Chief Executive Officer

Douglas Shire Council 64-66 Front Street Mossman QLD 4873

Attention: Town Planning Department

Dear Ms Brophy,

Please find attached a development application for a Material Change of Use for a Dwelling House at 127 Banabilla Road, Degarra.

Attached is DA form 1, Planning Report, Plans and the On-site effluent disposal report.

Please provide draft conditions prior to decision making.

Please provide the application fee via invoice and seek further information from the undersigned if required.

Kind regards Romany Lamond

DA Form 1 – Development application details

Approved form (version 1.3 effective 28 September 2020) made under section 282 of the Planning Act 2016.

This form **must** be used to make a development application **involving code assessment or impact assessment**, except when applying for development involving only building work.

For a development application involving **building work only**, use *DA Form 2 – Building work details*.

For a development application involving **building work associated with any other type of assessable development (i.e. material change of use, operational work or reconfiguring a lot)**, use this form (*DA Form 1*) **and** parts 4 to 6 of *DA Form 2 – Building work details*.

Unless stated otherwise, all parts of this form **must** be completed in full and all required supporting information **must** accompany the development application.

One or more additional pages may be attached as a schedule to this development application if there is insufficient space on the form to include all the necessary information.

This form and any other form relevant to the development application must be used to make a development application relating to strategic port land and Brisbane core port land under the *Transport Infrastructure Act 1994*, and airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*. For the purpose of assessing a development application relating to strategic port land and Brisbane core port land, any reference to a planning scheme is taken to mean a land use plan for the strategic port land, Brisbane port land use plan for Brisbane core port land, or a land use plan for airport land.

Note: All terms used in this form have the meaning given under the Planning Act 2016, the Planning Regulation 2017, or the Development Assessment Rules (DA Rules).

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	Romany Lamond
Contact name (only applicable for companies)	
Postal address (P.O. Box or street address)	CMB 66
Suburb	Mossman
State	QLD
Postcode	4873
Country	
Contact number	0488399166
Email address (non-mandatory)	michelerlamond@gmail.com
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

2) Owner's consent
2.1) Is written consent of the owner required for this development application?
☐ Yes – the written consent of the owner(s) is attached to this development application☑ No – proceed to 3)

PART 2 – LOCATION DETAILS

Note: P		elow and att		1) or 3.2), and 3. an for any or all _l			ne development	t application. For further information, see <u>DA</u>
3.1) Street address and lot on plan								
☐ Str	eet address	AND lot o	n plan for	lots must be liste an adjoining jetty, pontoon. A	or adja			premises (appropriate for development in
	Unit No.	Street No	o. Stre	Street Name and Type Suburb				Suburb
a)		127	Bana	Banabilla Road				Degarra
a)	Postcode	Lot No.	Plan	Type and Nu	umber (e.g. RP,	SP)	Local Government Area(s)
		5	SP1	23877				
	Unit No.	Street No	o. Stre	et Name and	Type			Suburb
b)								
D)	Postcode	Lot No.	Plan	Type and Nu	umber (e.g. RP,	SP)	Local Government Area(s)
e.(Note : P	g. channel dred lace each set o	lging in More of coordinates	ton Bay) in a separa			note area	s, over part of a	a lot or in water not adjoining or adjacent to land
Longit	ude(s)	La	ititude(s)		Datu	m		Local Government Area(s) (if applicable)
						GS84 DA94 ther:		
Co	ordinates of	premises	by easting	g and northing	9			
Eastin	g(s)	Northing	(s)) Zone Ref. Datu		m		Local Government Area(s) (if applicable)
				☐ 54	_	WGS84		
				<u> 55</u>		GDA94		
				<u></u> 56		ther:		
	dditional pre							
sch	ditional premiedule to this of the required				applica	tion and	the details of	f these premises have been attached in a
4) Iden	tify any of the	e following	that apply	to the premis	es and r	rovide a	any relevant o	details
								2000
In or adjacent to a water body or watercourse or in or above an aquifer Name of water body, watercourse or aquifer:								
On strategic port land under the <i>Transport Infrastructure Act 1994</i>								
Lot on plan description of strategic port land:								
Name of port authority for the lot:								
☐ In a	tidal area							
Name of local government for the tidal area (if applicable):								
Name of port authority for tidal area (if applicable):								
				ets (Restructur	ing and	Disposa	l) Act 2008	
Name o	of airport:							

Listed on the Environmental Management Register (EMR) ur	nder the Environmental Protection Act 1994
EMR site identification:	
Listed on the Contaminated Land Register (CLR) under the E	nvironmental Protection Act 1994
CLR site identification:	
5) Are there any existing easements over the premises?	
Note: Easement uses vary throughout Queensland and are to be identifie how they may affect the proposed development, see <u>DA Forms Guide.</u>	d correctly and accurately. For further information on easements and
☐ Yes – All easement locations, types and dimensions are inclu ☐ No	ded in plans submitted with this development application

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the first development aspect
a) What is the type of development? (tick only one box)
b) What is the approval type? (tick only one box)
□ Development permit □ Preliminary approval □ Preliminary approval that includes a variation approval □ Preliminary approval □ P
c) What is the level of assessment?
☐ Code assessment ☐ Impact assessment (requires public notification)
d) Provide a brief description of the proposal (e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):
Material Change of Use (Dwelling house)
e) Relevant plans Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <u>DA Forms guide:</u> Relevant plans.
Relevant plans of the proposed development are attached to the development application
6.2) Provide details about the second development aspect
a) What is the type of development? (tick only one box)
☐ Material change of use ☐ Reconfiguring a lot ☐ Operational work ☐ Building work
b) What is the approval type? (tick only one box)
☐ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval
c) What is the level of assessment?
☐ Code assessment ☐ Impact assessment (requires public notification)
d) Provide a brief description of the proposal (e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):
e) Relevant plans Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <u>DA Forms Guide:</u> Relevant plans.
Relevant plans of the proposed development are attached to the development application
6.3) Additional aspects of development
Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application Not required

Section 2 – Further development details

7) Does the proposed development application involve any of the following?

Material change of use	Yes – compl	ete division 1 if asses	ssable against	a local planning instr	ument	
Reconfiguring a lot	☐ Yes – compl	ete division 2				
Operational work	Yes – complete division 3					
Building work						
Division 1 — Material cl Note: This division is only requ assessable against a loc	ired to be completed	d if any part of the develop ent.	oment application	involves a material change	of use	
8.1) Describe the proposed mate	erial change of ι	use				
Provide a general description of proposed use		de the planning scher e each definition in a new i		Number of dwelling units (if applicable)	Gross floor area (m²) (if applicable)	
Dwelling House	Dwelli	ing House		1		
8.2) Does the proposed use invo		existing buildings on t	he premises?			
Note: This division is only requ		d if any part of the develop	ment application	involves reconfiguring a lot.		
9.1) What is the total number of	existing lots ma	king up the premises	?			
9.2) What is the nature of the lot	reconfiguration	? (tick all applicable boxe	s)			
Subdivision (complete 10))		Dividing land	d into parts by	agreement (complete 1	1))	
Boundary realignment (comple	ete 12))		Creating or changing an easement giving access to a lot from a constructed road (complete 13))			
10) Subdivision						
10.1) For this development, how	many lots are b	peing created and wh	at is the inten	ded use of those lots:		
Intended use of lots created	Residential	Commercial	Industrial	Other, please	e specify:	
Number of lots created						
10.2) Will the subdivision be started Yes – provide additional details. No						
How many stages will the works	include?					
What stage(s) will this developm apply to?	ent application					
11) Dividing land into parts by agparts?	greement – how	many parts are being	g created and	what is the intended ι	use of the	

Number of parts cre	eated						
12) Boundary realig	nmont						
12.1) What are the		nd pn	roposed areas	for each lo	t comprisina	the premises?	
	Curre		<u> </u>		у	•	posed lot
Lot on plan descrip	tion	Are	ea (m²)		Lot on plan	description	Area (m ²)
10.0) \//hat is the ma	and for	ا مطا		ava sa a sat2			
12.2) What is the re	eason tor	tne t	ooundary reali	gnment?			
13) What are the di (attach schedule if there				existing ea	sements bei	ng changed and	l/or any proposed easement?
Existing or	Width (ı		Length (m)		f the easeme	ent? (e.g.	Identify the land/lot(s)
proposed?				pedestrian a	ccess)		benefitted by the easement
Division 3 -	•			ed if any part o	f the developme	ent application involv	ves operational work.
14.1) What is the na					r ino dovolopino	те арричанот то	oo oporational work.
Road work				Stormwate			frastructure
☐ Drainage work☐ Landscaping] Earthwork] Signage	S	~	infrastructure vegetation
Other – please s	specify:		_	1 - 19 - 1-19 -			,
14.2) Is the operation	onal work	nec	essary to facil	itate the cre	ation of new	lots? (e.g. subdivis	sion)
Yes – specify nu	ımber of ı	new	lots:				
⊠ No			-f.th				
14.3) What is the m	ionetary v	/alue	of the propos	ed operatio	nai work? (in	clude GST, material	s and labour)
PART 4	– ASS	ES:	SMENT M	ANAGE	R DETAI	LS	
15) Identify the ass	essment	man	ager(s) who w	ill he asses	sing this dev	elonment applic	ation
Douglas Shire Cou		main	agor(o) who w	50 00000	onig tino dov	оюртноги аррио	auon
16) Has the local go	overnmer	ıt agı	reed to apply	a supersede	ed planning s	cheme for this o	levelopment application?
Yes – a copy of The local govern					•	• •	request – relevant documents
⊠ No							

PART 5 – REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements? *Note: A development application will require referral if prescribed by the* Planning Regulation 2017.

No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6
Matters requiring referral to the Chief Executive of the Planning Act 2016:
☐ Clearing native vegetation
Contaminated land (unexploded ordnance)
Environmentally relevant activities (ERA) (only if the ERA has not been devolved to a local government)
☐ Fisheries – aquaculture
Fisheries – declared fish habitat area
☐ Fisheries – marine plants
☐ Fisheries – waterway barrier works
☐ Hazardous chemical facilities
☐ Heritage places – Queensland heritage place (on or near a Queensland heritage place)
☐ Infrastructure-related referrals – designated premises
☐ Infrastructure-related referrals – state transport infrastructure
☐ Infrastructure-related referrals – State transport corridor and future State transport corridor
☐ Infrastructure-related referrals – State-controlled transport tunnels and future state-controlled transport tunnels
☐ Infrastructure-related referrals – near a state-controlled road intersection
☐ Koala habitat in SEQ region – interfering with koala habitat in koala habitat areas outside koala priority areas
☐ Koala habitat in SEQ region – key resource areas
☐ Ports – Brisbane core port land – near a State transport corridor or future State transport corridor
☐ Ports – Brisbane core port land – environmentally relevant activity (ERA)
☐ Ports – Brisbane core port land – tidal works or work in a coastal management district
Ports – Brisbane core port land – hazardous chemical facility
☐ Ports – Brisbane core port land – taking or interfering with water
☐ Ports – Brisbane core port land – referable dams
☐ Ports – Brisbane core port land – fisheries
Ports – Land within Port of Brisbane's port limits (below high-water mark)
☐ SEQ development area
☐ SEQ regional landscape and rural production area or SEQ rural living area – tourist activity or sport and recreation activity
☐ SEQ regional landscape and rural production area or SEQ rural living area – community activity
☐ SEQ regional landscape and rural production area or SEQ rural living area – indoor recreation
☐ SEQ regional landscape and rural production area or SEQ rural living area – urban activity
☐ SEQ regional landscape and rural production area or SEQ rural living area – combined use
☐ Tidal works or works in a coastal management district
Reconfiguring a lot in a coastal management district or for a canal
☐ Erosion prone area in a coastal management district
☐ Urban design
☐ Water-related development – taking or interfering with water
☐ Water-related development – removing quarry material (from a watercourse or lake)
☐ Water-related development – referable dams
☐ Water-related development –levees (category 3 levees only)
☐ Wetland protection area
Matters requiring referral to the local government:
☐ Airport land
Environmentally relevant activities (ERA) (only if the ERA has been devolved to local government)
Heritage places – Local heritage places
Matters requiring referral to the Chief Executive of the distribution entity or transmission entity:
☐ Infrastructure-related referrals – Electricity infrastructure

Matters requiring referral to:				
The Chief Executive of the holder of the licence, if not an individual				
 The holder of the licence, if the holder of the licence is an individual Infrastructure-related referrals – Oil and gas infrastructure 				
Matters requiring referral to the Brisbane City Council: Ports – Brisbane core port land				
	nistoring the Transport Infrastruc	sture Act 1004		
Matters requiring referral to the Minister responsible for admi Ports – Brisbane core port land (where inconsistent with the Brisbane)		ture Act 1994;		
Ports – Strategic port land	te port LOT for transport reasons)			
Matters requiring referral to the relevant port operator , if appl Ports – Land within Port of Brisbane's port limits (below high-				
Matters requiring referral to the Chief Executive of the relevan Ports – Land within limits of another port (below high-water man)				
Matters requiring referral to the Gold Coast Waterways Autho Tidal works or work in a coastal management district (in Gold				
	·			
Matters requiring referral to the Queensland Fire and Emerge Tidal works or work in a coastal management district (involvin				
18) Has any referral agency provided a referral response t	or this development application?	?		
☐ Yes – referral response(s) received and listed below ar☐ No	e attached to this development a	application		
Referral requirement	Referral agency	Date of referral response		
Identify and describe any changes made to the proposed of referral response and this development application, or incl. (if applicable).				
PART 6 – INFORMATION REQUES	т			
19) Information request under Part 3 of the DA Rules				
☑ I agree to receive an information request if determined	necessary for this development	application		
☐ I do not agree to accept an information request for this	development application			
Note: By not agreeing to accept an information request I, the applicant, a	_			
 that this development application will be assessed and decided bat application and the assessment manager and any referral agencie Rules to accept any additional information provided by the applican parties 	s relevant to the development application	n are not obligated under the DA		
 Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules. 				
Further advice about information requests is contained in the <u>DA Forms</u>	Guiae.			

PART 7 – FURTHER DETAILS

20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)	
Yes – provide details below or include details in a schedule to this development application	

□No				
List of approval/development application references	Reference number	Date		Assessment manager
☐ Approval ☐ Development application				
☐ Approval ☐ Development application				
21) Has the portable long service	leave levy been paid? (only applica	able to develop	ment applications invol	ving building work or operational work)
Yes – a copy of the receipted	QLeave form is attached to this o	developmen	t application	
manager decides the develop	ide evidence that the portable lo ment application. I acknowledge lence that the portable long servi	that the as	sessment manager	-
Not applicable (e.g. building of	and construction work is less than	\$150,000 e	excluding GST)	
Amount paid	Date paid (dd/mm/yy)		QLeave levy num	ber (A, B or E)
\$				
	1			
22) Is this development application	on in response to a show cause n	otice or req	uired as a result of	an enforcement notice?
Yes – show cause or enforcem No	nent notice is attached			
23) Further legislative requirer	nents			
Environmentally relevant ac	<u>tivities</u>			
23.1) Is this development appl Environmentally Relevant A				
	ent (form ESR/2015/1791) for nent application, and details ar			
⊠ No				
Note : Application for an environmental requires an environmental authority to				n at <u>www.qld.gov.au</u> . An ERA
Proposed ERA number:			RA threshold:	
Proposed ERA name:		-		
Multiple ERAs are applicabe this development application	le to this development applica on.	tion and th	e details have be	en attached in a schedule to
Hazardous chemical facilitie	<u>s</u>			
23.2) Is this development appl	ication for a hazardous chem	ical facilit	y ?	
Yes – Form 69: Notification application	of a facility exceeding 10% of	f schedule	15 threshold is at	tached to this development
⊠ No			15	
Note: See www.business.qld.gov.au t	or turther information about hazardou	s chemical no	otifications.	

Clearing native vegetation

23.3) Does this development application involve **clearing native vegetation** that requires written confirmation that the chief executive of the *Vegetation Management Act 1999* is satisfied the clearing is for a relevant purpose under section 22A of the *Vegetation Management Act 1999*?

 Yes – this development application includes written confirmation from the chief executive of the Vegetation Management Act 1999 (s22A determination) No
Note: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included, the development application is prohibited development. 2. See https://www.qld.gov.au/environment/land/vegetation/applying for further information on how to obtain a s22A determination.
Environmental offsets
23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a prescribed environmental matter under the <i>Environmental Offsets Act 2014</i> ?
 Yes − I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter No
Note : The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.
Koala habitat in SEQ Region
23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?
Yes – the development application involves premises in the koala habitat area in the koala priority area
Yes – the development application involves premises in the koala habitat area outside the koala priority area
No Note: If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this
development application. See koala habitat area guidance materials at <u>www.des.qld.gov.au</u> for further information.
Water resources
23.6) Does this development application involve taking or interfering with underground water through an
artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking
overland flow water under the <i>Water Act 2000</i> ?
 Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the <i>Water Act 2000</i> may be required prior to commencing development No
Note: Contact the Department of Natural Resources, Mines and Energy at www.dnrme.gld.gov.au for further information.
DA templates are available from https://planning.dsdmip.qld.gov.au/ . If the development application involves:
Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1
 Taking or interfering with water in a watercourse, lake or spring: complete DA Form1 Template 2 Taking overland flow water: complete DA Form 1 Template 3.
Waterway barrier works
23.7) Does this application involve waterway barrier works?
☐ Yes – the relevant template is completed and attached to this development application
⊠ No
DA templates are available from https://planning.dsdmip.qld.gov.au/ . For a development application involving waterway barrier works, complete DA Form 1 Template 4.
Marine activities
23.8) Does this development application involve aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?
Yes – an associated <i>resource</i> allocation authority is attached to this development application, if required under the <i>Fisheries Act 1994</i>
No Note: See guidance materials at www.daf.gld.gov.au for further information.
Quarry materials from a watercourse or lake
23.9) Does this development application involve the removal of quarry materials from a watercourse or lake
under the <i>Water Act 2000?</i>

☐ Yes – I acknowledge that a ⊠ No	a quarry material allocation notice must be obtained prior to commencing development
_	ural Resources, Mines and Energy at <u>www.dnrme.qld.gov.au</u> and <u>www.business.qld.gov.au</u> for further
Quarry materials from land	under tidal waters
23.10) Does this development under the Coastal Protection a	application involve the removal of quarry materials from land under tidal water and Management Act 1995?
☐ Yes – I acknowledge that a ⊠ No	a quarry material allocation notice must be obtained prior to commencing development
Note: Contact the Department of Env	ironment and Science at <u>www.des.qld.gov.au</u> for further information.
Referable dams	
	application involve a referable dam required to be failure impact assessed under bly (Safety and Reliability) Act 2008 (the Water Supply Act)?
•	g a Failure Impact Assessment' from the chief executive administering the Water nis development application
	v.dnrme.qld.qov.au for further information.
	within a coastal management district
	application involve tidal work or development in a coastal management district?
Evidence the propos if application involves pre A certificate of title No	ded with this development application: all meets the code for assessable development that is prescribed tidal work (only required escribed tidal work) v.des.qld.gov.au for further information.
Queensland and local herita	ge places
23.13) Does this development	application propose development on or adjoining a place entered in the Queensland se entered in a local government's Local Heritage Register ?
⊠ No	e place are provided in the table below
	v.des.gld.gov.au for information requirements regarding development of Queensland heritage places.
Name of the heritage place:	Place ID:
Brothels 23 14) Does this development	application involve a material change of use for a brothel?
	plication demonstrates how the proposal meets the code for a development
	der Schedule 3 of the <i>Prostitution Regulation 2014</i>
Decision under section 62 o	f the Transport Infrastructure Act 1994
23.15) Does this development	application involve new or changed access to a state-controlled road?
	be taken to be an application for a decision under section 62 of the <i>Transport</i> bject to the conditions in section 75 of the <i>Transport Infrastructure Act 1994</i> being
Walkable neighbourhoods a	ssessment benchmarks under Schedule 12A of the Planning Regulation
	application involve reconfiguring a lot into 2 or more lots in certain residential zones s), where at least one road is created or extended?

Yes – Schedule 12A is applicable to the development application and the assessment benchmarks contained in
schedule 12A have been considered
⊠ No
Note: See guidance materials at www.planning.dsdmip.qld.gov.au for further information.

PART 8 - CHECKLIST AND APPLICANT DECLARATION

24) Development application checklist	
I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17 Note: See the Planning Regulation 2017 for referral requirements	⊠ Yes
If building work is associated with the proposed development, Parts 4 to 6 of <u>DA Form 2 – Building work details</u> have been completed and attached to this development application	☐ Yes ☑ Not applicable
Supporting information addressing any applicable assessment benchmarks is with the development application Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see DAForms Guide: Planning Report Template .	⊠ Yes
Relevant plans of the development are attached to this development application Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see <u>DA Forms Guide: Relevant plans.</u>	⊠ Yes
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)	☐ Yes ☑ Not applicable
25) Applicant declaration	
By making this development application, I declare that all information in this development correct	application is true and
Where an email address is provided in Part 1 of this form, I consent to receive future electrom the assessment manager and any referral agency for the development application was required or permitted pursuant to sections 11 and 12 of the <i>Electronic Transactions Act</i>	here written information

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application. All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

Personal information will not be disclosed for a purpose unrelated to the *Planning Act 2016*, Planning Regulation 2017 and the DA Rules except where:

- such disclosure is in accordance with the provisions about public access to documents contained in the *Planning Act 2016* and the Planning Regulation 2017, and the access rules made under the *Planning Act 2016* and Planning Regulation 2017; or
- required by other legislation (including the Right to Information Act 2009); or
- otherwise required by law.

This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002.*

PART 9 – FOR COMPLETION OF THE ASSESSMENT MANAGER – FOR OFFICE USE ONLY

Date received:	Reference numb	per(s):	
Notification of engagement of a	alternative assessment manager		
Prescribed assessment manager			
Name of chosen assessment ma	nager		
Date chosen assessment manage	er engaged		
Contact number of chosen assessment manager			
Relevant licence number(s) of chosen assessment manager			
QLeave notification and payment			
Note: For completion by assessment manager if applicable			
Description of the work			
QLeave project number			
Amount paid (\$)		Date paid (dd/mm/yy)	
Date receipted form sighted by assessment manager			
Name of officer who sighted the form			

1. Introduction

This development application seeks to obtain a retrospective Material Change of Use development permit for a dwelling house at 127 Banabilla Road, Degarra. A previous owner has constructed the existing house and sheds and Councils records do not include a property file for the land. Whether the property file existed is under question, however, for completeness please accept this retrospective development application for a material change of use to permit the dwelling house and ancillary domestic outbuildings. The site is part zoned Rural and part zoned Environmental Management and the application is code assessable against the 2018 Douglas Shire Planning Scheme within the rural zone due to overlay code compliance for the dwelling house and adjacent shed and is code assessable for the lower shed within the Environmental Management Zone however it achieves compliance with the benchmarks.

2. Proposal

Proposed to Council is the development of a dwelling house and ancillary outbuildings at 127 Banabilla Road, Degarra via a code assessable material change of use development application.

The proposal consists of two domestic outbuildings (sheds) for storage and a class 1a dwelling house. See figure 1 below for imagery of the existing house.

The dwelling has been assessed by an RPEQ structural engineer and has been deemed to satisfy the BCA subject to minor structural improvements required in lieu of any historic copies of certified detailed design plans to bring the structure up to current standards.

The house is a single bedroom 142 square metre elevated steel frame pole home. The house is single level and is sited on the hillslope facing north with its footings at levels decreasing down the hill instead of resulting in a slab on ground cut and fill solution. The driveway is existing and is well designed with a 4m width, effective spoon drains, passing bays and hill side crossfall.



Figure 1: Existing house for approval

3. Site Characteristics

The site is a 3.1 hectare allotment with split zoning as the title is split by Banabilla Road and connected by a vinculum. The section where the house is sited is within the Rural Zone and is a hillslope area surrounded by vegetation. The house and shed are within an existing clearing in the order of 900 square metres. The other shed across Banabilla Road is within the Environmental Management Zone where the section of land is all cleared with the exception of some small self sewn regrowth trees.

The house has a single car garage adjacent to it with an area behind it for vehicle manouvering and an established access driveway which has stood the test of time with quality drainage design, two passing bays, crossfall towards the hill and a gravel base. Existing on site are two 22,500 litre water storage tanks supplied by roof water and a bore at the bottom of the hill.

Existing is a functional primary treatment septic system confirmed by the soil test and design report by Earthtest. Earthtest have designed a new AES system in another location in front of the house in the event that the existing primary treatment septic system land application area fails.

The site is sloping with an existing driveway which follows the contours of the land. The driveway has a number of spoon drains diverting surface water. Cut solutions make up the driveway but no fill and generally the driveway is cut down to where bedrock starts less than 2m below the surface. See Figures 2, 3 and 4 for evidence of sufficient width, crossfall, drainage and overall good engineering design with minimal to no scouring over time.



Figure 2: Upper passing bay and crossfall



Figure 3: Driveway mid way up hill



Figure 4:Lower passing bay



Figure 5: Drainage and driveway near house

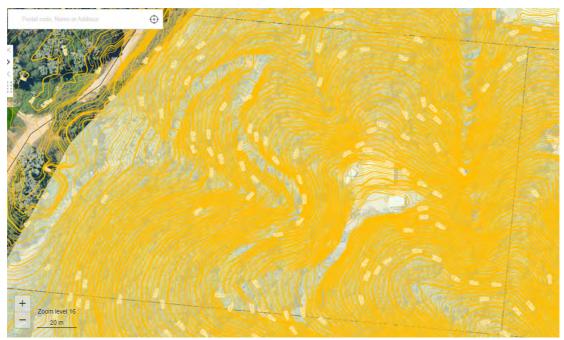


Figure 6. Driveway alignment from Councils' online interactive mapping tool.

The development area for the house is made up of three excavated pads with 2m high cuts. The top pad is for vehicle parking and manoeuvring and includes a garage shed and drainage features taking water away from the house, the middle pad area supports the majority of the house structure and water tanks. The smaller pad area 1m below supports the veranda.

These are no large boulders up-hill from the house, only cuts limited by the identification of hard bedrock. The certifying structural engineer has issued structural RPEQ certification for the house without the need for geotechnical risk assessment as the 9 footings are bored to bedrock and no building on fill has occurred. The Structural RPEQ has ordered some structural upgrades to occur but these are not in response to risk of slip. They relate to bracing and structural torsions affected by wind loading. The structural certification has been issued without the need for Geotech assessment as slip risk is minimal due to the depth of bedrock at all nine footings which has been tested with a dynamic cone penetrometer. See Figure 6 below showing dynamic cone penetrometer bedrock depth testing.



Figure 7: Downslope footing dynamic cone penetrometer bedrock depth survey

- 4. The proposal for the house and adjacent shed are self assessable in the Rural Zone, however, compliance with the acceptable solutions from the bushfire hazard overlay code, the hillslopes overlay code and the filling and excavation code need to be demonstrated as there are acceptable solutions which cannot be complied with.
 - The shed on the part of the land within the Environmental Management Zone triggers code assessment for its component of the material change of use as the dwelling house use inclusive of ancillary sheds is code assessable within the tables of assessment and the shed is within the flood plain assessment overlay area. It is not known whether the shed down on the lower part of the land within the Environmental Management Zone and Flood and Storm Tide Hazard overlay area floods. It should be noted that the slab level of this shed is 500mm above existing ground. Council is invited to condition that the shed floor level is to be immune of the 1% AEP level prior to the issue of a development permit for building work unless a specific level can be provided by Council.

For clarity, Table 1 below provides a summary of non-complying acceptable outcomes which have been addressed for assessment.

Scheme Component	Acceptable Solution	Alternative Solution
Rural Zone Code	White and shining metallic finishes are avoided on external surfaces of buildings.	Does not comply with AO3. The house is clad in Dulux True Blue and the Roof is colorbond surfmist. However the significant setbacks and location of the house on the land surrounded by dense remnant vegetation in a sma clearing render the house invisible from any other land in the Douglas Shire and from any public areas in the Douglas Shire thereby maintaining the Rural character of the area and complying with PO3.
Environmental Management Zone Code	Buildings and Structures are set back not more than 6 metres from the road frontage.	Does not comply with AO2 at the shed within the Environmental Management Zoned land is sited 1 metre from the esplanade frontage to an unconstructed part of the road. This section of road provides no formalised access to any other allotments and does not require formalisation. The character of the area is not affected by the reduced setback and the performance criteria is achieved with the 1 metre frontage setback to the shed

Hillslopes Overlay Code

AO1.1

Development is located on parts of the site that are not within the Hillslopes constraint sub-category as shown on the Hillslopes overlay Maps contained in schedule 2.

Cannot comply with AO1.1 because the entire site other than flood prone areas at low sections are within the Hillslopes Overlay Code. However, the proposal complies with PO1 because the house is situated in the centre of a clearing in the middle of the allotment surrounded by dense remnant and tall vegetation. This means that the house is not visible from any public areas within the Douglas Shire or from any neighbouring houses in the shire.

AO2.7

Buildings and structures:

- (a) are finished predominantly in the following exterior colours or surfaces:
- (b) moderately dark to darker shades of olive green, brown, green, blue, or charcoal; or
- (c) moderately dark to darker wood stains that blend with the colour and hues of the surrounding vegetation and landscape;
- (d) are not finished in the following exterior colours or surfaces:
- (e) pastel or terracotta colours, reds, yellows, shades of white or beige, or other bright colours that do not blend with the surrounding vegetation and landscape;
- (f) reflective surfaces.

AO2.8

Exterior colour schemes limit the use of white or other light colours to exterior trim and highlighting of architectural features AO2.7 and AO2.8 are not complied with as the roof is colorbond surfmist. However, the house is not visible from any public or private vantage points in the Douglas Shire so the hillslope backdrop is not affected by its appearance.

AO3

Excavation or fill:

- (a) is not more than 1.2 metres in height for each batter or retaining wall;
- (b) is setback a minimum of 2 metres from property boundaries;
- (c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 Landscaping;
- (d) does not exceed a maximum of 3 batters and 3 berms (i.e. not greater than 3.6 metres in height) on any one lot.

The proposal does not comply with A03 as the house pad includes cuts in the order of 2m high stepped down the hill. The cuts are stable and expose bedrock below a shallow layer of topsoil demonstrating stability. The proposal complies with PO3 because the house is sited in front of the cuts and is developed on posts minimising the extent of excavation. The house is developed in the centre of the allotment which is set back greater than 20 metres from any common boundaries.

Bushfire Hazard Overlay Code

AO10

Buildings or building envelopes are separated from hazardous vegetation by a distance that:

- (a) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and
- (b) is contained wholly within the development site.

AO10 is likely compliant however this is to be confirmed at Building approval stage as the radiant heat flux level is a consideration under AS3959-2009 for external cladding. Council should not impose a condition reflective of AO10 as this is the responsibility of the building certifier. Further, there is an exemption under the Building Code for rainforest species surrounding a house. It is likely that the certifier will rely on this. At the most Council should impose a condition requiring 'compliance with AS3959-2009.'

AO11

Development sites are separated from hazardous vegetation by a public road or fire trail which has:

- (a) a reserve or easement width of at least 20m:
- (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;
- (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path;
- (d) a minimum of 4.8m vertical clearance;
- (e) turning areas for firefighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;
- (f) a maximum gradient of 12.5%;
- (g) a cross fall of no greater than 10 degrees;
- (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy;
- (i) vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m;
- (j) designated fire trail signage;
- (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and
- (I) if a fire trail, has an access easement that is granted in favour of Council and Queensland

Does not comply with AO11. There are no public roads or fire trails that separate the development site from bushfire risk areas. The topography does not allow practical clearing of these. Further, the vegetation surrounding the house is rainforest species.

The local Rural fire truck has been to the house before, however, if there was a bush fire it is unlikely that the truck would traverse the driveway for risk of being caught by the fire.

Auxillery fire fighters utilise a relay technique and standard trucks carry atleast 7 hoses able to be connected together achieving a relayed solution whereby the hose is carried up the hill to the house.

Fire and Emergency Services.	

AO12

Private driveways:

- (a) do not exceed a length of 60m from the street to the building;
- (b) do not exceed a gradient of 12.5%;
- (c) have a minimum width of 3.5m;
- (d) have a minimum of 4.8m vertical clearance;
- (e) accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and
- (f) serve no more than 3 dwellings or buildings.

AO12 is not complied with. The driveway is in the order of 300 metres long and includes a section that is 1 in 4 slope. The proposal includes a driveway that is generally 5 metres wide. Safe evacuation is easily achievable. The local rural fire brigade is equipped with a rural appliance which can access the house.

Filling and Excavtion Code

AO2.2

Filling and excavation does not occur within 2 metres of the site boundary.

Does not comply with AO2.2. Some earthworks have occurred close to the boundary (within 1 metre) of the adjoining hillslope property to the south to provide for practical driveway construction. The driveway earthworks are contained to the land. Importantly, the dozer cut is not in an area visible from any location outside the driveway locality on the hillslope its self. The adjacent land remains undeveloped in the immediate area and therefore no privacy or stability issues are caused by the work within the 2m boundary setback area in accordance with PO2.

6.2.10 Rural zone code

6.2.10.1 Application

- (1) This code applies to assessing development in the Industry zone.
- (2) When using this code, reference should be made to Part 5.

6.2.10.2 Purpose

- (1) The purpose of the Rural zone code is to provide for:
 - (a) provide for rural uses including cropping, intensive horticulture, intensive animal industries, animal husbandry, animal keeping and other primary production activities;
 - (b) provide opportunities for non-rural uses, such as ancillary tourism activities that are compatible with agriculture, the environmental features, and landscape character of the rural area where the uses do not compromise the long-term use of the land for rural purposes;
 - (c) protect or manage significant natural resources and processes to maintain the capacity for primary production.
- (2) The local government purpose of the code is to:
 - (a) implement the policy direction set in the Strategic Framework, in particular:
 - (i) Theme 2: Environment and landscape values, Element 3.5.5 Scenic amenity.
 - (ii) Theme 3: Natural resource management, Element 3.6.2 Land and catchment management, Element 3.6.3 Primary production, forestry and fisheries, Element 3.6.4 Resource extraction.
 - (iii) Theme 5 Economy, Element 3.8.2 Economic growth and diversification, Element 3.8.4 Primary production.
 - (iv) Theme 6: Infrastructure and transport, Element 3.9.4 Transport.
 - (b) recognise the primacy of rural production, in particular sugar cultivation, and other farming practices in rural areas;
 - (c) provide protection to areas of ecological significance and scenic amenity significance where present.
- (3) The purpose of the code will be achieved through the following overall outcomes:
 - (a) Areas for use for primary production are conserved and fragmentation is avoided.
 - (b) Development embraces sustainable land management practices and contributes to the amenity and landscape of the area.
 - (c) Adverse impacts of land use, both on-site and on adjoining areas, are avoided and any unavoidable impacts are minimised through location, design, operation and management.
 - (d) Areas of remnant and riparian vegetation are retained or rehabilitated.

Criteria for assessment

Table 6.2.10.3.a - Rural zone code assessable development

Performance outcomes	Acceptable outcomes	Applicant response	
For self-assessable and assessable development			
PO1 The height of buildings is compatible with the rural character of the area and must not detrimentally impact on visual landscape amenity.	AO1.1 Dwelling houses are not more than 8.5 metres in height. Note – Height is inclusive of roof height. AO1.2 Rural farm sheds and other rural structures are not more than 10 metres in height.	Complies, the house is 7m high.	

Performance outcomes	Acceptable outcomes	Applicant response
Setbacks		
PO2 Buildings and structures are setback to maintain the rural character of the area and achieve separation from buildings on adjoining properties.	Buildings are setback not less than: (a) 40 metres from the property boundary and a State-controlled road; (b) 25 metres from the property boundary adjoining Cape Tribulation Road; (c) 20 metres from the boundary with any other road; (d) 6 metres from side and rear property boundaries.	Complies
PO3 Buildings/structures are designed to maintain the rural character of the area.	AO3 White and shining metallic finishes are avoided on external surfaces of buildings.	Does not comply with AO3 due to roof colour, see comment above in section4.
For assessable development		
PO4 The establishment of uses is consistent with the outcomes sought for the Rural zone and protects the zone from the intrusion of inconsistent uses.	AO4 Uses identified in Table 6.2.10.3.b are not established in the Rural zone.	Complies, Dwelling Houses are accepted Development in the Table of assessment

Perfor	mance outcomes	Acceptable outcomes	Applicant response
include (a) p	and other development to those that: cromote rural activities such as agriculture, rural enterprises and small scale industries that serve rural activities; or cromote low impact tourist activities based on the appreciation of the rural character, landscape and rural activities; or are compatible with rural activities.	AO5 No acceptable outcomes are prescribed.	Complies
watero to area or area	g native vegetation along ourses and in, or adjacent is of environmental value, as of remnant vegetation e is protected.	AO6 No acceptable outcomes are prescribed.	Complies, no vegetation along watercourses is proposed for removal
hectare (a) t (b) t	inimum lot size is 40 es, unless the lot reconfiguration results in no additional lots (e.g. amalgamation, boundary realignments to resolve encroachments); or the reconfiguration is limited to one additional lot to accommodate: (i)	AO7 No acceptable outcomes are prescribed.	n/a

Table 6.2.10.3.b - Inconsistent uses within the Rural zone.

Inco	neiei	USes

- Adult store
- Bar
- Brothel
- Car wash
- Child care centre
- Club
- Community care centre
- Community residence
- · Detention facility,
- Dual occupancy
- Dwelling unit
- Food and drink outlet
- Hardware and trade supplies
- Health care services
- High impact industry

- Hotel
- Indoor sport and recreation
- Low impact industry
- Medium impact industry
- Multiple dwelling
- Nightclub entertainment facility
- Non-resident workforce accommodation
- Office
- Outdoor sales
- Parking station
- Permanent plantation
- Port services
- Relocatable home park
- Renewable energy facility, being a wind farm

- Residential care facility
- Resort complex
- Retirement facility
- Rooming accommodation
- Sales office
- Service station
- Shop
- Shopping centre
- Short-term accommodation
- Showroom
- Special industry
- Theatre
- Warehouse

Note – This table does not imply that all other uses not listed in the table are automatically consistent uses within the zone. Assessable development must still demonstrate consistency through the assessment process.

8.2.5 Hillslopes overlay code

8.2.5.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational work or building work within the Hillslopes overlay, if:
 - (a) self assessable or assessable development where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
 - (b) impact assessable development.
- (2) Land in the Hillslopes overlay is identified on the Hillslopes overlay map in Schedule 2 and includes the following sub-categories:
 - (a) Hillslopes constraint sub-category.
- (3) When using this code, reference should be made to Part 5.

8.2.5.2 Purpose

- (1) The purpose of the Hillslopes overlay code is to:
 - (a) implement the policy direction in the Strategic Framework, in particular:
 - (i) Theme 1 Settlement pattern: Element 3.4.7 Mitigation of hazards;
 - (ii) Theme 2 Environment and landscape values: Element 3.5.5 Scenic amenity.
 - (b) enable an assessment of whether development is suitable on land within the Hillslopes sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development on hillslopes is safe, serviceable and accessible;
 - (b) the ecological values, landscape character and visual quality of the hillslopes are protected from development so as to retain the scenic backdrop to the region;
 - (c) Development on hillslopes is appropriate, having regard to the topographic constraints and environmental characteristics of the land;
 - (d) Development responds to the constraints of the site including gradient and slope stability;
 - (e) Works do not involve complex engineering solutions.

Criteria for assessment

Table 8.2.5.3.a - Hillslopes overlay code -assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable development		
PO1 The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.	AO1.1 Development is located on parts of the site that are not within the Hillslopes constraint sub-category as shown on the Hillslopes overlay Maps contained in schedule 2.	Cannot comply with AO1.1. See comment in section 4 . Complies with PO1
For assessable development		

Performance outcomes	Acceptable outcomes	Applicant response
The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.	AO2.1 Development does not occur on land with a gradient in excess of 1 in 6 (16.6%) or AO2.2 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the site. AO2.3 Access ways and driveways are: (a) constructed with surface materials that blend with the surrounding environment; (b) landscaped with dense planting to minimise the visual impact of the construction; (c) provided with erosion control measures immediately after construction.	Complies with AO2.2, the natural contours of the site have been followed. Complies with AO2.3, an existing formed and drained gravel driveway services the house.
	AO2.4 The clearing or disturbance of vegetation is limited to clearing and disturbance that: (a) is necessary for the construction of driveways; (b) is necessary to contain the proposed development; (c) minimises canopy clearing or disturbance; (d) minimises riparian clearing or disturbance. AO2.5 On land with slopes greater than 1 in 6 (16.6%) or greater, alternative construction methods to concrete slab on ground are utilised (i.e. split level or post and beam constructed buildings that minimise modification to the natural terrain of the land). AO2.6	AO2.4 is complied with, only clearing for a driveway and small house pad has been undertaken. Complies with AO2.5, post and beam construction has been used. Complies with AO2.6, the development is not on the top of a hill or ridge line. Does not comply with AO2.7. The roof is colourbond surfmist. See comment above in section 4.

Performance outcomes	Acceptable outcomes	Applicant response	
	Development does not alter the sky line.		
	AO2.7 Buildings and structures: (a) are finished predominantly in the following exterior colours or surfaces: (b) moderately dark to darker shades of olive green, brown, green, blue, or charcoal; or (c) moderately dark to darker wood stains that blend with the colour and hues of the surrounding vegetation and landscape; (d) are not finished in the following exterior colours or surfaces: (e) pastel or terracotta colours, reds, yellows, shades of white or beige, or other bright colours that do not blend with the surrounding vegetation and landscape; (f) reflective surfaces. AO2.8 Exterior colour schemes limit the	AO2.8 is not complied with	
	use of white or other light colours to exterior trim and highlighting of architectural features	AO2.9 complies with existing dense vegetation.	
	AO2.9 Areas between the first floor (including outdoor deck areas) and ground level are screened from view.	AO2.10 complies as there are no rec features or	
	AO2.10 Recreational or ornamental features (including tennis courts, ponds or swimming pools) do not occur on land: (a) with a gradient of 1 in 6 (16.6%) or more; (b) are designed to be sited and respond to the natural constraints of the land and require minimal earthworks	ornamental features.	
PO3 Excavation or filling does not have an adverse impact on the amenity, safety, stability or function of the site or adjoining premises through: (a) loss of privacy; (b) loss of access to sunlight;	AO3 Excavation or fill: (a) is not more than 1.2 metres in height for each batter or retaining wall; (b) is setback a minimum of 2 metres from property boundaries;	The proposal does not comply with A03 as the house pad includes cuts in the order of 2m high stepped down the hill. The cuts are stable and expose bedrock below a shallow layer of topsoil	

Performance outcomes		Acceptable outcomes		Applicant response
(c) (d)	intrusion of visual or overbearing impacts; complex engineering solutions.	(c)	is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping; does not exceed a maximum of 3 batters and 3 berms (i.e. not greater than 3.6 metres in height) on any one lot.	demonstrating stability. The proposal complies with PO3 because the house is sited in front of the cuts and is developed on posts minimising the extent of excavation. The house is developed in the centre of the allotment which is set back greater than 20 metres from any common boundaries.

Performance outcomes	Acceptable outcomes	Applicant response
Lot reconfiguration		
PO4 For development that involves reconfiguring a lot, lot layout and design is responsive to the natural constraints of the land and each lot is capable of being used for its intended purpose.	AO4.1 The frontage and depth of all lots is of sufficient width to: (a) allow driveways to follow the natural contours of the site and not exceed a gradient of 1 in 6 (16.6%); (b) accommodate any changes in gradient between the road and lot within the lot boundary and not within the road reserve.	N/A
	AO4.2 Development does not create new lots containing land of greater than 1 in 6 (16.6%), except where a rectangular area of land of lesser grade is contained within the new lots to accommodate the intended land use, with the balance left in its natural state to the greatest extent possible. Note – The size of rectangular areas is	
	outlined within each zone code. AO4.3 Development does not alter ridgelines. AO4.4 Lots are designed to ensure rooflines of future buildings and structures do not protrude above a ridgeline.	

8.2.2 Bushfire hazard overlay code

Note - Land shown on the bushfire hazard overlay map is designated as the bushfire prone area for the purposes of section 12 of the Building Regulations 2006. The bushfire hazard area (bushfire prone area) includes land covered by the high and medium hazard areas as well as the buffer area category on the overlay map.

8.2.2.1 Application

- (1) This code applies to assessing a material change of use, reconfiguring a lot, operational works or building work in the Bushfire hazard overlay, if:
 - (a) self-assessable or assessable where the code is identified as being applicable in the Assessment criteria for the Overlay Codes contained in the Levels of Assessment Tables in section 5.6;
 - (b) impact assessable development.
- (2) Land in the Bushfire hazard overlay is identified on the Bushfire hazard overlay map in Schedule 2 and includes the following sub-categories:

- (a) Medium bushfire risk sub-category;
- (b) High bushfire risk sub-category;
- (c) Very high bushfire risk sub-category;
- (d) Potential impact buffer sub-category.
- (3) When using this code, reference should be made to Part 5.

8.2.2.2 **Purpose**

- (1) The purpose of the Bushfire overlay code is to:
 - (a) implement the policy direction in the Strategic Framework, in particular:
 - (i) Theme 1 Settlement pattern: Element 3.4.7 Mitigation of hazards;
 - (ii) Theme 6 Infrastructure and transport: Element 3.9.2 Energy.
- (b) enable an assessment of whether development is suitable on land within the Bushfire risk overlay sub-categories.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) development avoids the establishment or intensification of vulnerable activities within or near areas that are subject to bushfire hazard;
 - (b) development is designed and located to minimise risks to people and property from bushfires;
 - (c) bushfire risk mitigation treatments are accommodated in a manner that avoids or minimises impacts on the natural environment and ecological processes;
 - (d) development involving the manufacture or storage of hazardous materials does not increase the risk to public safety or the environment in a bushfire event;
 - (e) development contributes to effective and efficient disaster management response and recovery capabilities.

Applicant response

Note - A site based assessment may ground-truth the extent of hazardous vegetation and extent and nature of the bushfire hazard area (bushfire prone area). Such assessments should be undertaken using the methodology set out in Planning scheme policy SC6.9 - Natural Hazards.

Acceptable outcomes

Criteria for assessment

Performance outcomes

Table 8.2.2.3.a - Bushfire hazard overlay code -assessable development

Performance outcomes	Acceptable outcomes	Applicant response						
For self-assessable and assessable development								
Compatible development								
PO1 A vulnerable use is not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances. Note - See the end of this code for examples of vulnerable uses.	Vulnerable uses are not established or expanded. Note – Where, following site inspection and consultation with Council, it is clear that the mapping is in error in identifying a premises as being subject to a medium, high, very high bushfire hazard or potential impact buffer sub-category, Council may supply a letter exempting the need for a Bushfire Management Plan. Note – Where the assessment manager has not previously approved a Bushfire Management Plan (either by condition of a previous development approval), the development proponent will be expected to prepare such a plan.	A house is not a vulnerable use						

Performance outcomes	Acceptable outcomes	Applicant response
	Note – Planning scheme policy SC6.9 - Natural hazards, provides a guide to the preparation of a Bushfire Management Plan.	
PO2 Emergency services and uses providing community support services are able to function effectively during and immediately after a bushfire hazard event.	AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.	n/a
PO3 Development involving hazardous materials manufactured or stored in bulk is not located in bushfire hazard sub-category.	AO3 The manufacture or storage of hazardous material in bulk does not occur within bushfire hazard sub-category.	n/a
Development design and separa	ation from bushfire hazard – recon	figuration of lots
PO4.1 Where reconfiguration is undertaken in an urban area or is for urban purposes or smaller scale rural residential purposes, a separation distance from hazardous vegetation is provided to achieve a radiant heat flux level of 29kW/m² at the edge of the proposed lot(s). Note - "Urban purposes" and "urban area" are defined in the Sustainable Planning Regulations 2009. Reconfiguration will be taken to be for rural residential purposes where proposed lots are between 2000m² and 2ha in area. "Smaller scale" rural residential purposes will be taken to be where the average proposed lot size is 6000m² or less. Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009. PO4.2 Where reconfiguration is undertaken for other purposes, a building envelope of reasonable dimensions is provided on each lot which achieves radiant heat flux level of 29kW/m² at any point.	AO4.1 No new lots are created within a bushfire hazard sub-category. or AO4.2 Lots are separated from hazardous vegetation by a distance that: (a) achieves radiant heat flux level of 29kW/m² at all boundaries; and (b) is contained wholly within the development site. Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation. For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages. Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.	n/a
PO5 Where reconfiguration is undertaken in an urban area or is for urban purposes, a constructed perimeter road with reticulated water supply is	AO5.1 Lot boundaries are separated from hazardous vegetation by a public road which: (a) has a two lane sealed carriageway;	n/a

Performance outcomes	Acceptable outcomes	Applicant response
established between the lots and the hazardous vegetation and is readily accessible at all times for urban fire fighting vehicles. The access is available for both fire fighting and maintenance/defensive works.	(b) contains a reticulated water supply; (c) is connected to other public roads at both ends and at intervals of no more than 500m; (d) accommodates geometry and turning radii in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (e) has a minimum of 4.8m vertical clearance above the road; (f) is designed to ensure hydrants and water access points are not located within parking bay allocations; and (g) incorporates roll-over kerbing. AO5.2 Fire hydrants are designed and installed in accordance with AS2419.1 2005, unless otherwise specified by the relevant water entity.	Applicant response
PO6 Where reconfiguration is	Note - Applicants should have regard to the relevant standards set out in the reconfiguration of a lot code and works codes in this planning scheme. AO6 Lot boundaries are separated	n/a
undertaken for smaller scale rural residential purposes, either a constructed perimeter road or a formed, all weather fire trail is established between the lots and the hazardous vegetation and is readily accessible at all times for the type of fire fighting vehicles servicing the area. The access is available for both fire fighting and maintenance/hazard reduction works.	from hazardous vegetation by a public road or fire trail which has: (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for firefighting appliances in accordance with Queensland Fire and Emergency Services' Fire	

Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; vehicular access at each end which is connected to the public road network at intervals of no more than 500m; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access asement that is granted in favour of Council and Queensland Fire and Emergency Services. AO7 Lot boundaries are separated from hazardous vegetation by a cacessible at all times for the type of fire fighting vehicles servicing the area. However, a fire trail will not be required where it would not serve a practical fire management purpose. AO8 AO7 Lot boundaries are separated from hazardous vegetation by a a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) in ocut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for fire- fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (a) maximum gradient of	Performance outcomes	Acceptable outcomes	Applicant response
accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network at intervals of no more than 500m; (ii) designated fire trail signage; (iii) used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. PO7 Where reconfiguration is undertaken for other purposes, a formed, all weather fire trail is provided between the hazardous vegetation and either the lot boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area. However, a fire trail will not be required where it would not serve a practical fire management purpose. AO7 Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has: (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for firefighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of		Access Guidelines; (f) a maximum gradient of 12.5%; (g) a cross fall of no greater than 10 degrees; (h) drainage and erosion	
favour of Council and Queensland Fire and Emergency Services. PO7 Where reconfiguration is undertaken for other purposes, a formed, all weather fire trail is provided between the hazardous vegetation and either the lot boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area. However, a fire trail will not be required where it would not serve a practical fire management purpose. However, a fire trail will not be required where it would not serve a practical fire management purpose. favour of Council and Emergency Services. AO7 Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has: (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for firefighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of		accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network at intervals of no more than 500m; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (I) if a fire trail, has an access	
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(g) a cross fall of no greater	Where reconfiguration is undertaken for other purposes, a formed, all weather fire trail is provided between the hazardous vegetation and either the lot boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area. However, a fire trail will not be required where it would not serve a practical fire	Lot boundaries are separated from hazardous vegetation by a public road or fire trail which has: (a) a reserve or easement width of at least 20m; (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation; (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (d) a minimum of 4.8m vertical clearance; (e) turning areas for firefighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (f) a maximum gradient of 12.5%;	n/a

Performance outcomes	Acceptable outcomes	Applicant response
	 (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. 	
PO8 The development design responds to the potential threat of bushfire and establishes clear evacuation routes which demonstrate an acceptable or tolerable risk to people.	The lot layout: (a) minimises the length of the development perimeter exposed to, or adjoining hazardous vegetation; (b) avoids the creation of potential bottle-neck points in the movement network; (c) establishes direct access to a safe assembly /evacuation area in the event of an approaching bushfire; and (d) ensures roads likely to be used in the event of a fire are designed to minimise traffic congestion. Note - For example, developments should avoid finger-like or hour-glass subdivision patterns or substantive vegetated corridors between lots. In order to demonstrate compliance with the performance outcome, a bushfire management plan prepared by a suitably qualified person may be required. The bushfire management plan should be developed in accordance with the Public Safety Business Agency (PSBA) guideline entitled "Undertaking a Bushfire Protection Plan. Advice from the Queensland Fire and Emergency Services (QFES) should be sought as appropriate	n/a
PO9 Critical infrastructure does not increase the potential bushfire hazard.	AO9 Critical or potentially hazardous infrastructure such as water supply, electricity, gas and telecommunications are placed underground.	n/a

Performance outcomes	Acceptable outcomes	Applicant response

Development design and separation from bushfire hazard – material change of use

PO10

Development is located and designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of:

- (a) 10kW/m² where involving a vulnerable use; or
- (b) 29kW/m² otherwise.

The radiant heat flux level is achieved by separation unless this is not practically achievable.

Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.

AO10

Buildings or building envelopes are separated from hazardous vegetation by a distance that:

- (a) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and
- (b) is contained wholly within the development site.

Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.

For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.

Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.

AO10 is likely compliant however this is to be confirmed at Building approval stage as the radiant heat flux level is a consideration under AS3959-2009 for external cladding. Council should not impose a condition reflective of AO10 as this is the responsibility of the building certifier. See further comments in section 4 above.

PO11

A formed, all weather fire trail is provided between the hazardous vegetation and the site boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.

However, a fire trail will not be required where it would not serve a practical fire management purpose.

Note - Fire trails are unlikely to be required where a development site involves less than 2.5ha

AO11

Development sites are separated from hazardous vegetation by a public road or fire trail which has:

- (a) a reserve or easement width of at least 20m:
- (b) a minimum trafficable (cleared and formed) width of 4m capable of accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;
- (c) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path:
- (d) a minimum of 4.8m vertical clearance:
- (e) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines;
- (f) a maximum gradient of 12.5%;
- (g) a cross fall of no greater than 10 degrees;

Does not comply with AO1.1. There are no public roads or fire trails that separate the development site from bushfire risk areas. The topography does not allow practical clearing of these. Further, the existing clearing is sufficient for bushfire buffer protection.

Performance outcomes	Acceptable outcomes	Applicant response
	 (h) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (i) vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m; (j) designated fire trail signage; (k) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (l) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. 	
All development		
PO12 All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.	Private driveways: (a) do not exceed a length of 60m from the street to the building; (b) do not exceed a gradient of 12.5%; (c) have a minimum width of 3.5m; (d) have a minimum of 4.8m vertical clearance; (e) accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and (f) serve no more than 3 dwellings or buildings.	AO12 is not complied with. The driveway is in the order of 200 metres long and includes a section that is 1 in 4 slope. The proposal includes a driveway that is generally 5 metres wide. Safe evacuation is easily achievable. The local rural fire brigade is equipped with a rural appliance which can access the house as it is 4wd.

Performance outcomes	Acceptable outcomes	Applicant response
PO13 Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.	A water tank is provided within 10m of each building (other than a class 10 building) which: (a) is either below ground level or of non-flammable construction; (b) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters: (i) 10,000l for residential buildings Note – A minimum of 7,500l is required in a tank and the extra 2,500l may be in the form of accessible swimming pools or dams. (ii) 45,000l for industrial buildings; and (iii) 20,000l for other buildings; (c) includes shielding of tanks and pumps in accordance with the relevant standards; (d) includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank; (e) is provided with fire brigade tank fittings – 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines; and (f) is clearly identified by directional signage provided at the street	Complies, two 20,000L tanks with 50mm ball valves are sited 9 metres from the house.
PO14 Landscaping does not increase the potential bushfire risk.	frontage. AO14 Landscaping uses species that are less likely to exacerbate a bushfire event, and does not increase fuel loads within separation areas.	No landscaping is proposed.

Performance outcomes	Acceptable outcomes	Applicant response
PO15 The risk of bushfire and the need to mitigate that risk is balanced against other factors (such as but not limited to, biodiversity or scenic amenity).	AO15 Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality where this has value.	Complies, the clearing for the house is minimal and is 900 square metres.

Note – 'Vulnerable activities' are those involving:

- (1) the accommodation or congregation of vulnerable sectors of the community such as child care centres, community care centre, educational establishments, detention facilities, hospitals, rooming accommodation, retirement facilities or residential care facilities; or
- (2) the provision of essential services including community uses, emergency services, utility installation, telecommunications facility, substations and major electricity infrastructure.

9.4.4 Filling and excavation code

9.4.4.1 Application

- (1) This code applies to assessing:
 - operational work for filling or excavation which is self-assessable or code assessable development if this code is an applicable code identified in the assessment criteria column of a table of assessment; or
 - (b) a material change of use or reconfiguring a lot if:
 - (i) assessable development where this code is identified as a prescribed secondary code in the assessment criteria column of a table of assessment; or
 - (ii) impact assessable development, to the extent relevant.

Note—This code does not apply to building work that is regulated under the Building Code of Australia. (2) When using this code, reference should be made to Part 5.

9.4.4.2 Purpose

- (1) The purpose of the Filling and excavation code is to assess the suitability of development for filling or excavation.
- (2) The purpose of the code will be achieved through the following overall outcomes:
 - (a) filling or excavation does not impact on the character or amenity of the site and surrounding areas;
 - (b) filling and excavation does not adversely impact on the environment;
 - (c) filling and excavation does not impact on water quality or drainage of upstream, downstream or adjoining properties;
 - (d) filling and excavation is designed to be fit for purpose and does not create land stability issues;
 - (e) filling and excavation works do not involve complex engineering solutions.

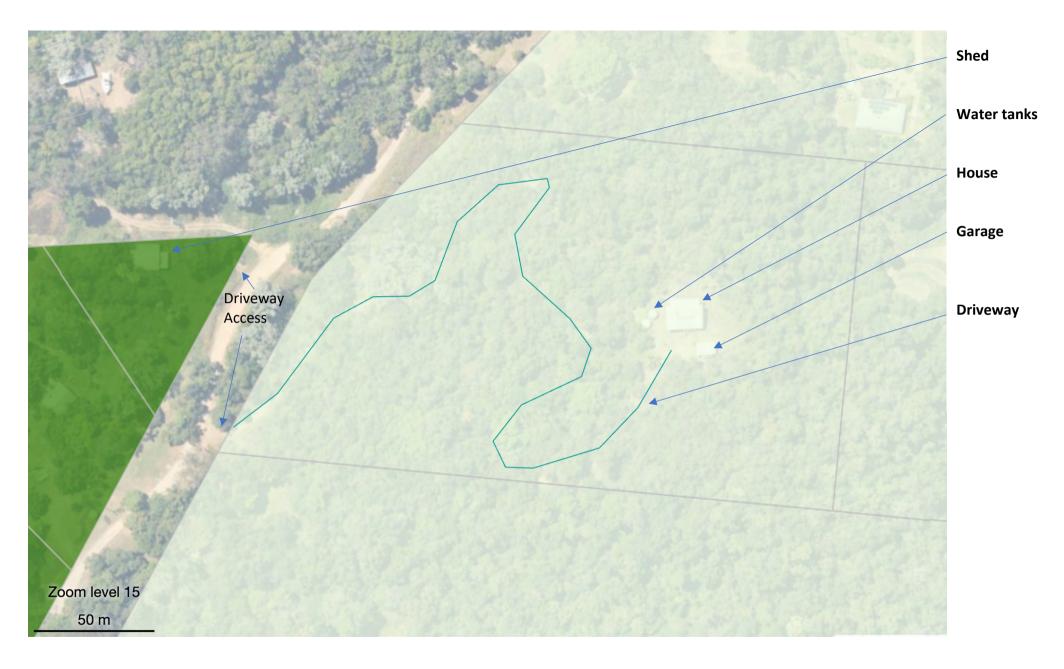
Table 9.4.4.3.a –Filling and excavation code – assessable development

Performance outcomes	Acceptable outcomes	Applicant response
For self-assessable and assess	able development	
Filling and excavation - General		
PO1 All filling and excavation work does not create a detrimental impact on the slope stability, erosion potential or visual amenity of the site or the surrounding area.	AO1.1 The height of cut and/or fill, whether retained or not, does not exceed 2 metres in height. and Cuts in excess of those stated in A1.1 above are separated by benches/ terraces with a minimum	Complies, cuts are 2m.
	width of 1.2 metres that incorporate drainage provisions and screen planting.	
	AO1.2 Cuts are supported by batters, retaining or rock walls and associated benches/terraces are capable of supporting mature vegetation.	Complies
	AO1.3 Cuts are screened from view by the siting of the building/structure, wherever possible.	Complies, house is in front of cuts.
	AO1.4 Topsoil from the site is retained from cuttings and reused on benches/terraces.	Complies, topsoil re-used.
	AO1.5 No crest of any cut or toe of any fill, or any part of any retaining wall or structure is closer than 600mm to any boundary of the property, unless the prior written approval of the adjoining landowner has been obtained.	Complies
	AO1.6 Non-retained cut and/or fill on slopes are stabilised and protected against scour and erosion by suitable measures, such as grassing, landscaping or other protective/aesthetic measures.	Complies, batters are grassed.
Visual Impact and Site Stability		
PO2	AO2.1	Complies

Performance outcomes	Acceptable outcomes	Applicant response
Filling and excavation are carried out in such a manner that the visual/scenic amenity of the area and the privacy and stability of adjoining properties is not compromised.	The extent of filling and excavation does not exceed 40% of the site area, or 500m² whichever is the lesser, except that AO2.1 does not apply to reconfiguration of 5 lots or more. AO2.2 Filling and excavation does not occur within 2 metres of the site boundary.	Does not comply with AO2.2. Some earthworks have occurred up to the boundary of the adjoining hillslope property to the south to provide for practical driveway construction. The driveway earthworks are contained to the land. Importantly, the dozer cut is not in an area visible from any location outside the driveway locality on the hillslope its self. The adjacent land remains undeveloped in the immediate area and therefore no privacy or stability issues are caused by the work within the 2m boundary setback area in accordance with PO2.
Flooding and drainage		
Filling and excavation does not result in a change to the run off characteristics of a site which then have a detrimental impact on the site or nearby land or adjacent road reserves.	AO3.1 Filling and excavation does not result in the ponding of water on a site or adjacent land or road reserves. AO3.2 Filling and excavation does not result in an increase in the flow of water across a site or any other land or road reserves.	Complies
	AO3.3 Filling and excavation does not result in an increase in the volume of water or concentration of water in a watercourse and overland flow paths.	Complies

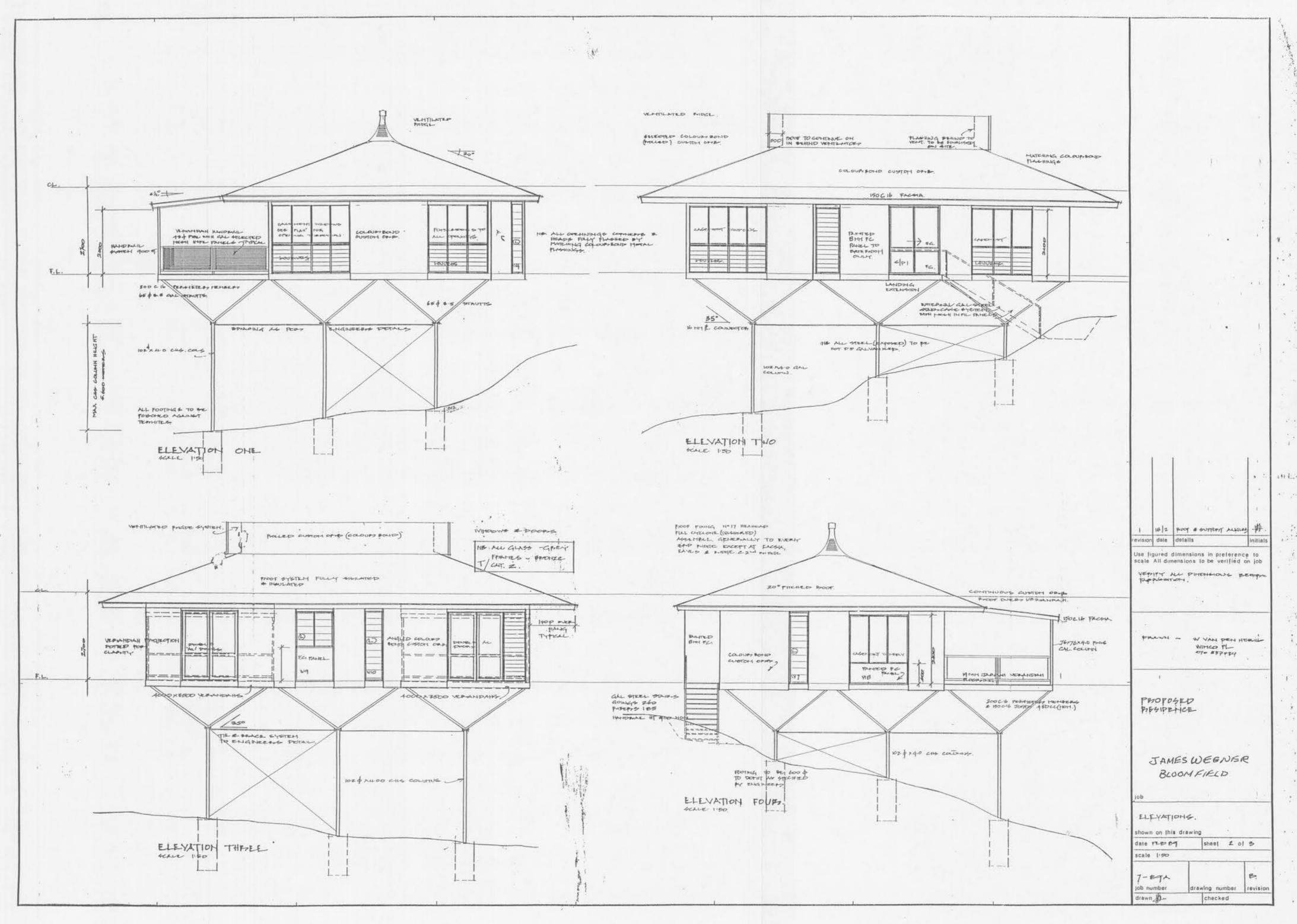
Performance outcomes	Acceptable outcomes	Applicant response
	AO3.4	Complies

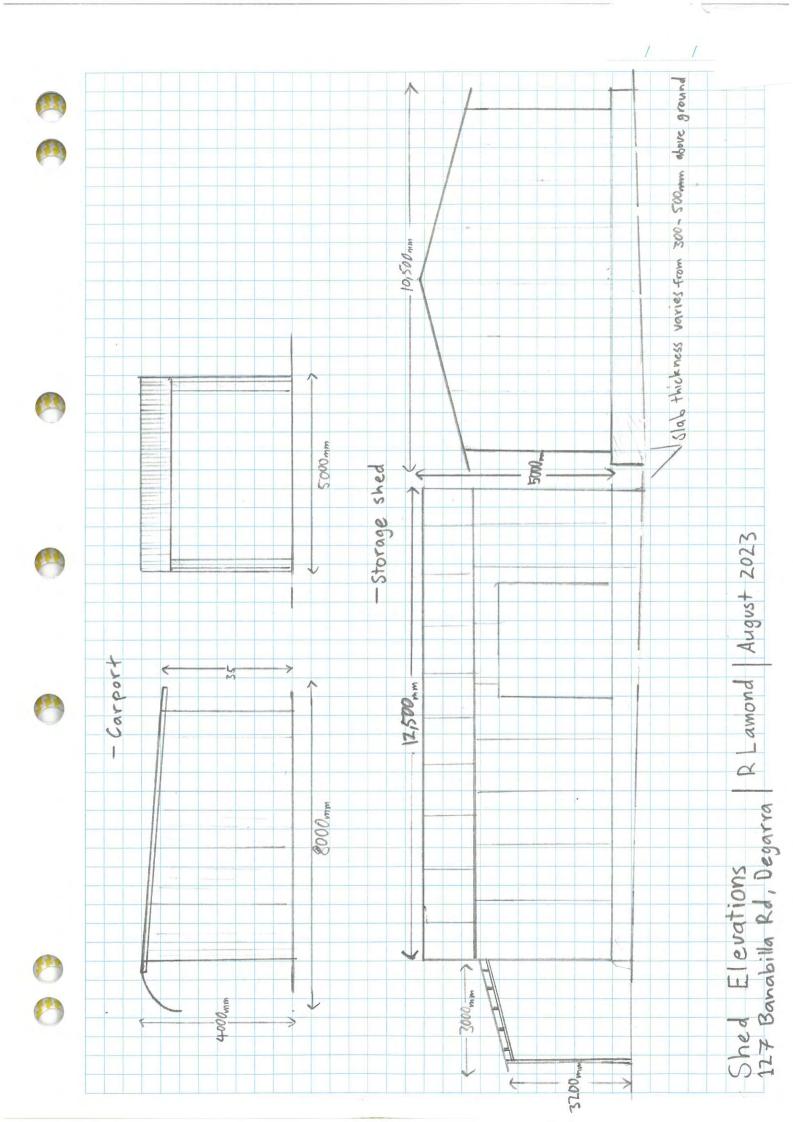
Performance outcomes	Acceptable outcomes	Applicant response
	Filling and excavation complies with the specifications set out in Planning Scheme Policy No SC5 – FNQROC Development Manual.	
Water quality		
PO4 Filling and excavation does not result in a reduction of the water quality of receiving waters.	AO4 Water quality is maintained to comply with the specifications set out in Planning Scheme Policy No SC5 – FNQROC Development Manual.	Complies
Infrastructure		
PO5 Excavation and filling does not impact on Public Utilities.	AO5 Excavation and filling is clear of the zone of influence of public utilities.	Complies

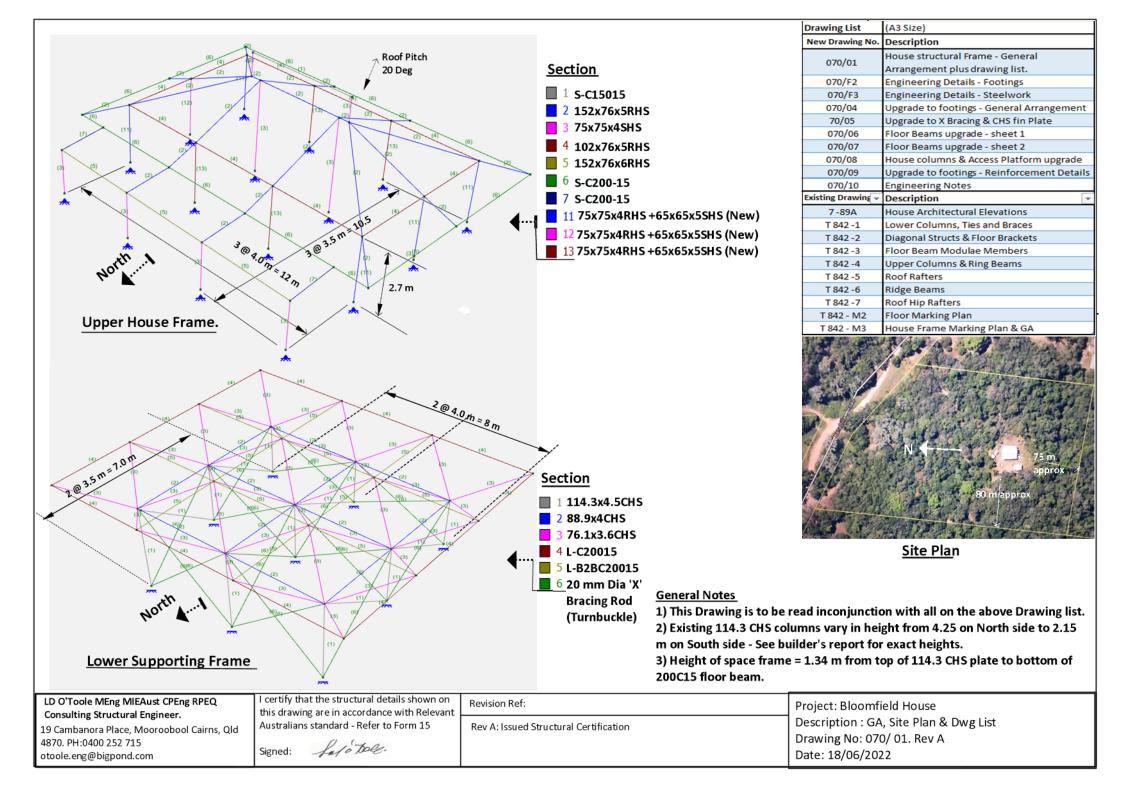


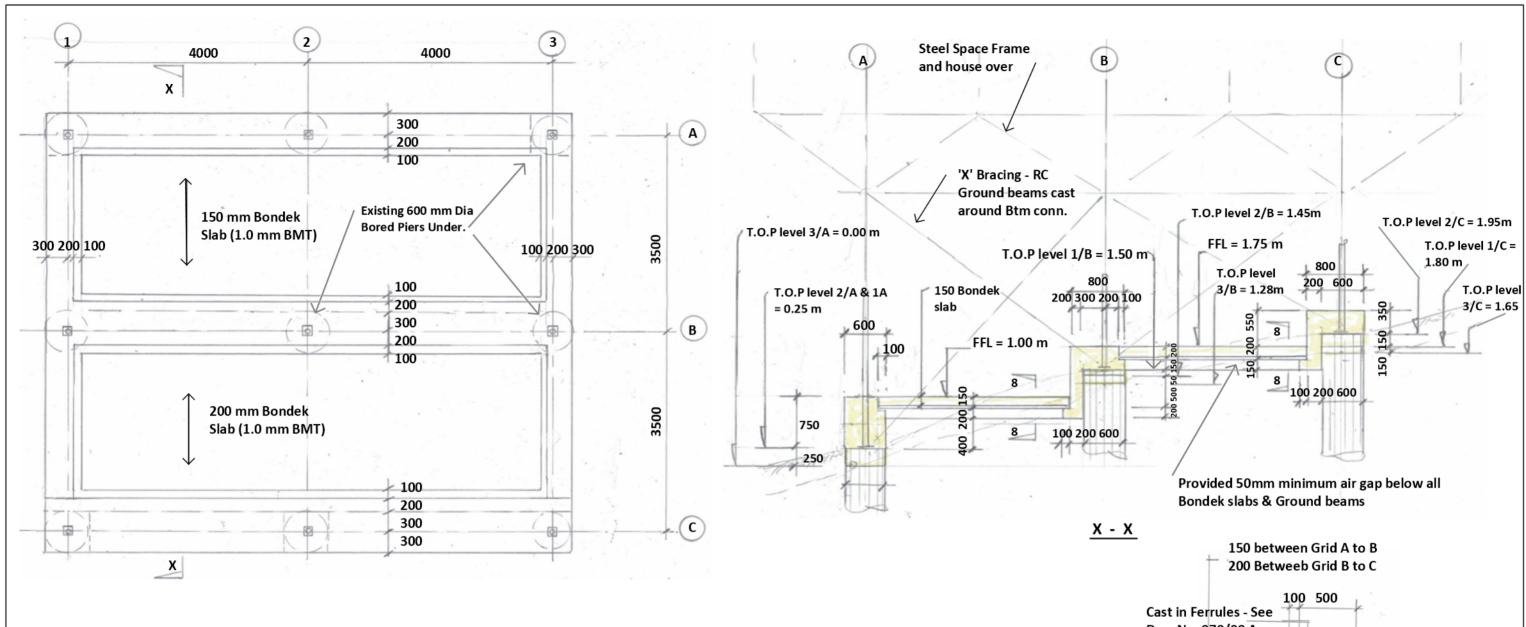
Site Plan

Reference: Plan 01 Drawn: R Lamond Date: 6 June 2023









Footing Plan

General Notes

- 1) This drawing is to be read in conjunction with all drawings listed on Dwg No. 070/01 A
- 2) Refer to Dwg No. 070 /09 A for Reinforcement Details
- 3) T.O.P denotes Top of Pier.

	tween Grid A tweeb Grid B		
	100 500	L .	
Cast in Ferrules - See	11	1	
Dwg No. 070/09 A		75	
		111	350
	Bondek		
200 bety	ween grid A	to B	
150 bet	ween grid B	to C	
	8 - 8		

L Dave O'Toole MIEAust CPEng RPE	Q NER
Consulting Structural Engineer	

19 Canbanora Place, Mooroobool, Cairns Qld 4870 Mobile Phone: 0400 252 715 Email: otoole.eng@bigpond.com

I certify that the structural details shown on this drawing are in accordance with all relevant Australian standards

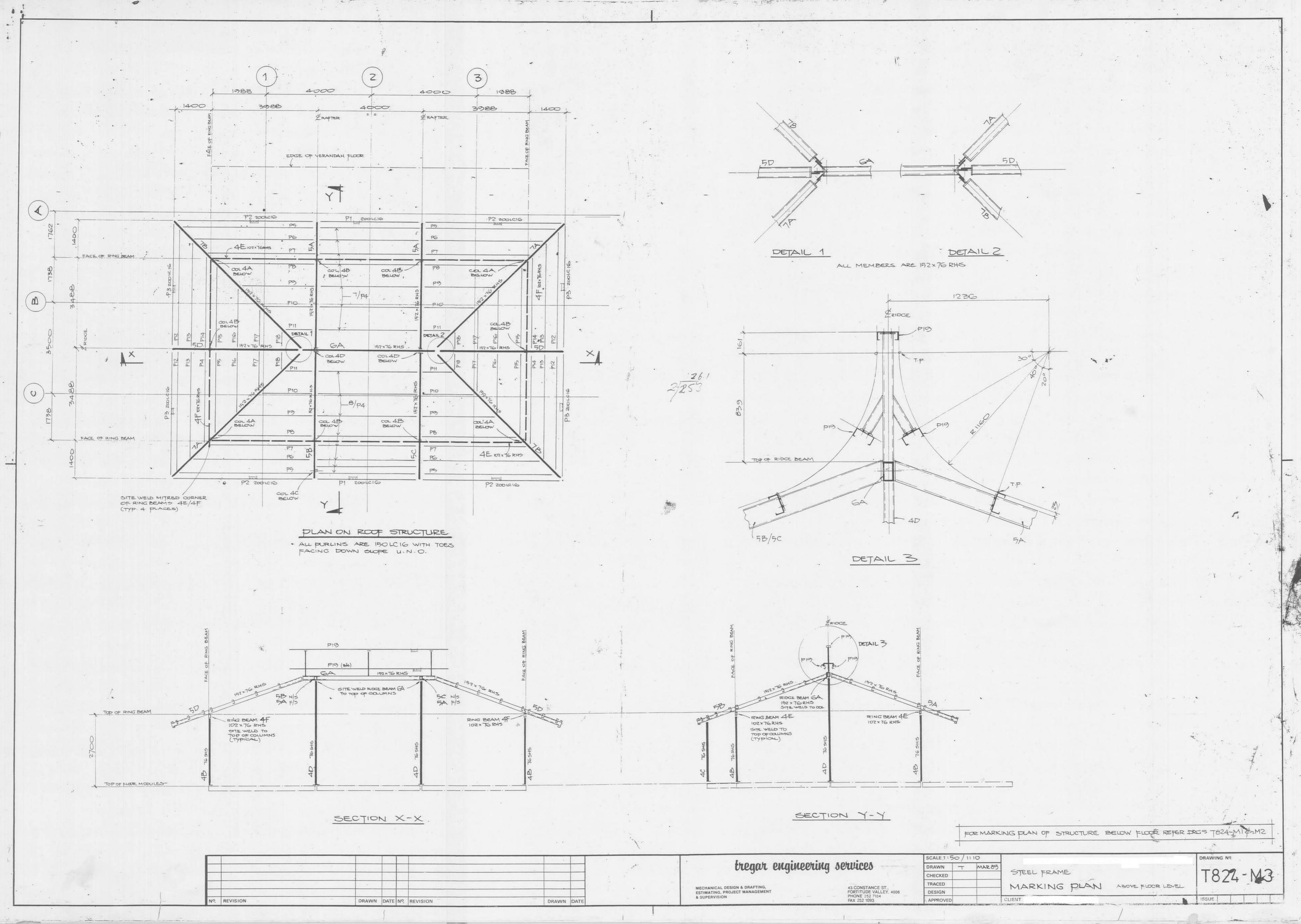
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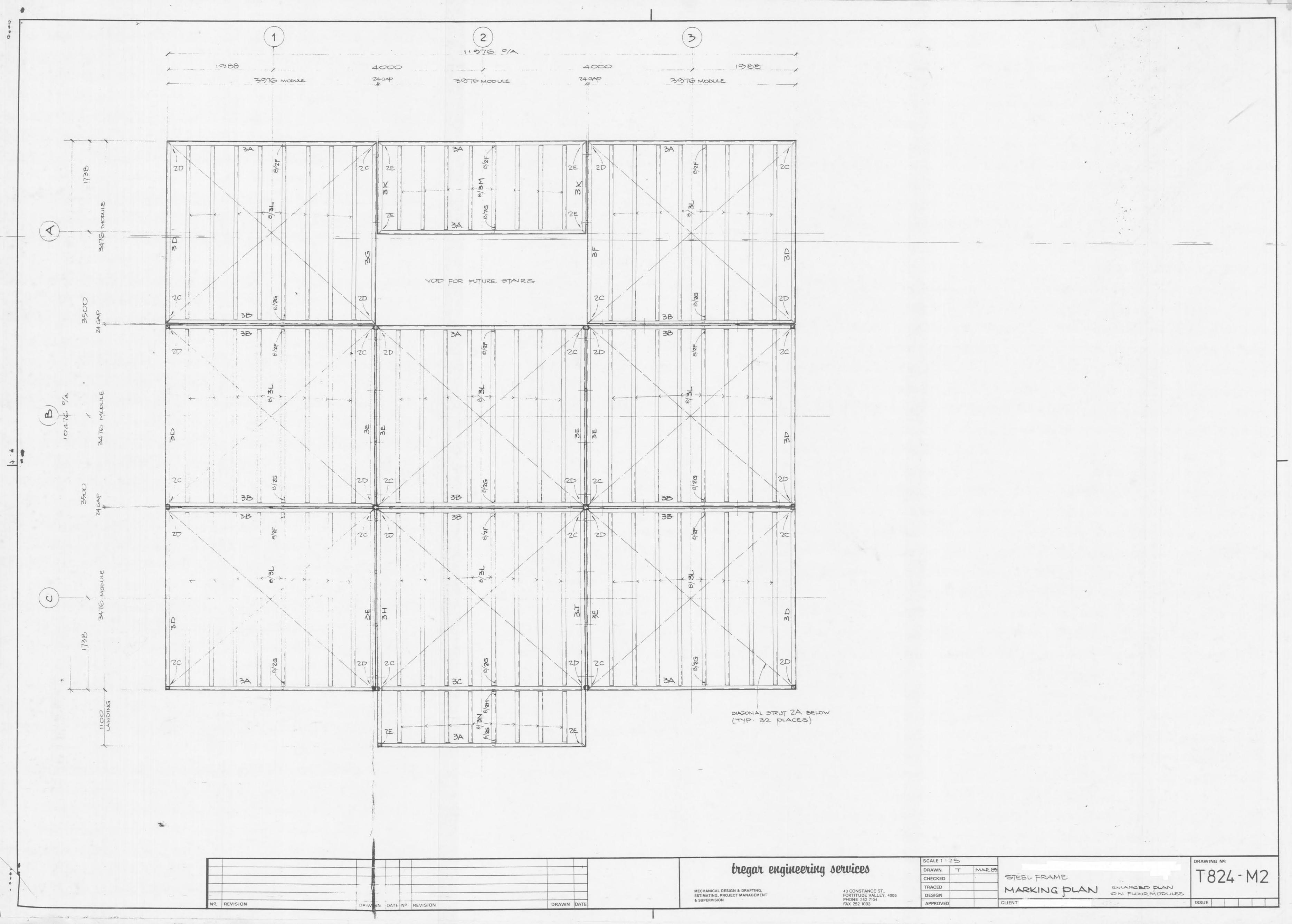
Α	23/07/2022	Issued for Structural Certification
Revision Reference	Date	Description

Project: Bloomfield House

Description: Footing Upgrade - GA Drawing No: 070 / 04 Rev A

Date: 23 /07 /2022







Site Classification

And

Wastewater Management System

For

Daniel Lamond

At

127 Banabilla Road

Degarra

Postal address: Earth Test, PO Box 1042, Tolga, Qld 4882. Phone: 4095 4734

e-mail: info@earthtest.com.au



INTRODUCTION:

Earth Test has been engaged by Daniel Lamond to assess, design and report on Site Classification and a Domestic Wastewater Management System at 127 Banabilla Road, Degarra.

Real Property Description:-

Lot 5, on SP123877

Local Authority: Douglas Shire Council.

It is understood the intention is to assess compliance of the existing dwelling at the site. A site and soil evaluation was carried out in May 2022.

SITE FACTORS:

The site was identified during a meeting with the owner on-site.

The Lot has an area of 8.7225 acres, the site is a clearing in the rainforest.

The water supply to the site is onsite roof rain water.

There is extensive rock outcrop at the site. No intermittent watercourses where noted in the immediate area.

Two Dynamic Cone Penetrometer tests were performed at locations DCP1 & DCP2, two boreholes BH1 and BH2 and one constant head soil permeability test P1 as shown on the site plan. Atterberg Limits tests were performed on a disturbed sample from Borehole1.



Existing structure at 127 Banabilla Road, Degarra

Ph: 4095 4734 Page 1 Jun-22 SI 340-22Report



SITE INVESTIGATION REPORT

BOREHOLE LOG

CLIENT: Daniel Lamond. DATE SAMPLED: 20/04/2022

PROJECT: 127 Banabilla Road, Degarra. Sampled by: G. Negri

REPORT DATE: 26/05/2022

BOREHOLE No: BH1

DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.6	Red-Brown Gravelly Clay-Silt	Disturbed sample 0.6m.
0.6	Refusal	Watertable not encountered

BOREHOLE No:

DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.3	Red-Brown Gravelly Clay-Silt	Watertable not encountered
0.3	Refusal	

BOREHOLE No:

DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.4	Red-Brown Gravelly Clay-Silt	Watertable not encountered
0.4	Refusal	

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ATTERBERG LIMITS TEST REPORT

CLIENT: Daniel Lamond SAMPLE No: SI 340-22

PROJECT: 127 Banabilla Road, Degarra

DATE SAMPLED: 20/04/2022

SAMPLE DETAILS: BH1 0.6m **Sampled by:** G. Negri

REPORT DATE: 26/05/2022 Tested By: PW

TEST METHOD	RESULT
Liquid Limit: AS 1289.3.9.2	39%
Plastic Limit: AS 1289.3.2.1	23%
Plasticity Index: AS 1289.3.3.1	16%
Linear Shrinkage: AS 1289.3.4.1	6.5%
Length Of Mould:	125mm
Cracking, Crumbling, Curling, Number Of Breaks:	Nil
Sample History:	Air Dried
Preparation Method:	Dry Sieved
Insitu Moisture Content:	6.0%
% Passing 0.075mm:	

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DYNAMIC CONE PENETROMETER REPORT AS 1289.6.3.2

CLIENT: Daniel Lamond SAMPLE No: SI 340-22

PROJECT: 127 Banabilla Road, Degarra. DATE SAMPLED: 20/04/2022

SAMPLE DETAILS: Sites "DCP1 & DCP2" as per **Tested By:** G. Negri

site plan.

REPORT DATE: 26/05/2022

DEPTH	Site: DCP1	Site: DCP2
(Metres)	No Blows	No Blows
0.0 - 0.1	2	7
0.1 - 0.2	3	9
0.2 - 0.3	3	13
0.3 - 0.4	5	22+
0.4 - 0.5	14	
0.5 - 0.6	13	
0.6 - 0.7	20+	
0.7 - 0.8		
0.8 - 0.9		
0.9 - 1.0		
1.0 – 1.1		
1.1 – 1.2		
1.2 – 1.3		
1.3 – 1.4		
1.4 – 1.5		
1.5 – 1.6		
1.6 – 1.7		
1.7 – 1.8		
1.8 – 1.9		
1.9 - 2.0		

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SITE CLASSIFICATION

127 Banabilla Road, Degarra.

(AS2870-2011 Clause 2.1.3 (d)) "the sites may be subject to mine subsidence, landslip, collapse activity or coastal erosion."

The Dynamic Cone Penetrometer test results indicate adequate allowable bearing pressure to 1.0m.

The Atterberg Limits test results indicate a moderately reactive soil.

Due to the site may being subject to landslip, the site must be classified **CLASS-"P"**.

To comply with the "Building Services Board Subsidence Policy" advice should be sought from a Registered Professional Engineer for footing design.

All site works must be carried out in accordance with AS 3798-2007 "Guidelines on earthworks for commercial and residential developments"

If the depth of any cut exceeds 0.5m or uncontrolled fill exceeds 0.4m the classification shall be reconsidered.

Because this investigation is limited in scope and extent, it is possible that areas may exist which differ from those shown on the test hole records and used in the site classification. Should any variation from the reported conditions be encountered during excavation work, this office must be notified immediately so that reappraisal of the classification can be made.

Gavin Negri Earth Test

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SITE AND SOIL EVALUATION

127 Banabilla Road, Degarra.

The site and soil evaluation carried out on 20/04/2022 provided the following results.

Site Assessment

Site FactorResultSlope20 DegreesShapeLinear-Planar

Aspect North
Exposure Good.
Erosion/land slip Not noted.
Boulders/rock outcrop Not in LAA

Vegetation Grass clearing in rainforest.

Watercourse/Bores Not in area affected by the land application area.

Water table Not encountered during investigation.

Fill Existing garden terraces

Flooding Not likely.
Channelled run-off Not found
Soil surface conditions Firm, Dry

Other site specific factors

Soil Assessment

Soil Property
Colour

Result
Brown

Texture Gravelly Clay-Loam

Structure Weak Coarse Fragments 15%

Measured Permeability Ksat (m/d) Indicative Permeability 0.5-1.5

Dispersion Slakes
Soil Category 4
Resultant Design Load Rate, DLR (mm/day) 20

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WASTEWATER MANAGEMENT SYSTEM

An "All-Waste" septic tank discharging into an "Advanced Enviro-Septic" bed is considered suitable for this site.

This system has been designed to conform to the requirements of the following codes, acts, regulations and standards. All work to be carried out in accordance with the following codes.

- AS/NZ 1547:2012 On-site domestic-wastewater management.
- Oueensland PLUMBING AND DRAINAGE ACT 2018.
- Queensland STANDARD PLUMBING AND DRAINAGE REGULATION 2019.
- Queensland PLUMBING AND WASTEWATER CODE.

SYSTEM SIZING FACTORS.

A population equivalent of three (3) persons has been chosen for the existing one bedroom dwelling.

The residence is connected to an onsite roof rain water supply system.

Standard water-reduction fixtures <u>must</u> be used to ensure the integrity of the system. They shall include:-

- Dual flush 6/3 Litre water closets.
- Shower-flow restrictors.
- Aerator faucets (taps).
- Water-conserving automatic washing machines.

Note: - Garbage grinders are not permitted.

As per AS/NZ 1547:2012 Appendix H, Table H1 the "Typical wastewater design flow" for a "Onsite roof rainwater supply" gives a flow allowance of 120 L/Person/day.

The daily flow for the dwelling (3 persons @ 120 L/person/day) will be 360 L/day.

From AS/NZ 1547:2012 Table J1 the minimum capacity of the All-Waste septic tank required is 3000 L.

The tank must NOT be fitted with an outlet filter.

Currently installed at the site is a 3000L All-Waste Septic tank going into a conventional trench on unknown size, which seems to be in good working order.

As per AES requirements the building shall have a total of 2 x 50mm vents or 1 x (minimum) 80mm vent 3m minimum above the low vent.

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LAND-APPLICATION SYSTEM

DISPOSAL AREA SIZING

From AS/NZ 1547:2012 APPENDIX L, L4 DESIGN AREA SIZING, L4.2 Sizing

L = Q / (DLRxW)

Where:

L = length in m

Q = design daily flow in L/day

DLR = Design Loading Rate in mm/d

W = Width in m

L = 360/(20*2.0)

= 9.0 m.

Use one 9.0m long by 2.0m wide Advanced Enviro-Septic bed.

See site plan and detail cross-section.

1kg gypsum per m² shall be applied to the base before laying Aggregate

Currently installed at the site is one conventional bed, it seems to be working without noticeable failure and would have complied with regulations at the time. Should the existing fail or the property be sold from the current owners, the above design shall be installed.

SYSTEM SAND

All configurations of Advanced Enviro-Septic® require a minimum of 150mm of system sand surrounding the circumference of the pipe. This sand, typically gravelly coarse sand, must adhere to the following percentage and quality restrictions.

AS Sieve Size (mm)	Percent Passing %
9.50	100
4.75	95-100
2.36	80-100
1.18	50-85
0.600	25-60
0.300	5-30
0.150	0-10
0.075	0-2

If there is any doubt if the sand media will pass requirements please contact Earth Test for further advice.

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SYSTEM INSTALLATION

Avoid compaction by keeping people and machinery off the finished trench or bed floor. The system shall be installed by a licensed plumber in accordance with the manufacturer's recommendations and the relevant Australian Standards.

Operation and Maintenance

Homeowners should be fully informed of the proper operation and maintenance requirements of the on-site wastewater system.

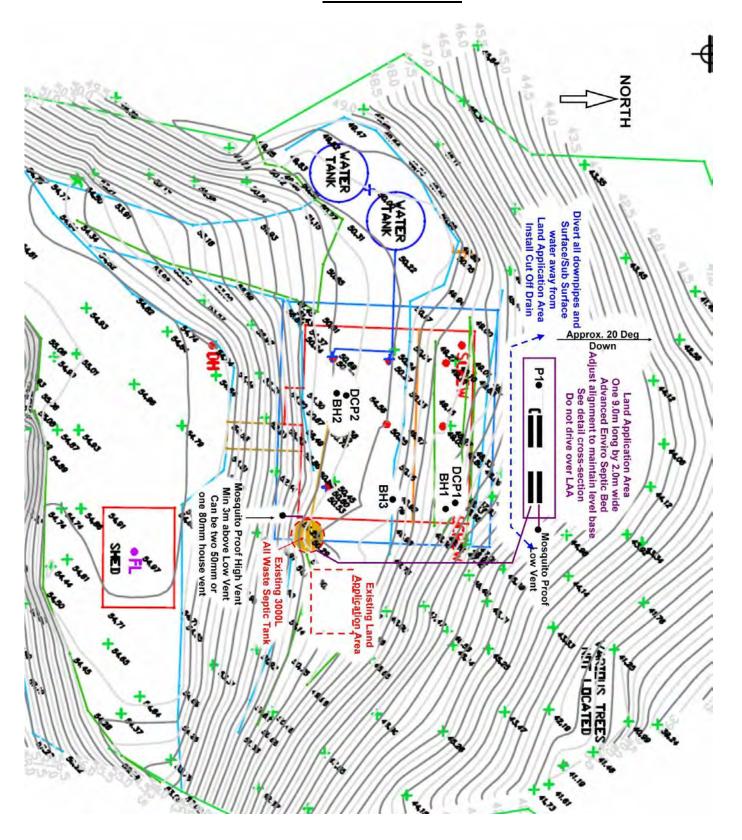
Gavin Negri Earth Test

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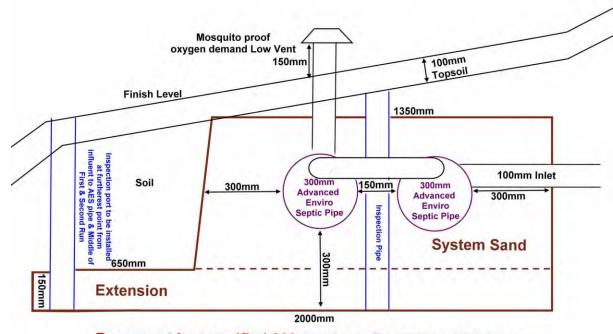


Consoil Solutions Pty. Ltd. T/A Earth Test QBCC #. 15092731

SITE PLAN 127 Banabilla Road, Degarra. NOT TO SCALE

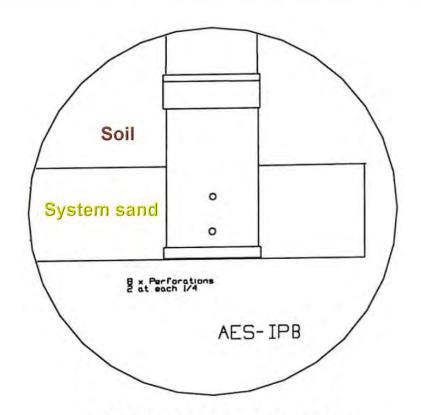






Base must be scarrified 200mm deep. Parallel to AES Pipes

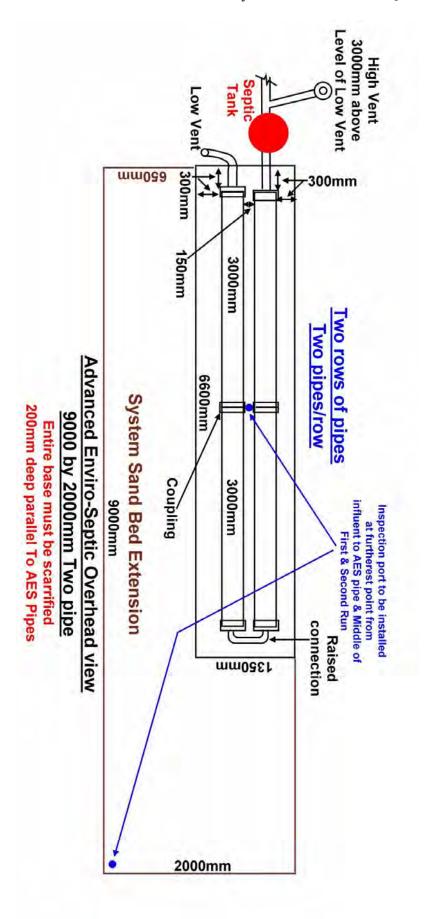
2000mm Wide Two Pipe Advanced Enviro-Septic Cross-Section



AES Inspection point detail

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Advanced Enviro-septic Design Calculator V9.0 ©

AES The World Leader in Passive Solutions © Site Address 127 Banabilla Road, Degarra QLD Post Code 4895 Client Name Daniel Lammond Date of Site Visit Designers Designers Ph 07 4095 4734 Earth Test 15092731 Name Number (e.gQBCC) Plumber Ph Plumb / Drainer Lic Plumber TBA TBA TBA Number Lic Number Designers AES Council Area Douglas Shire Council 1164 Date 26/5/2022 Cert Number

This Calculator is a guide only, receiving soil classification, surface water, water tables and all other site constraints addressed by the qualified designer.

System Designers site and soil calculation data entry		IMPORTANT NOTES
Enter AES L/m loading rate, "30" for ADV Secondary or "38" Secondary	38	>> This design is for a SECONDARY system.
Is this a new installation Y or N	Y	>> Minimun single vent size is 80mm or 2 x 50mm house vents
Number of Bedrooms	1	>> This is not used in ANY Calculation. If not known use N/A or 0.
Number of persons	3	>> A septic tank outlet filter is NOT RECOMMENDED
Daily Design Flow Allowance Litre/Person/Day	120	
Number of rows required to suit site constraints	2	>> The maximum length of a single AES pipe run is 30m or 10 PIPES
Infiltration Soil Category from site/soil evaluation. CATEGORY	4	>> Catagory may require design considerations. Ref AS1547
Design Loading Rate based on site & soil evaluation DLR (mm/day)	20	>> Soil conditioning may be necessary. Ref AS1547 & Comments.
Bore log depth below system Basal area	1.5m	>> Min depth 1.5m. Check water table/restrictive layer
Is this design a GRAVITY system with no outlet filter? Y or N	Y	>> GRAVITY. A House Vent & LOW VENT required on this system
PLEASE CHECK YOU HAVE FALL FROM TANK TO AES SYSTEM PIPE	ES	

COMMENTS :- " The outcome must be important to everyone.

- Ripping of receiving surface required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate & rip parallel to the site slope/AES pipe.
- Specialist soils advice & special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS1547
- Designers need to be familar with special requirements of Local Authorities. ie Minimum falls from Septic tank outlets to Land application areas etc
- Plumbers are reminded to practice good construction techniques as per AS 1547 & as provided on AES installation instructions supplied with components.

AES System Calculator Outcomes				AES dimensio	ns	
Total System load - litres / day (Q).	360	1/d			AES System	Extension Area
Min Length of AES pipe rows to treat loading	4.74	lm		Length:(L)		
Number of FULL AES Pipe lengths per row	2	lths		Width:(W)		
Total Capacity of AES System pipe in Litres	848	ltr.		Sand Depth:	0.75m	0.15m
_				Area m2	8.9 m^2	9.1 m^2
HEE CHE I ENCERIC OF DIDE IN THIC DECICAL CAPTED V			21		77 P. : P. I 4: P.	-4

USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)

>>Slope percentage must be 0% & infiltration footprint must be level for this design

IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y"		у	Enter Custon	Width in metre	2	
AES INFILTRATION FOOT PRINT AREA - $L = Q / (DLR x W)$	Length Width		Minimum AES foot print required			Ī
						ı
The length & width of excavation required for this design is >>	9.00m	x 2.00m	=	18.0	m2 total	

AES pipes are best centered in the trench parallel to the site slope

Code	AES System Bill of Materials.		
AES-PIPE	AES 3 metre Lengths required	4	lths
AESC	AES Couplings required	2	ea
AESO	AES Offset adaptors	4	ea
AESODV	AES Oxygen demand vent	1	ea
AES-IPB	AES 100mm Inspection point base	2	ea
TD Kit 4	4 Hole Distribution Box Kit		ea
TD Kit 7	7 Hole Distribution Box Kit		ea
VS43-4	Sweet Air Filter VS43-4		ea
AES DESO	Double Offset Adaptors		ea
TO	OTAL SYSTEM SAND REQUIRED (Estimate Only)	10	m3
Please email your AES Calculator (EXCEL FORMAT), Site Layout & AES Design to			•

- > The AES Calculator is a design aid to allow checking of the AES components, configuration and is a guide only. Site and soil conditions referencing AS1547 are calculated and designed by a Qualified Wastewater Designer.
- > Chankar Environmental accepts no responsibility for the soil evaluation, loading calculations or DLR entered by the designer for this calculator.
- > AES pipes can be cut to length on site. They are supplied in 3 meter lengths only.
- > AES ONLY supply AES components as detailed in the Bill of Materials.
- > SEPTIC Tank & other components including SAND will need to be sourced from other suppliers. Refer to our WEBSITE www.enviro-septic.com.au OR 07 5474 4055

 AES-Design-V9.0-Calculator © Copy Right Chankar Environmental Pty Ltd 20/1/2022