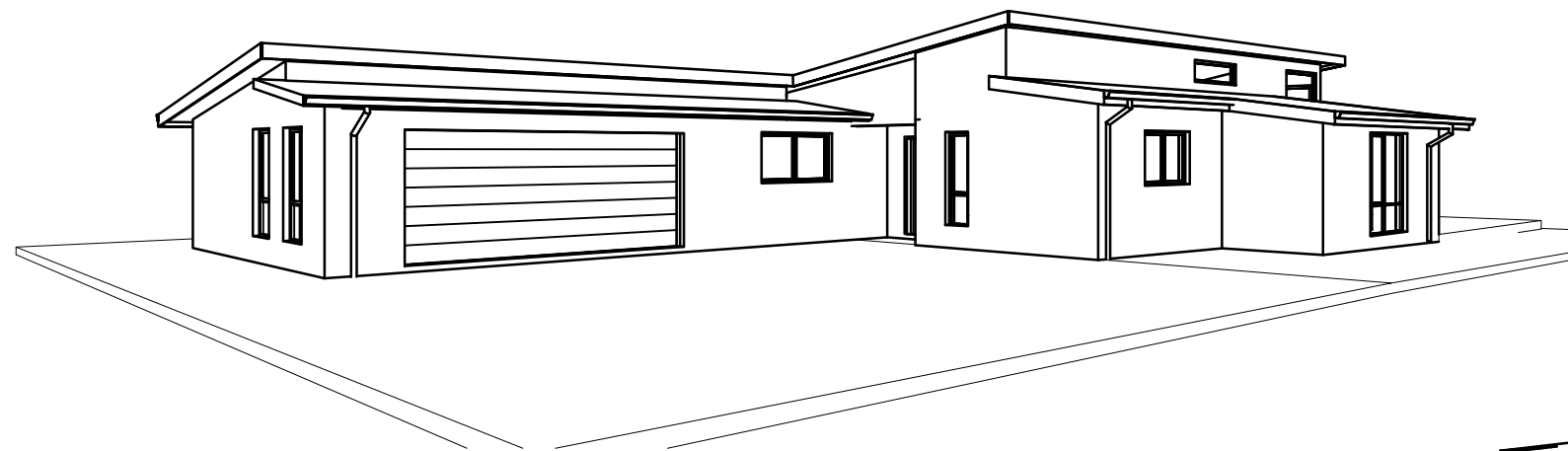
roof plan



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scale 1:200 **date** nov 2020 **drawing No** 17



WINDOW DETAILS

AWNING SYSTEM
DOUBLE GLAZED, 4/10/4, U VALUE 4.3
CONSTRUCTION TO BAL 19



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scale	1:200	date	nov 2020	drawing No	20
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perspectives

13 October 2020

Reference No. GL20565Ab

Mr Stuart Brown
7 Lucy Place
PROSPECT TAS 7250

Dear Sir

**RE: Site Classification & On-site Wastewater Disposal Assessment and Design
12755 Highland Lakes Road, Golden Valley**

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

Should you require clarification of any aspect of this report, please contact Michael Banks or the undersigned on 03 6326 5001.

For and on behalf of

Geoton Pty Ltd



Tony Barraera

Director – Principal Geotechnical Engineer

1 INTRODUCTION

A limited scope investigation has been conducted for Mr Stuart Brown at the site of a proposed residential development at 12755 Highland Lakes Road, Golden Valley.

The investigation has been conducted to assess the following:

- The general subsurface conditions at the site and consequently assign a Site Classification in accordance with AS 2870 – 2011 “Residential Slabs and Footings”;
- The surrounding topography and provide a Wind Classification in accordance with AS 4055 – 2012 “Wind Loads for Housing”; and
- The suitability of the site for disposal of domestic wastewater and the design of an on-site wastewater disposal system in accordance with AS/NZS 1547:2012 “On-site domestic wastewater management”.

A site plan of the proposed development was provided, prepared by Kel Clark, Drawing No. 4, dated October 2020. We understand that the proposed development will comprise a 3-bedroom dwelling.

2 FIELD INVESTIGATION

The field investigation was conducted on 16 September 2020 and involved the drilling of 6 boreholes by a 4WD mounted auger rig to the auger refusal depths of 0.3m to 1.9m.

In-situ vane shear strength tests were conducted in the clay layers encountered in the investigation. In addition, the permeability of the site was tested using a constant head permeameter.

The results of the field tests are shown on the borehole logs.

The logs of the boreholes are included in Appendix A and their locations are shown on Figure 1 attached.

3 SITE CONDITIONS

The proposed development site is located within an approximately 18.5ha sized property on the lower eastern side of Highland Lakes Road, Golden Valley. The property comprises partially cleared grazing land with an existing shack located within the upper eastern portion of the property. An unnamed tributary of Quamby Brook runs from the south to the north near the eastern boundary of the property.

The proposed development site is in the upper south eastern portion of the property on an existing bench formation. The proposed development site has a cover of grass and ferns with scattered mature trees. The proposed onsite wastewater disposal area is located downslope, to the north of the proposed dwelling site on a gentle grassed slope.

Photographs of the site and wastewater disposal area are provided as Plates 1 and 2.

The MRT Digital Geological Atlas, 1: 25,000 Series, indicates that the site is mapped on Permian period un-fossiliferous pebbly siltstone, siltstone and sandstone, with this being generally confirmed by our field investigation.

Examination of the LIST Landslide Planning Map indicates that the mid portion of the site is mapped within a low to medium hazard band. The location of the proposed residence is not within a mapped landslide hazard band.

The investigation indicated that the soil profile is relatively uniform over the site. Boreholes BH1 to BH4 encountered topsoils to depths of 0.1m to 0.3m, underlain by extremely weathered material (rock fabric with soil properties) to the auger refusal depths of 0.3m to 0.6m on inferred highly weathered rock.

Boreholes BH5 and BH6 encountered topsoil to depths of 0.3m, overlying high plasticity silty clay to depths of 1.2m, underlain by extremely weathered material to the auger refusal depths of 1.4m to 1.9m on inferred highly weathered rock.

The boreholes did not encounter any signs of seepage over the investigated depths.

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

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

4 SITE CLASSIFICATION

After allowing due consideration of the site geology, drainage and soil conditions, the site has been classified as follows:

CLASS S (AS 2870)

Foundation designs in accordance with this classification are to be subject to the overriding conditions of Section 5 below.

This Classification is applicable only for ground conditions encountered at the time of this investigation. If cut or fill earthworks are carried out, then the Site Classification will need to be re-assessed, and possibly changed.

5 FOUNDATIONS

Particular attention should be paid to the design of footings as required by AS 2870 – 2011.

In addition to normal founding requirements arising from the above classification, particular conditions at this site dictate that the founding medium for all footings would be as follows:

**EXTREMELY WEATHERED material –
remoulded Clayey SILT properties, low plasticity, brown
encountered 0.2m to 0.3m below the existing ground surface**

An allowable bearing pressure of **100 kPa** is available for edge beams, strips and pads founded as above.

The site classification presented assumes that the current natural drainage and infiltration conditions at the site will not be markedly affected by the proposed site development work. Care should therefore be taken to ensure that surface water is not permitted to collect adjacent to the structure and that significant changes to seasonal soil moisture equilibria do not develop as a result of service trench construction or tree root action.

Attention is drawn to Appendix B of AS 2870 and CSIRO Building Technical File BTF18 “Foundation Maintenance and Footing Performance: A Homeowner’s Guide” as a guide to maintenance requirements for the proposed structure.

Although the borehole data provides an indication of subsurface conditions at the site, variations in soil conditions may occur in areas of the site not specifically covered by the field investigation. The base of all footing or beam excavations should therefore be inspected to ensure that the founding medium meets the requirements referenced herein with respect to type and strength of founding material.

The boreholes were backfilled shortly after being drilled, not allowing time for groundwater seepage flows to develop. Groundwater seepages or higher groundwater levels can occur during and/or after a prolonged period of wet weather or a heavy rainfall event.

6 WIND CLASSIFICATION

After allowing due consideration of the region, terrain, shielding and topography, the site has been classified as follows:

WIND CLASSIFICATION N3 (AS 4055)

REGION	TERRAIN CATEGORY	SHIELDING	TOPOGRAPHY
A	TC2	NS	T2

7 EFFLUENT DISPOSAL

The AS/NZS 1547:2012 provides a guide to typical wastewater flow allowances under a range of circumstances. The standard recommends a typical wastewater flow of 120L/person/day for households on tank water. As the proposed development is to be a three-bedroom dwelling, a population equivalent of 5 has been adopted. As such, a wastewater daily flow of **600L/day** is required.

7.1 Permeability of Soil and Soil Category

The soil has been classified as follows:

- Texture – Medium to Heavy Clay (Table E1 from AS/NZS 1547);
- Structure – Moderately Structured (Table E4 from AS/NZS 1547); and
- Category – 6 (Table E1 from AS/NZS 1547).

For moderately structured Category 6 soils the indicative K_{sat} from AS/NZS1547 Table 5.1 is $<0.06\text{m/day}$.

- Adopted Permeability – 0.02m/day .

7.2 Disposal and Treatment Method

The soils within the proposed effluent disposal area are assessed as having sufficient depth and clay content to provide an adequate attenuation period for the breakdown of pathogens within the treated effluent.

As the site has Category 6 soils that have very low permeability, the site is not suitable for traditional absorption trenches or beds.

As such, the site is considered suitable for the disposal of domestic wastewater by way of an Aerated Wastewater Treatment System (AWTS) and sub-surface (near surface) irrigation.

7.3 Design Irrigation Rate

According to AS/NZS 1547 Table M1, the recommended design irrigation rate (DIR) for sub-surface irrigation (drip irrigation) on Category 6 soils is 2mm/day .

7.4 AWTS and Sub-Surface Irrigation

The disposal area is calculated using the following equation:

$$A = Q / \text{DIR},$$

where A is area in m^2 ;
 Q is design daily flow in L/day; and
 DIR is design irrigation rate in mm/day.

As the DIR has been set at 2mm/day and the Q at 600L/day , the area required for the effluent disposal field is **300m^2** as per the equation above.

There is adequate area for effluent disposal on site.

A reserve (back-up) area of 300m^2 is available if required.

The sub-surface irrigation is to be constructed as per the cross sections detailed in Figure WW-05 attached. The design details for the irrigation area are as follows:

- The irrigation lines are generally installed at a depth of 100mm into a minimum depth of 250mm of good quality topsoil. However, as an alternative, installing the irrigation lines on the surface and covering them with thick covers of mulch (at least 150mm thick) is considered acceptable;
- The irrigation lines are required to have a typical line spacing of 1m ; and
- The irrigation area is not to be located through any poorly drained depressions. As such, minor filling/mounding of the irrigation area may be required to ensure there is no localised saturated area.

Guidelines for the design of sub-surface irrigation are outlined in AS/NZS 1547 Appendix M.

The area of the disposal field shall be vegetated with grasses or other suitable vegetation. A list of Tasmanian plants suitable for treated wastewater from AWTs units is attached as Appendix B.

The risk management process is an inherent part of the on-site wastewater disposal design. The on-site wastewater disposal system has been designed by considering the site characteristics and with risk identification in accordance with AS1547:2012. The risk reduction measures are detailed in the report and form the basis of the system selection and design.

As part of the Building Act, the client must specify the AWTs model and provide the Certificate of Accreditation for that particular model before the proposed development gets approval. A list of accredited AWTs models can be found on the Tasmanian Consumer, Building and Occupational Services website.

<https://www.cbos.tas.gov.au/topics/technical-regulation/plumbing-standards/wastewater/aerated-wastewater-treatment-systems>

7.5 Setbacks

The minimum separation distances between the disposal area and downslope features are based on Appendix R from AS/NZS 1547 "Recommended Setback Distances for Land Application Systems". As per Table R1 from AS/NZS 1547 the following minimum setbacks are required:

- 35m from downslope sensitive features such as watercourses;
- 3.0m from property boundaries;
- 3.0m from buildings; and
- 3.0m from downhill cut batters.

7.6 Wastewater Recommendations

It is recommended that the following actions are undertaken in looking after your system:

- Minimise domestic water use;
- Minimise the use of non-biodegradable detergents;
- Minimise the use of detergents containing phosphorous (e.g. Calgon or similar);
- Avoid discharging polluting chemicals into wastewater systems; and
- Monitor quality of groundwater.

References:

AS 2870 - 2011 Residential Slabs and Footings

AS 4055 - 2012 Wind Loads for Housing

AS/NZS 1547 - 2012 On-site domestic wastewater management

Attachments:

Limitations of report

Figure 1 - Locality Plan

Figure 2 - Site Plan

Figure WW-01 – Typical Cut-Off Trench Section

Figure WW-05 – Typical AWTS Section

Site Photographs

Appendix A: Borehole Logs & Explanation Sheets

Appendix B: List of AWTS Example Plants

Appendix C: Certificate Forms

Geotechnical Consultants - Limitations of report

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

Project specific criteria

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

Subsurface variations with time

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

Interpretation of factual data

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

Report Recommendations

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

Specific purposes

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

Interpretation by others

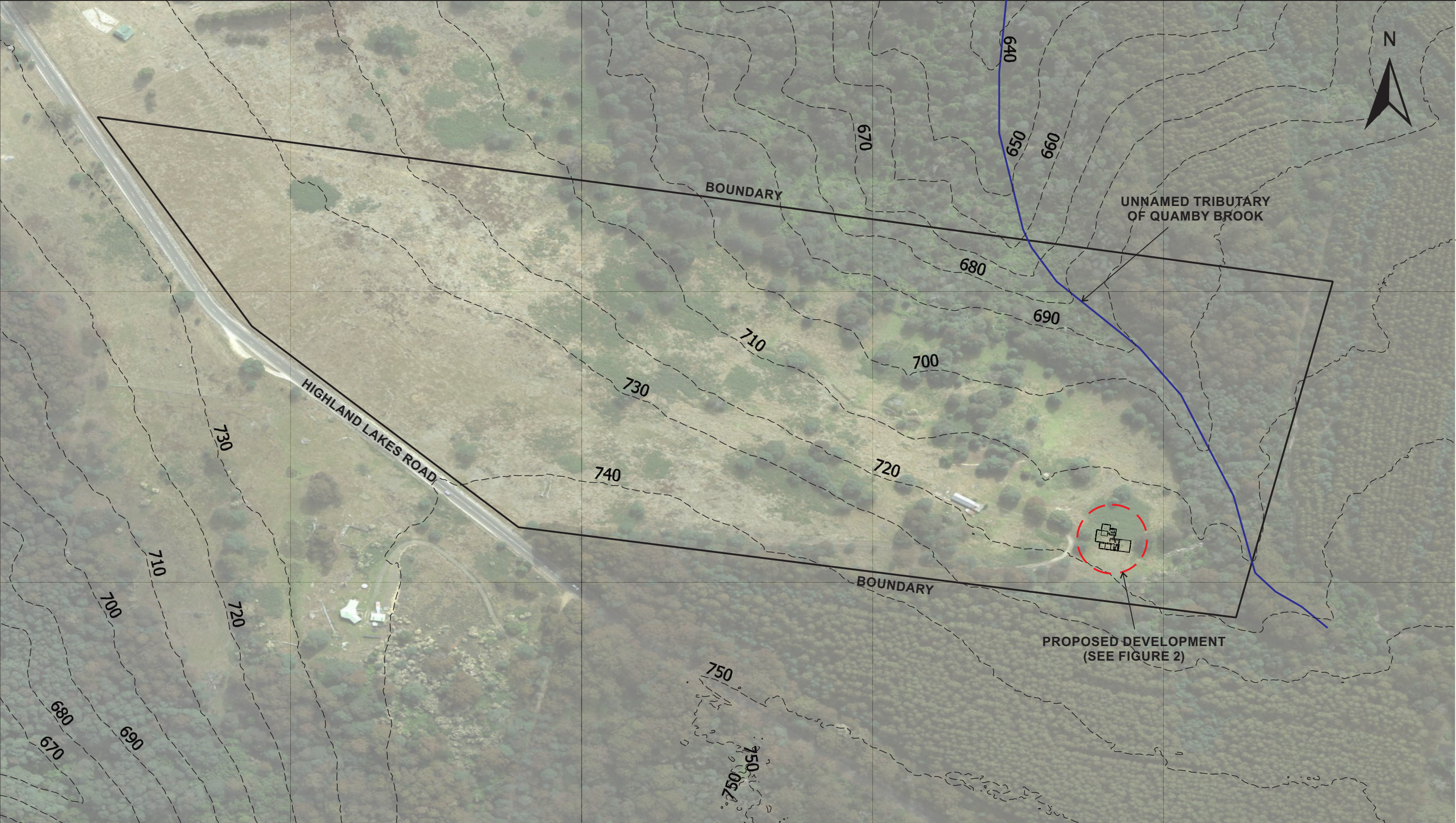
Geoton will not be responsible for interpretations of site data or the report findings by others involved in the design and construction process. Where any confusion exists, clarification should be sought from Geoton.

Report integrity

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

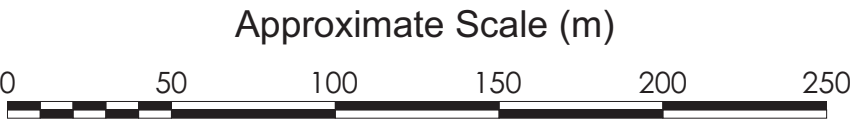
Geoenvironmental issues

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



Legend

— 20 — Contour Lines (m)





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date	14/10/2020	drawn	MB
scale	As Shown	approved	TB
original size	A3	rev	

client:	MR STUART BROWN		
project:	12755 HIGHLANDS LAKES ROAD GOLDEN VALLEY		
title:	LOCALITY PLAN		
project no:	GL20565A	figure no.	1



<div>Legend</div> <div><div>BH 1</div><div></div><div>Approximate Borehole Location</div></div> <div><div>5°</div><div></div><div>Approximate Slope Angle</div></div>	<div>GEOTON Pty Ltd</div>	client: MR STUART BROWN	
		project: 12755 HIGHLAND LAKES ROAD GOLDEN VALLEY	
	date	14/10/2020	drawn MB
	scale	As Shown	approved TB
original size A3		rev	
		project no: GL20565A	figure no. 2

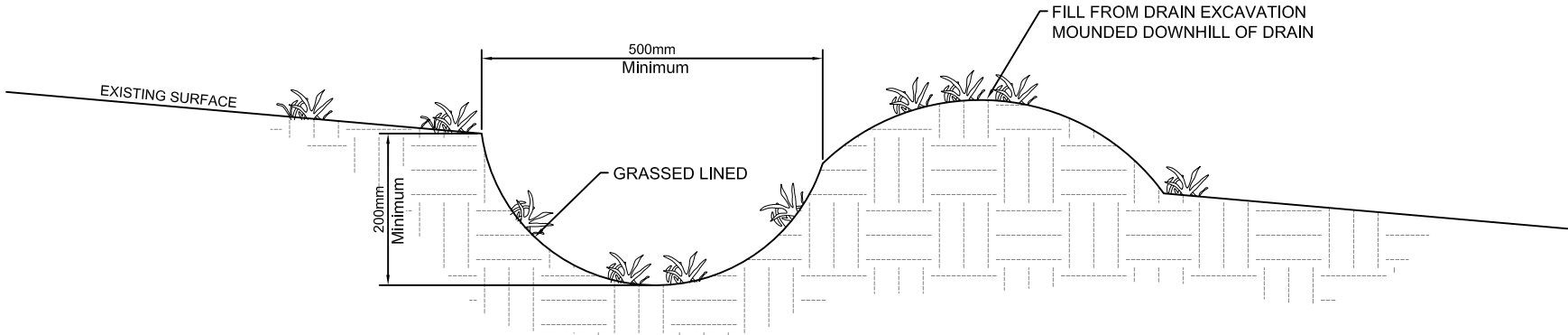
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- SITE CLASSIFICATION
- WASTEWATER ASSESSMENT
- ROADWORKS
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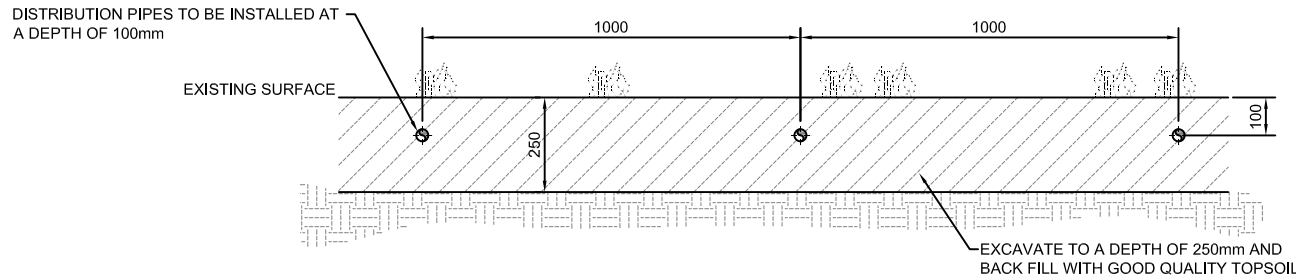
TYPICAL CUT-OFF DRAIN SECTION
SCALE 1:10



FIGURE:	WW-01
DATE:	18/12/19
REVISION:	A
SCALE:	@ A4
DRAWN:	B.STREET
DESIGNED:	T.BARRIERA
APPROVED:	T.BARRIERA

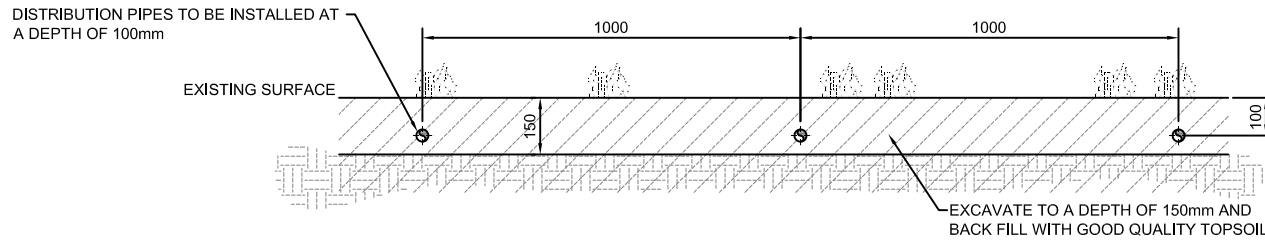
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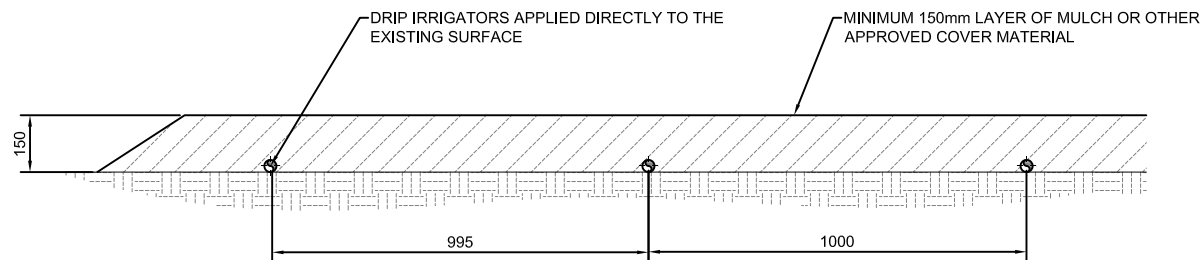


SHALLOW SUB-SURFACE DRIP IRRIGATION
CATEGORY 1,2 & 6 SOILS

SCALE 1:20



SHALLOW SUB-SURFACE DRIP IRRIGATION
CATEGORY 3,4 & 5 SOILS



COVERED SURFACE DRIP IRRIGATION

SCALE 1:20

SCALE

0mm 250mm 500mm 750mm 1000mm

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PLATE 1 - Looking south-east across the proposed dwelling site.



PLATE 2 - Looking north toward the proposed wastewater disposal area.

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				project:	12755 HIGHLAND LAKES ROAD GOLDEN VALLEY	
title: PHOTOGRAPH				project no:	GL20565A	figure no. PLATES 1 & 2
date:	14/10/2020	original size	A4			

Appendix A

Borehole Logs

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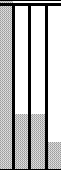

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Borehole no. BH1

Sheet no. 1 of 1

Job no. GL20565A

Client :		Mr Stuart Brown					Date :		16/09/2020		
Project :		Site Classification & On-site Wastewater Disposal Assessment					Logged By :		MB		
Location :		12755 Highland Lakes Road, Golden Valley									
Drill model :		Drilltech		Easting:		Slope: 90°		RL Surface :			
Hole diameter :		150mm		Northing:		Bearing: -		Datum :			
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
ADV	N				0.25			TOPSOIL - Clayey SILT, low plasticity, grey, with organics, with fine grained sand	M	F/ St	
								EXTREMELY WEATHERED material - remoulded Clayey SILT properties, low plasticity, brown, with fine grained sand	M/D	D	
					0.50			Borehole BH1 refusal @ 0.3m on inferred highly weathered rock			
					0.75						
					1.00						
					1.25						
					1.50						
					1.75						
					2.00						
					2.25						

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Borehole no. BH2

Sheet no. 1 of 1

Job no. GL20565A

Client :		Mr Stuart Brown					Date :		16/09/2020		
Project :		Site Classification & On-site Wastewater Disposal Assessment					Logged By :		MB		
Location :		12755 Highland Lakes Road, Golden Valley									
Drill model :		Drilltech		Easting:		Slope: 90°		RL Surface :			
Hole diameter :		150mm		Northing:		Bearing: -		Datum :			
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
ADV	N				0.25			TOPSOIL - Clayey SILT, low plasticity, grey, with organics, with fine grained sand	M	F/ St	V = refusal
					0.50			EXTREMELY WEATHERED material - remoulded Clayey SILT properties, low plasticity, brown, with fine grained sand	M/D	D	
					0.75			Borehole BH2 refusal @ 0.6m on inferred highly weathered rock			
					1.00						
					1.25						
					1.50						
					1.75						
					2.00						
					2.25						

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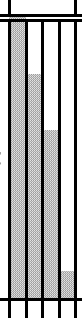

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Borehole no. BH3

Sheet no. 1 of 1

Job no. GL20565A

Client :		Mr Stuart Brown					Date :		16/09/2020		
Project :		Site Classification & On-site Wastewater Disposal Assessment					Logged By :		MB		
Location :		12755 Highland Lakes Road, Golden Valley									
Drill model :		Drilltech		Easting:		Slope: 90°		RL Surface :			
Hole diameter :		150mm		Northing:		Bearing: -		Datum :			
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
ADV	N							TOPSOIL - Clayey SILT, low plasticity, grey, with organics, with fine grained sand	M	F/ St	
					0.25			EXTREMELY WEATHERED material - remoulded Clayey SILT properties, low plasticity, brown, with fine grained sand	M/D	D	
					0.50			Borehole BH3 refusal @ 0.3m on inferred highly weathered rock			
					0.75						
					1.00						
					1.25						
					1.50						
					1.75						
					2.00						
					2.25						

Client :		Mr Stuart Brown					Date : 16/09/2020				
Project :		Site Classification & On-site Wastewater Disposal Assessment					Logged By : MB				
Location :		12755 Highland Lakes Road, Golden Valley									
Drill model :		Drilltech		Easting:		Slope: 90°		RL Surface :			
Hole diameter :		150mm		Northing:		Bearing: -		Datum :			
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
ADV	N				0.25			TOPSOIL - Clayey SILT, low plasticity, grey, with organics, with fine grained sand	M	F/St	
					0.50			EXTREMELY WEATHERED material - remoulded Clayey SILT properties, low plasticity, brown, with fine grained sand	M/D	D	
					0.75			Borehole BH4 refusal @ 0.5m on inferred highly weathered rock			
					1.00						
					1.25						
					1.50						
					1.75						
					2.00						
					2.25						

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Borehole no. BH5

Sheet no. 1 of 1

Job no. GL20565A

Client :		Mr Stuart Brown					Date :		16/09/2020		
Project :		Site Classification & On-site Wastewater Disposal Assessment					Logged By :		MB		
Location :		12755 Highland Lakes Road, Golden Valley									
Drill model :		Drilltech		Easting:		Slope: 90°		RL Surface :			
Hole diameter :		150mm		Northing:		Bearing: -		Datum :			
Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
ADV	N				0.25			TOPSOIL - Clayey SILT, low plasticity, grey, with organics, with fine grained sand	M	F/St	W<PL
					0.50		CI/CH	Silty CLAY - medium to high plasticity, orange/brown, with fine grained sand	M	VSt	
					0.75						
					1.00						
					1.25			EXTREMELY WEATHERED material - remoulded Clayey SILT properties, low plasticity, brown, with fine grained sand	M/D	D	
					1.50			Borehole BH5 refusal @ 1.4m on inferred highly weathered rock			
					1.75						
					2.00						
					2.25						

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Borehole no. BH6

Sheet no. 1 of 1

Job no. GL20565A

Client :		Mr Stuart Brown					Date : 16/09/2020		
Project :		Site Classification & On-site Wastewater Disposal Assessment					Logged By : MB		
Location :		12755 Highland Lakes Road, Golden Valley							
Drill model :		Drilltech		Easting:		Slope: 90°		RL Surface :	
Hole diameter :		150mm		Northing:		Bearing: -		Datum :	

Method	Support	Penetration	Water	Notes Samples Tests	Depth (m)	Graphic log	Classification Symbol	Material Description	Moisture condition	Consistency density, index	Structure, additional observations
ADV	N				0.25			TOPSOIL - Clayey SILT, low plasticity, grey, with organics, with fine grained sand	M	F/St	W<PL
					0.50		CI/CH	Silty CLAY - medium to high plasticity, orange/brown, with fine grained sand	M	VSt	
					0.75						
					1.00						
					1.25						
					1.50			EXTREMELY WEATHERED material - remoulded Clayey SAND properties, fine to medium grained, brown, low plasticity clay, with fine angular gravel	M	D	
					1.75						
					2.00			Borehole BH6 refusal @ 1.9m on inferred highly weathered rock			
					2.25						

Investigation Log Explanation Sheet

METHOD – BOREHOLE

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

* Bit shown by suffix e.g. ADT

METHOD – EXCAVATION

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

SUPPORT

TERM	Description
M	Mud
N	Nil
C	Casing
S	Shoring

PENETRATION

1	2	3	4	
				No resistance ranging to Refusal

WATER

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

NOTES, SAMPLES, TESTS

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

CLASSIFICATION SYMBOLS AND SOIL DESCRIPTION

Based on AS 1726:2017

MOISTURE

TERM	Description
D	Dry
M	Moist
W	Wet

CONSISTENCY/DENSITY INDEX

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

Soil Description Explanation Sheet (1 of 2)

DEFINITION

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

CLASSIFICATION SYMBOL AND SOIL NAME

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

PARTICLE SIZE DEFINITIONS

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

MOISTURE CONDITION

Coarse Grained Soils

Dry Non-cohesive and free running.

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

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

Fine Grained Soils

Moist, dry of Plastic Limited – $w < PL$

Hard and friable or powdery.

Moist, near Plastic Limit – $w \approx PL$

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

Moist, wet of Plastic Limit – $w > PL$

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

Wet, near Liquid Limit – $w \approx LL$

Wet, wet of Liquid Limit – $w > LL$

CONSISTENCY TERMS FOR COHESIVE SOILS

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

RELATIVE DENSITY OF NON-COHESIVE SOILS

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

DESCRIPTIVE TERMS FOR ACCESSORY SOIL COMPONENTS

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

SOIL STRUCTURE

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

GEOLOGICAL ORIGIN

WEATHERED IN PLACE SOILS

Extremely weathered material	Structure and/or fabric of parent rock material retained and visible.
Residual soil	Structure and/or fabric of parent rock material not retained and visible.

TRANSPORTED SOILS

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

Soil Description Explanation Sheet (2 of 2)

SOIL CLASSIFICATION INCLUDING IDENTIFICATION AND DESCRIPTION

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

• LL – Liquid Limit.

COMMON DEFECTS IN SOILS

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

Appendix B

Example Plants

Taz Wild Plants

Phone: (03) 6384 2165
Fax: (03) 6384 2165
Web site: www.tazwild.com

Wastewater Treatment Units

Tasmanian Plants suitable for Water from Wastewater Treatment Units

Water from septic tanks and aerated wastewater treatment units such as Biocycle, Envirocycle or other may contain salts, boron and disease bearing microbes. The major ingredients of most cleaning fluids are various salts, of which common kitchen salt (sodium chloride) is the least common. These salts may have large concentrations in wastewater, which can have a detrimental effect on plants. The survival of plants will depend on the concentrations of salts. Long-term build up of chemicals and salts in the soil will adversely affect any plantings.

We can't guarantee these plants will survive but they are tolerant to reasonable amounts of the main offenders and will tolerate wet conditions.

Below is a list of plants to help make an attractive garden bed for your wastewater treatment area.

PLANTS 1 – 6m

Acacia mucronata

Variable willow wattle, Narrow leaf wattle

An upright or spreading, medium to tall shrub 3-4m X 2-3m. Quick growing. Profuse cream to yellow flowers in spring, showy. Attracts seed eating birds. Drought tolerant.

Acacia verticillata

Prickly Moses

Prickly shrub to 2m. Useful habitat plant and very attractive in flower.

Banksia marginata

Honeysuckle, Silver banksia

Evergreen shrub or small tree with attractive narrow, smooth edged leaves which are square or notched at the end and silvery beneath. Greenish yellow cones of flowers that last as cut flowers. Grows well in sandy soil. Strong upright growth.

Bauera rubioides

Dog Rose

Hardy small to medium dense shrub. 1-2m X 1-2m wide with masses of dainty pink flowers, flowering most of year, attracting butterflies. Grows well in wet or moist soils, prefers acid soils. Likes full or filtered sun. Good coastal plant. Frost tolerant. Prune regularly. Good erosion control.

Callistemon pallidus

Lemon Bottlebrush

Evergreen medium shrub, very upright with silky leaves that become smooth with age. Lovely lemon yellow bottlebrushes in spring and summer. Likes a dry or moist position. Tolerates full or filtered sunlight. Attracts nectar eating birds.

Callitris oblonga

Cypress pine, South esk pine

This is one of Australia's native conifers. It has an attractive shrubby shape and is suitable for use in the garden as a fast growing hedge, since it can be pruned to shape. It is also useful for gardens where the soil is rocky and sandy but will tolerate a range of soils, providing the drainage is good.

Correa backhousiana

Velvet correa

A dense, bushy, spreading shrub to 1.5m high by 2m wide. Leaves are glossy green on top, rusty coloured underneath. Greenish cream bell flowers in winter. Spring bird attracting. Tolerates lime and coastal plantings. Usually frost resistant.

Leptospermum lanigerum

Woolley tea-tree

Hardy medium to large shrub 2.5 to 5m high x 1.2-3m wide, massed with white flowers during spring. Soft grey foliage. Prefers moist to wet soils with good drainage and will grow well in full or filtered sun. Attracts butterflies and seed eating birds. Tolerates light snow, smog and frost.

Melaleuca ericifolia

A very hard, fast growing small evergreen tree suited to most soils and aspects. Suitable for poorly drained or saline soils and withstands coastal exposure. Needle-like leaves and 2-3cm long cream flower spikes, in spring and early summer. Ideal for planting as a screen.

Melaleuca gibbosa

Fine leafed paperbark, Slender honey-myrtle

Evergreen small shrub with mauve/purple ball shaped flowers in late spring and summer. Suitable for most soils, tolerating lime and salt soil. Frost resistant.

Melaleuca squarrosa

Tall, bushy shrub, good foliage. Scented, yellow brush flowers, in spring-summer. Suitable for most soils, tolerating very wet conditions, lime, saline and frost.

Micrantheum hexandrum

River box

Attractive foliage plant with new growth showing red stems. Cream flowers in spring. Grows up to 2m high. Prune to form a dense screen plant.

Notelaea ligustrina

Native Olive, Mock olive, Privet mock olive

Tall shrub with smooth, dark green leaves. Small yellow flowers and purple fruit. Prefers a moist, semi-shaded position but grows well in a wide range of conditions.

Pomaderris apetala

Dogwood

Medium to tall shrub 3 to 15 m. This shrub grows in a wide variety of sites from very dry to very wet but will grow larger with moisture. Looks good planted in copses.

SHRUBS TO 1m

Amperea xiphioclada

Upright or arching stems. Attractive foliage sculptural in appearance to 60cm. Useful for basket weaving. Dry to moist sites.

Blechnum penna-marina

Alpine Water Fern

Attractive, low growing, matted ground cover. Leathery dark green fronds to 15cm long, tinged pink when young. Ideal hanging baskets. Rockeries and moist positions in the open ground.

Blechnum wattsii

Hard Water Fern

Hardy and vigorous fern with dark green leathery fronds to 1m tall. Very easily grown in large pot or a moist, shady position in the ground.

Callistemon viridiflorus

Green Bottlebrush

Erect shrub with pale green bottlebrushes. Good in damp conditions. 1-2m X 1m. Frost resistant.

Carex appressa

Tall sedge, Tussock sedge

A tall perennial to 1.8m high. Stems acutely 3 angled and leaves 3-6mm broad. Occurs in winter wet depressions that can dry out completely in summer. Flowers in spring.

Carex inyx

Tassel Sedge

Evergreen clump forming sedge with green foliage and gorgeous golden brown pendulous tassels 1m x 1m.

Carex tasmanica

Curley Sedge

An upright sedge to 30cm. Attractive tight curls on tips of leaves. Wet sites but will tolerate long dry spells.

Dianella tasmanica

Flax Lily

An evergreen perennial plant with arching, strap-like leaves which can be up to 1.2m long. During spring and summer this plant bears clusters of nodding, star shaped, bright blue to purple flowers which are followed by glossy deep blue berries. Thrives in a sunny to partly shaded position in humus rich, well drained soil. Ideal for rockeries, poolside planting and containers.

Ficinea nodosa (syn isolepis nodosa)

Knobby club rush

Dense tufted native rush with stiff stems. Rounded brown flower knobs in summer. Suit damp or moist sandy soil. 60cm X 1m wide.

Ficinea nodosa (syn isolepis nodosa)

Knobby club rush (syn. *Isolepis nodosa*)

Ideal for planting around pond margins, this fast growing perennial plant forms clumps of upright, often arching, dark green stems. Brownish, globular flower heads are produced throughout the year. A tough hardy plant which thrives in full sun in a range of soils. Tolerates salt spray, waterlogged and saline soils. Adds texture and colour to seaside gardens and water features, useful for general garden planting.

Goodenia elongata

Lanky Goodenia

Suckering ground cover 10cm tall X 50cm. Glossy green leaves, rich yellow flowers on tall stems spring-summer, prefers moist soils in full sun or part shade.

Isolepis inundata

Knobby club rush, Swamp club rush

Handy aquatic for waters edge or general planting (eg. shrub beds, dry creek beds).

Lomandra longifolia

Long leaf mat bush, Sagg

A popular plant for use as accent in gardens, where the rush like foliage contrasts well with broad leafed plants. Use it next to ponds or as a boarder plant. Flowers in spring, bearing clusters of cream, strongly perfumed flowers - great for use in flora arrangements. A very adaptable plant that will grow well in a range of soils but does best in a moist position.

Mazus pumilio

Mauve carpet

Low growing creeping plant. Ideal ground cover, with mauve flowers, spring and summer. Semi shade or sun.

Melaleuca squamea

A bushy shrub to 1m with stunning mauve flowers in spring-summer. Grows well in a damp spot. Frost hardy.

Poa labillardieri

A popular native grass grown for its soft blue foliage. In the warmer months this clumping plant produces an attractive flower head with a purple tint. Thrives in a sunny to partly shaded position and grows in a range of soils. Suitable for planting under trees, embankments and mass plantings. Cut to just above ground level in late winter for fresh new spring growth.

Polystichum proliferum

Mother Shield Fern

An easy to grow fern with attractive green fronds. New fronds are covered with eye catching brownish scales. An ideal plant for ferneries and shaded garden positions but will perform equally well when planted in a container. Plant in humus rich, moist, well drained soil in part shade. Fertilise with a good organic fertilizer. When planting in containers use a premium potting mix.

Polystichum proliferum

Mother Shield Fern

Attractive native fern with arching fronds to 1m long forming plantlets near the tip. Very easily grown in a moist position in morning or filtered sun. Suitable for tubs.

Pratia pedunculata

Blue pratia, Common pratia, White pratia

This dainty, spreading plant forms a carpet of tiny green leaves which from spring to early summer is smothered in a mass of tiny, white flowers. This carpeting plant is ideal for filling in spaces near rocks and sleepers and makes an attractive groundcover. Thrives in a sunny to semi-shaded position in moist soil. Keep moist at all times.

Pratia pedunculata

Blue pratia, Common pratia, White pratia

This dainty, spreading plant forms a carpet of tiny, green leaves, which from spring to early summer is smothered in a mass of tiny blue flowers. This carpeting plant is ideal for filling in spaces near rocks and sleepers, and makes an attractive groundcover, thrives in a sunny to semi-shaded position in moist soil. Keep moist at all times.

Scaevola hookeri

Creeping fan flower, Mat fan flower

A very densely matting, evergreen groundcover with glossy, dark green leaves and small, white fan-shaped flowers in flushes, during spring, summer and autumn. An excellent soil binding plant for average to moist positions. Frost hardy.

Velleia paradoxa

Spur velleia

Wild flower 20cm X 20cm with large yellow flowers spring and summer. Prefers moist soils which are well drained and part shade to full sun.

Viola fuscoviolacea

A spreading, matting violet with attractive dense foliage and tiny deep purple-blue flowers in spring and summer. Prefers a moist position. Withstands frosts and snow.

Viola hederacea

Native violet

An attractive creeping evergreen perennial with fan shaped leaves. This plant produces beautiful mauve flowers over a long flowering period. An ideal ground cover for full sun to part shade in well drained soils.

TREES**Acacia dealbata**

Silver Wattle

A tall tree with a smooth trunk, often decorated with silvery, mottled patches contrasting with the greyish-green leaves. In spring, clusters of golden-yellow, fluffy ball like flowers almost cover the whole tree.

Acacia melanoxylon

Blackwood

A beautiful formal tree that produces one of Australia's most sought after woods for cabinet making. Light yellow flowers occur in winter and early spring. A useful tree for a windbreak or screen as it grows densely. It is also tolerant of a wide range of positions, however its height and width will be greatest if the soil is moist and fertile.

Eucalyptus ovata

Black gum, Swamp gum

Evergreen medium to tall moisture loving tree, good for poorly drained soils. Smooth white trunk. Masses of white flowers in autumn which attract birds. Frost hardy. Good tree for cool districts. Water absorber. Drought tolerant. Excellent shade and windbreak tree.

Eucalyptus rodwayi

Swamp Peppermint

This tree is suitable for a wide range of conditions, from very dry sandy soils to river banks. Grows 15 to 20m.

Eucalyptus viminalis

White Gum

A magnificent tree with a lovely white trunk. This tree is suitable for very dry to very wet sites. Its height is 20 to 40m depending on availability of moisture.

Pomaderris apetala

Dogwood

Medium to tall shrub 3 to 15 m. This shrub grows in a wide variety of sites from very dry to very wet but will grow larger with moisture. Looks good planted in copses.

Prostanthera lasianthos

Christmas bush, Tasmanian Christmas bush

The Tasmanian Christmas bush comes into flower around Christmas with masses of mint scented foliage. A rapid growth in a range of soils but for best results grow in a well drained soil and mulch to retain moisture in the drier months. An attractive plant that will grow in a range of positions in the garden.

Tasmania lanceolata

Mountain pepper, Native pepper

Small leafed mountain form. Handsome foliage shrub with bright green leaves and red stems. Creamy-yellow flowers in spring. Slow growing to 1.5m, hardy in a cool moist well drained position in sun or shade.

Appendix C

Certificate Forms

CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

Form **55**

To: Owner /Agent
 Address
 Suburb/postcode

Qualified person details:

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

Qualifications and Insurance details:
(description from Column 3 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Speciality area of expertise:
(description from Column 4 of the Director's Determination - Certificates by Qualified Persons for Assessable Items)

Details of work:

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

Certificate details:

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

This certificate is in relation to the above assessable item, at any stage, as part of - (tick one)

building work, plumbing work or plumbing installation or demolition work:

or

a building, temporary structure or plumbing installation:

☐☒

In issuing this certificate the following matters are relevant –

Documents:	Geoton Pty Ltd, Report Reference No. GL20565Ab, dated 14/10/2020
Relevant calculations:	Refer to report
References:	AS 2870 – 2011 Residential Slabs and Footings Construction AS 4055 – 2012 Wind Loads for Housing CSIRO Building Technical File 18


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

Site Classification in accordance to AS2870 - 2011
Wind Loading in accordance to AS 4055 - 2012
Findings and recommendations of report

Scope and/or Limitations

The classification applies to the site as investigated at the time and does not account for any future alteration to foundation conditions resulting from earthworks, drainage condition changes or site maintenance variations.

I certify the matters described in this certificate.

	<i>Signed:</i>	<i>Certificate No:</i>	<i>Date:</i>
Qualified person:		GL20565Ab	14/10/2020

LOADING CERTIFICATE

To: **Mr Stuart Brown**

Owner /Agent

Certificate Ref:
AS/NZS 1547:2012
Section 7.4.2

7 Lucy Place

Address

Prospect Tas

7250

Suburb/postcode

Details of work:

Address:

12755 Highland Lakes Road

Lot No:

1

Golden Valley Tas

7304

Certificate of title No:

34463/1

The work
related to this
certificate:

On-site domestic-wastewater
management

(description of the work or part work being
certified)

Certificate details:

In issuing this certificate the following matters are relevant –

Documents:

Report GL20565Ab dated 14/10/2020
Figure 1 – Locality Plan
Figure 2 – Site Plan
Figure WW-01 – Typical Cut-off Drain Section
Figure WW-05 – Typical AWTs Section

Relevant
calculations:

Contained in the above

References:

AS/NZS1547:2012 On-site domestic-wastewater management

Substance of Certificate:

This certificate sets out the design criteria and the limitations associated with use of the system.

Wastewater Characteristics

Population equivalent used for this assessment = 5 (3 bedroom equivalent dwelling)
Wastewater volume (L/day) used for this assessment = 600 (120 Litres per person)
Approximate blackwater volume (L/day) = 240
Approximate greywater volume (L/day) = 360

Soil Characteristics/Design Criteria

Texture (Table E4 from AS/NZS 1547) = Medium to Heavy clay
Soil category (Table E1 from AS/NZS 1547) = 6
Soil structure (Table E4 from AS/NZS 1547) = Moderately Structured
Indicative permeability (Table 5.1 from AS/NZS 1547) = <0.06m/day
Adopted permeability = 0.02m/day
Adopted Design Irrigation Rate = 2mm/day
Soil thickness for disposal = 1.4m
Minimum depth (m) to water = >2.0m

Dimensions for On-Site Treatment System

Disposal and treatment methods = Aerated Wastewater Treatment System (AWTS) and sub-surface irrigation

Site modification and specific design = Not required

Primary disposal area required = 300m²

Reserve disposal area required = 300m²

Location and use of Reserve area = Reserve area located to the north of the proposed primary irrigation area. Currently vacant with a low cover of grass.

Is there sufficient area available on site for disposal (including reserve) = Yes

Notes

The purpose of the reserve area is to allow for future extension of the land application system to allow a factor of safety against unforeseen malfunction or failure, perhaps following increased household occupancy or inadvertent misuse of the system.

The land application area may be reduced to account for flow reductions by water-saving devices, provided the organic loading rate is not higher than it would have been without the flow reduction.

Allowable Variation from Design Flow

Based on an approved AWTS 10 EP system (10 equivalent persons) rated at 1500 litres per day and a wastewater design volume of 600L/day the allowable variation from design flow (peak loading events) would be an additional 900L/day.

System Limitations

Consequences of overloading the system:

- (A) Adverse effects on soil properties and plant growth through excess salt accumulation in the root zone during extended dry periods
- (B) Harmful long-term environmental effects to the soil of land application system or the adjacent surface water and groundwater; or
- (C) Increased risk to public health from surface ponding in the land application area or channelling or seepage beyond the land application area.

Consequences of underloading the system:

Not applicable to this type of system.


Operation Requirements

Refer to operation manual of preferred aerated wastewater treatment system.

Maintenance Requirements

Refer to operation manual of preferred aerated wastewater treatment system.

I certify the matters described in this certificate.

	<i>Signed:</i>	<i>Date:</i>	<i>Certificate No.</i>
Certifier:		14/10/2020	GL20565Ab

CERTIFICATE OF THE RESPONSIBLE DESIGNER

Section 94
Section 106
Section 129
Section 155

To: Mr Stuart Brown *Owner name*
7 Lucy Place *Address*
Prospect TAS 7250 *Suburb/postcode*

Form **35**

Designer details:

Name: Tony Barriera *Category:* Civil Engineer
Hydraulic - Domestic
Business name: Geoton Pty Ltd *Phone No:* 03 6326 5001
Business address: P O Box 522
Prospect TAS 7250 *Fax No:*
Licence No: IEAust 471929, CC6220 P *Email address:* tbarriera@geoton.com.au

Details of the proposed work:

Owner/Applicant: Mr Stuart Brown *Designer's project reference No.* GL20565Ab
Address: 12755 Highland Lakes Road
Golden Valley TAS 7304 *Lot No:* 34463/1
Type of work: Building work ☐ Plumbing work ☒ *(X all applicable)*

Description of work:

New building
on-site wastewater management system

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

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

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

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

Other details:

All design documents provided in Report GL20565Ab, dated 14/10/2020

Design documents provided:

The following documents are provided with this Certificate –

Document description:

Drawing numbers:	Prepared by:	Date:
Schedules:	Prepared by:	Date:
Specifications:	Prepared by:	Date:
Computations:	Prepared by:	Date:
Performance solution proposals:	Prepared by:	Date:
Test reports:	Prepared by:	Date:

Standards, codes or guidelines relied on in design process:

All design documents are contained within report
AS/NZS1547:2012 On-site domestic-wastewater management

Any other relevant documentation:**Attribution as designer:**

I Tony Barriera of Geoton Pty Ltd 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.

*Name: (print)**Signed**Date*

Designer:

Tony Barriera



14/10/2020

Licence No:

CC6220P

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.

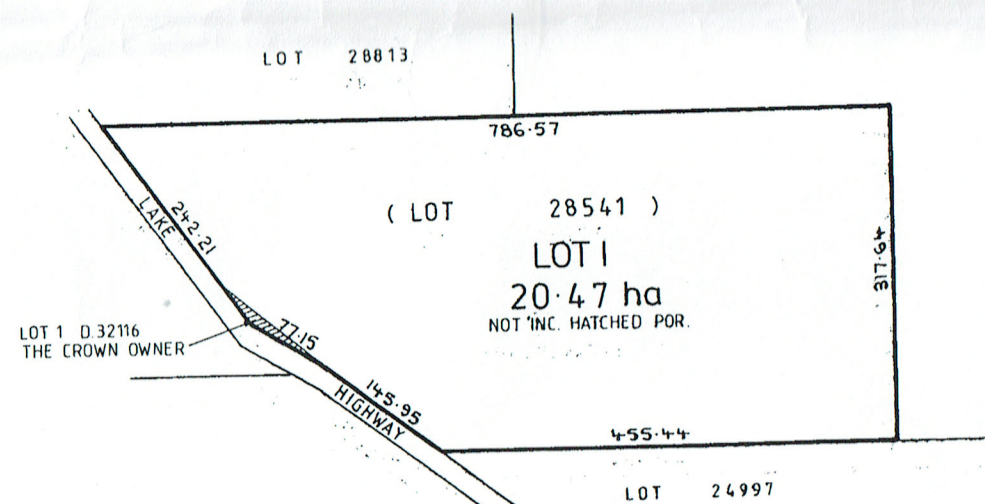
Certification:	
-----------------------	--

I Tony Barriera of Geoton Pty Ltd 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

	<i>Name: (print)</i>	<i>Signed</i>	<i>Date</i>
Designer:	<div>Tony Barriera</div>	<div></div>	<div>14/10/2020</div>

Owner:	PLAN OF TITLE of land situated in the WESTMORLAND NOIA COMPILED FROM..... SCALE 1:5000 MEASUREMENTS IN METRES	Registered Number: D.34463
Title Reference: C.T. 4376-58		Approved
Grantee:		Recorder of Titles



10/3/88

SEARCH OF TORRENS TITLE	
VOLUME 34463	FOLIO 1
EDITION 3	DATE OF ISSUE 07-Jul-1995

SEARCH DATE : 24-Nov-2020
SEARCH TIME : 02.02 PM

DESCRIPTION OF LAND

Parish of NOIA, Land District of WESTMORLAND
Lot 1 on Diagram 34463
Derivation : Part of Lot 28541 Gtd. to A.E. Berne.
Prior CT 4458/7

SCHEDULE 1

B885250 TRANSFER to ELIZABETH HELEN JOHNS Registered
07-Jul-1995 at noon

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
B581253 MORTGAGE to Trust Bank Registered 24-Feb-1993 at 12.
01 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

Planning Application for 12755 Highland Lakes Road

For – Elizabeth Lord and Stuart Brown

Property ID - 7465943

Title Reference – 34463/1

Area of land – 20.47ha

Zoning - Rural Resource

Construction of dwelling

This form and the associated drawings are submitted for planning approval in accordance with the Meander Valley Council Planning Scheme

The purpose of the dwelling and such siting is on a slightly sloping area with views to the mountains and in the vicinity of an existing shed

The site has an area of 20.47ha and is surrounded by bush and plantation timbers on three sides, there is a small water course running though the north east corner.

An existing old weatherboard shed exists on the site and this will be retained

This new development complies with Section 26.3.2 P1.1 & P1.2

Section 26.3.3 Irrigation District - complies

This new development complies with Section 26.4, part A1 & P1

The new development is located on the lowest part of the property surrounded by bush and plantation on three sides

This new development does not comply with Section 26.4 A2.1, but could comply with P2

The building is located 40m from the southern boundary and 77m from the eastern boundary on a relatively level position

CODES

E1 BUSHFIRE HAZARD CODE E1-1

Proposed dwelling is bounded by forest to the south, east and north the west
With large areas of grassland (proposed residential lot) to the west and the BAL has been determined between BAL19 and BAL29 (to be provided at building issue)

E2 POTENTIALLY CONTAMINATED LAND ZONE

Not applicable

E3 LANDSLIP ZONE

Not applicable

E4 ROAD AND RAIL ASSETS CODE

Not applicable – existing access

E5 FLOOD PRONE AREAS CODE E5-1

not applicable

this allotment is not in a flood prone region or an area potentially subject to flooding.

E6.1 CAR PARKING AND SUSTAINABLE TRANSPORT CODE

E6.6.1

A1 min 3 car spaces provided plus additional space to the east of dwelling

E6.7.1 Construction of car parking

A1 3 car spaces provided surfaces will be compacted gravel

6.7.2 Design and layout of carparking

A1.1 N/A

A1.2 N/A

P1 carparking area not visible from road

A2.1 manoeuvring paths can be utilised in front of dwelling garage

A2.2 area for parking of 3 cars is 10m x 10m

P1 complies

E7 SCENIC MANAGEMENT CODE

Complies with the code as the new ` located approx. 380m from the highway and located in a low part of the property and screened by various trees between road and dwelling.

E8 HABITAT & VEGETATION MANAGEMENT

Complies with this code as no trees will be removed on the dwelling site

E9 WATER QUALITY CODE

E9.2.1 not applicable, the development is not within 50m of a wetland or watercourse or within a water catchment area

ONSITE WASTEWATER MANAGEMENT

a site report and wastewater management report have been provided by a qualified engineer.

Vehicle movement and car parking are clear of the proposed effluent drain system.

The private open space is not used for surface irrigation of treated wastewater

Department of State Growth

Salamanca Building Parliament Square
4 Salamanca Place, Hobart TAS
GPO Box 536, Hobart TAS 7001 Australia
Email permits@stategrowth.tas.gov.au Web www.stategrowth.tas.gov.au
Ref: SRA-21-37



Stuart Brown
By email: stuartbr4@gmail.com

Dear Stuart

Crown Landowner Consent Granted - 12755 Highland Lakes Road, Golden Valley

I refer to your recent request for Crown landowner consent relating to the development application at 12755 Highland Lakes Road, Golden Valley for construction of access.

I, Fiona McLeod, Manager Asset Management, State Roads, the Department of State Growth, having been duly delegated by the Minister under Section 52 (1F) of the *Land Use Planning and Approvals Act 1993* (the Act), and in accordance with the provisions of Section 52 (1B) (b) of the Act, hereby give my consent to the making of the application, insofar as it affects the State road network and any Crown land under the jurisdiction of this Department.

The consent given by this letter is for the **making of the application only** insofar as that it impacts Department of State Growth administered Crown land and is with reference to your application dated 2 February 2021, and the documents approved, as follows:

Approved Document Name	Author	Date Received	Notes
Crown Landowner Consent Application Form – 12755 Highland Lakes Road, Golden Valley	Stuart Brown	02-02-2021	
Planning Permit Application Form – 12755 Highland Lakes Road, Golden Valley (CT34463/1), dated 27/11/2020	Stuart Brown	02-02-2021	
Certificate of Title Documents – CT 34463/1		02-02-2021	
Traffic Assessment – Proposed Residence, 12755 Highland Lakes Road Golden Valley, dated January 2021	Terry Eaton	02-02-2021	
Property Site Plan – Map extracted from Traffic Impact Assessment – Proposed Residence, 12755 Highland Lakes Road Golden Valley (Attachments), by Terry Eaton, marked up by applicant.	Stuart Brown	02-02-2021	

Access – construction or alteration (Access works permit required)

In giving consent to lodge the subject development application, the Department notes that the proposed access to the State road network will require the following additional consent:

The consent of the Minister under Section 16 of the *Roads and Jetties Act 1935* to undertake works within the State road reservation.

For further information please visit https://www.transport.tas.gov.au/roads_and_traffic_management/permits_and_bookings/new_or_altered_access_onto_a_road_driveways or contact permits@stategrowth.tas.gov.au.

On sealed State roads all new accesses must be sealed from the road to the property boundary as a minimum.

Pursuant to Section 16 of the *Roads and Jetties Act 1935*, where a vehicle access has been constructed from land to a State highway or subsidiary road, the owner of that land is responsible for the maintenance and repair of the whole of the vehicular access.

The Department reserves the right to make a representation to the relevant Council in relation to any aspect of the proposed development relating to its road network and/or property.

Yours sincerely



Fiona McLeod
MANAGER ASSET MANAGEMENT

Delegate of
Minister for Infrastructure and Transport
Michael Ferguson MP

15 February 2021

cc: General Manager, Meander Valley Council

OWNER DETAILS:

Owner/s name: ELIZABETH HELEN DHNS (MARDEN) ^{NAME} Mobile No: 0400 633 706
Email address: libbyj18@gmail.com Phone No:
Postal address: 7 LUCK PLACE, PROSPECT 7250

• Owners details **MUST** be completed **IN FULL** for the current owner as per the Certificate of Title.

APPLICANT DETAILS:

Applicant: STUART BROWN Mobile No: 0466 328 028
Email address: stuartbr4@gmail.com Phone No:
Postal address: 7 LUCK PLACE, PROSPECT 7250

Preferred means of correspondence, including notifications, requests for information and permits (Indicate by ✓ box):

☒ Email

☐ Australia Post

If you do not select a box Council will use email as the primary method of contact

COPYRIGHT AUTHORITY:

I authorise the Council and the Crown in right of the state of Tasmania to provide to any person, for the purposes of assessment or public consultation, a partial or complete copy of documents relating to this application.

I acknowledge that a charge may be made to recover costs of copying. I do not require to be paid a fee or to be informed of any copies that are made under this authority.

I confirm that I am the copyright owner or have the authority to sign on behalf of any other person with copyright for documents relating to this application.

NOTE: This authority is intended to cover copies made by the Crown or Council under Sections 40, 43, 49, or 183 of the *Copyright Act 1968*.

ENTRY TO LAND:

I consent to the entry of the land by an Authorised Officer in accordance with Section 65J (1) (a), for any purpose connected with the administration and enforcement of the *Land Use Planning and Approvals Act 1993* and assessment of this application.

Where the applicant is NOT the owner, I hereby declare that the owner of the land to which this application relates has been notified of this application being made, has provided consent, and the information and details supplied by me in this application are a true and accurate description of the proposal.

Applicant:

Name: (Print)

Stuart Brown

Signed:



Date:

27/11/2020

Please Note: If the application involves Crown land you will need to provide a letter of consent and this form signed by the Minister, or a delegated officer of the Crown.

Crown Consent:
(if required)

Name: (Print)


Delegate of
Minister for Infrastructure
Michael Ferguson MP

Signed:

Date:

15/02/2021

PRIVACY STATEMENT

The Meander Valley Council abides by the *Personal Information Protection Act 2004* and views the protection of your privacy as an integral part of its commitment towards complete accountability and integrity in all its activities and programs.

Collection of Personal Information: The personal information being collected from you for the purposes of the *Personal Information Protection Act, 2004* and will be used solely by Council in accordance with its Privacy Policy. Council is collecting this information from you in order to process your planning application.

Disclosure of Personal Information: Council will take all necessary measures to prevent unauthorised access to or disclosure of your personal information. External organisations to whom this personal information will be disclosed as required under the *Land Use Planning and Approvals Act 1993*. This information will not be disclosed to any other external agencies unless required or authorised by law.

Correction of Personal Information: If you wish to alter any personal information you have supplied to Council please

Stuart Brown and Elizabeth Lord

Agricultural Assessment of Proposed Development at 12755 Highland Lakes Road, Golden Valley

24/12/2020





Pinion Advisory was formed in July 2020 by the merger of three Australian consulting firms – Macquarie Franklin, Rural Directions and Sunraysia Agriculture.

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**An appropriate
citation for this
report is:**

*Pinion Advisory, December 2020, Agricultural Assessment
Report of Proposed Development at 12755 Highland Lakes
Road, Golden Valley*

Date	Issue number	Document Status	Authorised by
24/12/2020	1	Draft	Jason Lynch

This report has been prepared in accordance with the scope of services described in the contract or agreement between Pinion Advisory and the Client. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client and Pinion Advisory accepts no responsibility for its use by other parties.

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1 Executive summary

This agricultural assessment report has been prepared on behalf of the proponent, Stuart Brown and Elizabeth Lord, and covers various aspects of the proposed development at 12755 Highland Lakes Road, Golden Valley.

The property is zoned rural residential and not used for agricultural land use activity.

The planned development consists of a residential dwelling on the property.

The proposed residential dwelling would allow to the proponent to live on the property and enjoy the residential and rural bucolic amenity of the property.

Adjacent and nearby land use surrounding the property in question includes land used for forestry and environmental management and for residential use on the rural resource zoned land.

Due to the nature and site of the proposed development it will not constrain, prejudice and/or limit the agricultural land, as per plantation forestry and/or environmental management land use activities on the adjacent and nearby properties.

2 Purpose

This report has been undertaken on behalf of S Brown & E Lord (the proponents) and will accompany an application to the Meander Valley Council seeking approval to develop land at 12755 Highland Lakes Road, Golden Valley.

The document provides an agricultural assessment of the property in question and reports on how the proposal complies with the relevant clauses of the Meander Valley Interim Planning Scheme 2013.

2.1 Land Capability

The currently recognised reference for identifying land capability is based on the class definitions and methodology described in the Land Classification Handbook, Second Edition, C.J Grose, 1999, Department of Primary Industries, Water and Environment, Tasmania.

Most agricultural land in Tasmania has been classified by the Department of Primary Industries and Water at a scale of 1:100,000, according to its ability to withstand degradation. A scale of 1 to 7 has been developed with Class 1 being the most resilient to degradation processes and Class 7 the least. Class 1, 2 and 3 is collectively termed "prime agricultural land". For planning purposes, a scale of 1:100,000 is often unsuitable and a re-assessment is required at a scale of 1:25,000 or 1:10,000. Factors influencing capability include elevation, slope, climate, soil type, rooting depth, salinity, rockiness and susceptibility to wind, water erosion and flooding.

In providing the opinion enclosed here, it is to be noted that Jason Lynch possess a B.AppSc(hort), is a member of Australian Institute of Agriculture, Certified Practising Agricultural and has over 20 years experience in the agricultural industry in Tasmania. Jason is skilled to undertake agricultural and development assessments as well as land capability studies. He has previously been engaged by property owners, independent planners, surveyors and Councils to undertake assessments within the Brighton, Burnie, Central Coast, Central Highlands, Circular Head, Clarence, Devonport, George Town, Huonville, Kentish, King Island, Kingston, Latrobe, Launceston, Meander Valley, Northern Midlands, Southern Midlands and Waratah-Wynyard municipalities. Most of these studies have involved the assessment of land for development purposes for potential conflict with Council Planning Schemes.

2.2 Meander Valley Interim Planning Scheme

The Meander Interim Planning came into effect in October 2013 and sets out the requirements for use and development of land in the Meander Valley municipality.

3 Property location

The property is owned by S Brown (the proponent) and is located at 12755 Highland Lakes Road, Golden Valley. Table 1 and Figure 1.

Table 1 Property details

Title Address	Title Reference	Property ID	Hectares (Approx)
12755 Highland Lakes Road, Golden Valley	34463/1	7465943	18.6

The property is located in the southern elevated area of the Golden Valley, is covered gently sloping and undulating land on the western area of the block, the eastern area of the property is covered by moderate to steep sloping and undulating ground and an unnamed tributary of the Quamby Brook flows in a northerly direction though the far eastern area of the property. Figure 2.

The vegetation present on the property includes unimproved pastureland which covers the western area of the property, with the eastern area of the block covered by a mixture of native vegetation which is dominated by *Acacia melanoxylon* forest and *Eucalyptus delegatensis* forest.

No threatened native vegetation communities have been identified on the block (Threatened Native Vegetation Communities 2014).

Infrastructure present on the property is limited to a boundary fence along the roadside boundary, small dam, shed and outbuildings and an access laneway.

The property in question is zoned rural living agriculture according to the Meander Valley Interim Planning Scheme with all adjacent properties to the similarly zoned agriculture to the) and adjacent to the west, south and north, and environmental management zoned land further to the west and north and rural resource zoned land to the east and north Figure 3.

The property is held as private freehold land and is immediately surrounded by private freehold land to the west and south, conservation area further to the west (Quamby Bluff conservation area), permanent timber production zoned land to the east, state reserve to the north (Fairy Glen state reserve), and crown land further to the south. Figure 4.

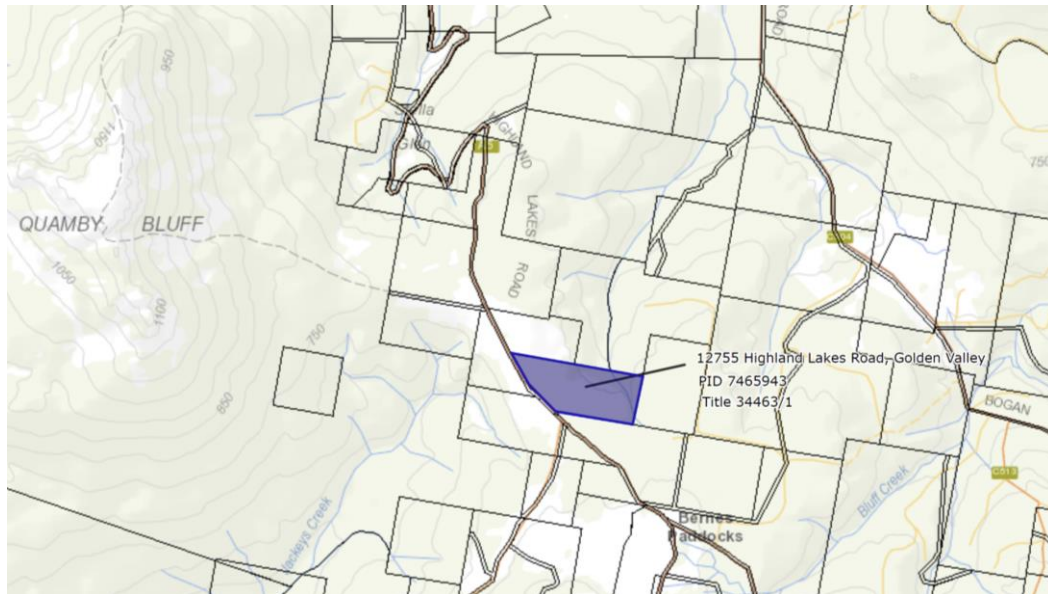


Figure 1 Property location (source the LIST)

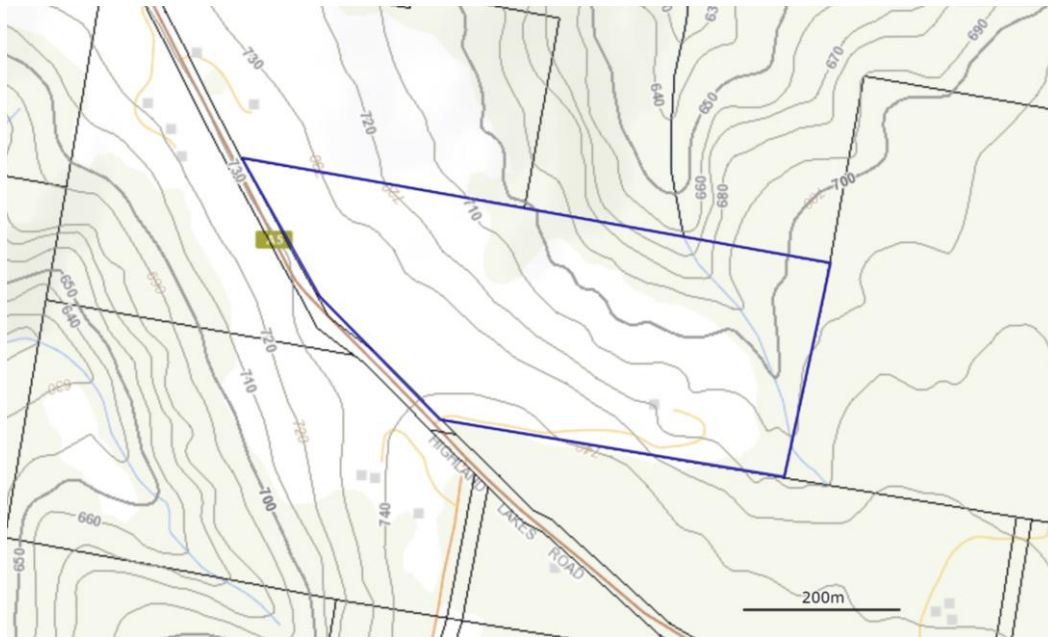


Figure 2 Topography of the property (contours in 10 meters) (source the LIST)



Figure 3 Zoning map with rural living present on the property in question (highlighted in blue) and adjacent to the west, south and north, and environmental management zoned land further to the west and north and rural resource zoned land to the east and north (source the LIST)



Figure 4 Private freehold (yellow shaded) covering the property itself and adjacent to the south, north, east and west, conservation area further to the west (grey shaded), permanent timber production zoned land to the east (green shaded), state reserve to the north (brown shaded) and crown land further to the south (source the LIST)

4 Land capability

The official land capability map for the area was produced by the DPIWE in 1993 at a scale of 1:100,000 and reported in their Meander Report. On the subject lot, DPIWE identified the property to be covered by Class 4 and 5 land.

A more detailed inspection of the property was undertaken by the author in December 2020, and determined the property is covered by Class 5+6 and 6 land (Figure 6);

Class 5 land is described as:

Land with slight to moderate limitations to pastoral use. This land is unsuitable for cropping, although some areas on easier slopes may be cultivated for pasture establishment or renewal. The effects of limitations on the grazing potential may be reduced by applying appropriate soil conservation measures and land management practices.

Class 5+6 land is characterised as:

At least 60% Land unsuited to cropping and with slight to moderate limitations to pastoral use, up to 40% Land well suited to grazing but which is limited to occasional cropping or a very restricted range of crops

Class 6 land is characterised as:

Land marginally suitable for grazing because of severe limitations. This land has low productivity, high risk of erosion, low natural fertility or other limitations that severely restrict agricultural use.

The key land capability limitation associated with the property is;

- Erosion (e) associated with the risk of rill and sheet erosion on the steeper land, the potential for degraded soil structural due to pugging from livestock movement on waterlogged soils and/or inappropriate, excessive ground cultivation activities and stream bank erosion.
- Climate (c) associated with the elevation and prevailing rainfall, restricted growing day degrees and shorter length of growing season.



Figure 5 Land capability areas on the property in question

Table 2 Land capability table

Land Capability Class (ha)	Land Characteristics							
	Geology & Soils	Slope %	Topography & Elevation	Erosion Type & Severity	Climatic Limitations	Soil Qualities	Main Land Management Requirements	Agricultural Versatility
5+6ce (approx. 7.0 ha)	Loamy dermosol derived from Permian mudstone geology as per the Quamby soil profile. Grey and brown shallow loamy soils with stone and gravels present throughout the soil profile.	3-10%	Gently sloping and undulating ground associated. 710-735m ALS	Moderate/high risk. Associated with the risk of rill and sheet erosion on bare and exposed soils, the potential for degraded soil structural due to pugging from livestock movement on waterlogged soils, inappropriate and excessive ground cultivation activities.	High This land experiences cold winters and cool summer conditions. Receives on average 1385 mm annual rainfall, has potentially up to 50 annual frost events, has 500 GDD (Oct to April) and up to 2000 chill hours (May to August).	These soils are imperfectly drained and have a low/moderate soil moisture holding capacity. Topsoil depth ranges from 10-20 cm deep. Frequent stone and gravel fragments are present throughout the soil profile with occasional stone and rock fragment on the ground surface.	Avoid situations that lead to the exposure of bare soil, therefore maintain sufficient ground cover.	Unsuitable for cropping and suitable for pastoral use with moderate/severe limitations.

Land Capability Class (ha)	Geology & Soils	Slope %	Topography & Elevation	Erosion Type & Severity	Climatic Limitations	Soil Qualities	Main Land Management Requirements	Agricultural Versatility
6ce (approx. 11.5 ha)	<p>Loamy dermosol derived from Permian mudstone geology as per the Quamby soil profile.</p> <p>Grey and brown shallow loam and clayey soils with stone and gravels present throughout the soil profile.</p>	5-40%	<p>Moderate to steep sloping and undulating ground.</p> <p>680-710m ALS</p>	Moderate/high risk. Associated with the risk of rill and sheet erosion on bare and exposed soils, the potential for degraded soil structural due to pugging from livestock movement on waterlogged soils, inappropriate and excessive ground cultivation activities, and possible mass movement.	<p>High</p> <p>This land experiences cold winters and cool summer conditions.</p> <p>Receives on average 1385 mm annual rainfall, has potentially up to 50 annual frost events, has 500 GDD (Oct to April) and up to 2000 chill hours (May to August).</p>	<p>These soils are imperfectly drained and have a low/moderate soil moisture holding capacity.</p> <p>Topsoil depth ranges from 10-20 cm deep.</p> <p>Frequent stone and gravel fragments are present throughout the soil profile with occasional stone and rock fragment on the ground surface.</p>	Avoid situations that lead to the exposure of bare soil, therefore maintain sufficient ground cover.	<p>Unsuitable for cropping and suitable for pastoral use with severe limitations.</p> <p>Please note that the majority of this area of the property is currently covered by native forest and vegetation and is not used for and/or capable of supporting agricultural land use activity.</p>



Figure 6 South easterly view towards the site of the development behind the vegetation on the left side of the image in a private location



Figure 7 North westerly view along Highland Lakes Road from the western boundary of the property.



Figure 8 Shallow gravelly brown Quamby soil profile present over much of the property

5 Proposed Development

The proposed development consists of construction of a new residential dwelling and would be located on the far south east corner of the block.

It is intended that the residential dwelling would allow the proponent to live on the property and enjoy the residential and rural bucolic amenity offered by this location.

The site of the development would be located approximately 25m lower in altitude than the Highland Lakes Road in a particularly private position.

The proposed size of the residential dwelling would be 250m² (subject to final survey) and building plans.

The separation and setback distances to the property boundaries are shown in Figure 9 and outlined in Table 3.



Figure 9 Location of the proposed development (marked with a blue dot) and nearest boundary setback distances (white lines and marked A, B, C and D)

Table 3 Nearest boundary separation distances (subject to survey)

Nearest boundary	North	South	East	West
Setback distance (m)	210	35	60	345

Three trees (*Acacia dealbata*) will be removed as part of the proposed development. These trees do not form part of a forest and/or bushland vegetation community and have been growing on land which has been previously cleared. Figure These tress species are not identified as vulnerable threatened native vegetation. This vegetation

removal ensures appropriate siting of the house on a suitable building land, optimises the aspect of the dwelling and would provide an appropriate setback buffer to the dwelling. The privacy and associated setback buffer to the southern and eastern boundary would not be impacted by this vegetation removal.



Figure 10 Tree removal (identified as 1,2 and 3) on the land in the immediate vicinity of the location of the proposed residential dwelling (marked with a blue dot) on the south eastern corner of the property in question (boundaries highlighted in blue)

Based on the location and nature of the proposed development it would not result in negative impacts to adjacent and nearby primary production and/or environmental management land nor the residential amenity of adjacent properties.

6 Water Availability

6.1 Water resources

An unnamed tributary of the Quamby Brook flows through the far eastern area of the property in a northerly direction.

A small stock water dam is present on the central eastern area of the block, with a nominal capacity of less than 1 ML.

The proponent has a stock and domestic water right to the unnamed tributary of the Quamby Brook which flows through the property.

The property is not located in a declared irrigation district.

The property is not serviced by TasWater for the provision of drinking water or sewerage services.

The proposed development will have no impact and/or negatively impact the current and/or future water resources present on the block, nor that of adjacent and nearby properties.

6.2 Storm water disposal

The storm water generated from the residential dwelling development, as would be produced from hard standing surfaces and the roof surfaces of the building would be partially collected in tanks with any overflow disposed of by in-ground absorption which is a sufficient means is to handle the quantity and flow rates of run-off generated.

7 Impact on primary production land use activity

The property in question is surrounded by land used for forestry and environmental management and for residential use on the rural resource zoned land.

Adjacent and nearby land use activity includes:

- To the west:
 - o Residential living and amenity on rural living zoned land (ranging from 3.7 to 16.5 hectare blocks)
- To the east:
 - o Plantation forestry on rural resource zoned land (18.8 hectare block)
- To the north:
 - o Fairy Glen state reserve (18 hectare block)
- To the north west:
 - o Residential living and amenity on rural living zoned land (11.6 hectare block)
- To the north east:
 - o Plantation forestry on rural resource zoned land (27.8 hectare block)
- To the south:
 - o Residential living and amenity on rural living zoned land (18.6 hectare block)

The layout and nature of the development in conjunction with the prevailing topography, elevation differences, vegetation present, separation distances to the adjacent and nearby land and nature of the adjacent land use activity would not result in increased fettering and/or negatively impacting on the current or future potential primary production activity on the adjacent and/or nearby land.

After inspecting the site, I have concluded that the nature of the proposed development and associated separation and buffer distances are sufficient to prevent unreasonable impact on primary production activities on the residential amenity and vice versa.

7.1 Potential impact of neighbouring primary production activity to the development

The key risk area is to the east where primary production land use activity would be closest, as per plantation forestry which occurs on the rural resource zoned land, however the separation distances, layout and nature of the proposed development would not result in negative impacts and/or constrain the current and future use of this land.

The plantation forestry land use activity on the property adjacent to the south occurs on rural living zoned land.

Plantation forestry would be, by the very nature of the intensity and frequency of the land use activities associated with this type of primary industry, considered low impact in terms of the potential to create conflict with adjacent residential use and amenity on rural living zoned land.

Typically, timber harvesting occurs over a period of a few weeks every 20-25 years, then subsequently tree seedlings are replanted, weed control activities may be undertaken and then the plantation forest is left to regrow typically over the following 20-25 years.

However, normal primary production land use activities (eg forestry) on the land adjacent to the east of the property in question is not expected to have any unreasonable impact on the proposed development.

The nearby residential dwelling located on 29 Riversdale Road (property title 209323/1) is surrounded by rural resource zoned land on three sides (north, east and south) and this has created an existing level of fettering and constraint on the adjacent and nearby plantation forestry land use activity on this rural resource zoned land.

An assessment of the key risks are summarised below in Table 4. This has been compiled on the basis that the neighbouring farm activities would be based on forestry use.

Table 4 Potential risk from neighbouring primary production land use activity and possible mitigation strategies

Potential Risk from Neighbouring Land Use Activity	Extent of Risk & Possible Mitigation Strategy
1. Spray drift and dust	Risk = low. Existing separation and buffer distances will mitigate the impact of sprays and dust if applied under normal recommended conditions. Aerial, ground and/or spot spraying could be potentially conducted on the adjacent land. Spraying events should be communicated in a timely manner to the inhabitants of the dwelling. The use and application of crop protection sprays are guided by the "Agvet chemicals code of practice, Code of practice for ground spraying, 2014" and "Agvet chemicals code of practice, Code of practice for aerial spraying, 2014" which details the responsibilities of land managers in relation to primary use land zoning usage and were relevant occupiers of residential dwellings. See Figure 11 for the 100m aerial spraying buffer adjacent to the non-rural resource zoned land. The existing vegetation on the property in question would assist in mitigating the potential movement of spray drift and dusts.
2. Noise from machinery	Risk = low. Very occasional machinery traffic will occur when timber harvesting, land preparation and tree planting activities are undertaken on the adjacent forestry land. The layout of the proposed development, topography, vegetation present and buffer

	distances will moderate the potential for noise impact. This is a country area and it accepted that sounds and noise associated with primary production land use activity can, will and occur.
3. Irrigation water over boundary	Risk = nil. No irrigation currently does and/or would occur on adjacent land.
4. Stock escaping and causing damage.	Risk = nil. No livestock are run on the neighbouring properties.
5. Electric fences	Risk = low. No electric fencing is present on the property boundaries.



Figure 11 Aerial spraying buffer (highlighted in red) on adjacent non-rural resource zoned land

The proposed development would not be anticipated to fetter and/or constrain the neighbouring primary production land use activity, that being for forestry land use activity.

7.2 Potential impact of development on neighbouring primary production land use activity

The potential impacts and constraints that could be imposed on neighbouring primary production from the development are usually manifested as complaints possibly made by the visitors to the proposed development against primary production practices and issues, with other risks possibly including trespass, theft and damage to the property. Table 5.

Some of these risks rely on an element of criminal intent.

Table 5 Potential impact to neighbouring agricultural land use activity on the proposed development and mitigation strategies

Potential Risk to Neighbouring Agricultural Activity	Extent of Risk & Possible Mitigation Strategy
1. Trespass	Risk = low. Mitigation measures include maintenance of sound boundary fencing (where it is appropriate, practical and suitable to erect), lockable gates and appropriate signage to warn visitors about entry onto private land; report unauthorised entry to police.
2. Theft	Risk = low. Ensure there is good quality boundary fencing (where it is appropriate, practical and suitable to erect) on neighbouring properties and appropriate signage to deter inadvertent entry to property; limit vehicle movements, report thefts to police.
3. Damage to property	Risk = low. As for theft.
4. Weed infestation	Risk = low. Risks are expected to be negligible, with the proponents committed to managing the property for weeds and undertaking ongoing and routine weed control activities.
5. Fire outbreak	Risk = low. Fire risk can be mitigated by careful operation of outside barbeques and disposal of rubbish.
6. Dog menace to neighbouring livestock	Risk = nil. No livestock are run on the adjacent properties.

7.3 Impact on residential amenity

This area of the Golden Valley is sparsely populated, see Figure 12.

Eight residential dwellings are located within 1000m of the proposed location of the residential dwelling on the property in question.

The nearest residential dwelling to the location of the proposed development would be located approximately 360m to the south east.

The topographic variation, separation distance and existing vegetation present would ensure that no negative impacts and/or disruption to the residential amenity on the closest property.



Figure 12 Nearby existing residential dwellings (green dots) within a 1000m radius (red line) of the location of the proposed residential development site (blue dot) on the property in question (outlined in blue)

7.4 Land potentially suitable for agricultural

The 2017 study by the Department of Justice, Planning Policy Unit on behalf of the Minister for Planning and Local Government into the land potentially suitable for agriculture zone identified the property in question as being excluded from the study as per its rural living land zoning. Figure 13.

In the nearby area of the property in question a single property have been identified in the study, and recognised as being constrained criteria 3, whilst the properties to the east, north west and south are excluded and land to the north and further to the east was not assessed in the study (as per the Forestry Tasmania and Park and Wildlife owned properties)

The proposed development would not result in a change to the constraint criteria 3 on the adjacent nearby land to the east of the property in question and would not result in cumulative reduction and/or negative impact in the land considered available and/or suitable for agricultural land use activity (as per forestry land use activity).



Figure 13 Land potentially suitable for agriculture zoning with the property in question (outlined in blue) excluded from the study area and the constrained criteria 3 property (green shaded) (source the LIST)

8 Compliance with Meander Valley Interim Planning Scheme

8.1 13.1.1 Zone purpose statement

Objective	
Objective	Response
13.1.1.1 To provide for residential use or development on large lots in a rural setting where services are limited.	13.1.1.1 The proposed development at 12755 Highland Lakes Road consists of a residential dwelling on an 18.6 hectare block of land where minimal services are available.
13.1.1.2 To provide for compatible use and development that does not adversely impact on residential amenity.	13.1.1.2 The proposed development is sensitive to the existing residential amenity on the adjacent rural living zoned land, and will not adversely impact them due to the nature of the development, setback distances, vegetation present, prevailing topography and private location of the site.
13.1.1.3 To provide for rural lifestyle opportunities in strategic locations to maximise efficiencies for services and infrastructure.	13.1.1.3 The proposed development would allow the proponents to enjoy the rural lifestyle and bucolic amenity associated with this property. The residential use of the rural living zoned land in this area of Golden Valley is linear in nature, and this proposed development is consistent with this approach.
13.1.1.4 To provide for a mix of residential and low impact rural uses.	13.1.1.4 The proposed development is consistent with the existing mix of residential use and low impact rural uses on adjacent and nearby properties area. The property has a very low land capability and is incapable to supporting productive agricultural land use activities.

8.2 13.1.2 Local area objectives

Objective
<p>Local area objectives, as per applicable to the Golden Valley area.</p> <p>Golden Valley:</p> <ul style="list-style-type: none"> a) To retain a low level of visibility of development through unobtrusive siting and design, including materials and finishes. b) Where development is visible, ensure that materials are non-reflective and the design integrates with the landscape. c) The retention of vegetation and lower densities, particularly on steeper slopes, is the preferred means to integrate and screen development to reduce the visual impact of buildings and access driveways from roads and neighbouring properties.
<p>Response</p> <ul style="list-style-type: none"> a) The proposed residential dwelling development would be located in a particularly private and unobtrusive setting, is screened by extensive vegetation in conjunction with topographic variation means it is would have negligible level of visibility from adjacent properties and the Highland Lakes Road. The dwelling's design and materials would be unobtrusive and sensitive to the environment. b) The proposed development would have minimal visibility and would be sensitively positioned in such a way that it integrates well into the surrounding landscape and topography. c) The proposed development would be located on land which is already cleared and open and the vegetation on the property would be preserved such that it would be screened from creating a visual impact from the Highland Lakes Road and adjacent properties.

8.3 13.1.3 Desired Future Character Statements

Statements
<p>Desired future character statements</p> <p>Golden Valley:</p> <ul style="list-style-type: none"> a) Golden Valley is characterized by predominantly forested hills with some cleared areas of pasture adjoining the Lake Highway and Tiers View Road. b) There is a linear pattern of residential uses, however with limited visibility of development as most are obscured by vegetation.
<p>Response</p> <ul style="list-style-type: none"> a) The proposed development is consistent with the landscape present along this section of Highlands Lakes Road, the cleared pastureland would be undisturbed and the balance of the forest and bushland vegetation on the block would not be cleared and/or impacted by the development. b) The proposed development is consistent with the linear pattern of development, and the nature and site of the proposed residential dwelling development is a location which offers a high level of privacy and offers very minimal visibility from the adjacent properties and the Highland Lakes Road.

8.4 13.3.1 Amenity

Objective	
<p>Objective</p> <p>To ensure that uses do not adversely impact upon the occupiers of adjoining and nearby residential uses.</p>	
<p>Acceptable Solution</p> <p>A1 If for permitted or no permit required uses.</p> <p>A2 Commercial vehicles for discretionary uses must only operate between 6.00am and 10.00pm.</p>	<p>Response</p> <p>A1 The proposed development is a single residential dwelling and is a permitted use as per Use Table 13.2.</p> <p>A2 The proposed development is not for commercial purposes. This clause does not apply.</p>

8.5 13.3.1 Rural living character

The proposed development is a permitted residential use.

8.6 13.3.2 Building design and siting

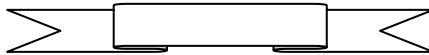
Objective	
Objective To ensure that uses do not adversely impact upon the occupiers of adjoining and nearby residential uses.	
Response The proposed development is compliant with: <ul style="list-style-type: none"> - A1: the proposed dwelling site coverage would be less than 5% of the total property area - A2: the proposed dwelling height would be less than 8 meters - A3: the proposed dwelling would be set back more than 350m from the frontage of the property. - A5: the proposed development is a single residential dwelling and is a permitted use as per Use Table 13.2. <p>The proposed development would be located within 200m of nearby rural resource zoned land and three trees will be removed as part of the proposed development, and hence the concentration on the response to Acceptable Solutions P4 and P6.</p>	
P4 Buildings must be sited so that side and rear setbacks: a) protect the amenity of adjoining dwellings by providing separation that is consistent with the character of the surrounding area having regard to the: i) impact on the amenity and privacy of habitable room windows and private open space; and ii) impact on the solar access of habitable room windows and private open space; and iii) locations of existing buildings and private open space areas; and iv) size and proportions of the lot; and v) extent to which the slope, retaining walls, fences or existing vegetation screening reduce or increase the impact of the proposed variation; and vi) local area objectives, if any; and b) protect agricultural uses on adjoining lots from constraints.	P4 a) The proposed site of the residential dwelling development would be located to ensure the amenity of the adjoining dwellings is preserved by: <ol style="list-style-type: none"> The property in questions' topography, vegetation present in conjunction with the separation distances to adjoining residential dwelling would result in no negative impacts and/or compromise the amenity and privacy of the habitable rooms and private open spaces of the proposed residential dwelling The proposed dwelling would have a northerly aspect and this would have no impact on the adjoining properties residential amenity and ensures the solar access of habitable room windows and private open spaces. The existing buildings on the property in question would not be impacted by the proposed development and no change would occur to the open spaces on the block The size and proportions of the property in question would be adjusted and/or

<p>P6: no forest, bushland or existing vegetation will be removed as part of the proposed development.</p>	<p>changed as a result of the proposed development.</p> <p>V. Three trees will be removed as part of the development. Refer to the response below to 13.3.2 P6 for detail on the minimal vegetation changes on the property. The development will not slopes and/or fences on the property and no retaining walls are present on the block.</p> <p>VI. The proposed development is consistent with the local are objectives which are applicable to the Golden Valley area.</p> <p>b) The adjacent agricultural land use activity is limited to plantation forestry on the properties to the east and north east of the property in question. Section 7 of the agricultural report provides extensive detail on the how and why the proposed development will not negatively impact and/or constrain the plantation forestry use on the adjacent land.</p> <p>P6 Three trees (<i>Acacia dealbata</i>) will be removed as part of the development, of two have already been removed. Please refer to</p> <p>These trees do not form part of a contiguous parcel of forest and/or bushland vegetation community. The trees are growing on land which would have been previously cleared and these trees have been allowed to regrow. This vegetation removal ensures appropriate siting of the house on a suitable building land, optimises the aspect of the dwelling and would provide an appropriate setback buffer to the dwelling. These tress species are not identified as vulnerable threatened native vegetation. Referencing the Forest Practices Authority "Current criteria used to assess instruments for the purposes of the Forest Practices Regulations 4(g), (h) and (l) – circumstances in which a forest practices plan is not required" the land clearing would not require a forest practices plan:</p> <ul style="list-style-type: none"> - Small scale clearing is involved, that being <1ha in size - Non-vulnerable land - Previously cleared land
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	The removal of these trees will have a negligible impact on the overall total amount and diversity of vegetation present on the property.
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9 Conclusions

1. The proposed development consists of a residential dwelling development on the property at 12755 Highland Lakes Road, Golden Valley.
2. The 12755 Highland Lakes Road property is zoned as rural living.
3. The proposed development will allow for the proponent to live on the property and enjoy the residential and rural bucolic amenity of the property.
4. Many of the potential risks to and from neighbouring residential and primary production activities have been identified. These can be mitigated and would be minimised by the location, nature and design of the various elements of the development, extensive vegetation present and the separation and buffer distances.
5. The proposed development would not result in the agricultural land use activities on the adjacent land to the east to be negatively impacted, materially diminished and/or prejudiced by the residential amenity of adjacent properties.
6. The proposed development would be compliant with the various applicable clauses of the Meander Valley Interim Planning Scheme 2013.



10 References

Department of Primary Industries, Parks, Water & Environment. 2014. Agvet Chemicals Code of Practice Code of Practice for Aerial Spraying. Tasmanian Government.

Department of Primary Industries, Parks, Water & Environment. 2014. Agvet Chemicals Code of Practice Code of Practice for Ground Spraying. Tasmanian Government.

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Grose C.J. (1999) Land Capability Handbook: Guidelines for the Classification of Agricultural Land in Tasmania. 2nd Edition, DPIWE, Tasmania.

Noble, K. E. 1993. Land Capability Survey of Tasmania. Meander, 1:100 000 map. Department of Primary Industry, Tasmania, Australia.

Noble, K. E. 1993. Land Capability Survey of Tasmania. Meander Report. Department of Primary Industry, Tasmania, 1993.

11 Declaration

I declare that I have made all the enquiries which I consider desirable or appropriate, and no matters of significance which I regard as relevant have, to my knowledge, been withheld.

Jason Lynch

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