IDAS form 1—Application details

(*Sustainable Planning Act 2009* version 4.2 effective 3 August 2015)

This form must be used for **ALL** development applications.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete this form (*IDAS form 1—Application details)*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form and any other IDAS form relevant to your application must be used for development applications 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*. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

PLEASE NOTE: This form is not required to accompany requests for compliance assessment.

Mandatory requirements

Applicant details (Note: the applicant is the person responsible for making the application and need not be the owner of the land. The applicant is responsible for ensuring the information provided on all IDAS application forms is correct. Any development permit or preliminary approval that may be issued as a consequence of this application will be issued to the applicant.)

Name/s (individual or company name in full)	EDWARD BROCKENSHIRE		
For companies, contact name			
Postal address	LOT 40/22 SPURWOOD RD		
Suburb	COOMBAY		
State	QLD	Postcode	4873
Country	AUST.		
Contact phone number	40 989229		
Mobile number (non-mandatory requirement)	—		
Fax number (non-mandatory requirement)	—		

40. 2015. 1173. 1

Queensland Government

Email address (non-mandatory requirement): edbrock015 @gmail.com

Applicant's reference number (non-mandatory requirement): —

1. What is the nature of the development proposed and what type of approval is being sought?

Table A—Aspect 1 of the application (If there are additional aspects to the application please list in Table B—Aspect 2.)

a) What is the nature of the development? (Please only tick one box.)

☑ Material change of use ☐ Reconfiguring a lot ☐ Building work ☐ Operational work

b) What is the approval type? (Please only tick one box.)

☐ Preliminary approval under s241 of SPA ☐ Preliminary approval under s241 and s242 of SPA ☐ Development permit

c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

1 RESIDENTIAL HOUSE
1 SHED.

d) What is the level of assessment? (Please only tick one box.)

☐ Impact assessment ☐ Code assessment

Table B—Aspect 2 of the application (If there are additional aspects to the application please list in Table C—Additional aspects of the application.)

a) What is the nature of development? (Please only tick one box.)

☐ Material change of use ☐ Reconfiguring a lot ☐ Building work ☐ Operational work

b) What is the approval type? (Please only tick one box.)

☐ Preliminary approval under s241 of SPA ☐ Preliminary approval under s241 and s242 of SPA ☐ Development permit

c) Provide a brief description of the proposal, including use definition and number of buildings or structures where applicable (e.g. six unit apartment building defined as a *multi-unit dwelling*, 30 lot residential subdivision etc.)

d) What is the level of assessment?

☐ Impact assessment ☐ Code assessment

Table C—Additional aspects of the application (If there are additional aspects to the application please list in a separate table on an extra page and attach to this form.)

☐ Refer attached schedule ☑ Not required

2. Location of the premises (Complete Table D and/or Table E as applicable. Identify each lot in a separate row.)

Table D—Street address and lot on plan for the premises or street address and lot on plan for the land adjoining or adjacent to the premises (Note: this table is to be used for applications involving taking or interfering with water.) (Attach a separate schedule if there is insufficient space in this table.)

☑ Street address **and** lot on plan (All lots must be listed.)

☐ Street address **and** lot on plan for the land adjoining or adjacent to the premises (Appropriate for development in water but adjoining or adjacent to land, e.g. jetty, pontoon. All lots must be listed.)

Street address					**Lot on plan description**		**Local government area** (e.g. Logan, Cairns)
Lot	Unit no.	Street no.	Street name and official suburb/ locality name	Post-code	Lot no.	Plan type and plan no.	
i)		28	BUCHANAN CREEK ROAD	4873	28	RP737378	DOUGLAS.
ii)							
iii)							

Planning scheme details (If the premises involves multiple zones, clearly identify the relevant zone/s for each lot in a separate row in the below table. Non-mandatory)

Lot	Applicable zone / precinct	Applicable local plan / precinct	Applicable overlay/s
i)	RAINFOREST RESIDENTIAL PRECINCT		
ii)			
iii)			

Table E—Premises coordinates (Appropriate for development in remote areas, over part of a lot or in water not adjoining or adjacent to land e.g. channel dredging in Moreton Bay.) (Attach a separate schedule if there is insufficient space in this table.)

Coordinates (Note: place each set of coordinates in a separate row)				**Zone reference**	**Datum**	**Local government area (if applicable)**
Easting	Northing	Latitude	Longitude			
					☐ GDA94 ☐ WGS84 ☐ other	

3. Total area of the premises on which the development is proposed (indicate square metres)

10 050 m²

4. Current use/s of the premises (e.g. vacant land, house, apartment building, cane farm etc.)

VACANT LAND.

5. Are there any current approvals (e.g. a preliminary approval) associated with this application? (Non-mandatory requirement)

☑ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

6. Is owner's consent required for this application? (Refer to notes at the end of this form for more information.)

☑ No

☐ Yes—complete either Table F, Table G or Table H as applicable

Table F	
Name of owner/s of the land	
I/We, the above-mentioned owner/s of the land, consent to the making of this application.	
Signature of owner/s of the land	
Date	

Table G	
Name of owner/s of the land	
☐ The owner's written consent is attached or will be provided separately to the assessment manager.	

Table H	
Name of owner/s of the land	
☐ By making this application, I, the applicant, declare that the owner has given written consent to the making of the application.	

7. Identify if any of the following apply to the premises (Tick applicable box/es.)

☐ Adjacent to a water body, watercourse or aquifer (e.g. creek, river, lake, canal)—complete Table I

☐ On strategic port land under the *Transport Infrastructure Act 1994*—complete Table J

☐ In a tidal water area—complete Table K

☐ On Brisbane core port land under the *Transport Infrastructure Act 1994* (No table requires completion.)

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008* (no table requires completion)

☐ Listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* (no table requires completion)

Table I
Name of water body, watercourse or aquifer

Table J	
Lot on plan description for strategic port land	Port authority for the lot

Table K	
Name of local government for the tidal area (if applicable)	Port authority for the tidal area (if applicable)

8. Are there any existing easements on the premises? (e.g. for vehicular access, electricity, overland flow, water etc)

☑ No ☐ Yes—ensure the type, location and dimension of each easement is included in the plans submitted

9. Does the proposal include new building work or operational work on the premises? (Including any services)

☐ No ☑ Yes—ensure the nature, location and dimension of proposed works are included in plans submitted

10. Is the payment of a portable long service leave levy applicable to this application? (Refer to notes at the end of this form for more information.)

☑ No—go to question 12 ☐ Yes

11. Has the portable long service leave levy been paid? (Refer to notes at the end of this form for more information.)

☐ No

☐ Yes—complete Table L and submit with this application the yellow local government/private certifier's copy of the receipted QLeave form

Table L		
Amount paid	Date paid (dd/mm/yy)	QLeave project number (6 digit number starting with A, B, E, L or P)

12. Has the local government agreed to apply a superseded planning scheme to this application under section 96 of the *Sustainable Planning Act 2009*?

☑ No

☐ Yes—please provide details below

Name of local government	Date of written notice given by local government (dd/mm/yy)	Reference number of written notice given by local government (if applicable)

13. List below all of the forms and supporting information that accompany this application (Include all IDAS forms, checklists, mandatory supporting information etc. that will be submitted as part of this application)

Description of attachment or title of attachment	Method of lodgement to assessment manager
IDAS FORMS 1 & 5	
SITE PLAN	
LANDSCAPE PLAN	
PLUMBING PLAN	
SOIL TEST.	

14. Applicant's declaration

☑ By making this application, I declare that all information in this application is true and correct (Note: it is unlawful to provide false or misleading information)

Notes for completing this form

- Section 261 of the *Sustainable Planning Act 2009* prescribes when an application is a properly-made application. Note, the assessment manager has discretion to accept an application as properly made despite any non-compliance with the requirement to provide mandatory supporting information under section 260(1)(c) of the *Sustainable Planning Act 2009*

Applicant details

- Where the applicant is not a natural person, ensure the applicant entity is a real legal entity.

Question 1

- Schedule 3 of the Sustainable Planning Regulation 2009 identifies assessable development and the type of assessment. Where schedule 3 identifies assessable development as "various aspects of development" the applicant must identify each aspect of the development on Tables A, B and C respectively and as required.

Question 6

- Section 263 of the *Sustainable Planning Act 2009* sets out when the consent of the owner of the land is required for an application. Section 260(1)(e) of the *Sustainable Planning Act 2009* provides that if the owner's consent is required under section 263, then an application must contain, or be accompanied by, the written consent of the owner, or include a declaration by the applicant that the owner has given written consent to the making of the application. If a development application relates to a state resource, the application is not required to be supported by evidence of an allocation or entitlement to a state resource. However, where the state is the owner of the subject land, the written consent of the state, as landowner, may be required. Allocation or entitlement to the state resource is a separate process and will need to be obtained before development commences.

Question 7

- If the premises is listed on either the Contaminated Land Register (CLR) or the Environmental Management Register (EMR) under the *Environmental Protection Act 1994* it may be necessary to seek compliance assessment. Schedule 18 of the Sustainable Planning Regulation 2009 identifies where compliance assessment is required.

Question 11

- The *Building and Construction Industry (Portable Long Service Leave) Act 1991* prescribes when the portable long service leave levy is payable.
- The portable long service leave levy amount and other prescribed percentages and rates for calculating the levy are prescribed in the Building and Construction Industry (Portable Long Service Leave) Regulation 2002.

Question 12

- The portable long service leave levy need not be paid when the application is made, but the *Building and Construction Industry (Portable Long Service Leave) Act 1991* requires the levy to be paid before a development permit is issued.
- Building and construction industry notification and payment forms are available from any Queensland post office or agency, on request from QLeave, or can be completed on the QLeave website at www.qleave.qld.gov.au. For further information contact QLeave on 1800 803 481 or visit www.qleave.qld.gov.au.

Privacy—The information collected in this form will be used by the Department of Infrastructure, Local Government and Planning (DILGP), assessment manager, referral agency and/or building certifier in accordance with the processing and assessment of your application. Your personal details should not be disclosed for a purpose outside of the IDAS process or the provisions about public access to planning and development information in the *Sustainable Planning Act 2009*, except where required by legislation (including the *Right to Information Act 2009*) or as required by Parliament. This information may be stored in relevant databases. The information collected will be retained as required by the *Public Records Act 2002*.

OFFICE USE ONLY

Date received | | Reference numbers | |

NOTIFICATION OF ENGAGEMENT OF A PRIVATE CERTIFIER

To | | Council. I have been engaged as the private certifier for the building work referred to in this application

Date of engagement	Name	BSA Certification license number	Building classification/s

QLEAVE NOTIFICATION AND PAYMENT (For completion by assessment manager or private certifier if applicable.)

Description of the work	QLeave project number	Amount paid ($)	Date paid	Date receipted form sighted by assessment manager	Name of officer who sighted the form

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

IDAS form 5—Material change of use assessable against a planning scheme

(*Sustainable Planning Act 2009* version 3.1 effective 3 August 2015)

This form must be used for development applications for a material change of use assessable against a planning scheme.

You **MUST** complete **ALL** questions that are stated to be a mandatory requirement unless otherwise identified on this form.

For all development applications, you must:

- complete *IDAS form 1—Application details*
- complete any other forms relevant to your application
- provide any mandatory supporting information identified on the forms as being required to accompany your application.

Attach extra pages if there is insufficient space on this form.

All terms used on this form have the meaning given in the *Sustainable Planning Act 2009* (SPA) or the Sustainable Planning Regulation 2009.

This form must also be used for material change of use on 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* that requires assessment against the land use plan for that land. Whenever a planning scheme is mentioned, take it to mean land use plan for the strategic port land, Brisbane core port land or airport land.

Mandatory requirements

1. Describe the proposed use. (Note: this is to provide additional detail to the information provided in question 1 of *IDAS form 1—Application details*. Attach a separate schedule if there is insufficient space in this table.)

General explanation of the proposed use	Planning scheme definition (include each definition in a new row) (non-mandatory)	No. of dwelling units (if applicable) or gross floor area (if applicable)	Days and hours of operation (if applicable)	No. of employees (if applicable)
RESIDENSE		1		

2. Are there any current approvals associated with the proposed material change of use? (e.g. a preliminary approval.)

☑ No ☐ Yes—provide details below

List of approval reference/s	Date approved (dd/mm/yy)	Date approval lapses (dd/mm/yy)

3. Does the proposed use involve the following? (Tick all applicable boxes.)

The reuse of existing buildings on the premises	☑ No	☐ Yes
New building work on the premises	☑ No	☐ Yes
The reuse of existing operational work on the premises	☑ No	☐ Yes
New operational work on the premises	☑ No	☐ Yes

Mandatory supporting information

4. Confirm that the following mandatory supporting information accompanies this application

Mandatory supporting information	Confirmation of lodgement	Method of lodgement
All applications		
A site plan drawn to an appropriate scale (1:100, 1:200 or 1:500 are **recommended** scales) which shows the following: • the location and site area of the land to which the application relates (*relevant land*) • the north point • the boundaries of the relevant land • any road frontages of the relevant land, including the name of the road • the location and use of any existing or proposed buildings or structures on the relevant land (note: where extensive demolition or new buildings are proposed, two separate plans [an existing site plan and proposed site plan] may be appropriate) • any existing or proposed easements on the relevant land and their function • the location and use of buildings on land adjoining the relevant land • all vehicle access points and any existing or proposed car parking areas on the relevant land. Car parking spaces for persons with disabilities and any service vehicle access and parking should be clearly marked • for any new building on the relevant land, the location of refuse storage • the location of any proposed retaining walls on the relevant land and their height • the location of any proposed landscaping on the relevant land • the location of any stormwater detention on the relevant land.	☑ Confirmed	
A statement about how the proposed development addresses the local government's planning scheme and any other planning instruments or documents relevant to the application.	☑ Confirmed	
A statement about the intensity and scale of the proposed use (e.g. number of visitors, number of seats, capacity of storage area etc.).	☑ Confirmed	
Information that states: • the existing or proposed floor area, site cover, maximum number of storeys and maximum height above natural ground level for existing or new buildings (e.g. information regarding existing buildings but not being reused) • the existing or proposed number of on-site car parking bays, type of vehicle cross-over (for non-residential uses) and vehicular servicing arrangement (for non-residential uses).	☑ Confirmed ☐ Not applicable	

A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	☐ Confirmed ☑ Not applicable	
When the application involves the reuse of existing buildings		
Plans showing the size, location, existing floor area, existing site cover, existing maximum number of storeys and existing maximum height above natural ground level of the buildings to be reused.	☐ Confirmed ☑ Not applicable	
When the application involves new building work (including extensions)		
Floor plans drawn to an appropriate scale (1:50, 1:100 or 1:200 are **recommended** scales) which show the following: • the north point • the intended use of each area on the floor plan (for commercial, industrial or mixed use developments only) • the room layout (for residential development only) with all rooms clearly labelled • the existing and the proposed built form (for extensions only) • the gross floor area of each proposed floor area.	☑ Confirmed	
Elevations drawn to an appropriate scale (1:100, 1:200 or 1:500 are **recommended** scales) which show plans of all building elevations and facades, clearly labelled to identify orientation (e.g. north elevation)	☑ Confirmed	
Plans showing the size, location, proposed site cover, proposed maximum number of storeys, and proposed maximum height above natural ground level of the proposed new building work.	☑ Confirmed ☐ Not applicable	
When the application involves reuse of other existing work		
Plans showing the nature, location, number of on-site car parking bays, existing area of landscaping, existing type of vehicular cross-over (non-residential uses), and existing type of vehicular servicing arrangement (non-residential uses) of the work to be reused.	☐ Confirmed ☑ Not applicable	
When the application involves new operational work		
Plans showing the nature, location, number of new on-site car parking bays, proposed area of new landscaping, proposed type of new vehicle cross-over (non-residential uses), proposed maximum new vehicular servicing arrangement (non-residential uses) of the proposed new operational work.	☐ Confirmed ☑ Not applicable	

Privacy—Please refer to your assessment manager, referral agency and/or building certifier for further details on the use of information recorded in this form.

OFFICE USE ONLY

Date received 18/1/15 Reference numbers RL009695

The *Sustainable Planning Act 2009* is administered by the Department of Infrastructure, Local Government and Planning. This form and all other required application materials should be sent to your assessment manager and any referral agency.

Lot 28 Buchanan Creek Road, Cow Bay, RP737398

Mr. Ed Brockenshire

The development planned for Lot 28 Buchanan Creek Road is within the Rainforest Residential Precinct (Settlement Areas North of the Daintree River Locality Code P24/A24.1, 4.3.9 Conservation Planning Area Code P1/ A1.1) and will consist of one house for residential purposes, with a maximum of 3 people living therein (4.3.9 Conservation Planning Area Code/P5).

The Development is sited in an existing cleared area/vacant lot (4.3.9 Conservation Planning Area Code P2/ A2.1) and there are no water courses adjacent to or within the boundaries (4.3.9 Conservation Planning Area Code P4). The dwelling will be set back from Buchanan Creek Rd boundary 25m and 27m from neigbouring boundaries (4.3.9 Conservation Planning Area code P3/A3.1). Each boundary will be densely revegetated with native and endemic species to a depth of 10-20 m (4.3.9 Conservation Planning Area Code P6/A6.1/A6.2/A6.3, 4.6.3 Landscaping Code P1-P5/P7-P10, 4.4.3 Natural Hazards Code P2, 4.5.6 Car Parking Code P3)).The property will not be fenced (4.6.3 Landscaping Code P6).All unplanted areas will be grassed and maintained by regular mowing and all water runoff will be directed to rain water storage tanks & garden beds or lawn(4.6.3 Landscaping Code P12-P13). There will be no trees planted close to dwellings to minimise potential hazards eg, fire (4.4.3 Natural Hazard Code P2), cyclones, personal injury (4.6.3 Landscaping Code P14-P15).Plant species will be selected and sited with consideration to the location of overhead and underground services (4.6.3 Landscaping Code P16). A reliable reticulated water supply system and 20 000 ltr water storage tank with appropriate fire brigade fittings will be situated near dwelling (4.4.3 Natural Hazards Code P2).There will be no hazardous materials manufactured or stored on site (4.4.3 Natural Hazards Code P3).

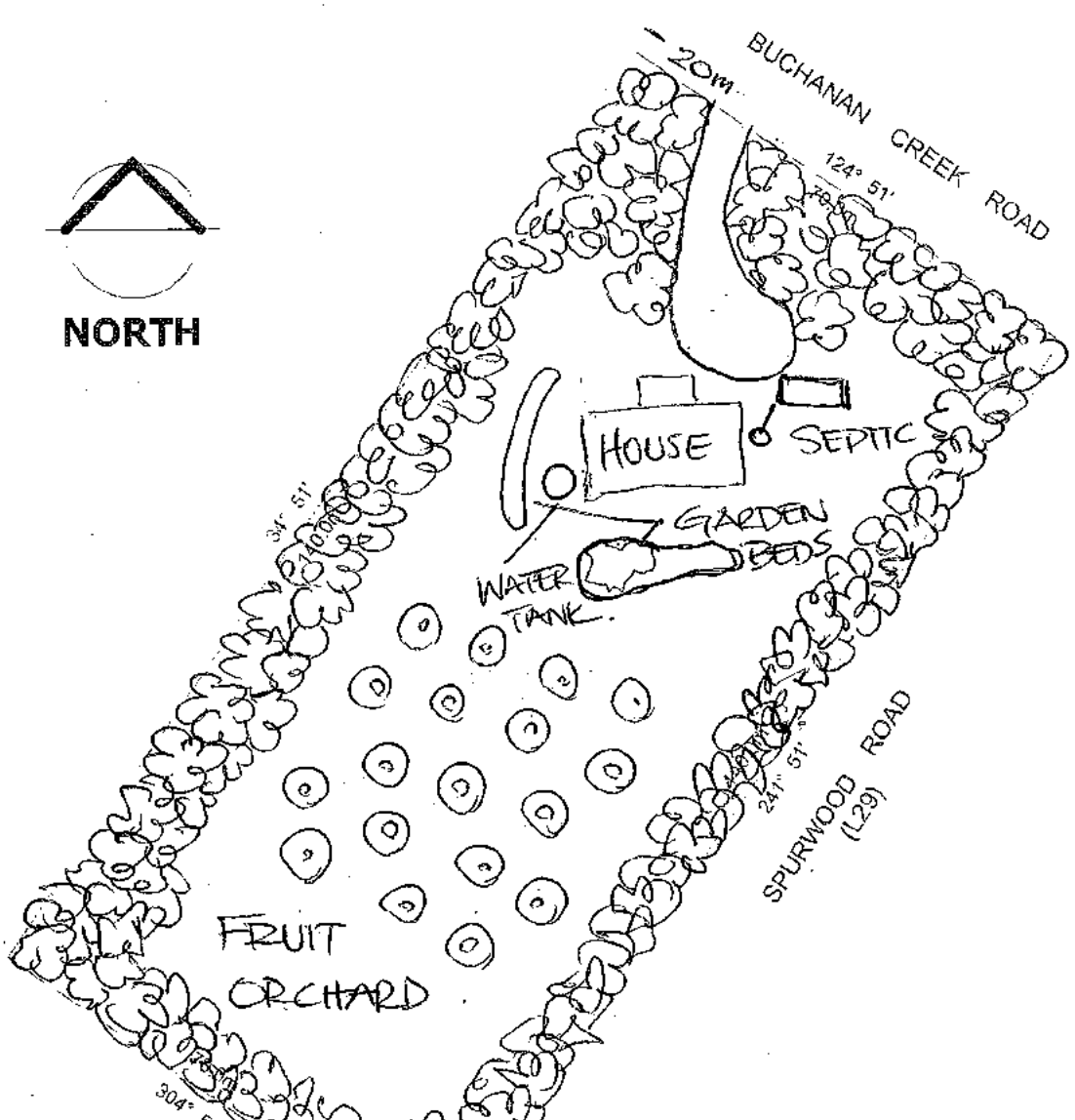
Lot 28 Buchanan Creek Road is a totally cleared/vacant block and has no

vegetation other than mowed grass within its boundaries (4.3.9 Conservation Planning Area Code 4.6.3/P2/A2.1, 4.6.3 Landscaping Code P, 4.4.3 Natural Hazards Code P1/P2), as stated above there are no watercourses within or adjacent to any boundaries (P7).

The dwelling will be a North facing, 2 bedroom timber construction, built on 1500cca stumps, with timber like cladding of brown and green colours to harmonise with the surroundings, A driveway on the Buchanan Creek Road Boundary will consist of compacted road base ,(to minimize erosion)and will lead to the front of the dwelling with parking space for 2 cars (P8/A8.1/A8.2/A8.3) , this will not impact on the neigbouring property (4.5.6 Car Parking Code P1/ P2). The Maximum height of the dwelling will be 4.5m, and will be powered by a solar system with a small backup generator. Waste water is addressed in the attached plumbing plan.

The block has no sloping sites (P9).

LANDSCAPE PLAN 28 BUCHANAN CRK RD.



1 Site Plan - L28/29

1 : 1000

	Sheet L
Sheet Number	She
1 of 3	Site Plan 3D Views
2 of 3	Floor Pla
3 of 3	Elevation
4 of 4	Section

GREG SKYRING Design and DRAFTING Pty. Ltd.

Lic. Under ORSA Act 1991 - No 1040371

PROJECT

Proposed Residences
Buchanan Creek Road,

Soil Engineering Services
FREE CALL
1800 GEOTEC (436 832)
EMAIL: admin@soilengineeringservices.com

27th October 2015

To Whom it May Concern

Site Classification for Proposed Residential Development
Lot 28 Buchanan Road, Cow Bay, Queensland
Report Reference CNS185

1. Introduction

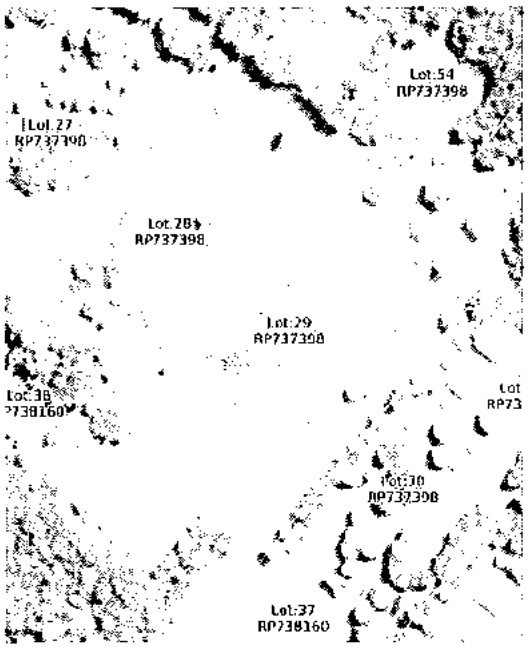
This report by Soil Engineering Services (SES) summarises the results of a site classification investigation for a proposed residential development at Lot 28 Buchanan Road, Cow Bay, Queensland. The work was commissioned by Ed Brockenshire.

The investigation comprised the excavation and subsequent logging of materials arising from two exploratory holes. Details of the field work are given in this report, together with our recommended site classification and comments relating to appropriate construction practice.

2. Site Description

The location of the proposed development, Lot 28 Buchanan Road, Cow Bay, Queensland comprises a flat previously undeveloped lot, levelled and cleared of vegetation in preparation for development. The general appearance of the site is illustrated in Photograph 1.

Photograph 1 Lot 28 Buchanan Road, Cow Bay, Photograph



Soil Engineering Services
FREE CALL:
1800 GEOTEC (436 832)
EMAIL: admin@soilengineeringservices.com

3. Field Work

Field work for this investigation comprised two augured boreholes, undertaken to a maximum depth of 1.50m below existing ground level. The boreholes were logged by an experienced field technician, who also took representative samples before the exploratory holes were backfilled with excavated spoil. A Dynamic Cone Penetrometer (DCP) test was carried out adjacent to each location to give an indication of the in situ strength of the near surface soils.

Materials encountered in the boreholes were broadly similar at both locations and have been summarised as follows;

Exploratory Hole	Strata Thickness (m)	Material Description
C2044 – BH01	0.00 – 0.10	Gravelly Silty CLAY (Cl) low medium plasticity, brown, fine to coarse gravel, fine to coarse sand, trace fine roots, firm, moist.
	0.10 – 1.50	Silty CLAY (Cl) of medium plasticity, red-brown, fine sand, firm, moist.
C2045 – BH02	0.00 – 0.10	Gravelly Silty CLAY (Cl) low medium plasticity, brown, fine to coarse gravel, fine to coarse sand, trace fine roots, firm, moist.
	0.10 – 1.50	Silty CLAY (Cl) of medium plasticity, red-brown, fine sand, firm, moist.

No free groundwater was encountered at either location however ground water levels can fluctuate due to seasonal and other factors.

Laboratory testing was undertaken confirm the Atterbergs Limits of materials encountered.

4. Comments

4.1. Proposed Development

It has been assumed for the purposes of this report that the proposed structure will be a single storey relatively light residential structure constructed at or near grade.

4.2. Ground Conditions

Both exploratory holes encountered a 0.10m thick layer of gravelly silty CLAY overlying firm silty CLAY proven to the termination depth of 1.50m below ground level.

4.3. Predicted Surface Movement

The results of investigation and testing indicate that the site may be considered to have a predicted surface movement (Y_s) due to seasonal changes in moisture content of 20mm to 40mm.

4.4. Allowable Bearing Capacity

Results of in situ testing indicate the near surface strata within the proposed development footprint are likely to provide an allowable bearing capacity for conventional footings of 100kPa under normal site conditions.

4.5. Site Classification

Based on the ground conditions and the results of laboratory testing and provided that appropriate site preparation methods are adopted, the building area can be classified as a **Class M** site when assessed in accordance with AS 2870 – 2011 'Residential slabs and footings – Construction' with an anticipated characteristic ground surface movement not exceeding 20mm.

4.6. Site Drainage Characteristics

In situ percolation testing was not undertaken on the site to establish drainage characteristics. Near surface soils encountered on the site were gravelly silty CLAY which are commonly characterised as poorly permeable with indicative permeabilities (k) of 10^{-9}m/s.

5. Site Preparation

Prior to construction of ground bearing slabs, foundations or placement of additional fill within the building footprint, it is recommended that the following site preparation methods are adopted:

- strip all remaining vegetation and soil containing organic matter from within the building footprint and grub out all remnant roots from the building area;
- then moisture condition (wet or dry) the exposed subgrade to approximate optimum moisture content;
- then compact the subgrade with at least 4 passes of a minimum 12 tonne static weight roller or similar, with a final test roll to identify any areas requiring further rolling or removal.

Any additional fill to the building footprint should comprise a granular soil placed in layers of maximum 250 mm loose thickness with each layer compacted to at least 98% Standard maximum dry density ratio, within 2% of the optimum moisture content for Standard compaction. Placement of additional fill should be subject to Level 1 geotechnical inspections and testing as per the requirements of AS 3798 – 2007.

6. Foundation Maintenance

The soil moisture around the buildings should be maintained and extremes of wetting and drying should be avoided. The following general measures are recommended to reduce the potential for footing and building damage caused by abnormal moisture variations within the site:

- Tree planting adjacent to the buildings should be restricted.
- Irregular or excessive watering of the gardens adjacent to the house should be avoided.
- Any leaking or damaged underground services should be repaired promptly.
- Provide paving (graded away from the building) to the edge of the building.

The site classification presented in Section 4.2 of the report is provided on the basis that the performance expectations set out in Appendix B of AS2870-2011 are acceptable and that site maintenance complies with the provisions of CSIRO Information Sheet BTF 18, "Foundation Maintenance and Footing Performance: A Homeowner's Guide", available from the CSIRO website.

Soil Engineering Services
1800 GEOTEC (436 832)
EMAIL: admin@soilengineeringservices.com

7. Limitations

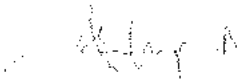
This report has been prepared for the proposed development at Lot 28 Buchanan Road, Cow Bay, Queensland for the sole use of Ed Brockenshire. The report has been produced for this project only and for the purpose(s) described in the report. It should not be used for other projects or by a third party. In preparing this report SES has necessarily relied upon information provided by the client and/or their agents.

It should be noted that the materials encountered at the test locations represent the ground conditions at those locations only. The nature and continuity of the materials away from the test locations are inferred. Variations to the ground conditions are likely. The findings contained within this report are the result of limited investigations conducted in accordance with normal practices and standards. To the best of our knowledge, they represent a reasonable interpretation of the general condition of the site. Under no circumstances, however, can it be considered that these findings represent the actual state of the site at all points.

8. References

Australian Standard AS 2870-2011 "Residential Slabs and Footings - Construction", June 2011, Standards Australia.
Australian Standard AS 3798 – 2007 "Guidelines on Earthworks for Commercial and Residential Developments", Standards Australia
Australian Standard AS1547 – 2012 " On-site domestic waste water management", Standards Australia

Yours faithfully
On Behalf of SES



Andrew Horspool
Engineering Geologist

ZAMMATARO PLUMBING PTY LTD

PO Box 107, Mossman QLD 4873
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Soil Site Assessment

November – 2015

Lot 28, Buchannan Creek Road, Cowbay, Qld, 4873

LOT 28
RP 737398

Version 8 – November 2014

Form 1—Compliance assessment application for plumbing, drainage and on-site sewerage work

GENERAL NOTES	**This form is to be used for the purposes of sections 85, 86 and 86A of the *Plumbing and Drainage Act 2002*.**
1. Type of application Application for a compliance permit or for a compliance certificate.	☑ Compliance permit ☐ Compliance certificate Compliance permit number *(if applicable)*: Date the work is proposed to commence: Related approvals:
2. Description of land The description must identify all land the subject of the application. The lot and plan details (e.g. SP/RP) are shown on title documents or a rates notice.	Street address *(include number, street, suburb/locality and postcode)* Lot 28, Buchanan Creek Road, Cowbay, Qld Lot and plan: L28 on RP737398 Postcode 4871 Shop/tenancy number *(if applicable)*: Storey/level *(if applicable)*: Local government area: Douglas Shire Council
3. Applicant and owner details Identify who is making the application. The applicant need not be the owner of the land. In signing and lodging this application, the applicant is responsible for ensuring the information provided is true. The local government will rely on this information when assessing the application.	Name (in full): Antonino Zammataro Signature: Date: 30/10/15 Contact person: Antonino Zammataro Phone number: (07)40 982 774 Mobile number: 0418 187 046 Fax number: (07)40 981 042 Email address of applicant: admin.zamplumb@bigpond.com Postal address: Po Box 107, Mossman, Qld, 4873 Owner's name if not the applicant: Ed Brockenshire Postal address of owner: 22 Spurwood Rd, Cowbay, Qld, 4871 Email address of owner (if known): daintreebungalows@bigpond.com
4. Responsible person The responsible person for compliance assessable work is a person who is licensed to perform the work and either performs or directs the performance of the work. If the responsible person for the work is not known, a signature in this part is not required. However, if this section is not signed a Form 7 must be completed by the responsible person and provided to the local government prior to requesting an assessment of the work.	Name *(in full)*: Antonino Zammataro QBCC occupational licence number (if applicable): 49850 QBCC contractor licence number: 79358 Phone number: (07)40982 774 Mobile number: 0418 187 046 Fax number: (07)40 981 042 Email address of responsible person: admin.zamplumb@bigpond.com Postal address: Po Box 107, Mossman, Qld Postcode 4873 Signature: Date: 30/10/15
5. Sanitary plumbing and sanitary drainage This section is mandatory if there is sanitary plumbing and/or drainage work involved.	If the application is for sanitary plumbing and/or drainage work, provide details of the proposed work ☑ new ☐ alteration Details (e.g. relocating WC) _____

6. Fixtures to be installed

Completion of this section is mandatory. A fixture pair may be considered one fixture.

Indicate the number of fixtures to be installed:

sinks:	1	basins:	1	urinals:		showers:	1
baths:		W.C.s:	1	laundry tubs:	1		
other:				**Total** number of fixtures:	5		

7. Water supply

Examples of supply details may include dual reticulation or recycled water.

Completion of this section is mandatory if there is water supply plumbing work. If a prior approval from the distributor-retailer is NOT provided with this application, the applicant may need to obtain an approval prior to the local government issuing a compliance permit.

If the application is for a new connection, or disconnection of an existing water service, complete the following:

(a) size of the service required (if known) _____mm

(b) purpose of the water service *(tick applicable boxes)*

☐ domestic ☐ industrial ☐ commercial ☐ fire

(c) nature of the work *(tick applicable boxes)*

☐ new ☐ alteration

Note—SEQ local governments cannot grant certain compliance permits or compliance certificates unless the distributor-retailer has approved the associated connection, connection change or disconnection to its water infrastructure; or it is a class of work that does not require distributor-retailer approval (Plumbing and Drainage Act 2002, section 85(7A) and 86(9A)).

8. Disposal of wastewater in unsewered area

Completion of this section is mandatory if there is an on-site sewerage facility or a greywater use facility.

A Chief Executive Approval (CEA) number must be included for any on-site sewerage treatment plant or greywater treatment plant.

All applications must be accompanied by an on-site sewerage evaluation report. If the application is for an on-site sewerage facility or greywater use facility, provide details of the following:

Type of facility

☑ on-site sewerage facility ☐ greywater use facility

Treatment Plant CEA Number: 14/2015

☐ service requirements (e.g. frequency of servicing *(if known)*:

_____

brand: Advanced Enviro Septic model: AES capacity: 1272L

☐ septic tank ☐ holding tank

brand:_____ model:_____ capacity:_____

Description of work

☐ new dwelling ☐ connect to existing facility ☐ conversion from septic to treatment plant

Number of bedrooms in dwellings to be serviced by the facility:_____

PRIVACY NOTICE: The information on this form is collected as required under the *Plumbing and Drainage Act 2002* (PDA) by local governments. This information may be stored in the local government database and will be used for purposes related to deciding an application and monitoring compliance under the PDA. Your personal information will be disclosed to the financial institution which handles the local government's financial transactions and may be disclosed to other local government agencies, local government authorities, the Queensland Building and Construction Commission and third parties for purposes relating to administering and monitoring compliance with the PDA. Personal information will otherwise only be disclosed to third parties with your consent or in accordance with the *Information Privacy Act 2009*.

RTI: The information collected on this form will be retained as required by the *Public Records Act 2002* and other relevant Acts and regulations, and is subject to the Right to Information regime established by the *Right to Information Act 2009*.

FEE ($)	DATE RECEIVED		RECEIVING OFFICER'S NAME/S		REFERENCE NUMBER/S	

Zammataro Plumbing Pty Ltd

Postal: **PO Box 107, Mossman QLD 4873** Factory: **8 Therese Drive, Mossman QLD 4873**

ON SITE SEWERAGE FACILITY
SITE AND SOIL EVALUATION REPORT

A: SITE EVALUATOR

Name: Anthony Zammataro

Signature: _____ Date: 30th.October .2015

B: SITE INFORMATION (desk-top evaluation)

Location Details,

Locality: Buchanan Creek road Cow Bay

Owner: E. Brokenshire ~~& C coye~~

Phone 40989229

Survey Plan Details: RP: RP 737398 Lots No: 28

Local Government: D.S.C. Parish : Alexander County: Solander

Site Plan Details Attached, Yes

Soil Type from Soil Maps etc: N/A

Climate

Annual Rainfall: 2245 mm Annual Potential Evapotranspiration: 1474 mm

Intended Water Supply Source:

Town Water Supply Rainwater (Roof Collection)

Dam Bore/Well ****

Other Water Tanks

C: SITE ASSESSMENT

Topography

Slope: **Slight slope House to disposal area**

Ground Cover: **Yes**

Geology: **N/A**

Drainage Patterns: N\A

Available Clearances: (Site Plan details attached)

Boundaries: more then 2 Metres as required (refer to site plan)

Wells Bores: Yes . More then 10 Metres away from disposal area

Embankments: None in disposal area

Stands of Trees, None in disposal area

Buildings: New Dwelling

Other: _____

Site History (Land Use): Unknown

Environmental Concerns: None

Site Stability:

Is expert Evaluation Necessary? ~~Yes~~ / No

If yes, attach stability report and give details here of:

Author: _____ Designation: _____

Company: _____ Date: _____

Drainage Controls

Depth of Seasonal water table (dug to depth of 2 metre did not strike water)

WINTER: AO SUMMER: AO.

Need for groundwater cut-off drains? No

Need for surface water collection / cut-off drains? Yes

Availability of Reserve / Setback Areas

Reserve Area available for disposal: 45 Sq. m (Refer to site plan)

Evaluator's Photographs attached ~~Yes~~ / No

SITE AND SOIL EVALUATION REPORT

Method:	Falling Water	*****
	Test Pit	
Other	Soil Texture Test \ Soil Classification Test	*****

D: SUBSOIL INVESTIGATION

Soil Profile Determination

Report:

Estimated Soil Category:

Soil Category	Description	Tick One
1.	Gravels and Sand	
2	Sandy Loams	
3	Loams	
4.	Clay Loams	*****
5	Light Clays	
6.	Medium to Heavy Clays	

Reasons for placing in Stated Soil Category: **On Site Test**

Reasons for Design Irrigation Rate (DLR) recommendation: **Based on Test and have assumed dLR of 10**

From AS 1547:2000

General Comments

Need for Groundwater Quality Protection: No

Type of Land Application Facility considered best suited to site. 3000 lt. Septic Tank to Aes Bed

Evaluator's preliminary assessment of minimum Land Application Area for the site:

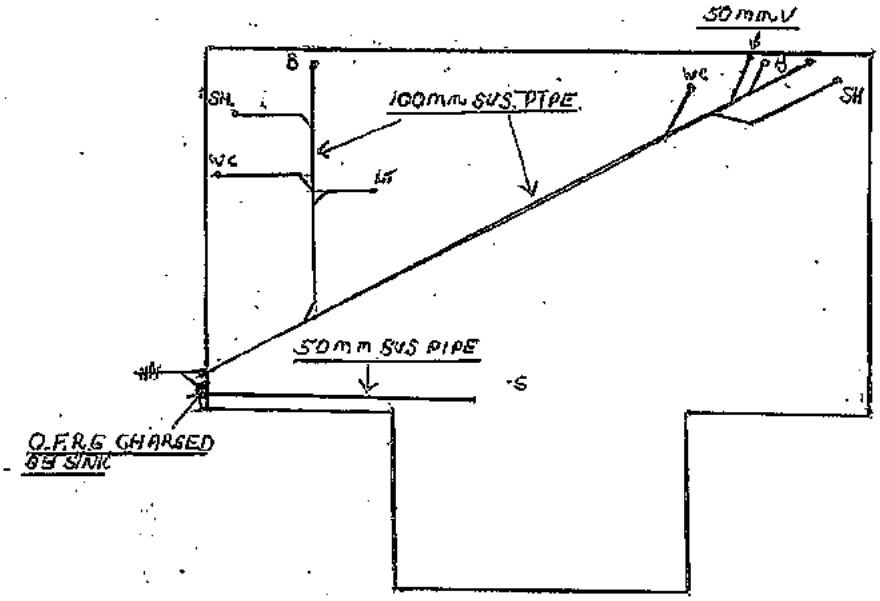
45 Sq. m (System 13 Sq . M / System Extension 32 Sq M)

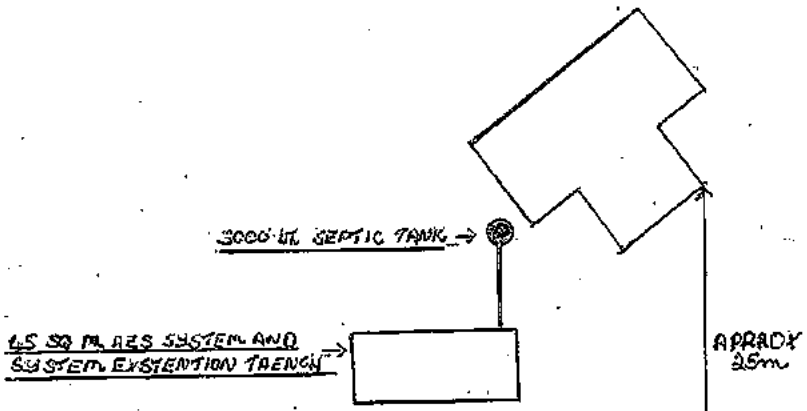
Estimated Daily Flow (Residence) **Based on a 2 bed home = 3 people x 150 litres per day = 450 Litre (Total)**

Design Considerations: Cat. 4 soil, 2 bedroom house,

Consultation with other parties:

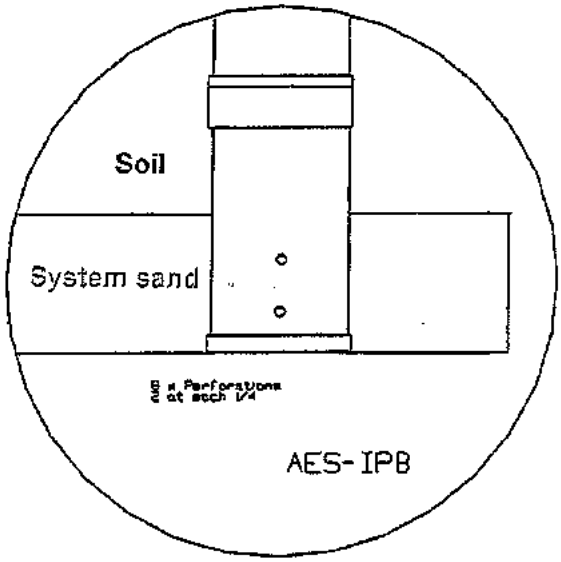
Neighbours	Local Environment Groups	
Environment Agencies	Not Applicable	*
Report Attached	No	



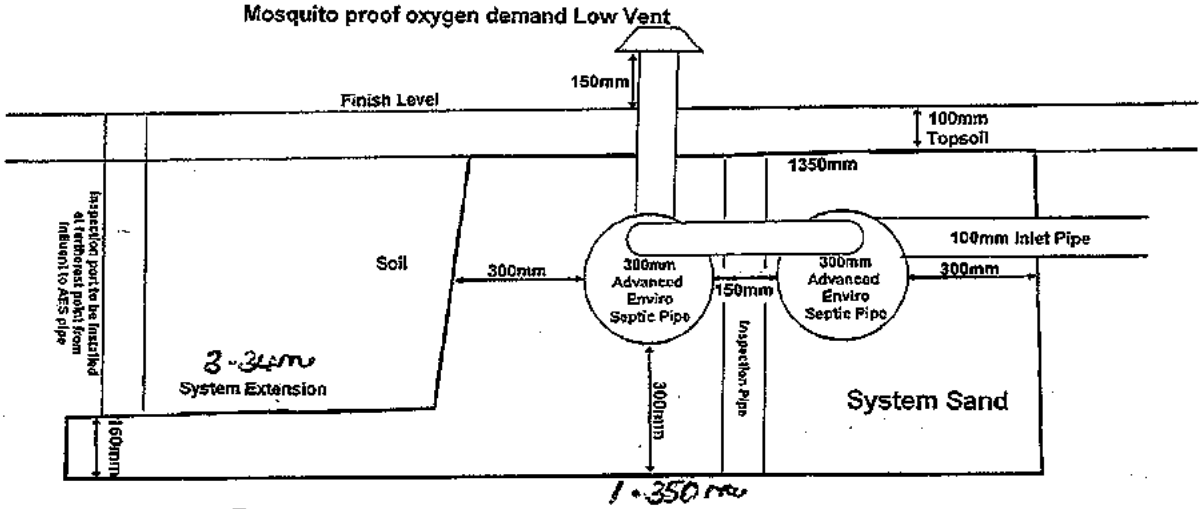


PROPOSED DRAINAGE AND ON SITE SEWERAGE FACILITY PLAN FOR E. BROKENSHIRE & C. GOYE LOT 28 BUCHANAN ROAD COW BAY

BUCHANAN CREEK ROAD

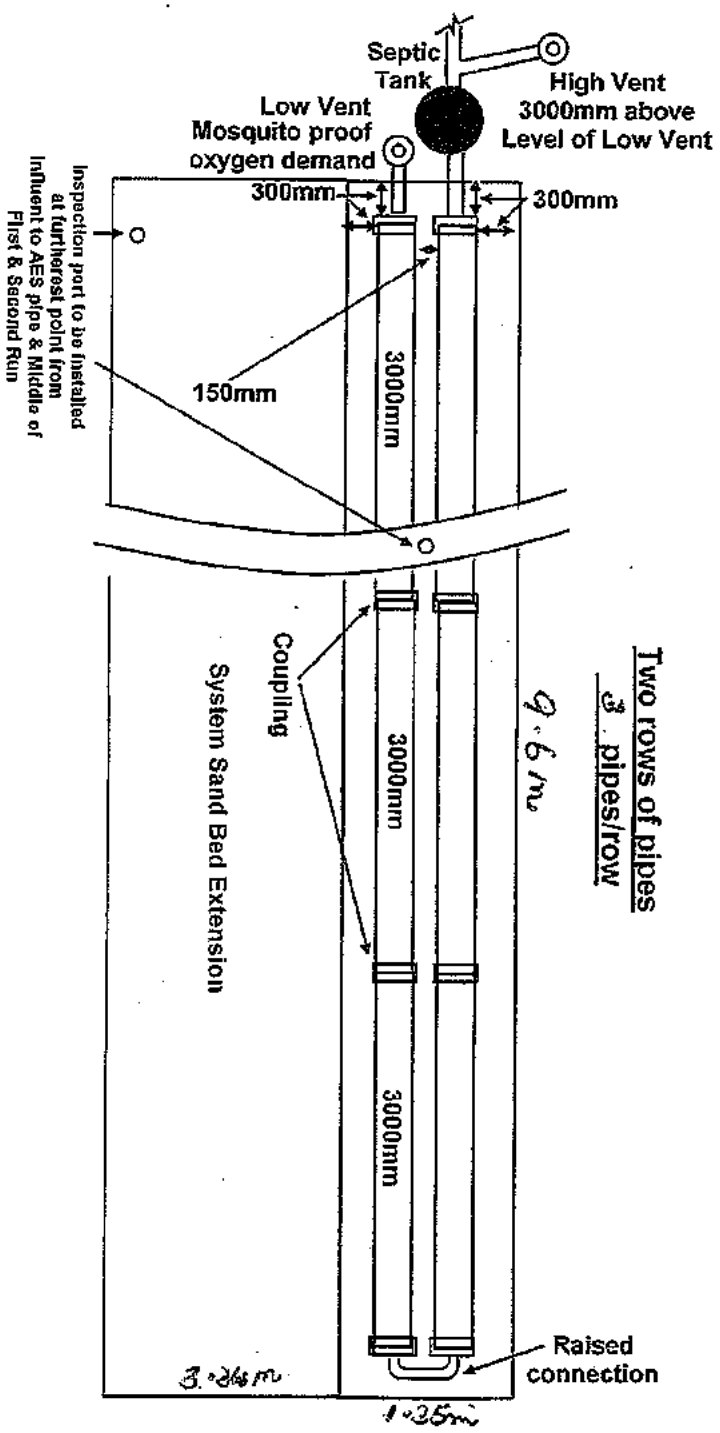


AES Inspection point detail



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

2880mm Wide Two Pipe
Advanced Enviro-Septic Cross-Section



Entire base must be scarrified
200mm deep parallel
To AES Pipes

ADVANCED ENVIRO-SEPTIC™ "Always The First Option"

Advanced Enviro-septic Design Calculator V8.3

"Always the BEST Option" until site and soil conditions rule it out.

Site Address	Lot 28 Buchanan road ,Cow Bay , Queensland				
Client Name	Ed Brokenshire				
Designed By	Antonio Zammataro	Designers Ph Number	40982774	QBSA Lic Number	
Lic Plumber	Antonio Zammataro	Plumber Ph Number	40982774	Plumb / Drainer Lic Number	49850
Council Area	Douglas shire Council	AES Certif Number		Date	30/10/15

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

System Designers site and soil calculation data entry		IMPORTANT NOTES
Is this a new home installation Y or N	y	>> Minimum single vent size is 80mm or 2 x 50mm house vents
Number of person	3	a septic tank outlet filter is NOT RECOMMENDED
Daily Design Flow Allowance Litre/Person/Day	150	
Number of rows required to suit site constraints	2	>> The maximum lth of a single AES pipe run is 30 meters
n surface Soil Category as established by site and soil evaluation. CATEGORY	4	>> Category may require design considerations, Ref AS1547
Design Loading Rate based on site & soil evaluation DLR (mm/day)	10	>> Soil conditioning may be necessary, Ref AS1547 & Comments.
Bore log depth below system Basel area	1000mm	>> Min depth below basel area is 600 mm to establish water table or restr
Enter System footprint Slope in % for standard AES systems to calculate ex	0	
Is this design a gravity system with no outlet filter? Y or N	y	>> A House Vent & LOW VENT required on this system

PLEASE CHECK YOU HAVE FALL FROM TANK TO AES SYSTEM PIPES

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

- Ripping of receiving surface is required in clay soil structures in Cat 4,5,6. In addition refer to AS 1547. Always excavate and rip parallel to the site slope/AES pipe.
- Specialist soils advice and special design techniques will be required for clay dominated soil having dispersive or shrink/swell behaviour. Refer AS1547
- Plumbers are reminded that good construction techniques as per AS1547 are especilly important in these soil types. Refer AS1547 & AES installation Instructions

AES System Calculator Outcomes		
Total System load - litres / day (Q).	450	l/d
Min Length of AES pipe rows to treat loading	7.5	lm
Number of FULL AES Pipe lengths per row	3	lths
Total Capacity of AES System pipe in Litres	1272	ltr.

AES dimensions	AES System	System Extension
Lth m : (L)	9.6	9.6
Width m:(W	1.35	3.34
Sand Depth	0.75	0.15
Area m2	13.0	32.0

DO YOU WISH TO USE CUT LENGTHS OF PIPE IN THIS DESIGN? (ENTER Y)

IF YOU WISH TO USE A TRENCH EXTENSION DESIGN OPTION ENTER "Y" — Enter Custom Width m >

AES INFILTRATION FOOT PRINT AREA - L = Q / (DLR x W)	Length		Width	Minimum AES foot print required .	
for this Basic Serial design is	9.6	x	4.69	= 45.0	m2 total

Code	AES System Bill of Materials			Chankar Environmental Use Only
AES-PIPE	AES 3 mtr Lths required	6	lths	
AESC	AESC Couplings required	4		
AESO	AESO Offset adaptors	4		
AESODV	AES Oxygen demand vent	1		
AES-IPB	AES 90mm Inspection port base	2		
AES Equ	AES Speed Flow Equaliser			
	TOTAL SYSTEM SAND REQUIRED (Guide Only)	17	m3	

PLEASE email your AES CALC and Drawings to

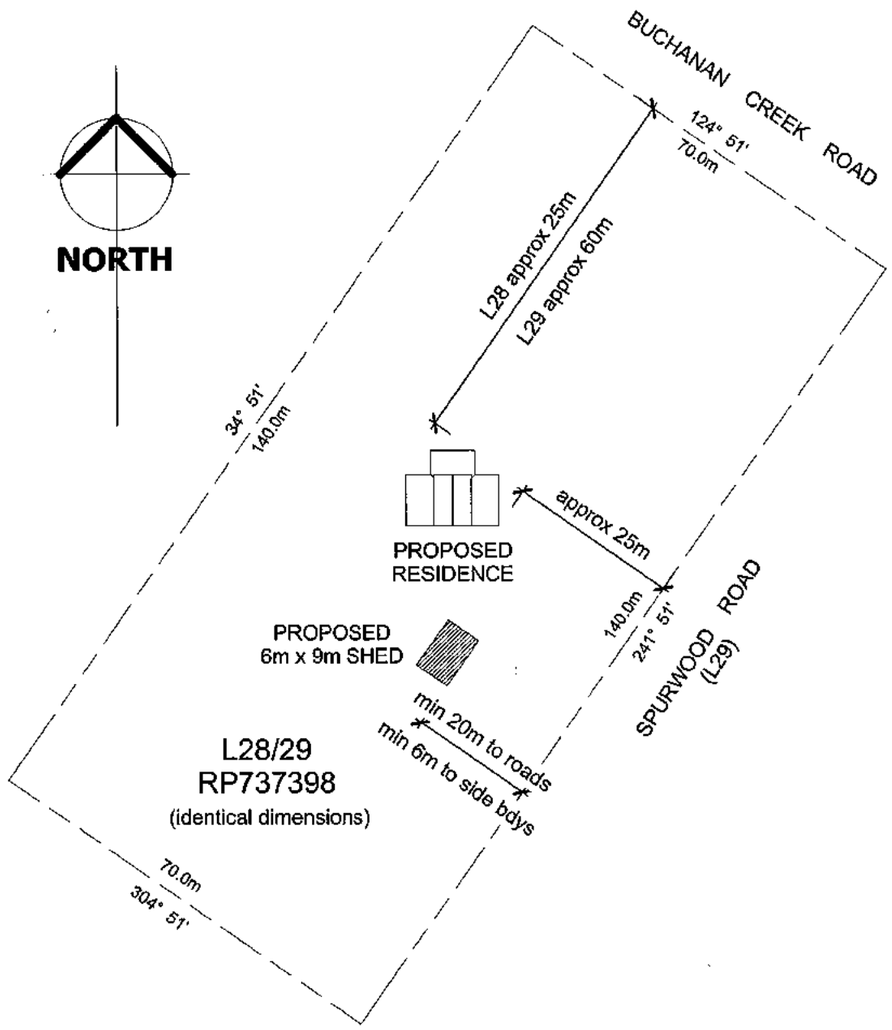
DESIGNREVIEW@ENVIRO-SEPTIC.COM.AU

Designreview@enviro-septic.com.au

The AES Calculator is a design aid to allow checking of the AES components and configuration and is a guide only. Site and soil conditions referencing the AS 1547 standard adopted by the applicable Local Authorities are calculated and designed by a Qualified Designer.

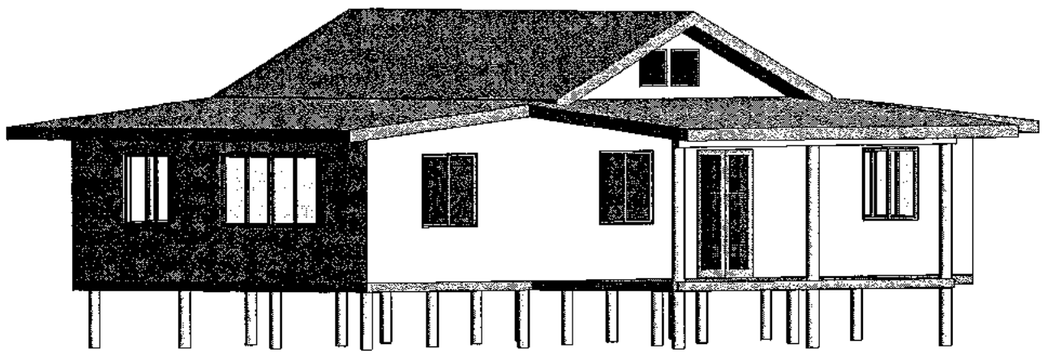
Chankar Environmental has no responsibility for the soil evaluation, loading calculations or DLR entered by the designer for this calculator.

AES pipes can be cut to lenght on site. They are supplied in 3 meter lths only.

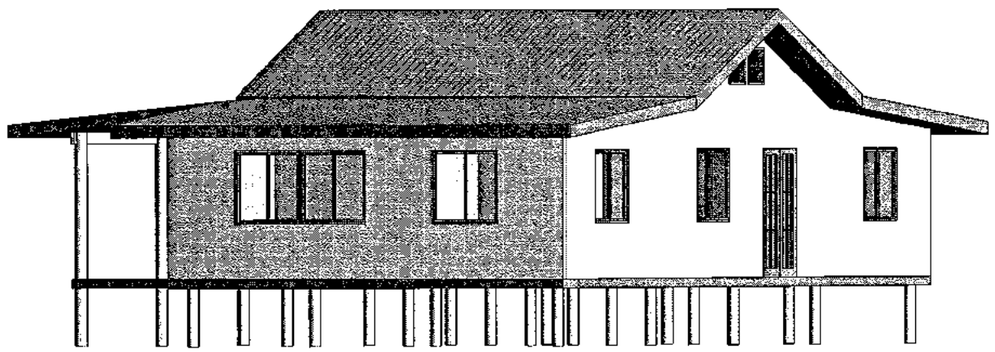


1 Site Plan - L28/29

1 : 1000



2 3D - North East



3 3D - South West

Sheet List	
Sheet Number	**Sheet Name**
1 of 3	Site Plan, Sheet List, 3D Views
2 of 3	Floor Plan
3 of 3	Elevations
4 of 4	Section

GREG SKYRING *Design* and DRAFTING Pty. Ltd.

Lic Under QBSA Act 1991 - No 1040371

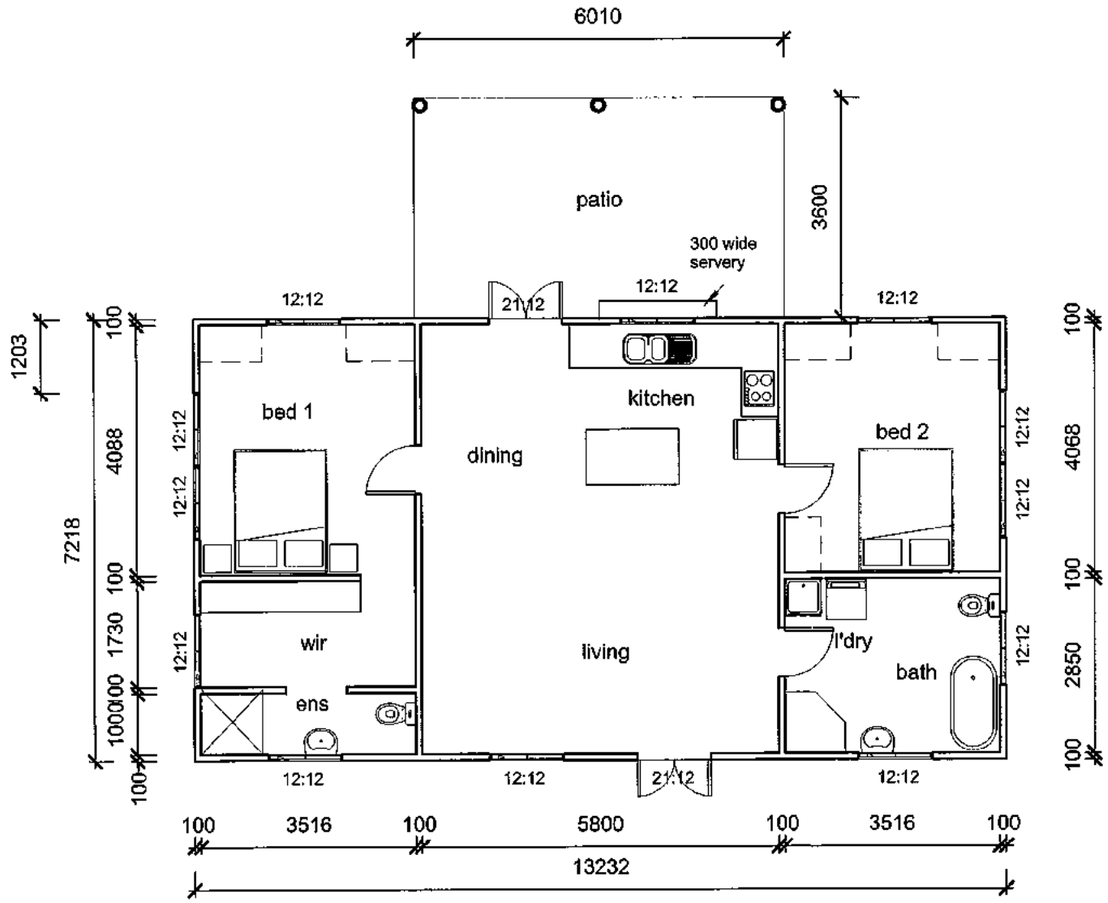
11 Noli Close, Mossman Q. 4873

Phone/Fax: (07) 40982061
Mobile: 0419212652
Email: skyringdesign@cyberworld.net.au

PROJECT

Proposed Residences
Buchanan Creek Road,
L28 and 29 RP737398,
COW BAY

CLIENT	WIND CLASS	PLAN NUMBER	SHEET
E. Brockenshire & C. Coye		210-15	1 of 3
SCALES	**PLAN TITLE**	**DATE OF ISSUE**	**REV**
1 : 1000	Site Plan, Sheet List, 3D Views	21.10.15	B



1 Floor Plan
1 : 100

LEGEND

- stud framed external walls, feature ply to ext
- stud framed internal walls, finished as above
- O 175Ø hwd cca posts
- FW • Floor Waste (optional)
- (WP) Waterproof wet area to AS3740.
- (S/A) Smoke alarms to AS3786.

FLOOR AREAS

Lving Area	95m²
Patio Area	22m²
TOTAL AREA	117m²

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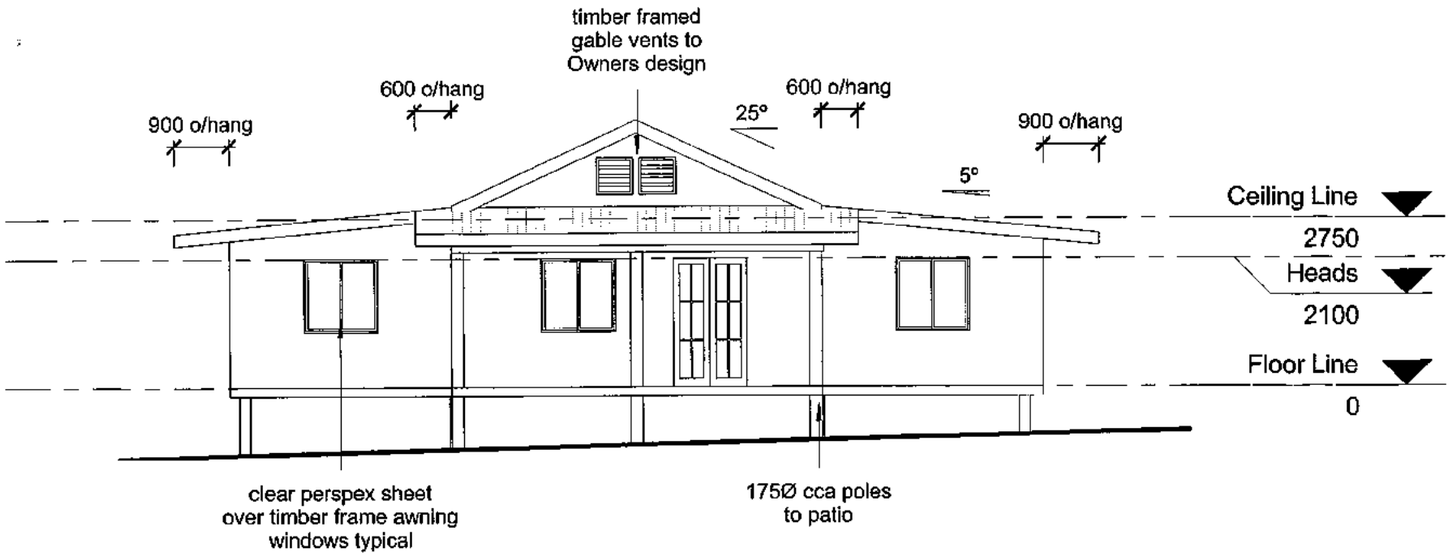
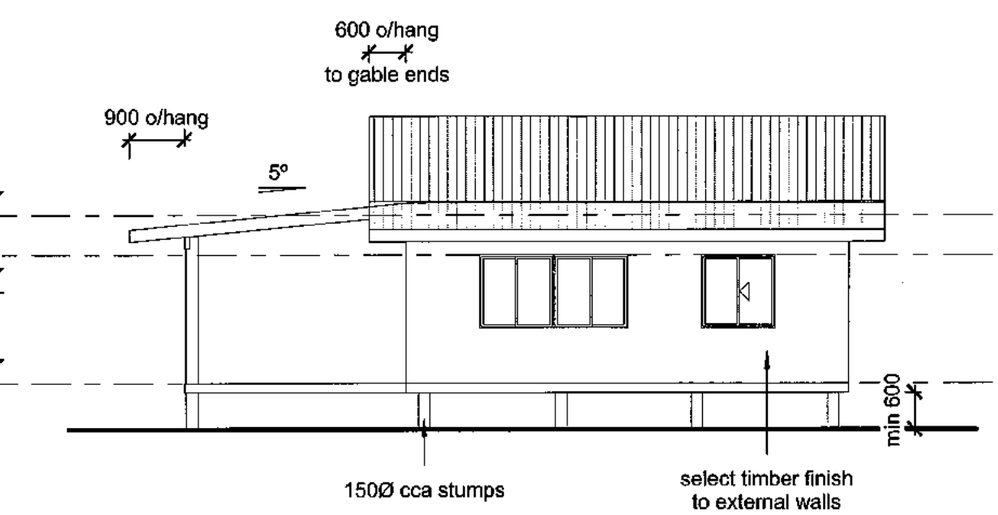
CLIENT	WIND CLASS	PLAN NUMBER	SHEET
E. Brockenshire & C. Coye	C2	210-15	2 of 3
SCALES 1 : 100	**PLAN TITLE** Floor Plan	**DATE OF ISSUE** 21.10.15	**REV** B



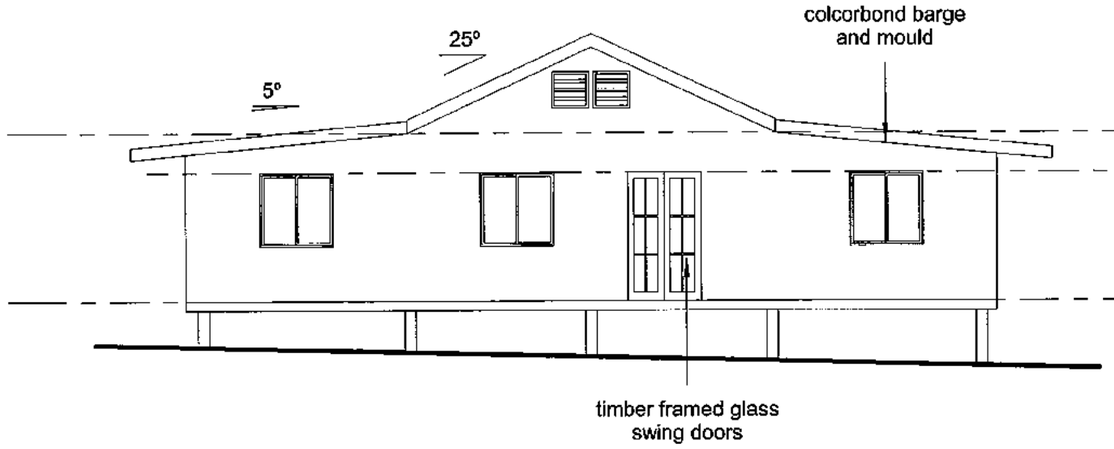
1 North Elevation

1 : 100



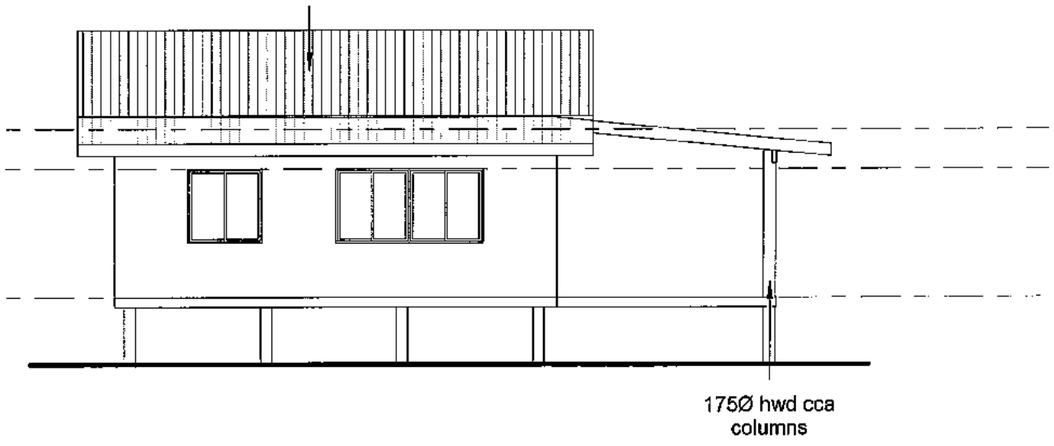
2 West Elevation

1 : 100



3 South Elevation

1 : 100



4 East Elevation

1 : 100

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1 : 100	Elevations	21.10.15	B