

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)

Greg Skyring Design and Drafting Pty Ltd

For companies, contact name

Greg Skyring

Postal address

11 Noli Close

Suburb Mossman

State Qld

Postcode 4873

Country Aust

Contact phone number

07 40982061

Mobile number (non-mandatory requirement)

Fax number (non-mandatory requirement)

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DOUGLAS SHIRE COUNCIL
RECEIVED

File Name MCLIC1346/2016
Document No

- 7 MAR 2016

Attention DPL orig ✓
Information

Email address (non-mandatory requirement)

greg

@skyringdesign.com.au

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.)

Proposed residence on rural cattle property, existing 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)			Unnamed road, off Forest Creek Road, Forest Creek	4873	64	BS6	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)	Rural		Refer to attached report
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			
					<input type="checkbox"/> GDA94 <input type="checkbox"/> WGS84 <input type="checkbox"/> other	

3. Total area of the premises on which the development is proposed (indicate square metres)499200m²**4. Current use/s of the premises** (e.g. vacant land, house, apartment building, cane farm etc.)

Cattle raising, existing shed

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

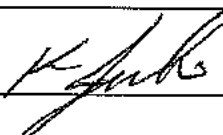
Name of owner/s of the land	Kevin David Jack
I/We, the above-mentioned owner/s of the land, consent to the making of this application.	
Signature of owner/s of the land	
Date	29/2/16

Table G

Name of owner/s of the land	
<input type="checkbox"/> 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	
<input type="checkbox"/> 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
Forest Creek

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 and 5	Hard copy
Planning Report, dated 7.03.16	Hard copy
Building Plans by Greg Skyring Design and Drafting, sheets 1-3, dated 7.03.16	Hard copy
Waste water report by Earth Test, report no SI 041-16, dates Feb 2016	Hard copy

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
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

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)
New House	house	173m ²		

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	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
New building work on the premises	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes
The reuse of existing operational work on the premises	<input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes
New operational work on the premises	<input checked="" type="checkbox"/> No	<input type="checkbox"/> 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		
<p>A site plan drawn to an appropriate scale (1:100, 1:200 or 1:500 are recommended scales) which shows the following:</p> <ul style="list-style-type: none"> the location and site area of the land to which the application relates (<i>relevant land</i>) 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. 	<input checked="" type="checkbox"/> Confirmed	Hard copy
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.	<input checked="" type="checkbox"/> Confirmed	Hard copy
A statement about the intensity and scale of the proposed use (e.g. number of visitors, number of seats, capacity of storage area etc.).	<input checked="" type="checkbox"/> Confirmed	Hard copy
<p>Information that states:</p> <ul style="list-style-type: none"> 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). 	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	Hard copy

A statement addressing the relevant part(s) of the State Development Assessment Provisions (SDAP).	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> 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.	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	Hard copy
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: <ul style="list-style-type: none"> 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. 	<input checked="" type="checkbox"/> Confirmed	Hard copy
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)	<input checked="" type="checkbox"/> Confirmed	Hard copy
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.	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	Hard copy
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.	<input checked="" type="checkbox"/> Confirmed <input type="checkbox"/> Not applicable	Hard copy
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.	<input type="checkbox"/> Confirmed <input checked="" type="checkbox"/> 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

Reference numbers

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.

The Manager,
Planning Services,
Cairns Regional Council,
PO Box 723,
Mossman QLD 4873

7th March 2016

Dear Sir/Madam,

RE: DEVELOPMENT PERMIT for a MATERIAL CHANGE OF USE for a House on land described as Lot 64 on BS6, off Forest Creek Road, Forest Creek

Please find attached IDAS Forms 1 and 5 duly completed, plans showing details of the proposed buildings, and a waste water report.

The proposed development activity is Code Assessable under the 2008 Douglas Shire Planning Scheme, and the following report provides supporting information to show compliance or otherwise with the planning area and codes within.

1.0 General Details

Applicant and Contact

Greg Skyring,
Greg Skyring Design and Drafting Pty Ltd
11 Noli Close,
Mossman QLD 4873

Ph 07 40982061
Fax 07 40982061
Email greg@skyringdesign.com.au

Registered Owner of Land

Kevin Jack

Real Property Description

Lot 64 BS6

Location

Unnamed road (off Forest Creek Road), Forest Creek

1.0 – General Details continued

Tenure	Freehold
Land Area	49.92ha
Present Use	rural - cattle grazing, exist 18m x 12m shed
Contaminated Lands or Environmental Management Registers	Nil
Easements and Encumbrances	None
Local Government Authority	Douglas Shire Council
Planning Scheme	2008 Douglas Shire Planning Scheme
Planning Area	Rural
Applicable Codes	Settlement Areas North of the Daintree River Locality Code Rural Planning Area Code Land Use Code - House
Applicable Overlays	Natural Areas and Scenic Amenity Code, See also 'Summary' at end of report.

2.0 Assessment Against the Douglas Shire Planning Scheme Codes

SETTLEMENT AREAS NORTH OF THE DAINTREE RIVER LOCALITY CODE

Elements of the Code

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P1 The Height of Buildings and structures is subservient to the surrounding environment and is in keeping with the unique character of the Locality.	A1.1 In the Planning Areas in this Locality the maximum Height of Buildings/structures is 6.5 metres and 2 Storeys. In addition, the roof or any ancillary roof features do not exceed a maximum Height of 3.5 metres.	The proposed house and exist shed are single storey and no greater than 6.0m in overall height
P2 Development is connected to sustainable on Site infrastructure services.	A2.1 Water storage is provided in tank/s with a minimum capacity to service the proposed use, including fire fighting capacity, and Access to the tank/s for fire trucks. Tank/s to	The property is already provided with an excess of 30,000 litre storage available in water tanks supplied from available roof areas, and a bore.

	<p>be fitted with a 50 mm ball valve with a camlock fitting and installed and connected prior to occupation and sited so as to be visually unobtrusive. Water storage tanks are to be fitted with screening at the inlet to prevent the intrusion of leaves and insects.</p> <p>A2.2 On any roof exceeding 100 m², gutters are installed and the flow diverted to a storage tank.</p> <p>A2.3 An environmentally acceptable and energy efficient power supply is constructed, installed and connected prior to occupation and sited so as to be screened from the road. (Information that the Council may request to demonstrate compliance with the Performance Criteria is outlined in Planning Scheme Policy No 10 – Reports and Information the Council May Request, for code and impact assessable development).</p>	<p>Complies</p> <p>Underground power will be provided from the closest off property source</p>
<p>P3 Onsite wastewater does not adversely impact on the environmental quality of the water and soil resources or the amenity of residents, through the implementation of best environmental practice.</p>	<p>No Acceptable Solution. (Information that the Council may request to demonstrate compliance with the Performance Criteria is outlined in Planning Scheme Policy No 10 – Reports and Information the Council May Request, for code and impact assessable development).</p>	<p>A waste water disposal report is attached, indicating that the Owner preferred option of a “Advanced Enviro-Septic” septic tank and trenching is an acceptable solution.</p>
<p>P4 The sustainability of the natural water resources of the area is protected for ecological and domestic consumption purposes.</p>	<p>A4.1 If groundwater is to be used development is limited to one bore per site and the bore is: - not located within 100m of a septic disposal trench (on the site or adjoining sites: and -not located within 100 m of another bore A4.2 Surface water is to be used for domestic purposes only.</p>	<p>Cattle are provided with bore fed drinking troughs in lieu of access to adjacent creeks.</p>

P5 Development does not adversely impact on areas of sensitive natural vegetation, foreshore areas, Watercourses and areas of tidal inundation which contribute to the Scenic Amenity and the natural values of the Locality5.	No Acceptable Solution. (Information that the Council may request to demonstrate compliance with the Performance Criteria is outlined in Planning Scheme Policy No 10 – Reports and Information the Council May Request, for code and impact assessable development).	Complies
P6 Development is subservient to the surrounding natural environment in scale and intensity and is designed to be energy efficient and functional in a humid tropical rainforest environment.	<p>A6.1 The exterior finishes and colours of Buildings are non-reflective and complement the colours of the surrounding vegetation and viewshed.</p> <p>A6.2 Buildings must be designed such that natural light is maximized and the need for internal lighting during daylight hours is minimized.</p> <p>A6.3 The development incorporates building design features and architectural elements detailed in Planning Scheme Policy No 2 – Building Design and Architectural Elements.</p> <p>A6.4 The noise of generators is controlled by design or the generator is enclosed in a sound insulated building with a residential approved muffler. The noise level generated is less than 65 dBA when measured from a distance of 7 metres.</p> <p>A6.5 Any fuel storage associated with an on site generator and storage of 20 Litres or more of fuel is enclosed in a building and banded.</p>	<p>Medium colors will be used</p> <p>Large windows and doors have been located to all walls</p> <p>Complies</p> <p>Mains power will be used, therefore no generators will be required other than during power outages.</p>
P7 Landscaping of development Sites ensures the native landscape character of the Locality is dominant.	<p>A7.1 Landscaping utilises only native species and complies with the requirements of Planning Scheme Policy No 7 – Landscaping. AND</p> <p>All of the existing Landscaping to be retained and all of the proposed Landscaping is 100% endemic or native species and the details are provided on a Landscape Plan</p>	N/A

<p>P8 Site Access driveways and Roads within the Locality are retained as safe, slow speed, scenic drives.</p>	<p>A8.1 Site Access driveways and existing or proposed Roads comply with the relevant requirements of Planning Scheme Policy No 6 – FNQROC Development Manual and are maintained as low speed gravel Roads to maintain the scenic drive experience and to discourage the use of Roads by through-traffic. AND Where existing Roads/tracks are 4 wheel drive only, upgrading to facilitate conventional vehicles and an increase in through-traffic does not occur</p>	<p>The property access road is a single lane gravel road that services 2 residences. The driveway within the property is a max 3m wide with a light gravel overlay and appropriate drainage management.</p>
<p>P9 The onsite impacts on natural flow regimes and erosion and sedimentation are minimised</p>	<p>A9.1 Excavation and Fill is kept to a minimum and involves not more than 5% of the cleared area of the lot. A9.2 All exposed surfaces must incorporate erosion and sediment controls during construction and must be maintained until revegetation or other permanent stabilization has occurred. A9.3 There is no disturbance to tree roots and trenching does not involve any damage to tree roots. A9.4 On Site drainage and stormwater management: P1 maintains natural flow regimes; P2 minimises impervious surfaces; P3 avoids concentration of flows, but where there is any form of concentration of flow, energy dissipation measures are installed at the outlet to avoid erosion (eg: rock rip rap, gravel beds, diffusers etc).</p>	<p>Complies – access roads have been in place for decades and perform to an acceptable standard.</p>
<p>P10 The land use aspirations in any Indigenous Land Use Agreement (ILUA) are acknowledged and facilitated.</p>	<p>A10.1 Development is consistent with any ILUA relating to the land and the relevant provisions of the Planning Scheme.</p>	<p>N/A</p>

General Requirements – House

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P11 Development minimises the loss of vegetation and habitat connectivity on Site and is sited to protect the environmental values of the Site6.	<p>A11.1 The elements of development and Access to the site are included in a Designated Development Area (DDA).</p> <p>A11.2 Development is sited in an existing cleared area or in an area approved for Clearing under the Local Law – Vegetation Management but which is not cleared until a Building Permit is issued.</p> <p>A11.3 Any new Clearing is limited to a maximum area of 700 m2 and is sited clear of the High Bank of any Watercourse. (The 700m2 area of new Clearing does not include an access driveway).</p>	The proposed house is a consistent use in accordance with the assessment table, and is located in an existing clearing.
P12 All existing native vegetation on a House Site, other than that required and approved to be cleared to provide for the construction of a House and Access thereto, is protected to ensure the environmental integrity of the Locality.	No Acceptable Solution. (Information that the Council may request to demonstrate compliance with the Performance Criteria is outlined in Planning Scheme Policy No 10 – Reports and Information the Council May Request, for code and impact assessable development).	Complies
P13 Wildlife movement, fauna habitat and habitat corridors are protected and domestic impacts minimised.	<p>A13.1 Fences are limited in extent to the confines of the cleared area around the House and any associated gates are self closing.</p> <p>A13.2 External lighting is to be kept to the minimum necessary for orientation, safety and security. Flood lights must not point up and areas of retained vegetation should, in general, not be illuminated. Where appropriate, outdoor lights are controlled by movement detectors and/or have timers</p>	Complies

<p>P14 House Sites have efficient and safe vehicle Access and maneuvering areas on Site and to the Site to an acceptable standard for the Locality.</p>	<p>A14.1 Vehicle Access is limited to one access per lot and sited in an approved location clear of significant vegetation, any Watercourse or steep slopes. A14.2 Vehicular Access, with a maximum width of 4 metres, follows the contours of the Site, avoids large tree specimens or significant vegetation and habitat corridors and is constructed and maintained to a minimum gravel standard of 75 mm of road base on a compacted soil surface. A14.3 Vehicular Access is constructed prior to the construction of the House.</p>	<p>Complies</p> <p>A 3m wide graveled driveway exists and is considered adequate for traffic flow within the property.</p>
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NOTE: No further Performance Criteria in this code are relevant to this application

RURAL PLANNING AREA CODE

Consistent and Inconsistent Uses

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
<p>P1 The establishment of uses is consistent with the outcomes sought for the Rural Planning Area.</p>	<p>A1.1 Uses identified as inconsistent uses in the Assessment Table are not established in the Rural Planning Area.</p>	<p>The proposal of a dwelling and shed is a consistent use.</p>

Good Quality Agricultural Land

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
<p>P2 GQAL24 is only used for agricultural uses and primary production purposes.</p>	<p>A2.1 Agricultural land is used for agricultural uses in accordance with the classifications of the Agricultural Land Classes identified in the Shire and the requirements of State Planning Policy 1/92 – Development and the Conservation of Agricultural Land.</p>	<p>No change to the property use is planned.</p>

Buffering Incompatible Land Uses

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P3 A buffer is provided to separate agricultural activities that create odour, excessive noise or use agricultural chemicals, (including Aquaculture and Intensive Animal Husbandry), from residential development.	A3.1 A buffer is provided in accordance with the requirements of State Planning Policy 1/92 and Planning Guidelines – Separating Agricultural and Residential Land Uses (DNR 1997).	N/A

Building/Structure Setbacks and Screening

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
<p>P4 Buildings/structures are Setback to:</p> <ul style="list-style-type: none"> maintain the rural character of the area; and achieve separation from neighbouring Buildings and from Road Frontages. 	<p>A4.1 Buildings/structures are Setback not less than:</p> <ul style="list-style-type: none"> 40 metres from the property boundary adjoining a State Controlled Road; or 25 metres from the property boundary adjoining the Cape Tribulation Road; or 20 metres from the property boundary fronting any other Road; and 6 metres from the side and rear property boundaries of the Site. 	Boundary clearances are shown on the included Site Plan, and are in excess of the minimum required.
P5 Rural activities north of the Daintree River are screened to protect the Scenic Amenity of the area.	A5.1 A 10 metre Setback on rural land adjacent to any Road Frontage north of the Daintree River including Dense Planting of the setback area.	N/A - this property fronts no commonly used public road.

Rural Character

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P6 Buildings/structures are designed to maintain the rural character of the area.	A6.1 White and shining metallic finishes are avoided on external surfaces of Buildings located in prominent view.	Proposed colours are: Roof – bush land Walls - paperbark

Protecting and Enhancing Native Vegetation and Adjacent Environmentally Sensitive Area

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P7 Native vegetation existing along Watercourses and or adjacent to areas of environmental value or areas of remnant vegetation of value is protected	A7.1 No Acceptable Solution (Information that the Council may request to demonstrate compliance with the Performance Criteria is outlined in Planning Scheme Policy No 10 – Report and Information the Council May Request, for code and impact assessable development).	No vegetation will be cleared

Sloping Sites

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P8. Building/structures are designed and sited to be responsive to the constraints of sloping Sites.	A8.1 Building/structures are Erected on land with a maximum slope not exceeding 15%. OR Development proposed to be Erected on land with a maximum slope between 15% and 33% is accompanied by a Geotechnical Report prepared by a qualified engineer at development application stage. OR Development proposed to be Erected on land with a maximum slope above 33% is accompanied	N/A

	<p>by a Specialist Geotechnical Report prepared by a qualified engineer at development application stage which includes signoff that the Site can be stabilised.</p> <p>AND</p> <p>Any Building/structures proposed to be Erected on land with a maximum slope above 15% are accompanied by an additional Geotechnical Report prepared by a qualified engineer at building application stage. (Information that the Council may request as part of the Geotechnical Report are outlined in Planning Scheme Policy No 10 – Reports and Information the Council May Request, for code and impact assessable development.)</p>	
P9 The building style and construction methods used for development on sloping Sites are responsive to the Site constraints.	<p>A9.1 A split level building form is utilised.</p> <p>A9.2 A single plane concrete slab is not utilised.</p> <p>A9.3 Any voids between the floor of the Building and Ground Level, or between outdoor decks and Ground Level, are screened from view by using lattice/batten screening and/or Landscaping.</p>	N/A
P10 Development on sloping sites minimises any impact on the landscape character of the surrounding area.	A10.1 Buildings/structures are sited below any ridgelines and are sited to avoid protruding above the surrounding tree level.	N/A
P11 Development on sloping sites ensures that the quality and quantity of stormwater traversing the Site does not cause any detrimental impact to the natural environment or to any other Sites.	A11.1 All stormwater drainage discharges to a lawful point of discharge and does not adversely affect downstream, upstream, underground stream or adjacent properties.	N/A

Sustainable Siting and Design of Houses on land where the Natural Areas and Scenic Amenity Code is triggered

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P12 A House sited on hillside land is sited in an existing cleared area, or in an area approved for Clearing.	A12.1 A House is sited in an existing cleared area or in an area approved for Clearing under the Local Law – Vegetation Management but which is not cleared until development occurs. The Clearing is limited to a maximum area of 800 m2 and is sited clear of the High Bank of any Watercourse. EXCEPT In the World Heritage Areas and Environs Locality and the Settlement Areas North of the Daintree River Locality where the maximum clearing is limited to 700m2. (The 800m2/700m2 area of Clearing does not include an access driveway.) A12.2 The approved area for the Clearing of the House is not cleared until a Building Permit is issued.	N/A
P13 A House sited on hillside land is sited and designed so that it is subservient to the surrounding natural environment.	A13.1 A House is effectively screened from view by existing native trees in designated Setback area/s, or by the planting of additional native trees endemic to the local area.	N/A
P14 The exterior finishes of a House complements the surrounding natural environment.	A14.1 The exterior finishes and colours of Building/s are non reflective and complement the colours of the surrounding vegetation and viewshed. AND For self assessable development the exterior colours of Buildings/structures are chosen from the following list of Colourbond Colours: Jasper Sandbank Paperbark Dune Windspray Woodland Grey Bushland	Proposed colours are: Roof – bush land Walls - paperbark

	Pale Eucalypt Wilderness Cottage Green Plantation Blue Ridge and Ironstone.	
P15 A House is designed to be energy efficient and functional in a humid tropical rainforest environment.	A15.1 The development incorporates building design features and architectural elements detailed in Planning Scheme Policy No 2 – Building Design and Architectural Elements.	The house will be required to achieve a min 6 star energy rating for building approval.
P16 Any filling and excavation work does not create a detrimental impact on slope stability, erosion potential or Visual Amenity of the Site or the surrounding area.	A16.1 The height of cut and/or fill, whether retained or not, does not exceed 2 metres in height.	N/A
P17 The bulk and scale of a House is not visually obtrusive and does not compromise the Visual Amenity of the site and the surrounding area.	A17.1 The Gross Floor Area of the House does not exceed 250m ² .	GFA is 123m ²

LAND USE CODE

House Code

General

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P1 Buildings on a lot have the appearance and bulk of a single House with ancillary Outbuildings	A1.1 A lot contains no more than one House. A1.2 Ancillary Outbuildings have a maximum Site Coverage of 10% of the balance area of the Site not otherwise taken up by the House.	One house is proposed. The proposed shed has a site cover of 0.043%
P2 The House is used for residential purposes.	A2.1 The House is used by one Household.	One family will be in residence
P3 Resident's vehicles are accommodated on Site and are sited to minimise the dominance of car accommodation on the streetscape	A3.1 A minimum of 2 vehicle spaces are provided on Site and may be provided in tandem. A3.2 At least one garage, carport or designated car space must be located at least 6 metres from the Main Street Frontage.	Vehicle parking will be located within the existing shed; numerous opportunities are available for visitor parking on the property.

NATURAL AREAS AND SCENIC AMENITY CODE

Development in Areas of Natural and Scenic Amenity Value

[illegible]

	<p>Erected on an approved development Site within a DDA identified on a Site Plan drawn to scale.</p> <p>A2.4 Infrastructure, such as water mains, sewers, electricity and telecommunication services, is sited underground, wherever reasonable, to protect Scenic Amenity, and is located within a DDA on a Site Plan drawn to scale.</p> <p>A2.5 Internal Roads associated with the development are designed and constructed to achieve a low speed environment.</p> <p>A2.6 Roads and infrastructure services do not cross the Setback area/riparian corridor; or if this is not possible, the number of crossings is minimised.</p> <p>A2.7 Setback areas/riparian corridors are provided in accordance with A4.1, A4.2, A4.3 and A4.4 below;</p> <p style="text-align: center;">AND</p> <p>The lowest intensity of development occurs adjacent to any Setback area/riparian corridor, and in the case of reconfiguration, larger lots are located adjacent to any Setback area/riparian corridor.</p> <p>A2.8 There is no fragmentation or alienation of any Remnant Vegetation.</p> <p>A2.9 Any natural, environmental or Scenic Amenity value of any balance area outside the DDA is protected</p>	<p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p> <p>Complies</p>
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Setback Areas/Riparian Corridors

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
<p>P4 Setback areas/riparian corridors adjacent to Watercourses are provided/maintained or re-established and revegetated with species endemic to the local area.</p>	<p>A4.1 For residential reconfiguration (Residential 1, Residential 2 or Rural Settlement Planning Area), Aquaculture, Tourist Activities, Industrial Activities and other large scale developments or development likely to have an impact on water quality of adjacent Watercourse/s any degraded sections of the Setback area/riparian corridor are revegetated with endemic species typical of the riparian corridor in the area.</p>	<p>As there will be no changes to the current property use, other than the construction of a new house, or removal of remnant vegetation, there will be no change to the impact on the adjacent watercourse.</p>
	<p>A4.2 Revegetation occurs in accordance with a Landscape Plan prepared by a suitably qualified professional in compliance with the requirements of Planning Scheme Policy No 8 – Natural Areas and Scenic Amenity, Landscaping Code and Planning Scheme Policy No 7 – Landscaping.</p>	<p>N/A</p>
	<p>A4.3 The minimum width of the Setback area/riparian corridor, measured out from the shoulder of each high bank, for the respective categories of Watercourses, where a riparian corridor of vegetation already exists is:</p> <ul style="list-style-type: none"> • Category 1 – Major Perennial Watercourse – 30 metres • Category 2 – Perennial Watercourse – 20 metres • Category 3 – Minor Perennial – 10 metres, 	<p>The proposed house is approx 35m to the edge of remnant vegetation, and a min 45m to the approx centerline of the creek, which will equate to a setback distance from the high bank to comply with a Cat 1 watercourse.</p>

	<p>AND buildings are sited clear of the Setback area/riparian corridor, in accordance with the relevant Setbacks outlined above.</p> <p>OR The minimum width of the Setback area/riparian corridor, measured out from the shoulder of each high bank, for the respective categories of Watercourses, where no riparian corridor of vegetation already exists is:</p> <ul style="list-style-type: none"> • Category 1 – Major Perennial Watercourse – 10 metres P1 Category 2 – Perennial Watercourse – 5 metres - Category 3 – Minor Perennial – 2.5 metres, <p>AND buildings are sited clear of the Setback area/riparian corridor, in accordance with the relevant Setbacks above.</p> <p>A4.4 Native vegetation within the Setback area/riparian corridor, other than identified noxious and environmental weeds, is retained.</p>	Complies
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Use of Setback Areas/Riparian Corridors

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P5 Any use of a Setback area/riparian corridor does not adversely affect the integrity of the Setback area/riparian corridor.	<p>A5.1 Only low key, passive, low impact recreational facilities, including pedestrian and cycle paths or boardwalks, are located within the Setback area/riparian corridor.</p> <p>A5.2 The location of low key, passive, low impact recreational facilities, including pedestrian</p>	<p>N/A</p> <p>N/A</p>

	and cycle paths or boardwalks within the Setback area/riparian corridor, does not affect the connectivity function and landscape/environmental or Scenic Amenity values of the Setback area/riparian corridor.	
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Retaining and Protecting Highly Visible Areas

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
P6 Any development sited wholly or partially on land with a slope greater than 15% protects the Scenic Amenity values of the land from inappropriate and visually prominent development.	A6.1 Land with a slope greater than 15% and including Remnant Vegetation remains undeveloped and in its natural state.	N/A
	A6.2 Any development remains unobtrusive and sited below the tree line and ridge line. (Information that the Council may request to demonstrate compliance with the Performance Criteria is outlined in Planning Scheme Policy No 8 – Natural Areas and Scenic Amenity and Planning Scheme Policy No 10 – Reports and Information the Council May Request, for code and impact assessable development).	N/A

Overlay Codes - Not Applicable

Acid Sulfate Soils Code

Site elevation is approximately 7m, but no earthworks are required other than proof rolling.

Cultural Heritage and Valuable Sites

Not identified on Overlay

Natural Hazards

House location is identified on overlay as low risk

General Codes – Not Applicable

Landscaping

An uninterrupted view of the property and animals is considered an important aspect of the operation of this property.

Buildings on this property are approximately 1km from the closest public road (Forest Creek Road), and 300m from the nearest adjacent house, which is also on a same use property.

These distances should pose no privacy issues.

For these reasons landscaping is not proposed; therefore this Code is considered not applicable.

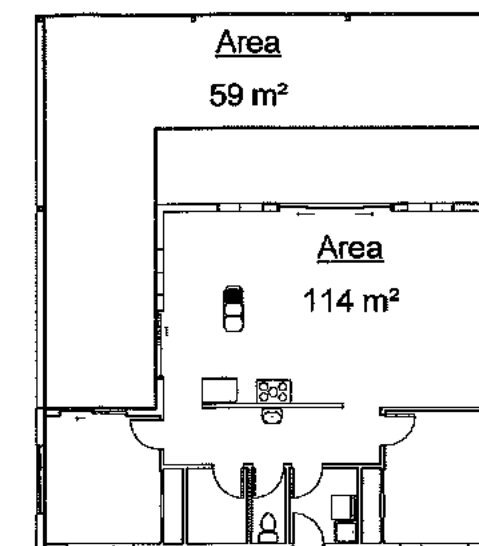
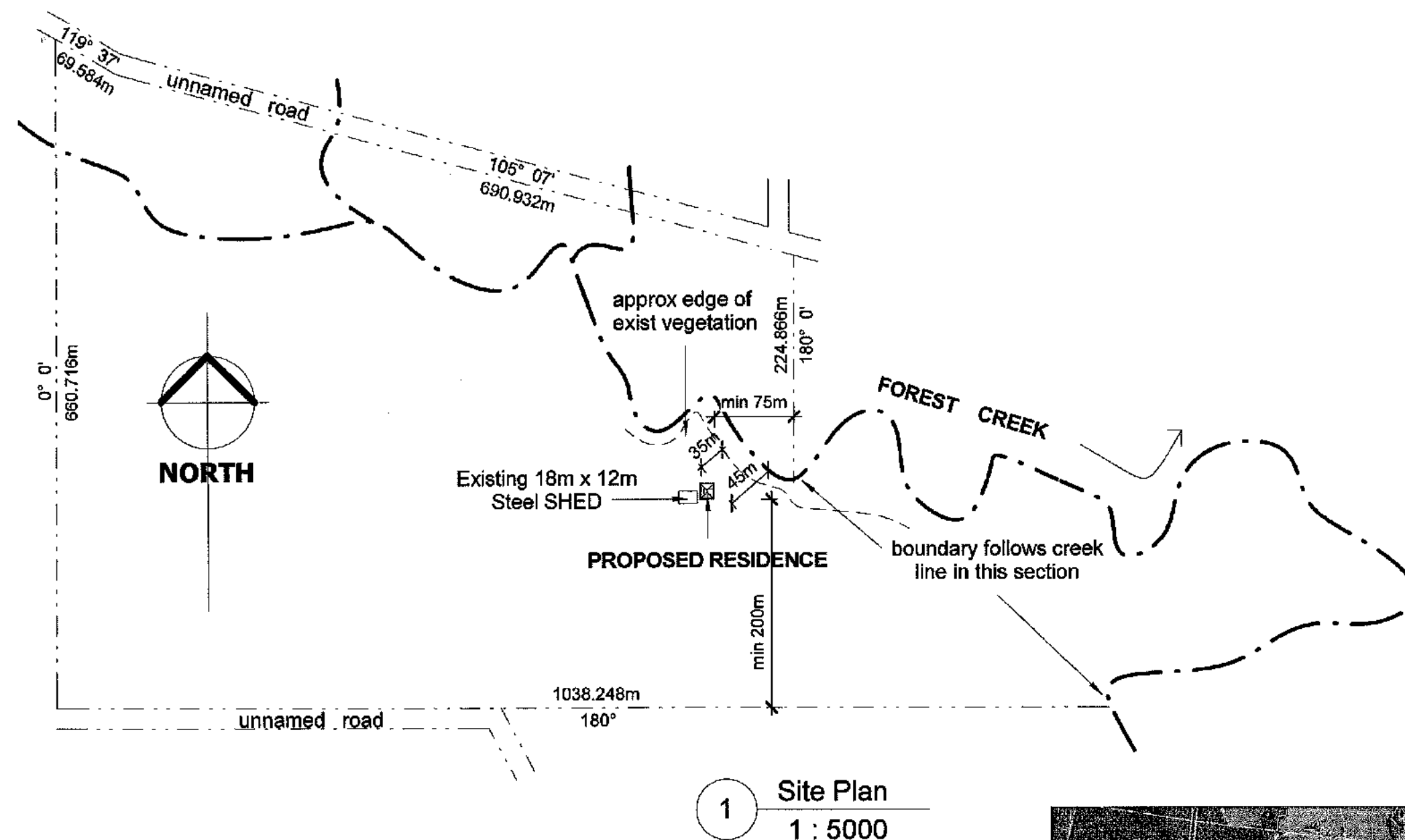
Vehicle Parking and Access

Car parking available on-site is in excess of that required under Schedule 1 of this Code for a house.

Conclusion

The development application seeks a Development Permit for Material Change of Use for the purpose of a single dwelling house on land described as Lot 64 BS6, unnamed road (off Forest Creek Road), Forest Creek.

The proposed development is considered generally consistent with the relevant Planning Scheme Codes and the surrounding locality. The report includes supporting information intended to address any concerns of Council as the assessing authority.



2 Area Plan
1 : 200

GROSS FLOOR AREAS

GFA House - 114m²
GFA Patio - 59m²
(>3m from ext walls)
TOTAL GFA - 173m²

BUILDING AREAS

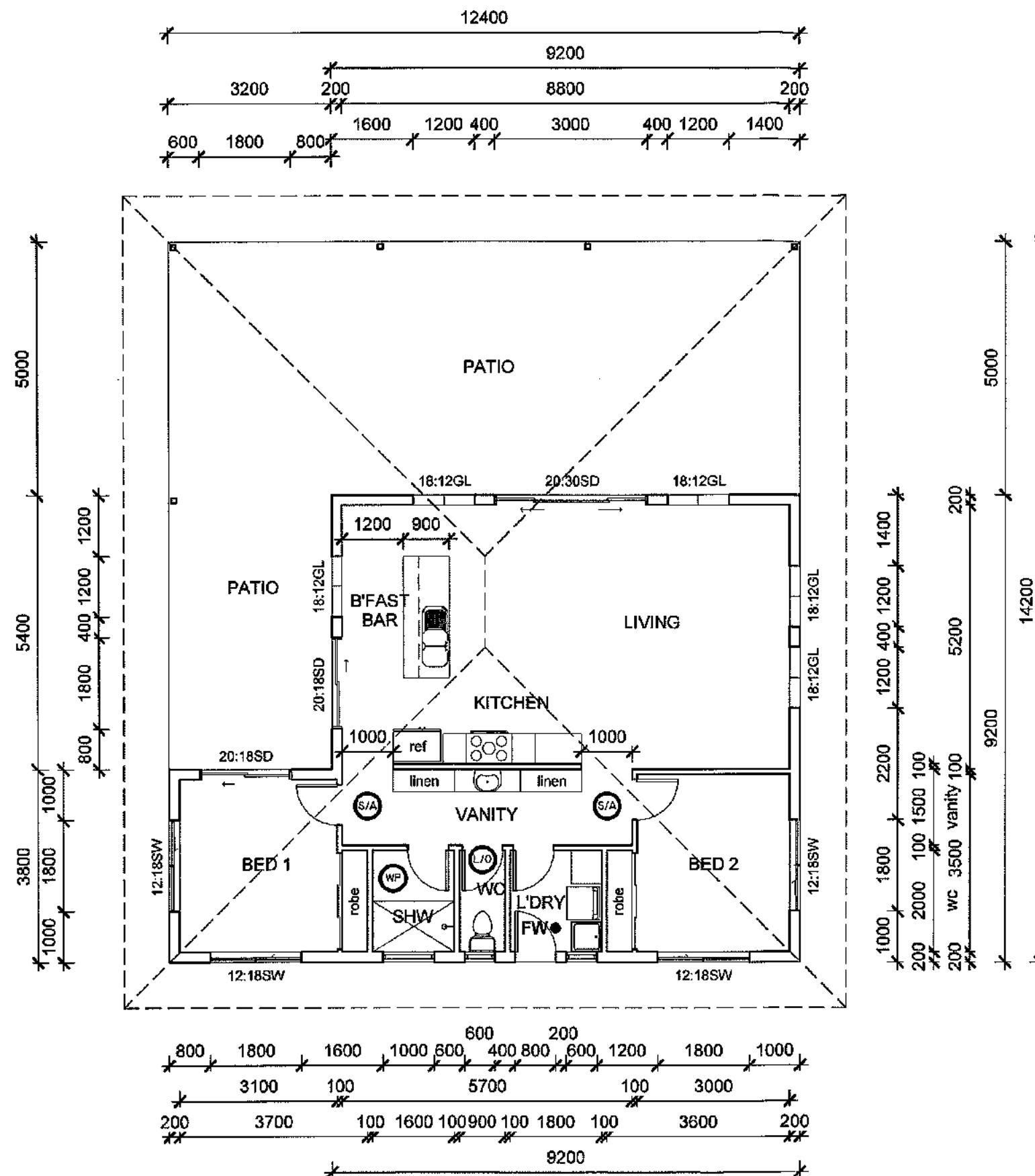
House - 173m²
Shed - 216m²
TOTAL - 389m²

Allot Area - 49.92ha
Site Cover - 0.078%

Sheet List	
Sheet Number	Sheet Name
1 of 3	Site Plan, Area Plan, Sheet List
2 of 3	Floor Plan
3 of 3	Elevations



3 Locality Plan
NTS



1 Floor Plan
1 : 100

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: greg@skyringdesign.com.au

PROJECT

Proposed Residence,
Off Forest Creek Road,
L64 BS6,
FOREST CREEK

CLIENT

K. Jack

WIND CLASS

C2

PLAN NUMBER

102-16

SHEET

2 of 3

SCALES

1 : 100

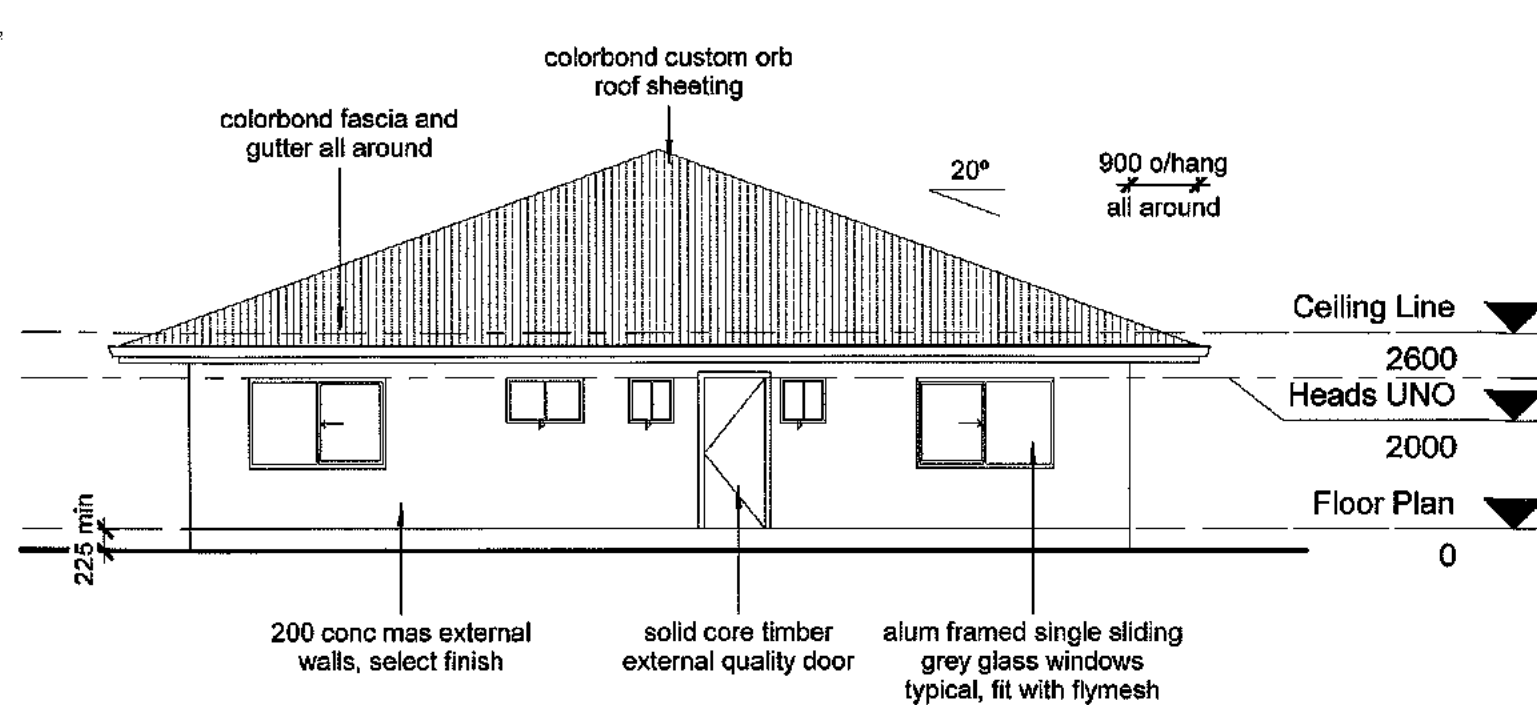
PLAN TITLE

Floor Plan

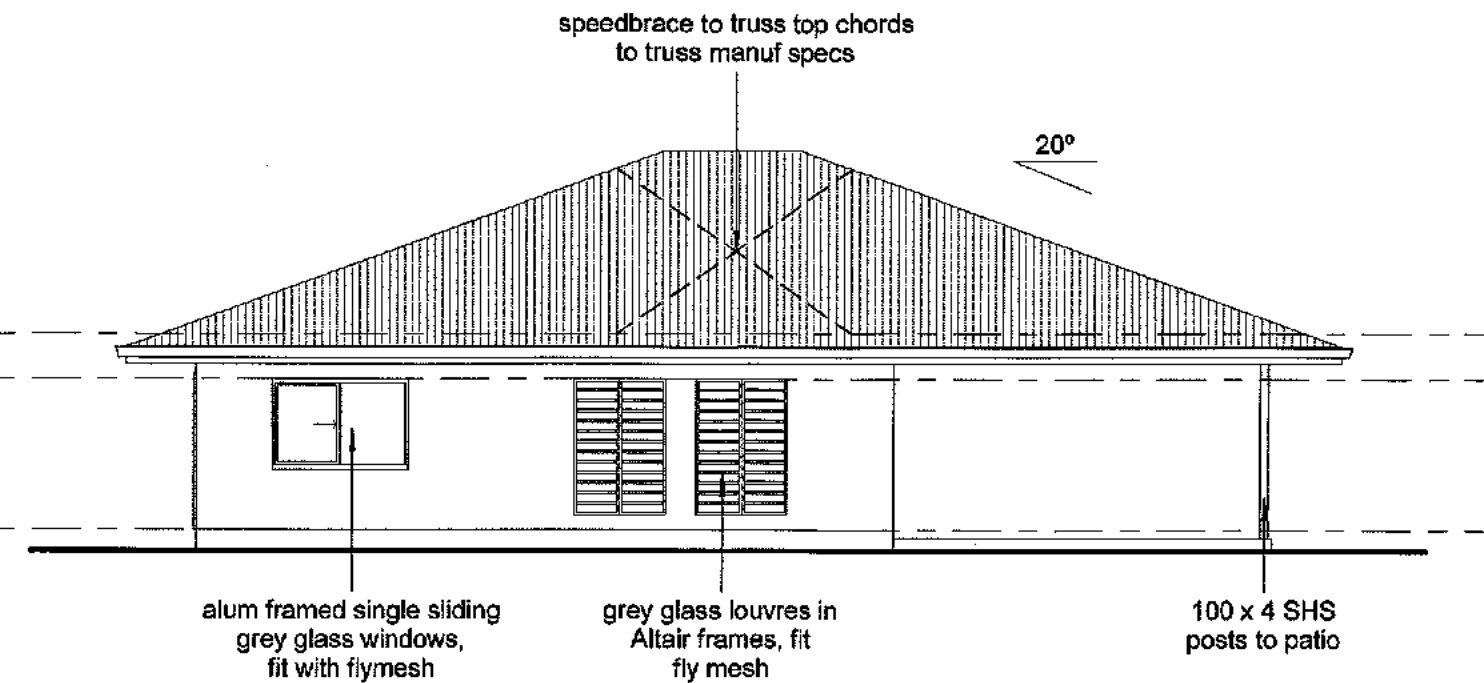
DATE OF ISSUE

7.03.16

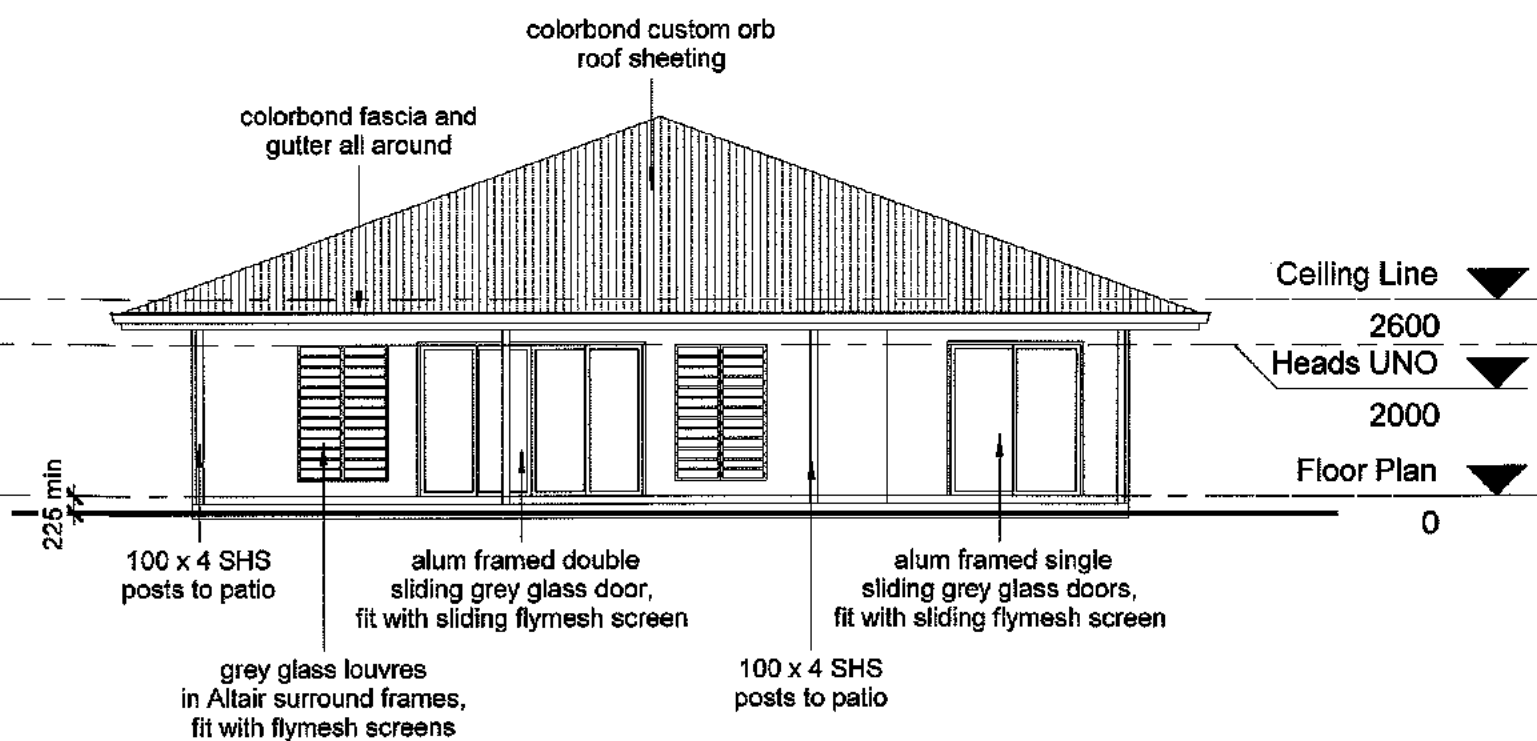
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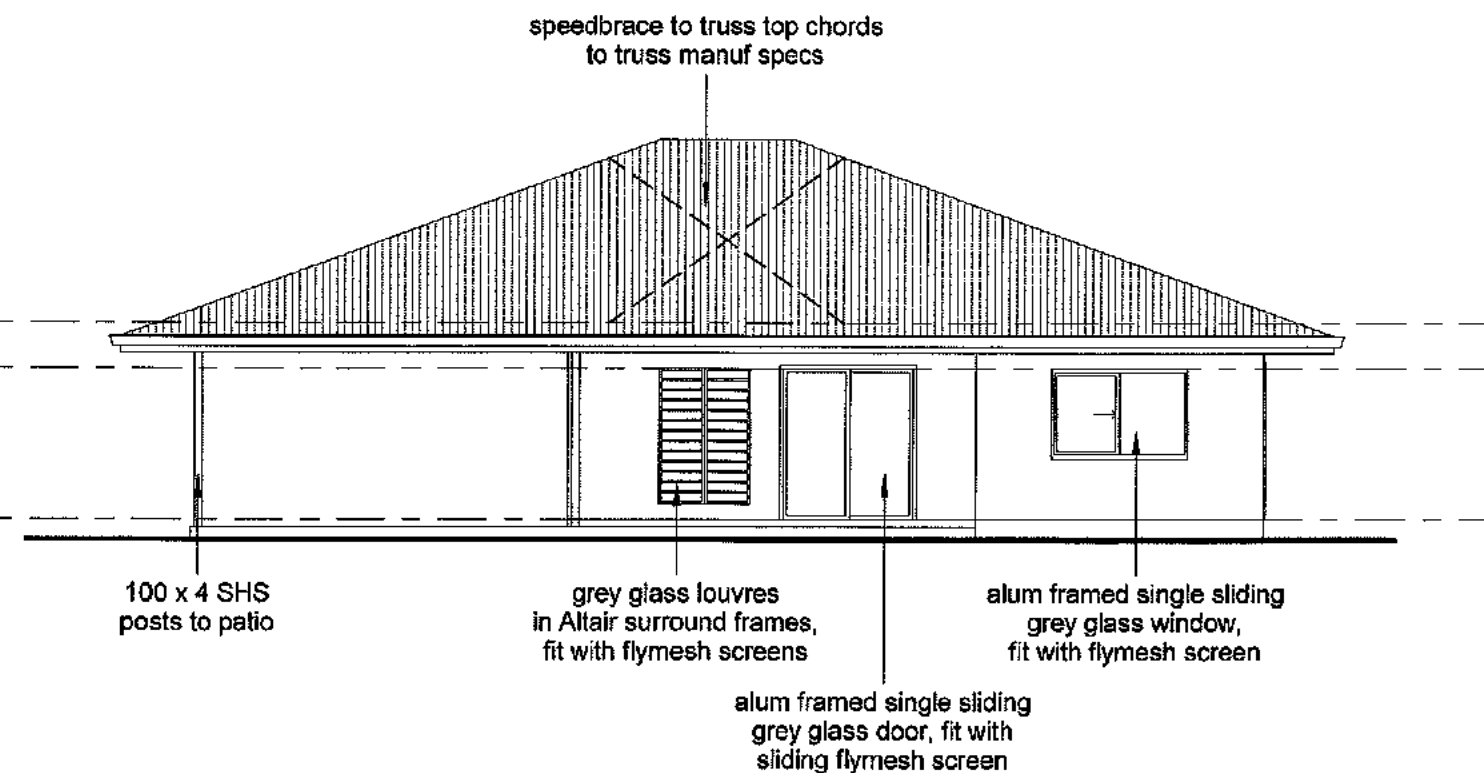
1 South Elevation
1 : 100



2 East Elevation
1 : 100



3 North Elevation
1 : 100



4 West Elevation
1 : 100



EARTH TEST

Site Classification

And

Wastewater Management System

For

Kevin Jack

At

Lot 64 Forest Creek Road

Forest Creek

Postal address: Earth Test, PO Box 1042, Tolga, Qld 4882. Phone: 4095 4734
e-mail: len@earthtest.com.au



INTRODUCTION:

Earth Test has been engaged by Kevin Jack to assess, design and report on Site Classification and a Domestic Wastewater Management System at Lot 64 Forest Creek Road, Forest Creek.

Real Property Description:-

Lot 64, on BS6

Local Authority: Douglas Shire Council.

It is understood the intention is to construct a new dwelling at the site.

A site and soil evaluation was carried out in February 2016.

SITE FACTORS:

The site was identified by its street address.

A photograph is included as part of this report to confirm the identity of the site.

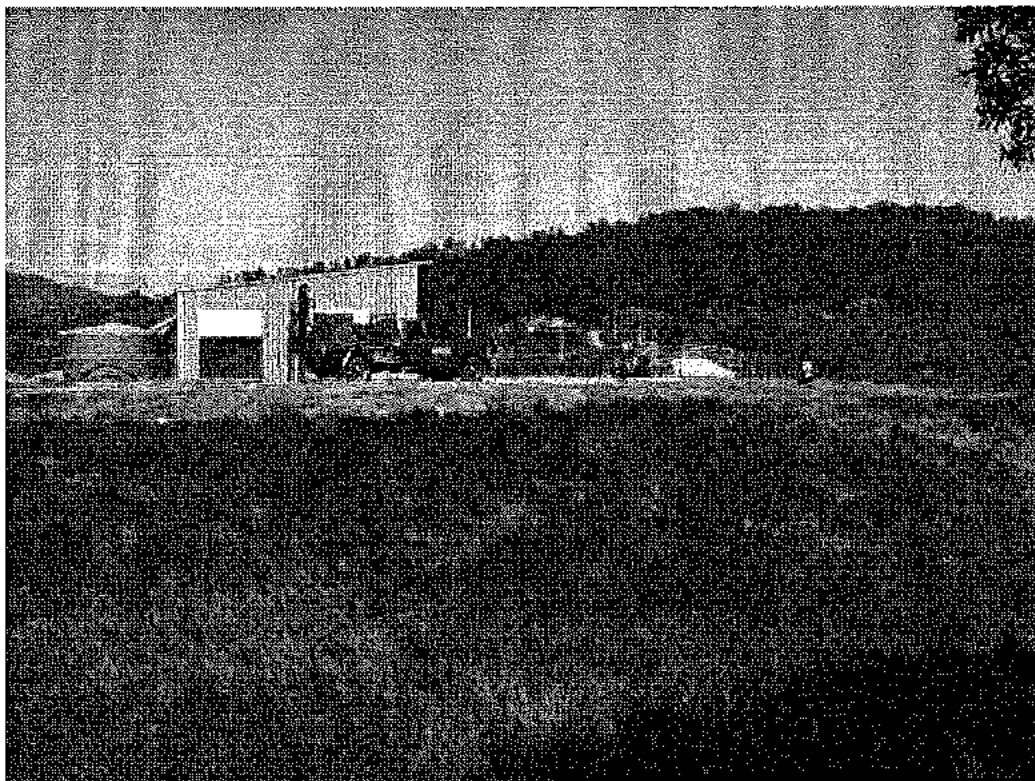
The Lot is 49.9 hectares and is covered with pasture with a less than 1 degree slope falling to the North East.

The water supply to the site is bore water.

Some cobbles are present in a previously filled level pad.

Two Dynamic Cone Penetrometer tests were performed at locations DCP1 and DCP2, one borehole BH1 and one permeability test P1 as shown on the site plan.

Atterberg Limits tests were performed on disturbed samples from Borehole1.



BH1 being drilled at Lot 64 Forest Creek Road, Forest Creek

**SITE INVESTIGATION REPORT****BOREHOLE LOG**

CLIENT: Kevin Jack. PROJECT: Lot 64 Forest Creek Road, Forest Creek. REPORT DATE: 29/02/2016		DATE SAMPLED: 17/02/2016 Sampled by: L. Quinn
BOREHOLE No: BH1		
DEPTH (m)	DESCRIPTION	COMMENTS
0.0-0.8	Orange-Brown Clayey-Silt with Gravel (Fill)	Disturbed sample 0.4-0.7m and 0.9-1.2m. Water table not encountered
0.8-2.0	Yellow-Brown Clayey-Silt	

**EARTH TEST**

QBSA Lic No. 1017941.

ATTERBERG LIMITS TEST REPORT**CLIENT:** Kevin Jack**SAMPLE No:** SI 041-16**PROJECT:** Lot 64 Forest Creek Road, Forest Creek**DATE SAMPLED:** 17/02/2016**SAMPLE DETAILS:** BH1 0.4-0.7m**Sampled by:** L. Quinn**REPORT DATE:** 29/02/2016**Tested By:** G. Negri

TEST METHOD	RESULT
Liquid Limit: AS 1289.3.1.2-2009	33%
Plastic Limit: AS 1289.3.2.1-2009	23%
Plasticity Index: AS 1289.3.3.1-2009	10%
Linear Shrinkage: AS 1289.3.4.1-2008	7.0%
Length Of Mould:	250.2mm
Cracking, Crumbling, Curling, Number Of Breaks:	Nil
Sample History:	Air Dried
Preparation Method:	Dry Sieved
Insitu Moisture Content:	7.6%

**ATTERBERG LIMITS TEST REPORT****CLIENT:** Kevin Jack**SAMPLE No:** SI 041-16**PROJECT:** Lot 64 Forest Creek Road, Forest Creek**DATE SAMPLED:** 17/02/2016**SAMPLE DETAILS:** BH1 0.9-1.2m**Sampled by:** L. Quinn**REPORT DATE:** 29/02/2016**Tested By:** G. Negri

TEST METHOD	RESULT
Liquid Limit: AS 1289.3.1.2-2009	31%
Plastic Limit: AS 1289.3.2.1-2009	21%
Plasticity Index: AS 1289.3.3.1-2009	10%
Linear Shrinkage: AS 1289.3.4.1-2008	7.0%
Length Of Mould:	250.3mm
Cracking, Crumbling, Curling, Number Of Breaks:	Two Breaks
Sample History:	Air Dried
Preparation Method:	Dry Sieved
Insitu Moisture Content:	17.5%

**DYNAMIC CONE PENETROMETER REPORT**
AS 1289.6.3.2**CLIENT:** Kevin Jack**SAMPLE No:** SI 041-16**PROJECT:** Lot 64 Forest Creek Road, Forest Creek.**DATE SAMPLED:** 17/02/2016**SAMPLE DETAILS:** Sites "DCP1 & DCP2" as per site plan.**Tested By:** L. Quinn & P. Weigand**REPORT DATE:** 29/02/2016

DEPTH (Metres)	Site: DCP1	Site: DCP2
	No. of Blows	No. of Blows
0.0 – 0.1	8	9
0.1 – 0.2	6	10
0.2 – 0.3	4	6
0.3 – 0.4	3	5
0.4 – 0.5	2	4
0.5 – 0.6	1	4
0.6 – 0.7	4	3
0.7 – 0.8	2	3
0.8 – 0.9	2	3
0.9 – 1.0	3	2
1.0 – 1.1	2	2
1.1 – 1.2	2	2
1.2 – 1.3	2	3
1.3 – 1.4	3	2
1.4 – 1.5	3	2
1.5 – 1.6	3	4
1.6 – 1.7	2	5
1.7 – 1.8	4	6
1.8 – 1.9	5	6
1.9 – 2.0	6	4
2.0 – 2.1	5	5
2.1 – 2.2	4	6
2.2 – 2.3	5	7
2.3 – 2.4	7	5
2.4 – 2.5	4	5
2.5 – 2.6	4	8
2.6 – 2.7	3	8
2.7 – 2.8	4	8
2.8 – 2.9	3	9



SITE CLASSIFICATION

Lot 64 Forest Creek Road, Forest Creek.

The Dynamic Cone Penetrometer test results indicate extremely soft conditions to depths of approximately 1.3m at DCP1 and 1.5m at DCP4.

Un-controlled fill exists at the site.

The Atterberg Limits test results indicate a slightly reactive soil.

Due to the presence of extremely soft conditions and un-controlled fill 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.

Leonard Quinn.
Earth Test.

**SITE AND SOIL EVALUATION****Lot 64 Forest Creek Road, Forest Creek.**

The site and soil evaluation carried out on 17/02/2016 provided the following results.

Site Assessment

<u>Site Factor</u>	<u>Result</u>
Slope	1 degree
Shape	Linear-Planar
Aspect	NE
Exposure	Good.
Erosion/land slip	Not noted.
Boulders/rock outcrop	Not noted
Vegetation	Grass.
Watercourse/Bores	Not noted.
Water table	1.4m.
Fill	Not found.
Flooding	Not likely.
Channelled run-off	Not found
Soil surface conditions	Firm, Dry
Other site specific factors	Not noted

Soil Assessment

<u>Soil Property</u>	<u>Result</u>
Colour	Yellow-Brown
Texture	Clay-Loam
Structure	Weak
Coarse Fragments	Nil
Measured Permeability Ksat (m/d)	0.3
Dispersion	Slakes
Soil Category	4
Resultant Design Load Rate, DLR (mm/day)	20



WASTEWATER MANAGEMENT SYSTEM

An "All-Waste" septic tank discharging into an above ground "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.
- Queensland PLUMBING AND DRAINAGE ACT 2002.
- Queensland STANDARD PLUMBING AND DRAINAGE REGULATION 2003.
- Queensland PLUMBING AND WASTEWATER CODE.

SYSTEM SIZING FACTORS.

A population equivalent of four (4) persons has been chosen for the proposed two bedroom dwelling.

The residence is connected to a reticulated water supply system.

Standard water-reduction fixtures must 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 "Reticulated water supply" gives a flow allowance of 150 L/Person/day.

The daily flow for the dwelling (4 persons @ 150 L/person/day) will be 600 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.



LAND-APPLICATION SYSTEM

DISPOSAL AREA SIZING

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

$$L = Q / (DLR \times W)$$

Where:

L = length in m

Q = design daily flow in L/day

DLR = Design Loading Rate in mm/d

W = Width in m

$$\begin{aligned} L &= 600 / (20 \times 3.13) \\ &= 9.6\text{m.} \end{aligned}$$

Use one 3.13m wide by 9.6m long Advanced Enviro-Septic bed.

See site plan and detail cross-section.

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.



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.

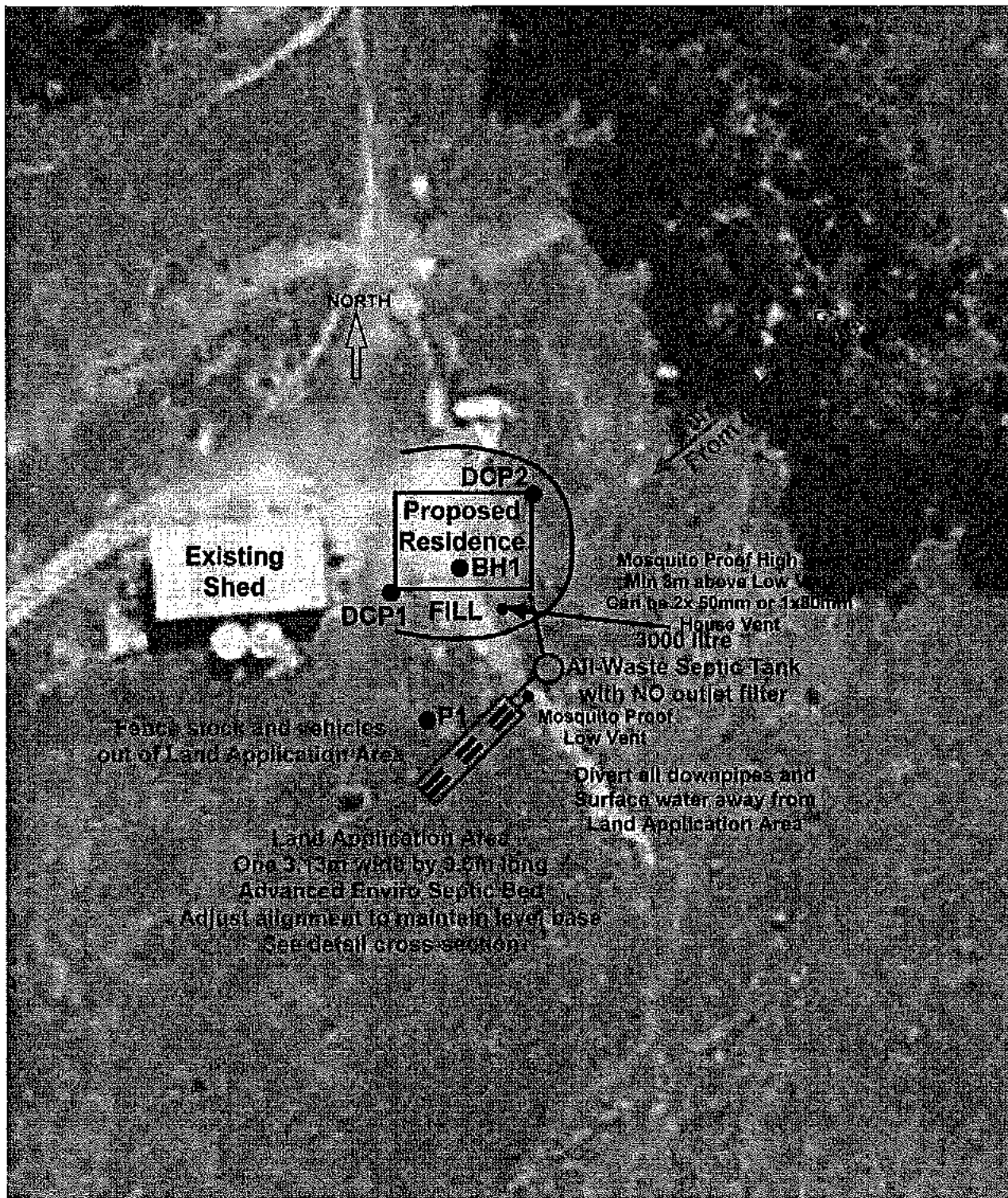
Leonard Quinn
Earth Test

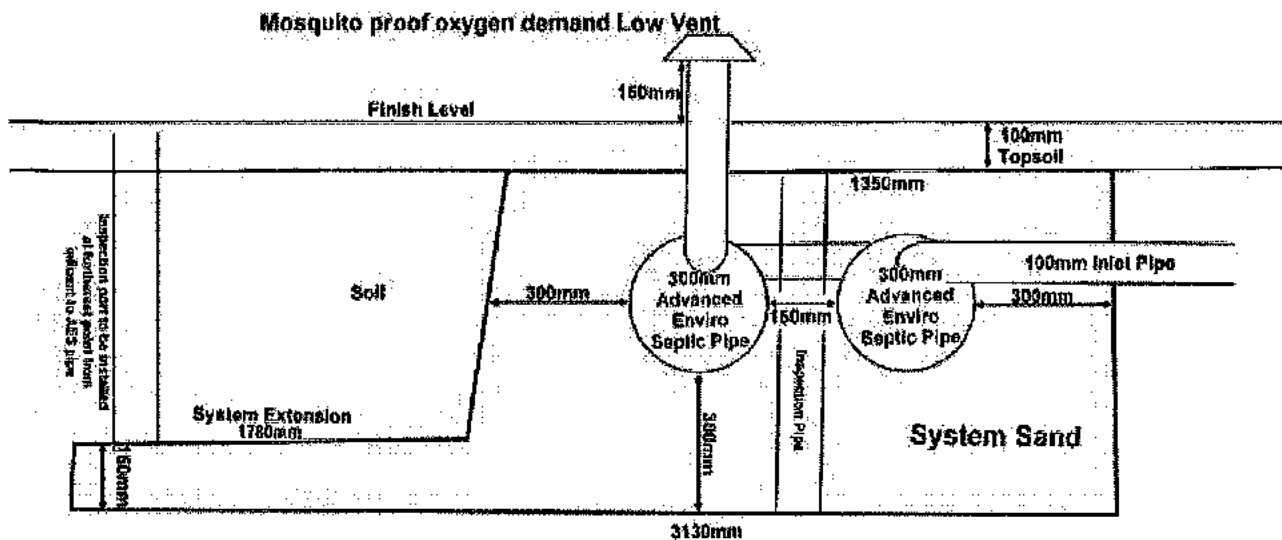


SITE PLAN

Lot 64 Forest Creek Road, Forest Creek.

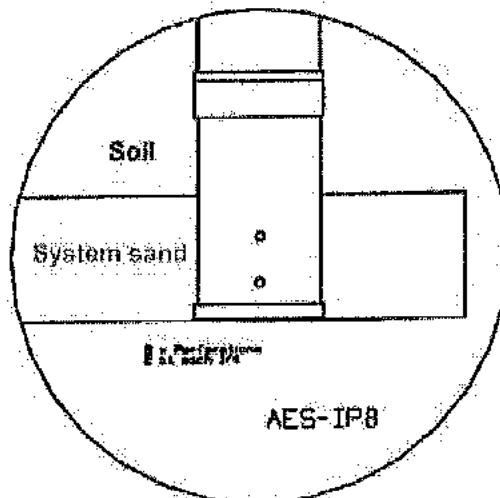
NOT TO SCALE



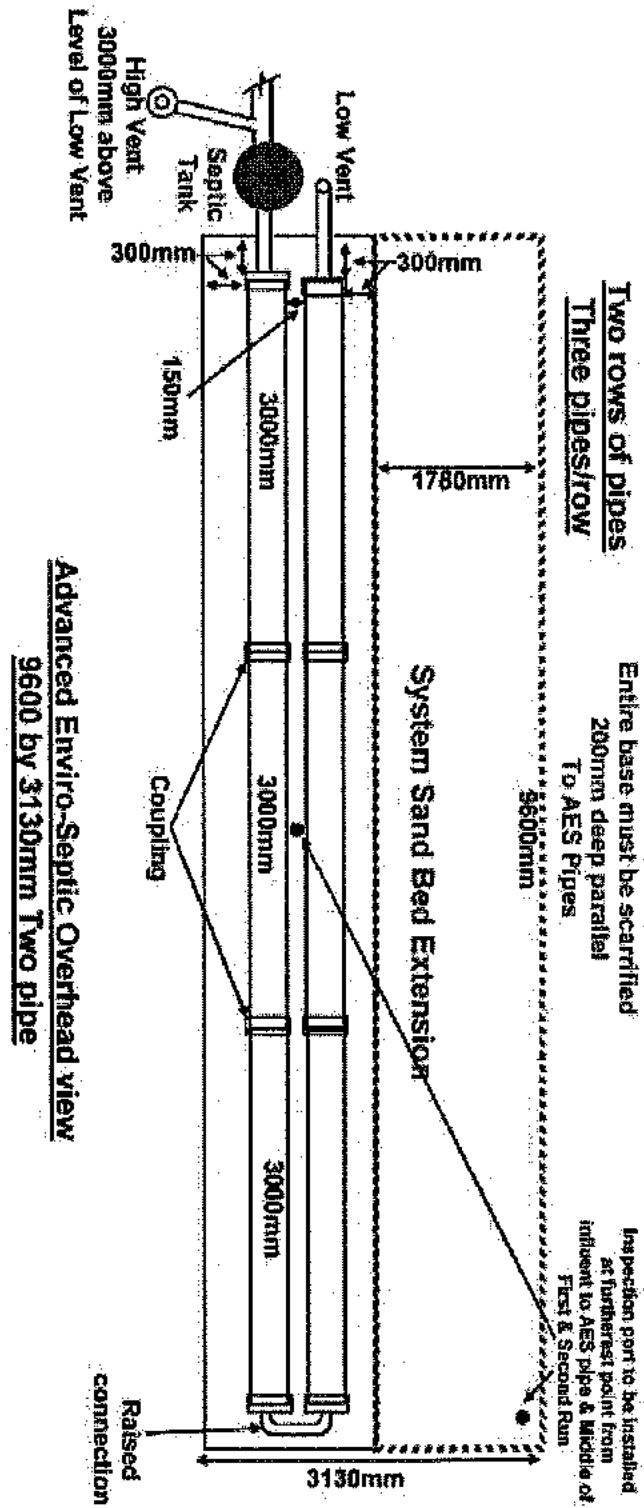


Base must be scarrified 200mm deep. Parallel to AES Pipes

**3130mm Wide Two Pipe
Advanced Enviro-Septic Cross-Section**



AES Inspection point detail





**ADVANCED
ENVIRO-SEPTIC™**
"Always The First Option"

Advanced Enviro-septic Design Calculator v8.5

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

Site Address	Lot 64 Forest Creek Road, Forest Creek	State	Qld	Post Code
Client Name Kevin Jack				
Designers Name	Earth Test	Designers P# Number	10954734	Designers Lic Number (eg.CBCC)
Lic Plumber Name		Plumber P# Number		Plumber / Designer Lic Number
Council Area Douglas Shire Council		Designers AES Cert Number		Date
				18/02/16

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 Use And Gain Experience Quickly

ORIGINAL WORKS

Enter the AES litre/meter loading rate, "20" for Advanced Secondary or "35" Secondary	35	>> This design is for a SECONDARY system.
Is this a new installation? Y or N	Y	>> Minimum single vent size is 60mm or 2 x 50mm house vents
Number of person	4	a septic tank quiet floor is NOT RECOMMENDED
Daily Design Flow Allowance Litre/Person/Day	150	
Number of rows required to suit site constraints	2	>> The maximum Rk of a single AES pipe run is 80 meters
Infiltration 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)	20	>> Soil conditioning may be necessary. Ref AS1547 & Comments.
Bore log depth below system El level area	1400	>> Min depth below base level is 600 mm to establish water table or restrictive layer
Enter System footprint Slope in % for standard AES systems to calculate extension	1.5	>> Some Councils have minimum limits to Land application areas ?
Is this design a gravity system with no outlet flow? Y or N	Y	>> A House Vent & LOW VENT required on this system


PLEASE CHECK YOU HAVE FILL 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
- Designers need to be familiar with special requirements of Local Authorities. IE - Minimum falls from Septic tank outlets to Land application areas, etc
- Members are reminded that good construction techniques as per AS1547 are absolutely important in these soil types. Refer AS1547 & AES Installation Instructions

AES system Calculative Outcomes:		
Total System load - litres / day (Q _d)	600	l/d
Min. Length of AES pipe rows to treat loading	7.9	m
Number of FULL AES Pipe lengths per row	9	nos
Total Capacity of AES System pipe in Litres	1272	ltr.

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 @ extra	
ARE INFILTRATION FOOT PRINT AREA - $L \times Q / (DAR \times 90)$		Length	Width	Minimum AES Foot Print Required	
for this Basic Serial design is		9.6	7	3.33	28.0
					THE TOTAL

AES System Bill of Materials				Charker Environmental Use Only	
AES-PIPE	AES 3 mtr Lits required	8	lits		 <p>Digitally signed by Kane Dickson DN: cn=Kane Dickson, o=Charker Environmental, ou=Design Review, email=designreview@enviro-septic.com.au, c=AU Date: 2016.02.29 15:43:04 +1000'</p>
AESC	AESC Couplings required	4	ea		
AESO	AESO Offset adaptors	4	ea		
AESODV	AES Oxygen demand vent	1	ea		
AES-IPB	AES 100mm inspection point base	2	ea		
AES-EQU	AES Speed Flow Equaliser		ea		
TOTAL SYSTEM SAND REQUIRED (Under Only)		15	m3		
<p>PLEASE email your AES CALC and Drawings to DESIGNREVIEW@ENVIRO-SEPTIC.COM.AU</p>					<p>Designreview@enviro-septic.com.au</p>

- > 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 standards calculated and designed by a Qualified Designer.
- > Checker 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 length on site. They are supplied in 9 meter lengths only.

AES-Design-V0.5-Calculator Copy Right - Charitar Environmental pty ltd 1.E1-2015