

DA Form 1 – Development application details

Approved form (version 1.0 effective 3 July 2017) made under section 282 of the Planning Act 2016.

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

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

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

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

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

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

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

PART 1 – APPLICANT DETAILS

1) Applicant details	
Applicant name(s) (individual or company full name)	LIZ LANG & JUERGEN KEONIG
Contact name (only applicable for companies)	
Postal address (P.O. Box or street address)	9- GMA CERTIFICATION GROUP
Suburb	P.O. Box 831
State	PORT DOUGLAS Q
Postcode	4877
Country	
Contact number	0407 350 158
Email address (non-mandatory)	adminpd@gmacent.com.au
Mobile number (non-mandatory)	
Fax number (non-mandatory)	
Applicant's reference number(s) (if applicable)	

2) Owner's consent	
2.1) Is written consent of the owner required for this development application?	
<input checked="" type="checkbox"/>	Yes – the written consent of the owner(s) is attached to this development application
<input checked="" type="checkbox"/>	No – proceed to 3)



PART 2 – LOCATION DETAILS

3) Location of the premises (complete 3.1) or 3.2), and 3.3) as applicable)

Note: Provide details below and attach a site plan for any or all premises part of the development application. For further information, see [DA Forms Guide: Relevant plans](#).

3.1) Street address and lot on plan

☒ Street address **AND** lot on plan (all lots must be listed), **or**

☐ Street address **AND** lot on plan for an adjoining or adjacent property of the premises (appropriate for development in water but adjoining or adjacent to land e.g. jetty, pontoon; all lots must be listed).

a)	Unit No.	Street No.	Street Name and Type	Suburb
		21	HIBISCUS COURT	REEBY POINT
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)
	4873	31	RP 749728	DOUGLTON
b)	Unit No.	Street No.	Street Name and Type	Suburb
	Postcode	Lot No.	Plan Type and Number (e.g. RP, SP)	Local Government Area(s)

3.2) Coordinates of premises (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)

Note: Place each set of coordinates in a separate row. Only one set of coordinates is required for this part.

☐ Coordinates of premises by longitude and latitude

Longitude(s)	Latitude(s)	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

☐ Coordinates of premises by easting and northing

Easting(s)	Northing(s)	Zone Ref.	Datum	Local Government Area(s) (if applicable)
		<input type="checkbox"/> 54 <input type="checkbox"/> 55 <input type="checkbox"/> 56	<input type="checkbox"/> WGS84 <input type="checkbox"/> GDA94 <input type="checkbox"/> Other:	

3.3) Additional premises

☐ Additional premises are relevant to this development application and their details have been attached in a schedule to this application

☐ Not required

4) Identify any of the following that apply to the premises and provide any relevant details

☐ In or adjacent to a water body or watercourse or in or above an aquifer

Name of water body, watercourse or aquifer:

☐ On strategic port land under the *Transport Infrastructure Act 1994*

Lot on plan description of strategic port land:

Name of port authority for the lot:

☐ In a tidal area

Name of local government for the tidal area (if applicable):

Name of port authority for tidal area (if applicable):

☐ On airport land under the *Airport Assets (Restructuring and Disposal) Act 2008*

Name of airport:

☐ Listed on the Environmental Management Register (EMR) under the *Environmental Protection Act 1994*

EMR site identification:

☐ Listed on the Contaminated Land Register (CLR) under the *Environmental Protection Act 1994*

CLR site identification:

5) Are there any existing easements over the premises?

Note: Easement uses vary throughout Queensland and are to be identified correctly and accurately. For further information on easements and how they may affect the proposed development, see [DA Forms Guide](#).

- ☐ Yes – All easement locations, types and dimensions are included in plans submitted with this development application
- ☒ No

PART 3 – DEVELOPMENT DETAILS

Section 1 – Aspects of development

6.1) Provide details about the first development aspect

a) What is the type of development? *(tick only one box)*

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

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

- ☐ Development permit ☒ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

- ☒ Code assessment ☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal (e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):

PROPOSED GARAGE

e) Relevant plans

Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms guide: Relevant plans](#).

- ☒ Relevant plans of the proposed development are attached to the development application

6.2) Provide details about the second development aspect

a) What is the type of development? *(tick only one box)*

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

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

- ☐ Development permit ☐ Preliminary approval ☐ Preliminary approval that includes a variation approval

c) What is the level of assessment?

- ☐ Code assessment ☐ Impact assessment *(requires public notification)*

d) Provide a brief description of the proposal (e.g. 6 unit apartment building defined as multi-unit dwelling, reconfiguration of 1 lot into 3 lots):

e) Relevant plans

Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).

- ☒ Relevant plans of the proposed development are attached to the development application

6.3) Additional aspects of development

- ☐ Additional aspects of development are relevant to this development application and the details for these aspects that would be required under Part 3 Section 1 of this form have been attached to this development application
- ☐ Not required

Section 2 – Further development details

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

Material change of use	<input type="checkbox"/> Yes – complete division 1 if assessable against a local planning instrument
Reconfiguring a lot	<input type="checkbox"/> Yes – complete division 2
Operational work	<input type="checkbox"/> Yes – complete division 3
Building work	<input checked="" type="checkbox"/> Yes – complete <i>DA Form 2 – Building work details</i> ASSESSABLE AGAINST PLANNING SCHEME

Division 1 – Material change of use

Note: This division is only required to be completed if any part of the development application involves a material change of use assessable against a local planning instrument.

8.1) Describe the proposed material change of use

Provide a general description of the proposed use	Provide the planning scheme definition (include each definition in a new row)	Number of dwelling units (if applicable)	Gross floor area (m ²) (if applicable)
PROPOSED CARPACE	BUILDING WORK	—	—

8.2) Does the proposed use involve the use of existing buildings on the premises?

- ☐ Yes
☒ No

Division 2 – Reconfiguring a lot

Note: This division is only required to be completed if any part of the development application involves reconfiguring a lot.

9.1) What is the total number of existing lots making up the premises?

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9.2) What is the nature of the lot reconfiguration? (tick all applicable boxes)

- | | |
|--|--|
| <input type="checkbox"/> Subdivision (complete 10)) | <input type="checkbox"/> Dividing land into parts by agreement (complete 11)) |
| <input type="checkbox"/> Boundary realignment (complete 12)) | <input type="checkbox"/> Creating or changing an easement giving access to a lot from a construction road (complete 13)) |

10) Subdivision

10.1) For this development, how many lots are being created and what is the intended use of those lots:

Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created				

10.2) Will the subdivision be staged?

- ☐ Yes – provide additional details below
☐ No

How many stages will the works include?	
What stage(s) will this development application apply to?	

11) Dividing land into parts by agreement – how many parts are being created and what is the intended use of the parts?

Intended use of parts created	Residential	Commercial	Industrial	Other, please specify:
Number of parts created				

12) Boundary realignment

12.1) What are the current and proposed areas for each lot comprising the premises?

Current lot		Proposed lot	
Lot on plan description	Area (m ²)	Lot on plan description	Area (m ²)

12.2) What is the reason for the boundary realignment?

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13) What are the dimensions and nature of any existing easements being changed and/or any proposed easement?

(attach schedule if there are more than two easements)

Existing or proposed?	Width (m)	Length (m)	Purpose of the easement? (e.g. pedestrian access)	Identify the land/lot(s) benefitted by the easement

Division 3 – Operational work

Note: This division is only required to be completed if any part of the development application involves operational work.

14.1) What is the nature of the operational work?

- | | | |
|--|-------------------------------------|--|
| <input type="checkbox"/> Road work | <input type="checkbox"/> Stormwater | <input type="checkbox"/> Water infrastructure |
| <input type="checkbox"/> Drainage work | <input type="checkbox"/> Earthworks | <input type="checkbox"/> Sewage infrastructure |
| <input type="checkbox"/> Landscaping | <input type="checkbox"/> Signage | <input type="checkbox"/> Clearing vegetation |
| <input type="checkbox"/> Other – please specify: <table border="1" style="display: inline-table; width: 300px; height: 20px;"></table> | | |

14.2) Is the operational work necessary to facilitate the creation of new lots? (e.g. subdivision)

☐ Yes – specify number of new lots:

☐ No

14.3) What is the monetary value of the proposed operational work? (include GST, materials and labour)

\$

PART 4 – ASSESSMENT MANAGER DETAILS

15) Identify the assessment manager(s) who will be assessing this development application

DOUGLAS SHIRE COUNCIL

16) Has the local government agreed to apply a superseded planning scheme for this development application?

- ☐ Yes – a copy of the decision notice is attached to this development application
- ☐ Local government is taken to have agreed to the superseded planning scheme request – relevant documents attached
- ☒ No

PART 5 – REFERRAL DETAILS

17) Do any aspects of the proposed development require referral for any referral requirements?

Note: A development application will require referral if prescribed by the Planning Regulation 2017.

- ☒ No, there are no referral requirements relevant to any development aspects identified in this development application – proceed to Part 6

Matters requiring referral to the **chief executive of the Planning Regulation 2017:**

- ☐ Clearing native vegetation
- ☐ Contaminated land (unexploded ordnance)

<input type="checkbox"/> Environmentally relevant activities (ERA) <i>(only if the ERA have not been devolved to a local government)</i> <input type="checkbox"/> Fisheries – aquaculture <input type="checkbox"/> Fisheries – declared fish habitat area <input type="checkbox"/> Fisheries – marine plants <input type="checkbox"/> Fisheries – waterway barrier works <input type="checkbox"/> Hazardous chemical facilities <input type="checkbox"/> Queensland heritage place <i>(on or near a Queensland heritage place)</i> <input type="checkbox"/> Infrastructure – designated premises <input type="checkbox"/> Infrastructure – state transport infrastructure <input type="checkbox"/> Infrastructure – state transport corridors and future state transport corridors <input type="checkbox"/> Infrastructure – state-controlled transport tunnels and future state-controlled transport tunnels <input type="checkbox"/> Infrastructure – state-controlled roads <input type="checkbox"/> Land within Port of Brisbane's port limits <input type="checkbox"/> SEQ development area <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – community activity <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – indoor recreation <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – residential development <input type="checkbox"/> SEQ regional landscape and rural production area or SEQ Rural living area – urban activity <input type="checkbox"/> Tidal works or works in a coastal management district <input type="checkbox"/> Urban design <input type="checkbox"/> Water-related development – taking or interfering with water <input type="checkbox"/> Water-related development – removing quarry material <i>(from a watercourse or lake)</i> <input type="checkbox"/> Water-related development – referable dams <input type="checkbox"/> Water-related development – construction of new levees or modification of existing levees <i>(category 2 or 3 levees only)</i> <input type="checkbox"/> Wetland protection area
Matters requiring referral to the local government: <input type="checkbox"/> Airport land <input type="checkbox"/> Environmentally relevant activities (ERA) <i>(only if the ERA have been devolved to local government)</i> <input type="checkbox"/> Local heritage places
Matters requiring referral to the chief executive of the distribution entity or transmission entity: <input type="checkbox"/> Electricity infrastructure
Matters requiring referral to: <ul style="list-style-type: none"> • The chief executive of the holder of the licence, if not an individual • The holder of the licence, if the holder of the licence is an individual <input type="checkbox"/> Oil and gas infrastructure
Matters requiring referral to the Brisbane City Council: <input type="checkbox"/> Brisbane core port land
Matters requiring referral to the Minister under the Transport Infrastructure Act 1994: <input type="checkbox"/> Brisbane core port land <input type="checkbox"/> Strategic port land
Matters requiring referral to the relevant port operator: <input type="checkbox"/> Brisbane core port land <i>(below high-water mark and within port limits)</i>
Matters requiring referral to the chief executive of the relevant port authority: <input type="checkbox"/> Land within limits of another port
Matters requiring referral to the Gold Coast Waterways Authority: <input type="checkbox"/> Tidal works, or development in a coastal management district in Gold Coast waters
Matters requiring referral to the Queensland Fire and Emergency Service: <input type="checkbox"/> Tidal works, or development in a coastal management district

18) Has any referral agency provided a referral response for this development application?

- ☐ Yes – referral response(s) received and listed below are attached to this development application
- ☐ No

Referral requirement	Referral agency	Date of referral response

Identify and describe any changes made to the proposed development application that was the subject of the referral response and the development application the subject of this form, or include details in a schedule to this development application (if applicable).

PART 6 – INFORMATION REQUEST**19) Information request under Part 3 of the DA Rules**

- ☒ I agree to receive an information request if determined necessary for this development application
- ☐ I do not agree to accept an information request for this development application

Note: By not agreeing to accept an information request I, the applicant, acknowledge:

- that this development application will be assessed and decided based on the information provided when making this development application and the assessment manager and any referral agencies relevant to the development application are not obligated under the DA Rules to accept any additional information provided by the applicant for the development application unless agreed to by the relevant parties
- Part 3 of the DA Rules will still apply if the application is an application listed under section 11.3 of the DA Rules.

Further advice about information requests is contained in the DA Forms Guide.

PART 7 – FURTHER DETAILS**20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)**

- ☐ Yes – provide details below or include details in a schedule to this development application
- ☒ No

List of approval/development application references	Reference number	Date	Assessment manager
<input type="checkbox"/> Approval			
<input type="checkbox"/> Development application			
<input type="checkbox"/> Approval			
<input type="checkbox"/> Development application			

21) Has the portable long service leave levy been paid? (only applicable to development applications involving building work or operational work)

- ☐ Yes – the yellow local government/private certifier's copy of the receipted QLeave form is attached to this development application
- ☐ No – I, the applicant will provide evidence that the portable long service leave levy has been paid before the assessment manager decides the development application. I acknowledge that the assessment manager may give a development approval only if I provide evidence that the portable long service leave levy has been paid
- ☒ Not applicable

Amount paid	Date paid (dd/mm/yy)	QLeave levy number (A, B or E)
\$		

22) Is this development application in response to a show cause notice or required as a result of an enforcement notice?

- ☐ Yes – show cause or enforcement notice is attached
- ☒ No

23) Further legislative requirements**Environmentally relevant activities**

23.1) Is this development application also taken to be an application for an environmental authority for an **Environmentally Relevant Activity (ERA)** under section 115 of the *Environmental Protection Act 1994*?

☐ Yes – the required attachment (form EM941) for an application for an environmental authority accompanies this development application, and details are provided in the table below

☒ No

Note: Application for an environmental authority can be found by searching "EM941" at www.qld.gov.au. An ERA requires an environmental authority to operate. See www.business.qld.gov.au for further information.

Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			

☐ Multiple ERAs are applicable to this development application and the details have been attached in a schedule to this development application.

Hazardous chemical facilities

23.2) Is this development application for a **hazardous chemical facility**?

☐ Yes – Form 69: Notification of a facility exceeding 10% of schedule 15 threshold is attached to this development application

☒ No

Note: See www.justice.qld.gov.au for further information.

Clearing native vegetation

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

☐ Yes – this development application is accompanied by written confirmation from the chief executive of the *Vegetation Management Act 1999* (s22A determination)

☒ No

Note: See www.qld.gov.au for further information.

Environmental offsets

23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a **prescribed environmental matter** under the *Environmental Offsets Act 2014*?

☐ Yes – I acknowledge that an environmental offset must be provided for any prescribed activity assessed as having a significant residual impact on a prescribed environmental matter

☒ No

Note: The environmental offset section of the Queensland Government's website can be accessed at www.qld.gov.au for further information on environmental offsets.

Koala conservation

23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work within an assessable development area under Schedule 10, Part 10 of the *Planning Regulation 2017*?

☐ Yes

☒ No

Note: See guidance materials at www.ehp.qld.gov.au for further information.

Water resources

23.6) Does this development application involve **taking or interfering with artesian or sub artesian water, taking or interfering with water in a watercourse, lake or spring, taking overland flow water or waterway barrier works**?

☐ Yes – the relevant template is completed and attached to this development application

☒ No

Note: DA templates are available from www.dilgp.qld.gov.au.

23.7) Does this application involve **taking or interfering with artesian or sub artesian water, taking or interfering with water in a watercourse, lake or spring, or taking overland flow water** under the *Water Act 2000*?

☐ Yes – I acknowledge that a relevant water authorisation under the *Water Act 2000* may be required prior to

commencing development

☒ No*Note: Contact the Department of Natural Resources and Mines at www.dnrm.qld.gov.au for further information.***Marine activities****23.8) Does this development application involve aquaculture, works within a declared fish habitat area or removal, disturbance or destruction of marine plants?**☐ Yes – an associated resource allocation authority is attached to this development application, if required under the *Fisheries Act 1994*☒ No*Note: See guidance materials at www.daf.qld.gov.au for further information.***Quarry materials from a watercourse or lake****23.9) Does this development application involve the removal of quarry materials from a watercourse or lake under the *Water Act 2000*?**☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development☒ No*Note: Contact the Department of Natural Resources and Mines at www.dnrm.qld.gov.au for further information.***Quarry materials from land under tidal waters****23.10) Does this development application involve the removal of quarry materials from land under tidal water under the *Coastal Protection and Management Act 1995*?**☐ Yes – I acknowledge that a quarry material allocation notice must be obtained prior to commencing development☒ No*Note: Contact the Department of Environment and Heritage Protection at www.ehp.qld.gov.au for further information.***Referable dams****23.11) Does this development application involve a referable dam required to be failure impact assessed under section 343 of the *Water Supply (Safety and Reliability) Act 2008* (the *Water Supply Act*)?**☐ Yes – the 'Notice Accepting a Failure Impact Assessment' from the chief executive administering the *Water Supply Act* is attached to this development application☒ No*Note: See guidance materials at www.dews.qld.gov.au for further information.***Tidal work or development within a coastal management district****23.12) Does this development application involve tidal work or development in a coastal management district?**☐ Yes – the following is included with this development application:☐ Evidence the proposal meets the code for assessable development that is prescribed tidal work (*only required if application involves prescribed tidal work*)☐ A certificate of title☒ No*Note: See guidance materials at www.ehp.qld.gov.au for further information.***Queensland and local heritage places****23.13) Does this development application propose development on or adjoining a place entered in the **Queensland heritage register** or on a place entered in a local government's **Local Heritage Register**?**☐ Yes – details of the heritage place are provided in the table below☒ No*Note: See guidance materials at www.ehp.qld.gov.au for information requirements regarding development of Queensland heritage places.*

Name of the heritage place:

Place ID:

Brothels**23.14) Does this development application involve a material change of use for a brothel?**☐ Yes – this development application demonstrates how the proposal meets the code for a development application for a brothel under Schedule 3 of the *Prostitution Regulation 2014*☒ No

Decision under section 62 of the Transport Infrastructure Act 1994

23.15) Does this development application involve new or changed access to a state-controlled road?

- ☐ Yes - this application will be taken to be an application for a decision under section 62 of the *Transport Infrastructure Act 1994* (subject to the conditions in section 75 of the *Transport Infrastructure Act 1994* being satisfied)
- ☒ No

PART 8 – CHECKLIST AND APPLICANT DECLARATION**24) Development application checklist**

I have identified the assessment manager in question 15 and all relevant referral requirement(s) in question 17

☒ Yes*Note: See the Planning Regulation 2017 for referral requirements*If building work is associated with the proposed development, Parts 4 to 6 of *Form 2 – Building work details* have been completed and attached to this development application
☐ Yes
☒ Not applicable

Supporting information addressing any applicable assessment benchmarks is with development application

Note: This is a mandatory requirement and includes any relevant templates under question 23, a planning report and any technical reports required by the relevant categorising instruments (e.g. local government planning schemes, State Planning Policy, State Development Assessment Provisions). For further information, see [DA Forms Guide: Planning Report Template](#).

☒ Yes

Relevant plans of the development are attached to this development application

Note: Relevant plans are required to be submitted for all aspects of this development application. For further information, see [DA Forms Guide: Relevant plans](#).

☒ Yes

The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21))

☐ Yes
☒ Not applicable
25) Applicant declaration
☒ By making this development application, I declare that all information in this development application is true and correct

☒ Where an email address is provided in Part 1 of this form, I consent to receive future electronic communications from the assessment manager and any referral agency for the development application where written information is required or permitted pursuant to sections 11 and 12 of the *Electronic Transactions Act 2001*
Note: It is unlawful to intentionally provide false or misleading information.

Privacy – Personal information collected in this form will be used by the assessment manager and/or chosen assessment manager, any relevant referral agency and/or building certifier (including any professional advisers which may be engaged by those entities) while processing, assessing and deciding the development application.

All information relating to this development application may be available for inspection and purchase, and/or published on the assessment manager's and/or referral agency's website.

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

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

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

PART 9 – FOR OFFICE USE ONLY

Date received:

Reference number(s):

Notification of engagement of alternative assessment manager	
Prescribed assessment manager	
Name of chosen assessment manager	
Date chosen assessment manager engaged	
Contact number of chosen assessment manager	
Relevant licence number(s) of chosen assessment manager	

QLeave notification and payment	
<i>Note: For completion by assessment manager if applicable</i>	
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 *Planning Act 2016*, the *Planning Regulation 2017* and the *DA Rules* are administered by the Department of Infrastructure, Local Government and Planning. This form and all other required development application materials should be sent to the assessment manager.

GMA Certification Group Pty Ltd

BUILDING SURVEYORS

Queensland's leaders in Building Certification Services



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30 July 2018

The Chief Executive Officer
Douglas Shire Council
PO Box 723
MOSSMAN Q 4873

Attention: Development Assessment

Dear Sir/Madam,

**Re: Application for Building Work Made Assessable Development under the Planning Scheme
Lot 31 RP749728 [no. 21] Hibiscus Avenue, Rocky Point**

GMA Certification Group has been engaged to assess an application for the construction of a garage on the abovementioned allotment. The subject site is located within an Environmental Management Zone.

Accordingly, an application for Building Work made Assessable Development under the Planning Scheme is enclosed for Council's consideration, which includes:

1. DA Form 1;
2. Assessment;
3. Geotechnical Report; &
4. Plans

Should you require any further information or wish to discuss the application, please contact me on 4098 5150 or by email Jevans@gmacert.com.au

Kind Regards,

Jeff Evans
GMA Certification Group

BUILDING APPROVALS & INSPECTIONS

Gold Coast
(07) 5578 1622

Sunshine Coast
(07) 5449 0383

BUILDING CERTIFICATION

Cloncurry
(07) 4742 2022

Chinchilla
(07) 4669 1166

FIRE SAFETY AUDITS

Atherton
(07) 4091 4196

Childers
(07) 4126 3069



Planning Report

**Application for a Development Permit for a Building Work
made assessable development under the Planning Scheme for
the purpose of a garage on land described as**

Lot 31 on RP749728 no. 21 Hibiscus Court, Rocky Point

July 2018

1.0 Application Details

Table 1. Summary of relevant details of the application.

Applicant	Elisabeth Lang & Juergen Koenig
Registered Owner of Land	Elisabeth Lang & Juergen Koenig
Contact	Jeff Evans GMA Certification Group Pty Ltd PO Box 831 PORT DOUGLAS Q 4877 Ph 07 4098 5150
Real Property Description	Lot 31 on RP749728
Location	21 Hibiscus Court, Rocky Point
Tenure	Free Hold
Total Area	2.275 Hectares
Present Use	Dwelling
Contaminated Lands or Environmental Management Registers	Nil
Easements and Encumbrances	Nil
Proposal	Development Permit for Building Work made assessable under the Planning Scheme for a garage
Local Government Authority	Douglas Shire Council
Planning Scheme	Douglas Shire Planning Scheme 2018
Planning Area	Environmental Management Zone
Overlays	Bushfire Hillslopes Natural Areas Potential Landslip Landscape Values – High

2.0 Proposed Development

The application seeks a Development Permit for a Building Work made assessable development under the Planning Scheme for the purpose of a garage on the subject allotment.

The attached plans illustrate:

- Site plan, indicating the location of the proposed garage; and,
- Architectural plans including floor plans and elevations.

3.0 Level of Assessment

The proposed development is ‘assessable development’ under the Douglas Shire Planning Scheme and as defined in the Planning Act 2016.

Under the provisions of the Planning Act and the Douglas Shire Planning Scheme, the following level of assessment is applicable, in accordance with the IDAS process:

- ‘Code Assessable’ – Building Work within the Environmental Management Zone

4.0 Planning Considerations

The Planning Act 2016, provides a legislative framework within Queensland for local and state authorities to assess development applications. Relevant matters within the Planning Act with respect to the application are considered below.

4.1 Douglas Shire Planning Scheme Code Assessment

Table 2 provides an assessment of the proposal with regard to the Douglas Shire Planning Scheme’s associated Codes. The proposal generally complies with the Acceptable Solutions of the Scheme.

Table 2. Assessment Against the Douglas Shire Planning Scheme Codes

Environmental Management Zone Code

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	COMMENTS
PO1 The height of all buildings and structures is in keeping with the natural characteristics of the site. Buildings and structures are low-rise and not unduly visible from external sites.	AO1.1 Buildings and structures are not more than 8.5 metres and two storeys in height. Note – Height is inclusive of the roof height. AO1.2 Buildings have a roof height not less than 2 metres.	The proposed development complies as it has a maximum height of approximately 8.3m.
PO2 Buildings and structures are set back to: (a) maintain the natural character of the area; (b) achieve separation from neighbouring buildings and from road frontages.	AO2 Buildings and structures are set back not less than: (a) 40 metres from the frontage of a state controlled road; (b) 25 metres from the frontage to Cape Tribulation Road; (c) 6 metres from any other road; (d) 6 metres from the side and rear boundaries of the site.	The proposed setback is 3200mm from the road boundary to the outermost projection. The reduced setback is necessary to reduce the overall height of the building due to the slope of the land. The proposal will be consistent with setback of the existing dwelling on the allotment and therefore will maintain the natural character of the area and achieve adequate separation from neighbouring buildings.
PO3 Development is consistent with the purpose of the Environmental management zone and protects the zone from the intrusion of inconsistent uses.	AO3 Inconsistent uses as identified in Table 6.2.4.3.b are not established in the Environmental management zone.	The use is not inconsistent.
PO4 The site coverage of all buildings and structures	PO4 No acceptable outcomes are prescribed.	NA

and associated services do not have an adverse effect on the environmental or scenic values of the site.		
PO5 Development is located, designed, operated and managed to respond to the characteristics, features and constraints of the site and its surrounds.	<p>AO5.1 Buildings, structures and associated access, infrastructure and private open space are sited:</p> <p>(a) within areas of the site which are already cleared; or</p> <p>(b) within areas of the site which are environmentally degraded;</p> <p>(c) to minimise additional vegetation clearing.</p> <p>AO5.2 Buildings and structures and associated infrastructure are not located on slopes greater than 1 in 6 (16.6%) or on a ridgeline</p>	<p>The garage is to be constructed on an area of the land which has previously been landscape by the owners. Therefore, natural vegetation will not be affected.</p> <p>The garage is to be located on a slope which is consistent with the existing dwelling. A geotechnical report accompanies the application.</p>
<p>PO6 Buildings and structures are responsive to steep slope through innovative construction techniques so as to:</p> <p>(a) maintain the geotechnical stability of slopes;</p> <p>(b) minimise cut and/or fill;</p> <p>(c) minimise the overall height of development</p>	<p>AO6.1 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the land and single plane concrete slab on-ground methods of construction are not utilised.</p> <p>AO6.2 Access and vehicle manoeuvring and parking areas are constructed and maintained to:</p> <p>(a) minimise erosion;</p> <p>(b) minimise cut and fill;</p> <p>(c) follow the natural contours of the site.</p>	<p>The location and design of the proposed garage maintains the geotechnical stability of the site, minimises cut and fill and overall height of the building.</p>
PO7 The exterior finishes of buildings and structures are consistent with the surrounding natural environment.	PO7 The exterior finishes and colours of buildings and structures are non-reflective and are moderately dark to darker shades of grey, green, blue and brown or the development is not visible external to the site.	Exterior colours of the garage will be consistent with the existing dwelling.

PO8 Development does not adversely affect the amenity of the zone and adjoining land uses in terms of traffic, noise, dust, odour, lighting or other physical or environmental impacts.	AO8 No acceptable outcomes are prescribed	NA
PO9 The density of development ensures that the environmental and scenic amenity values of the site and surrounding area are not adversely affected.	AO9 The maximum residential density is one dwelling house per lot.	Complies.
PO10 Lot reconfiguration results in no additional lots.	AO10 No acceptable outcomes are prescribed.	NA

Landscape Values Overlay Code

Development in a High landscape value area

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	COMMENTS
PO1 Development within High landscape value areas identified on the Landscape values overlay maps contained in Schedule 2: (a) avoids detrimental impacts on the landscape values of forested skylines, visible hillslopes, ridgelines, the coastal foreshore or the shoreline of other water bodies through the loss of vegetation; (b) is effectively screened from view from a road, lookout or other public place by an existing natural landform or native vegetation, or will be effectively screened by native vegetation within 3 years of construction; (c) retains existing vegetation	AO1.1 Buildings and structures are not more than 8.5 metres and two storeys in height. Note - Height is inclusive of roof height.	Proposal complies.
	AO1.2 Buildings and structures are setback not less than 50 metres from ridgelines or peaks.	Proposal complies.
	AO1.3 Development is screened from view from roads or other public places by an existing natural landform or an existing native vegetation buffer.	Due to the site constraints, it is unavoidable to construct the garage in the proposed location.

<p>and incorporates new landscaping to enhance existing vegetation and visually soften built form elements;</p> <p>(d) incorporates development of a scale, design, height, position on site, construction materials and external finishes that are compatible with the landscape values of the locality;</p> <p>(e) avoids detrimental impacts on landscape values and excessive changes to the natural landform as a result of the location, position on site, scale, design, extent and alignment of earthworks, roads, driveways, retaining walls and other on-ground or in-ground infrastructure;</p> <p>(f) avoids detrimental impacts on landscape values and views as a result of the location, position on site, scale, design and alignment of telecommunications facilities, electricity towers, poles and lines and other tall infrastructure;</p> <p>(g) extractive industry operations are avoided.</p> <p>Note - A visual impact assessment is undertaken in accordance with Planning scheme policy SC6.6 – Landscape values in order to satisfy performance outcomes.</p>	<p>A01.4 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided:</p> <p>(h) development follows the natural; contours of the site;</p> <p>(i) buildings are split level or suspended floor construction, or a combination of the two;</p> <p>(j) lightweight materials are used to areas with suspended floors.</p> <p>Note - Examples of suitable lightweight materials include timber or fibre cement boards or sheeting for walls and factory treated metal sheeting for walls and roofs.</p> <p>A01.5 The external features, walls and roofs of buildings and structures have a subdued and non-reflective palette.</p> <p>Note - Examples of suitable colours include shades of green, olive green, blue green, grey green, green blue, indigo, brown, blue grey, and green yellow.</p> <p>A01.6 No clearing of native vegetation occurs on land with a slope greater than 1 in 6 (16.5%).</p> <p>A01.7 Where for accommodation activities or reconfiguration of a lot in a High landscape value area, development demonstrates that the height, design, scale, positioning on-</p>	<p>The design of the garage is consistent with that of the existing dwelling. Therefore, visual impact will be minimised.</p> <p>See Environmental Management Zone Code assessment for proposed colours.</p> <p>Only plants installed by the owners will be affected.</p> <p>NA</p>
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	<p>site, proposed construction materials and external finishes are compatible with the landscape values.</p> <p>Note - A visual impact assessment undertaken in accordance with Planning scheme policy SC6.6 – Landscape values may be required.</p> <p>AO1.8 Advertising devices do not occur.</p>	NA
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Bushfire Hazard Overlay Code

PERFORMANCE OUTCOMES	ACCEPTABLE OUTCOMES	COMMENTS
<p>PO1 A vulnerable use is not established or materially intensified within a bushfire hazard area (bushfire prone area) unless there is an overriding need or other exceptional circumstances.</p>	<p>AO1 Vulnerable uses are not established or expanded.</p>	<p>The proposal is not a vulnerable use.</p>
<p>AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.</p>	<p>AO2 Emergency Services and uses providing community support services are not located in a bushfire hazard sub-category and have direct access to low hazard evacuation routes.</p>	NA
<p>PO3 Development involving hazardous materials manufactured or stored in bulk is not located in bushfire hazard sub-category.</p>	<p>AO3 The manufacture or storage of hazardous material in bulk does not occur within bushfire hazard sub-category.</p>	NA
<p>PO10 Development is located and</p>	<p>AO10 Buildings or building</p>	

<p>designed to ensure proposed buildings or building envelopes achieve a radiant heat flux level at any point on the building or envelope respectively, of:</p> <p>(k) 10kW/m² where involving a vulnerable use; or</p> <p>(l) 29kW/m² otherwise.</p> <p>The radiant heat flux level is achieved by separation unless this is not practically achievable.</p> <p>Note - The radiant heat levels and separation distances are to be established in accordance with method 2 set out in AS3959-2009.</p>	<p>envelopes are separated from hazardous vegetation by a distance that:</p> <p>(m) achieves a radiant heat flux level of at any point on the building or envelope respectively, of 10kW/m² for a vulnerable use or 29kW/m² otherwise; and</p> <p>(n) is contained wholly within the development site.</p> <p>Note - Where a separation distance is proposed to be achieved by utilising existing cleared developed areas external to the site, certainty must be established (through tenure or other means) that the land will remain cleared of hazardous vegetation.</p> <p>For staged developments, temporary separation distances, perimeter roads or fire trails may be absorbed as part of subsequent stages.</p> <p>Note - The achievement of a cleared separation distance may not be achievable where other provisions within the planning scheme require protection of certain ecological, slope, visual or character features or functions.</p>	<p>The proposed development is located adjacent to rainforest, therefore risk from fire is extremely low.</p>
<p>PO11</p> <p>A formed, all weather fire trail is provided between the hazardous vegetation and the site boundary or building envelope, and is readily accessible at all times for the type of fire fighting vehicles servicing the area.</p>	<p>AO11</p> <p>Development sites are separated from hazardous vegetation by a public road or fire trail which has:</p> <p>(o) a reserve or easement width of at least 20m;</p> <p>(p) a minimum trafficable (cleared and formed) width of 4m capable of</p>	<p>The nearby vegetation is not considered hazardous. Further, the area between the development and road boundary is clear of vegetation.</p>

<p>However, a fire trail will not be required where it would not serve a practical fire management purpose.</p> <p>Note - Fire trails are unlikely to be required where a development site involves less than 2.5ha</p>	<p>accommodating a 15 tonne vehicle and which is at least 6m clear of vegetation;</p> <ul style="list-style-type: none"> (q) no cut or fill embankments or retaining walls adjacent to the 4m wide trafficable path; (r) a minimum of 4.8m vertical clearance; (s) turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; (t) a maximum gradient of 12.5%; (u) a cross fall of no greater than 10 degrees; (v) drainage and erosion control devices in accordance with the standards prescribed in a planning scheme policy; (w) vehicular access at each end which is connected to the public road network which is connected to the public road network at intervals of no more than 500m; (x) designated fire trail signage; (y) if used, has gates locked with a system authorised by Queensland Fire and Emergency Services; and (z) if a fire trail, has an access easement that is granted in favour of Council and Queensland Fire and Emergency Services. 	
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<p>PO12</p> <p>All premises are provided with vehicular access that enables safe evacuation for occupants and easy access by fire fighting appliances.</p>	<p>AO12</p> <p>Private driveways:</p> <p>(aa) do not exceed a length of 60m from the street to the building;</p> <p>(bb) do not exceed a gradient of 12.5%;</p> <p>(cc) have a minimum width of 3.5m;</p> <p>(dd) have a minimum of 4.8m vertical clearance;</p> <p>(ee) accommodate turning areas for fire-fighting appliances in accordance with Queensland Fire and Emergency Services' Fire Hydrant and Vehicle Access Guidelines; and</p> <p>(ff) serve no more than 3 dwellings or buildings.</p>	<p>Proposal complies.</p>
<p>PO13</p> <p>Development outside reticulated water supply areas includes a dedicated static supply that is available solely for fire fighting purposes and can be accessed by fire fighting appliances.</p>	<p>AO13</p> <p>A water tank is provided within 10m of each building (other than a class 10 building) which:</p> <p>(gg) is either below ground level or of non-flammable construction;</p> <p>(hh) has a take off connection at a level that allows the following dedicated, static water supply to be left available for access by fire fighters:</p> <p>(i) 10,000l for residential buildings</p> <p>Note – A minimum of 7,500l is required in a tank and the extra 2,500l may be in the form of accessible swimming pools or dams.</p> <p>(ii) 45,000l for industrial buildings; and</p> <p>(iii) 20,000l for other buildings;</p> <p>(ii) includes shielding of tanks and pumps in accordance with the relevant</p>	<p>It is proposed to provide sufficient water storage to comply with this Acceptable Outcome. However, water supply is to be provided via above ground plastic tank/s as with 99% of the of properties not on a reticulated water supply.</p>

	standards; (jj) includes a hardstand area allowing medium rigid vehicle (15 tonne fire appliance) access within 6m of the tank; (kk) is provided with fire brigade tank fittings – 50mm ball valve and male camlock coupling and, if underground, an access hole of 200mm (minimum) to accommodate suction lines; and (ll) is clearly identified by directional signage provided at the street frontage.	Town water is available, therefore this requirement is not applicable.
PO14 Landscaping does not increase the potential bushfire risk.	AO14 Landscaping uses species that are less likely to exacerbate a bushfire event, and does not increase fuel loads within separation areas.	Noted.
PO15 The risk of bushfire and the need to mitigate that risk is balanced against other factors (such as but not limited to, biodiversity or scenic amenity).	AO15 Bushfire risk mitigation treatments do not have a significant impact on the natural environment or landscape character of the locality where this has value.	Noted.

Natural Areas Overlay Code

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
PO1 Development protects matters of environmental significance.	AO1.1 Development avoids significant impact on the relevant environmental values. or AO1.2 A report is prepared by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, that the	The proposed location of the garage avoids any significant environmental areas by construction within an area where ornamental shrubs have been planted.

	<p>development site does not contain any matters of state and local environmental significance.</p> <p>Or</p> <p>AO1.3 Development is located, designed and operated to mitigate significant impacts on environmental values. For example, a report certified by an appropriately qualified person demonstrating to the satisfaction of the assessment manager, how the proposed development mitigates impacts, including on water quality, hydrology and biological processes.</p>	
PO2 Development is located, designed and constructed to avoid significant impacts on matters of environmental significance.	<p>AO2 The design and layout of development minimises adverse impacts on ecologically important areas by: (a) focusing development in cleared areas to protect existing habitat; (b) utilising design to consolidate density and preserve existing habitat and native vegetation; (c) aligning new property boundaries to maintain ecologically important areas; (d) ensuring that alterations to natural landforms, hydrology and drainage patterns on the development site do not negatively affect ecologically important areas; (e) ensuring that significant fauna habitats are protected in their environmental context; and (f) incorporating measures that allow for the safe movement of fauna through the site.</p>	<p>The proposed location of the garage avoids any significant environmental areas by construction within an area where ornamental shrubs have been planted.</p>

PO3 An adequate buffer to areas of state environmental significance is provided and maintained.	<p>AO3.1 A buffer for an area of state environmental significance (Wetland protection area) has a minimum width of: (a) 100 metres where the area is located outside Urban areas; or (b) 50 metres where the area is located within a Urban areas.</p> <p>or</p> <p>AO3.2 A buffer for an area of state environmental significance is applied and maintained, the width of which is supported by an evaluation of environmental values, including the function and threats to matters of environmental significance.</p>	NA
PO4 Wetland and wetland buffer areas are maintained, protected and restored. Note – Wetland buffer areas are identified in AO3.1.	<p>AO4.1 Native vegetation within wetlands and wetland buffer areas is retained.</p> <p>AO4.2 Degraded sections of wetlands and wetland buffer areas are revegetated with endemic native plants in patterns and densities which emulate the relevant regional ecosystem.</p>	NA
PO5 Development avoids the introduction of nonnative pest species (plant or animal), that pose a risk to ecological integrity.	<p>AO5.1 Development avoids the introduction of non-native pest species.</p> <p>AO5.2 The threat of existing pest species is controlled by adopting pest management practices for long-term ecological integrity.</p>	NA
PO6 Development protects and enhances ecological connectivity and/or habitat extent.	AO6.1 Development retains native vegetation in areas large enough to maintain ecological values, functions and processes. and	The proposed location of the garage avoids any significant environmental areas by construction within an area where ornamental shrubs have been planted.

	<p>AO6.2 Development within an ecological corridor rehabilitates native vegetation. and AO6.3 Development within a conservation corridor mitigates adverse impacts on native fauna, feeding, nesting, breeding and roosting sites and native fauna movements.</p>	
PO7 Development minimises disturbance to matters of state environmental significance (including existing ecological corridors).	<p>AO7.1 Development avoids shading of vegetation by setting back buildings by a distance equivalent to the height of the native vegetation. and</p> <p>AO7.2 Development does not encroach within 10 metres of existing riparian vegetation and watercourses.</p>	NA
PO8 Development is set back from waterways to protect and maintain: (a) water quality; (b) hydrological functions; (c) ecological processes; (d) biodiversity values; (e) riparian and in-stream habitat values and connectivity; (f) in-stream migration.	<p>AO8.1 Where a waterway is contained within an easement or a reserve required for that purpose, development does not occur within the easement or reserve;</p> <p>or</p> <p>AO8.2 Development does not occur on the part of the site affected by the waterway corridor.</p>	NA
PO9 Development is set back from waterways to protect and maintain: (a) water quality; (b) hydrological functions; (c) ecological processes; (d) biodiversity values; (e) riparian and in-stream habitat values and connectivity; (f) in-stream migration	AO9 Development does not occur on that part of the site affected by a waterway corridor.	NA

Potential Landslip Overlay Code

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
PO1 The siting and design of development does not involve complex engineering solutions and does not create or increase the potential landslide hazard risk to the site or adjoining premises through: (a) building design; (b) increased slope; (c) removal of vegetation; (d) stability of soil; (e) earthworks; (f) alteration of existing ground water or surface water paths; (g) waste disposal areas.	<p>AO1.1 Development is located on that part of the site not affected by the Potential landslide hazard overlay.</p> <p>Or</p> <p>AO1.2 Development is on an existing stable, benched site and requires no further earthworks</p> <p>or</p> <p>AO1.3 A competent person certifies that: (a) the stability of the site, including associated buildings and infrastructure, will be maintained during the course of the development and will remain stable for the life of the development; (b) development of the site will not increase the risk of landslide hazard activity on other land, including land above the site; (c) the site is not subject to the risk of landslide activity on other land; (d) any measures identified in a site-specific geotechnical report for stabilising the site or development have been fully implemented; (e) development does not concentrate existing ground</p>	Geotechnical assessment of the proposed development is attached.

	water and surface water paths; (f) development does not incorporate on-site waste water disposal.	
PO2 The siting and design of necessary retaining structures does not cause an adverse visual impact on landscape character or scenic amenity quality of the area.	AO2 Excavation or fill: (a) is not more than 1.2 metres in height for each batter or retaining wall; (b) is setback a minimum of 2 metres from property boundaries; (c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping; (d) does not exceed a maximum of 3 batters and 3 berms (i.e. Not greater than 3.6 metres in height) on any one lot.	No excavation or filling proposed.

Hillslopes Overlay Code

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
PO2 The landscape character and visual amenity quality of hillslopes areas is retained to protect the scenic backdrop to the region.	<p>AO2.1 Development does not occur on land with a gradient in excess of 1 in 6 (16.6%) or</p> <p>AO2.2 Where development on land steeper than 1 in 6 (16.6%) cannot be avoided, development follows the natural contours of the site.</p> <p>AO2.3 Access ways and driveways are: (a) constructed with surface materials that blend with the surrounding environment; (b) landscaped with dense planting to minimise the visual impact of the construction; (c) provided with erosion control measures immediately after construction.</p>	<p>Due to the slope of the land, the proposed construction method is unavoidable so as to minimise disturbance of the site.</p> <p>Driveway will be consistent with existing driveway.</p>

	<p>AO2.4 The clearing or disturbance of vegetation is limited to clearing and disturbance that: (a) is necessary for the construction of driveways; (b) is necessary to contain the proposed development; (c) minimises canopy clearing or disturbance; (d) minimises riparian clearing or disturbance.</p>	<p>The design of the garage results in minimal disturbance of vegetation.</p>
	<p>AO2.5 On land with slopes greater than 1 in 6 (16.6%) or greater, alternative construction methods to concrete slab on ground are utilised (i.e. split level or post and beam constructed buildings that minimise modification to the natural terrain of the land).</p>	<p>The construction method proposed is the same as the existing dwelling and will result no excavation or filling.</p>
	<p>AO2.6 Development does not alter the sky line.</p>	<p>N/A</p>
	<p>AO2.7 Buildings and structures: (a) are finished predominantly in the following exterior colours or surfaces: (i) moderately dark to darker shades of olive green, brown, green, blue, or charcoal; or (ii) moderately dark to darker wood stains that blend with the colour and hues of the surrounding vegetation and landscape; (b) are not finished in the following exterior colours or surfaces: (i) pastel or terracotta colours, reds, yellows, shades of white or beige, or other bright colours that do not blend with the surrounding vegetation and landscape; (ii) reflective surfaces.</p>	<p>Garage to finished in the same colours as the existing dwelling.</p>

	<p>AO2.8 Exterior colour schemes limit the use of white or other light colours to exterior trim and highlighting of architectural features</p> <p>AO2.9 Areas between the first floor (including outdoor deck areas) and ground level are screened from view.</p> <p>AO2.10 Recreational or ornamental features (including tennis courts, ponds or swimming pools) do not occur on land: (a) with a gradient of 1 in 6 (16.6%) or more; (b) are designed to be sited and respond to the natural constraints of the land and require minimal earthworks.</p>	<p>The land slopes away from the road. Therefore, the underfloor area is only visible from the adjacent bushland.</p> <p>NA</p>
<p>PO3 Excavation or filling does not have an adverse impact on the amenity, safety, stability or function of the site or adjoining premises through: (a) loss of privacy; (b) loss of access to sunlight; (c) intrusion of visual or overbearing impacts; (d) complex engineering solutions.</p>	<p>AO3 Excavation or fill: (a) is not more than 1.2 metres in height for each batter or retaining wall; (b) is setback a minimum of 2 metres from property boundaries; (c) is stepped with a minimum 2 metre wide berm to incorporate landscaping in accordance with Planning scheme policy SC6.7 – Landscaping; (d) does not exceed a maximum of 3 batters and 3 berms (i.e. not greater than 3.6 metres in height) on any one lot.</p>	<p>No excavation or filling proposed.</p>

Infrastructure Works Code – Applicable parts only.

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
<p>PO3 An adequate, safe and reliable supply of potable, fire fighting and general use water is</p>	<p>AO3.1 The premises is connected to Council's reticulated water supply system in accordance</p>	<p>Garage only, therefore not applicable. However, town water is connected to the site.</p>

provided.	<p>with the Design Guidelines set out in Section D6 of the Planning scheme policy SC5 – FNQROC Regional Development Manual;</p> <p>or</p> <p>A03.2 Where a reticulated water supply system is not available to the premises, on site water storage tank/s with a minimum capacity of 10,000 litres of stored water, with a minimum 7,500 litre tank, with the balance from other sources (e.g. accessible swimming pool, dam etc.) and access to the tank/s for fire trucks is provided for each new house or other development. Tank/s are to be fitted with a 50mm ball valve with a camlock fitting and installed and connected prior to occupation of the house and sited to be visually unobtrusive.</p>	
<p>PO4 Provision is made for the treatment and disposal of effluent to ensure that there are no adverse impacts on water quality and no adverse ecological impacts as a result of the system or as a result of increasing the cumulative effect of systems in the locality.</p>	<p>AO4.1 The site is connected to Council's sewerage system and the extension of or connection to the sewerage system is designed and constructed in accordance with the Design Guidelines set out in Section D7 of the Planning scheme policy SC5 – FNQROC Regional Development Manual;</p> <p>or</p> <p>AO4.2 Where not in a sewerage scheme area, the proposed disposal system meets the</p>	Not applicable as development is for a garage.

	requirements of Section 33 of the <i>Environmental Protection Policy (Water) 1997</i> and the proposed on site effluent disposal system is designed in accordance with the <i>Plumbing and Drainage Act (2002)</i> .	
<p>PO5</p> <p>Development is planned, designed, constructed and operated to avoid or minimise adverse impacts on stormwater quality in natural and developed catchments by:</p> <p>(mm) achieving stormwater quality objectives;</p> <p>(nn) protecting water environmental values;</p> <p>(oo) maintaining waterway hydrology.</p>	<p>A05.1</p> <p>A connection is provided from the premises to Council's drainage system;</p> <p>or</p> <p>A05.2</p> <p>An underground drainage system is constructed to convey stormwater from the premises to Council's drainage system in accordance with the Design Guidelines set out in Sections D4 and D5 of the Planning scheme policy SC5 – FNQROC Regional Development Manual.</p> <p>A05.3</p> <p>A stormwater quality management plan is prepared, and provides for achievable stormwater quality treatment measures meeting design objectives listed in Error! Reference source not found. and Error! Reference source not found., reflecting land use constraints, such as:</p> <p>(pp) erosive, dispersive and/or saline soil types;</p> <p>(qq) landscape features (including landform);</p> <p>(rr) acid sulfate soil and management of nutrients of concern;</p> <p>(ss) rainfall erosivity.</p> <p>A05.4</p> <p>Erosion and sediment control</p>	<p>Garage roof waste water will be connected to the street drainage system.</p> <p>Stormwater will be from roof and driveway only.</p> <p>Noted.</p>

	<p>practices are designed, installed, constructed, monitored, maintained, and carried out in accordance with an erosion and sediment control plan.</p> <p>A05.5 Development incorporates stormwater flow control measures to achieve the design objectives set out in Error! Reference source not found. and Error! Reference source not found., including management of frequent flows, peak flows, and construction phase hydrological impacts.</p> <p>Note – Planning scheme policy SC5 – FNQROC Regional Development Manual provides guidance on soil and water control measures to meet the requirements of the <i>Environmental Protection Act 1994</i>.</p> <p>Note – During construction phases of development, contractors and builders are to have consideration in their work methods and site preparation for their environmental duty to protect stormwater quality.</p>	<p>Stormwater flow control will be achieved by discharge of roof waste water to the street drainage system.</p>
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Access, Parking and Servicing Code

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
PO1 Sufficient on-site car parking is provided to cater for the amount and type of vehicle traffic expected to be generated by the use or uses	AO1.1 The minimum number of on-site vehicle parking spaces is not less than the number prescribed in Table 9.4.1.3.b for that particular	There will be adequate area on-site for vehicle parking in accordance with Table 9.4.1.3.b

<p>of the site, having particular regard to:</p> <p>(a) the desired character of the area;</p> <p>(b) the nature of the particular use and its specific characteristics and scale;</p> <p>(c) the number of employees and the likely number of visitors to the site;</p> <p>(d) the level of local accessibility;</p> <p>(e) the nature and frequency of any public transport serving the area;</p> <p>(f) whether or not the use involves the retention of an existing building and the previous requirements for car parking for the building</p> <p>(g) whether or not the use involves a heritage building or place of local significance;</p> <p>(h) whether or not the proposed use involves the retention of significant vegetation.</p>	<p>use or uses.</p> <p>AO1.2 Car parking spaces are freely available for the parking of vehicles at all times and are not used for external storage purposes, the display of products or rented/sub-leased.</p> <p>AO1.3 Parking for motorcycles is substituted for ordinary vehicle parking to a maximum level of 2% of total ordinary vehicle parking.</p> <p>AO1.4 For parking areas exceeding 50 spaces parking, is provided for recreational vehicles as a substitute for ordinary vehicle parking to a maximum of 5% of total ordinary vehicle parking rate.</p>	<p>NA</p> <p>NA</p> <p>NA</p>
<p>PO2 Vehicle parking areas are designed and constructed in accordance with relevant standards.</p>	<p>AO2 Vehicle parking areas are designed and constructed in accordance with Australian Standard: (a) AS2890.1; (b) AS2890.3; (c) AS2890.6</p>	<p>NA</p>
<p>PO3 Access points are designed and constructed:</p> <p>(a) to operate safely and efficiently;</p> <p>(b) to accommodate the anticipated type and volume of vehicles</p> <p>(c) to provide for shared vehicle (including cyclists) and pedestrian use, where appropriate;</p> <p>(d) so that they do not</p>	<p>AO3.1 Access is limited to one access cross over per site and is an access point located, designed and constructed in accordance with:</p> <p>(a) Australian Standard AS2890.1;</p> <p>(b) Planning scheme policy SC6.5 – FNQROC Regional Development Manual - access crossovers.</p>	<p>One access point is proposed.</p>

<p>impede traffic or pedestrian movement on the adjacent road area; (e) so that they do not adversely impact upon existing intersections or future road or intersection improvements; (f) so that they do not adversely impact current and future on-street parking arrangements; (g) so that they do not adversely impact on existing services within the road reserve adjacent to the site; (h) so that they do not involve ramping, cutting of the adjoining road reserve or any built structures (other than what may be necessary to cross over a stormwater channel).</p>	<p>AO3.2 Access, including driveways or access crossovers:</p> <p>(a) are not placed over an existing:</p> <p>(i) telecommunications pit; (ii) stormwater kerb inlet; (iii) sewer utility hole; (iv) water valve or hydrant.</p> <p>a) bare designed to accommodate any adjacent footpath;</p> <p>(c) adhere to minimum sight distance requirements in accordance with AS2980.1.</p> <p>AO3.3 Driveways are:</p> <p>(a) designed to follow as closely as possible to the existing contours, but are no steeper than the gradients outlined in Planning scheme policy SC6.5 – FNQROC Regional Development Manual;</p> <p>(b) constructed such that where there is a grade shift to 1 in 4 (25%), there is an area with a grade of no more than 1 in 6 (16.6%) prior to this area, for a distance of at least 5 metres;</p> <p>(c) on gradients greater than 1 in 6 (16.6%) driveways are constructed to ensure the cross-fall of the driveway is one way and directed into the hill, for vehicle safety and drainage purposes;</p>	<p>Noted.</p> <p>The driveway access to the garage will be level.</p>
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	<p>(d) constructed such that the transitional change in grade from the road to the lot is fully contained within the lot and not within the road reserve;</p> <p>(e) designed to include all necessary associated drainage that intercepts and directs storm water runoff to the storm water drainage system</p> <p>A03.4 Surface construction materials are consistent with the current or intended future streetscape or character of the area and contrast with the surface construction materials of any adjacent footpath.</p>	Driveway will be concrete.
P04 Sufficient on-site wheel chair accessible car parking spaces are provided and are identified and reserved for such purposes.	A04 The number of on-site wheel chair accessible car parking spaces complies with the rates specified in AS2890 Parking Facilities.	NA
P05 Access for people with disabilities is provided to the building from the parking area and from the street.	A05 Access for people with disabilities is provided in accordance with the relevant Australian Standard.	NA
P06 Sufficient on-site bicycle parking is provided to cater for the anticipated demand generated by the development.	A06 The number of on-site bicycle parking spaces complies with the rates specified in Table 9.4.1.3.b.	NA
<p>P07 Development provides secure and convenient bicycle parking which:</p> <p>(a) for visitors is obvious and located close to the building's main entrance;</p> <p>(b) for employees is</p>	<p>A07.1 Development provides bicycle parking spaces for employees which are co-located with end-of-trip facilities (shower cubicles and lockers);</p> <p>A07.2 Development ensures that the location of visitor</p>	<p>NA</p> <p>NA</p>

<p>conveniently located to provide secure and convenient access between the bicycle storage area, end-of-trip facilities and the main area of the building;</p> <p>(c) is easily and safely accessible from outside the site.</p>	<p>bicycle parking is discernible either by direct view or using signs from the street.</p> <p>A07.3 Development provides visitor bicycle parking which does not impede pedestrian movement.</p>	NA
<p>PO8 Development provides walking and cycle routes through the site which:</p> <p>(a) link to the external network and pedestrian and cyclist destinations such as schools, shopping centres, open space, public transport stations, shops and local activity centres along the safest, most direct and convenient routes;</p> <p>(b) encourage walking and cycling;</p> <p>(c) ensure pedestrian and cyclist safety.</p>	<p>A08 Development provides walking and cycle routes which are constructed on the carriageway or through the site to:</p> <p>(a) create a walking or cycle route along the full frontage of the site;</p> <p>(b) connect to public transport and existing cycle and walking routes at the frontage or boundary of the site.</p>	NA
<p>PO9 Access, internal circulation and on-site parking for service vehicles are designed and constructed:</p> <p>(a) in accordance with relevant standards;</p> <p>(b) so that they do not interfere with the amenity of the surrounding area;</p> <p>(c) so that they allow for the safe and convenient movement of</p>	<p>A09.1 Access driveways, vehicle manoeuvring and onsite parking for service vehicles are designed and constructed in accordance with AS2890.1 and AS2890.2</p> <p>A09.2 Service and loading areas are contained fully within the site.</p> <p>A09.3 The movement of service vehicles and service operations are designed so they:</p> <p>(a) do not impede access to</p>	NA

pedestrians, cyclists and other vehicles.	<p>parking spaces;</p> <p>(b) do not impede vehicle or pedestrian traffic movement.</p>	
PO10 Sufficient queuing and set down areas are provided to accommodate the demand generated by the development.	<p>AO10.1 Development provides adequate area on-site for vehicle queuing to accommodate the demand generated by the development where drive through facilities or drop-off/pick-up services are proposed as part of the use, including, but not limited to, the following land uses:</p> <p>(a) car wash;</p> <p>(b) child care centre;</p> <p>(c) educational establishment where for a school;</p> <p>(d) food and drink outlet, where including a drive-through facility;</p> <p>(e) hardware and trade supplies, where including a drive-through facility;</p> <p>(f) hotel, where including a drive-through facility;</p> <p>(g) service station.</p> <p>AO10.2 Queuing and set-down areas are designed and constructed in accordance with AS2890.1.</p>	NA

Filling and Excavation Code

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
PO1 All filling and excavation work does not create a detrimental impact on the slope stability, erosion potential or visual amenity of the site or the	AO1.1 The height of cut and/or fill, whether retained or not, does not exceed 2 metres in height. and Cuts in excess of those stated in A1.1 above are separated by	No filling or excavation is proposed on-site other than for footings.

surrounding area.	<p>benches/ terraces with a minimum width of 1.2 metres that incorporate drainage provisions and screen planting.</p> <p>AO1.2 Cuts are supported by batters, retaining or rock walls and associated benches/terraces are capable of supporting mature vegetation.</p> <p>AO1.3 Cuts are screened from view by the siting of the building/structure, wherever possible</p> <p>AO1.4 Topsoil from the site is retained from cuttings and reused on benches/terraces.</p> <p>AO1.5 No crest of any cut or toe of any fill, or any part of any retaining wall or structure is closer than 600mm to any boundary of the property, unless the prior written approval of the adjoining landowner has been obtained.</p> <p>AO1.6 Non-retained cut and/or fill on slopes are stabilised and protected against scour and erosion by suitable measures, such as grassing, landscaping or other protective/aesthetic measures.</p>	<p>No cuts requiring retaining will be made</p> <p>NA</p> <p>NA</p> <p>NA</p> <p>NA</p>
PO2 Filling and excavation are carried out in such a manner that the visual/scenic amenity of the area and the privacy and stability of adjoining properties is not compromised.	<p>AO2.1 The extent of filling and excavation does not exceed 40% of the site area, or 500m² whichever is the lesser, except that</p> <p>AO2.1 does not apply to reconfiguration of 5 lots or</p>	<p>None proposed.</p> <p>NA</p>

	<p>more.</p> <p>A02.2 Filling and excavation does not occur within 2 metres of the site boundary.</p>	NA
<p>P03 Filling and excavation does not result in a change to the run off characteristics of a site which then have a detrimental impact on the site or nearby land or adjacent road reserves.</p>	<p>A03.1 Filling and excavation does not result in the ponding of water on a site or adjacent land or road reserves.</p> <p>A03.2 Filling and excavation does not result in an increase in the flow of water across a site or any other land or road reserves.</p> <p>A03.3 Filling and excavation does not result in an increase in the volume of water or concentration of water in a watercourse and overland flow paths.</p> <p>A03.4 Filling and excavation complies with the specifications set out in Planning Scheme Policy No SC5 – FNQROC Development Manual.</p>	None proposed.
<p>P04 Filling and excavation does not result in a reduction of the water quality of receiving waters</p>	<p>A04 Water quality is maintained to comply with the specifications set out in Planning Scheme Policy No SC5 – FNQROC Development Manual.</p>	Water quality to be maintained as per the FNQROC Development Manual
<p>P05 Excavation and filling does not impact on Public Utilities.</p>	<p>A05 Excavation and filling is clear of the zone of influence of public utilities.</p>	Noted.

Vegetation Management Code

PERFORMANCE CRITERIA	ACCEPTABLE SOLUTIONS	COMMENTS
<p>PO1 Vegetation is protected to ensure that:</p> <p>(a) the character and amenity of the local area is maintained;</p> <p>(b) vegetation damage does not result in fragmentation of habitats;</p> <p>(c) vegetation damage is undertaken in a sustainable manner;</p> <p>(d) the Shire's biodiversity and ecological values are maintained and protected;</p> <p>(e) vegetation of historical, cultural and / or visual significance is retained;</p> <p>(f) vegetation is retained for erosion prevention and slope stabilisation.</p>	<p>AO1.1 Vegetation damage is undertaken by a statutory authority on land other than freehold land that the statutory authority has control over; or</p> <p>AO1.2 Vegetation damage is undertaken by or on behalf of the local government on land controlled, owned or operated by the local government; or</p> <p>AO1.3 Vegetation damage, other than referenced in AO1.1 or AO1.2 is the damage of:</p> <p>(a) vegetation declared as a pest pursuant to the Land Protection (Pest and Stock Route Management) Act 2002; or</p> <p>(b) vegetation identified within the local government's register of declared plants pursuant to the local government's local laws; or</p> <p>(c) vegetation is located within a Rural zone and the trunk is located within ten metres of an existing building; or</p> <p>(d) vegetation is located within the Conservation zone or Environmental management zone and the trunk is located within three metres of an existing or approved structure, not</p>	<p>Building to be constructed on an area of the property that has been landscaped by the owners. Therefore, native vegetation will not be affected.</p>

	<p>including a boundary fence; or</p> <p>AO1.4 Vegetation damage that is reasonably necessary for carrying out work that is:</p> <p>(a) authorised or required under legislation or a local law;</p> <p>(b) specified in a notice served by the local government or another regulatory authority;</p> <p>or</p> <p>AO1.5 Vegetation damage for development where the damage is on land the subject of a valid development approval and is necessary to give effect to the development approval; or</p> <p>AO1.6 Vegetation damage is in accordance with an approved Property Map of Assessable Vegetation issued under the Vegetation Management Act 1999; or</p> <p>AO1.7 Vegetation damage is essential to the maintenance of an existing fire break; or</p> <p>AO1.8 Vegetation damage is essential to prevent interference to overhead service cabling; or</p> <p>AO1.9 Vegetation damage is for an approved Forest practice, where the lot is subject to a scheme approved under the Vegetation Management Act 1999; or</p>	
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	<p>AO1.10 Vegetation damage is undertaken in accordance with section 584 of the Sustainable Planning Act 2009.</p> <p>AO1.11 Vegetation damage where it is necessary to remove one tree in order to protect an adjacent more significant tree (where they are growing close to one another).</p> <p>AO1.12 Private property owners may only remove dead, dying, structurally unsound vegetation following receipt of written advice from, at minimum, a fully qualified Certificate V Arborist. A copy of the written advice is to be submitted to Council for its records, a minimum of seven business days prior to the vegetation damage work commencing.</p>	
PO2 Vegetation damaged on a lot does not result in a nuisance	<p>AO2.1 Damaged vegetation is removed and disposed of at an approved site; or</p> <p>AO2.2 Damaged vegetation is mulched or chipped if used onsite.</p>	Complies
PO3 Vegetation damage identified on the Places of significance overlay lot does not result in a negative impact on the site's heritage values	AO3 No acceptable outcomes are prescribed.	NA

Conclusion

The development application seeks a Development Permit for Building Work made assessable under the Planning Scheme for the purpose of a garage on land describes as Lot 31 RP749728 Hibiscus Avenue, Rocky Point.

The proposed development is considered consistent with the relevant Planning Scheme Codes and the surrounding locality.

In summary the report concludes:

- The proposal complies with the requirements for making a Development Application under the Planning Act 2016; &
- The proposal is consistent with the existing and future use of the property.



REF: #15297

24 July 2018

REPORT OF GEOTECHNICAL ASSESSMENT TO
LOT 31, #21 HIBISCUS COURT, ROCKY POINT QLD 4874
RP749728

1.0 Introduction

SOILTEST.BIZ was engaged to carry out a geotechnical assessment for a proposed residential development for Juergen Koenig & Liz Lang at Lot 31 Hibiscus Court. The field work and site classification was carried out by EARTHTEST - Job # SI 222-18 – 16th July 2018.

A site visit was also made by Soiltest.biz on 19th June 2018. During the site visit by Soiltest.biz, observations of slope angles, existing vegetation, evidence of soil creep, soil seepage and evidence of previous slips were made.

2.0 Development

An existing 3 storey residence has previously been constructed as shown on the attached site plan to the South East of the Lot. Further development proposed for the block is the construction of a single storey, garage placed on posts above the slope to be level with the existing street.

3.0 Requests of the assessment

The aims of the assessment were as follows:

- Assess the stability of the slopes where the garage is to be constructed,
- Comment on the stability of slopes associated with the proposed development.

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Page 1 of 6
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4.0 Field inspection

4.1 Field Work

Fieldwork was carried out by EARTHTEST - Job # SI 222-18 – 16th July 2018.

5.0 Investigation Results

5.1 Existing Surface

The proposed development site slopes from the South East to the North West. The proposed building area for the garage has not been surveyed. An on site measurement of the slope was taken and is measured to be approximately 35 degrees to the horizontal.

At the time of investigation on 19th June 2018 the slope noted above appeared to be stable with no obvious signs of instability.

5.2 Existing subsurface conditions

The surface of the allotment at the time of inspection was mostly open where the garage is to be placed with some gardens constructed into the bank down from the road. The remainder of the block, apart from immediately around the existing residence was fully treed with rainforest.



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7/24/2018 10:50:00 AM



6.0 Analysis

6.1 General stability conditions of the residence site

Stability analyses were carried out for the profile.

Material parameters adopted in the stability analyses are shown below:

Material	C(kPa)	PHI(degree)	DENSITY(kN/m3)
Hole 1			
0 - 1400			
Brown Clayey Silt	5	27	19

Analyses were performed for dry and wet conditions. A pore water pressure coefficient - $R_u=0.2$ was used to simulate seepage/water infiltration for wet conditions within the soils.

The F of S results of the stability analyses are as below

LOCATION	Max Cut Slope	DRY	WET
Slope at proposed Residence location (Location shown on site plan)	35 degrees	1.57	1.54

The results of the stability analyses indicate that the profile corresponding current conditions has adequate stability conditions, with **Very Low Risk** implications assessment based on MacGregor & Taylor and AGS assessment guidelines.

Increases in slope angle due to earthworks operations for the construction of the garage should be re-assessed as required.



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7.0 Recommendations

7.2.1 Earthworks - Future

7.2.1.1 Cut slopes

All cut batters formed in natural materials should be inspected during excavation by a geotechnical engineer to confirm that conditions exposed in the face are consistent with the values on which these guidelines are based.

In all cut/fill earthworks in the Douglas Shire and Cairns area, some instability is to be expected on batter faces. This instability is expected to be in the form of relatively minor slips or fretting and slumps on locally steep slopes or unsupported batters, which may occur during or after heavy rainfall. Some fretting may be anticipated in the batters. Given the Very Low Risk to residential development, this instability is generally accepted in the Douglas Shire & Cairns area and must be accepted by all parties involved in the proposed development.

To reduce potential problems caused by fretting instability it is advisable that a cut off concrete drain and berm is provided at the top of the slope at the proposed new garage entrance, lined at the base with a concrete base say 600 wide x 100 thick to prevent erosion. Also it is important to protect and replant cut and fill slopes and provide appropriate surface covering should be provided until replanting is established.

Any proposed retaining walls to form part of the proposed garage should be shown on plans by Davies Design & Drafting Service and should also be certified by a qualified Structural Engineer.

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Page 4 of 6
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7.2.1.2 Filled areas and fill slopes

Any filled area must be keyed into the existing slopes. Any filling should be placed by the use of a 10–15 tonne sheep foot or pad foot vibrating roller in layers not exceeding 400mm loose; 300 mm compacted and to 98% standard density by test .

Also it is important to protect and replant fill slopes as indicated above to reduce erosion and fretting to the fill slope.

7.2.2 Drainage

Drainage measures that should be implemented include:

- All storm water should be collected and discharged from the site via pipes or lined drains to the North West Gully.
- Drainage of the residence platform once cut should be away from the proposed structure toward the North East down the slope.

8.0 Conclusions

Based on the results of our geotechnical assessment of the proposed development, the conclusions are summarised as follows:

- Development of a proposed garage is considered to be feasible from a geotechnical point of view - provided appropriate engineering controls are implemented in construction.
- Cut and fill slopes and replanting should be achieved ASAP after excavation to reduce erosion of the surface. Appropriate surface covering should be provided until replanting is established
- The risk to property associated with instability to the upper & lower banks is assessed as **"VERY LOW"** at this time and should be reassessed if extra earthworks are carried out at a later date.

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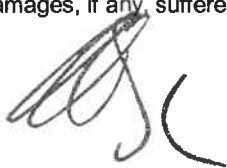
9.0 Report Limitations

It should be noted that there may be variations to the slope material conditions in different sections of the slopes assessed in the investigation.

Any assessments made in this report are based on the conditions indicated from the investigation described by EARTHTEST - Job # SI 222-18 – 16th July 2018. No warranty is either expressed or implied, that the actual conditions will conform exactly to the assessments contained in this report.

Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless noted otherwise. No responsibility is accepted by Soil Test.biz for incomplete or inaccurate data supplied by others.

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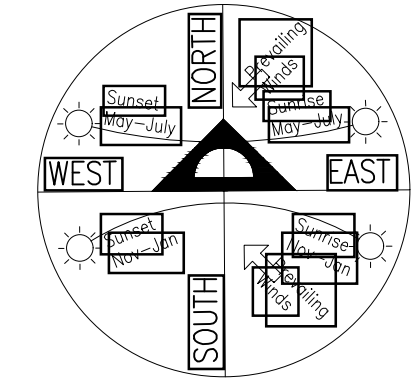
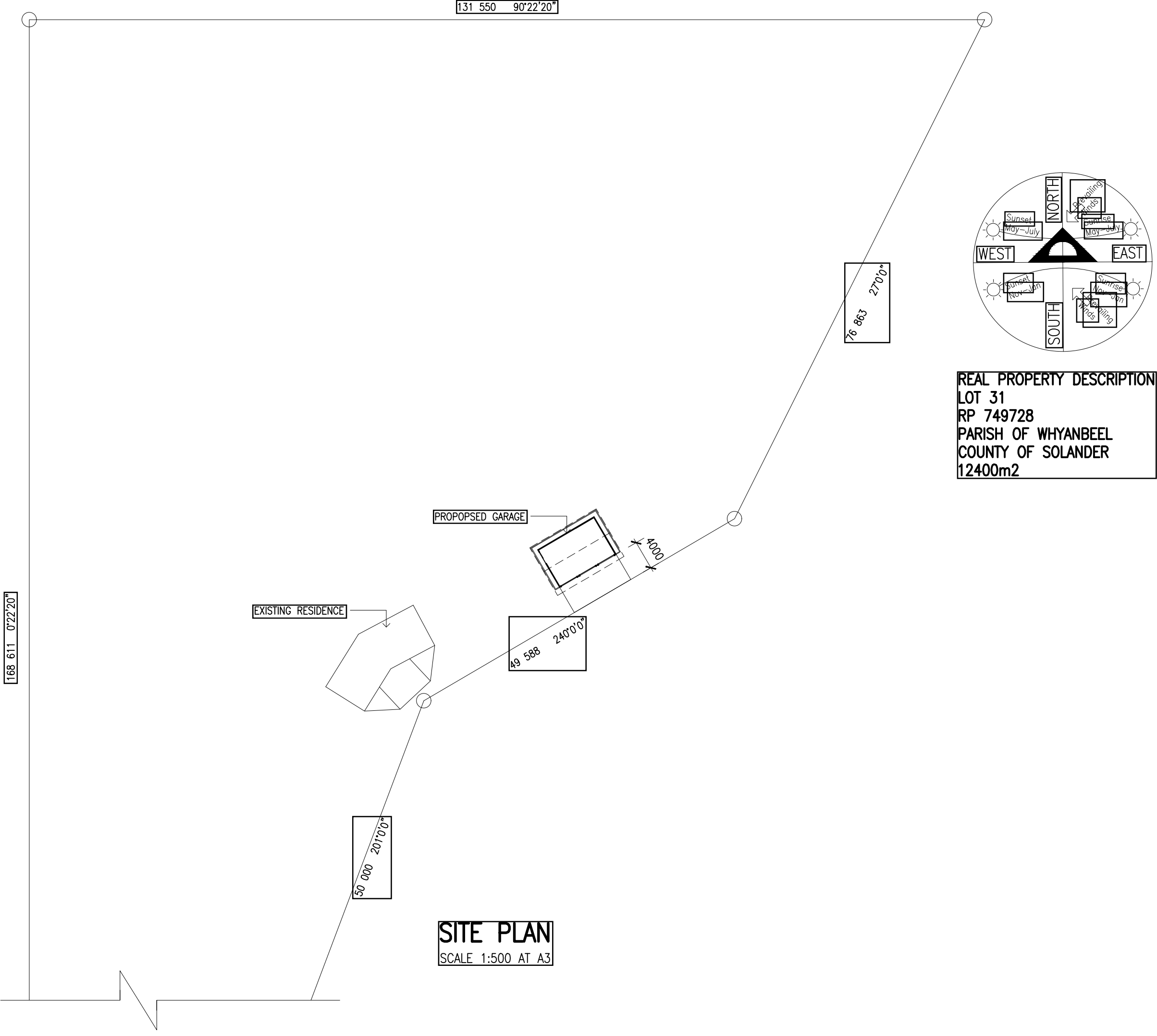
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RPEQ 1128

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REAL PROPERTY DESCRIPTION
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RP 749728
PARISH OF WHYANBEEL
COUNTY OF SOLANDER
12400m2

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CERTIFIED AS
STRUCTURALLY
ADEQUATE



KFB Engineers
Civil & Structural

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PO Box 927, Cairns Q 4870
P: 07 4032 0492 | F: 07 4032 0092
E: email@kfbeng.com.au

Date: _____
Job No: _____
Signed: _____
RPEQ No: _____

CLIENT:-
JUERGEN KOENIG

PROJECT:-
PROPOSED GARAGE AT-
LOT 31 HIBISCUS
COURT, ROCKY POINT

DRAWN:-
T.GOUGH

BUILDER:-
T.B.A.

DATE:- MAR 2018

ISSUE:-

DRAWING No:-

031 HIB

SHEET No:-

1 - 7

PROPOSED GARAGE

for:

JUERGEN KOENIG

at:

LOT 31 HIBISCUS COURT
ROCKY POINT
FAR NORTH QUEENSLAND

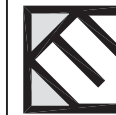
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DRAWING SCHEDULE

SHEET 1 SITE PLAN

SHEET 2 FLOOR PLAN & ELEVATIONS

SHEET 3 SLAB & FOOTING PLAN

SHEET 4 FLOOR FRAMING PLAN

SHEET 5 SECTIONS SHEET 1

SHEET 6 SECTIONS SHEET 2

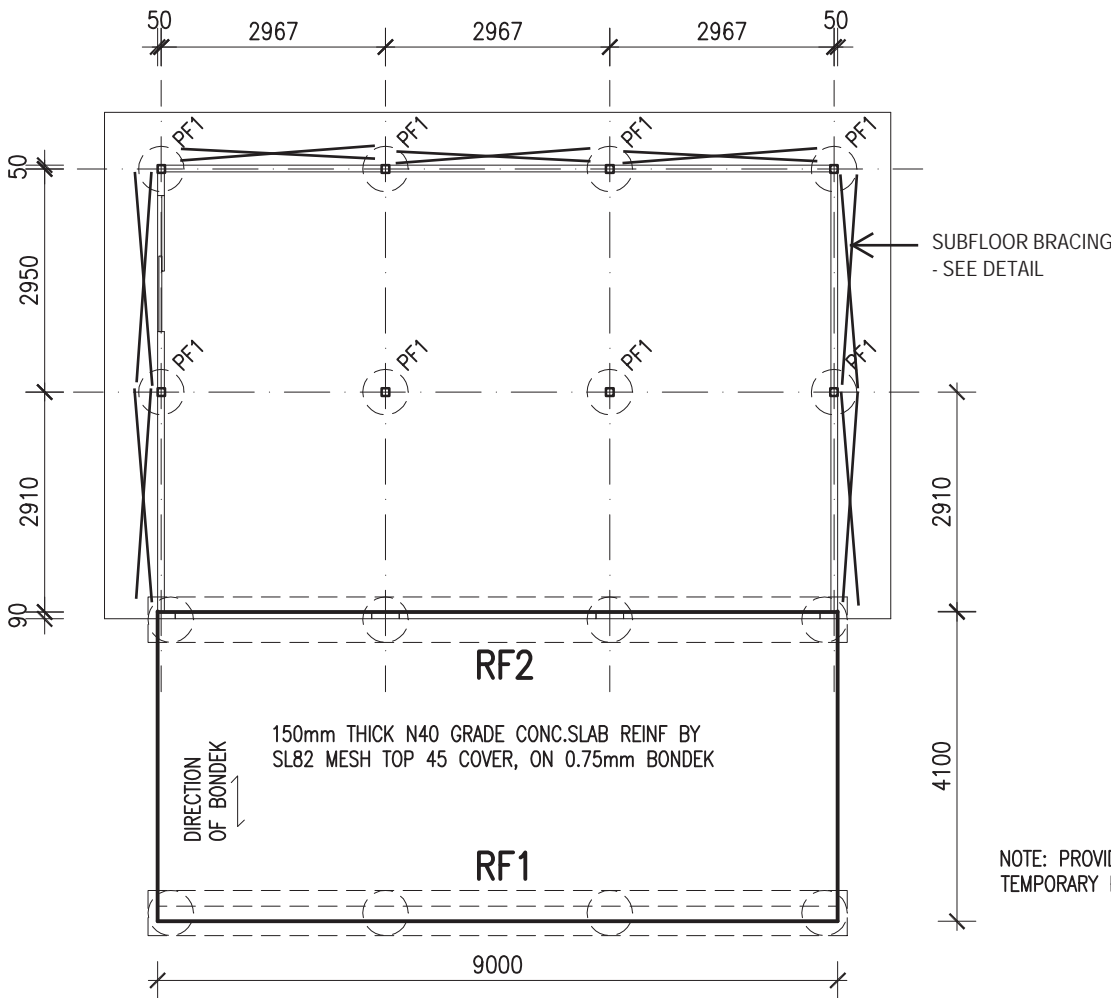
SHEET 7 TIE DOWN DETAILS



2 - 7

FOOTING & SLAB NOTES

- * FOOTINGS HAVE BEEN DESIGNED FOR A MINIMUM ALLOWABLE BEARING PRESSURE OF 100kPA & CLASS 'P' SITE CLASSIFICATION ACCORDING TO A.S. 2870
- * BUILDER TO VERIFY SITE CONDITIONS PRIOR TO CONSTRUCTION
- * NATURAL FOUNDATIONS TO BE GRUBBED OUT & FREE FROM ORGANIC MATTER & DEBRIS & COMPACTED TO A MIN. 95% SRDD AT -5% TO +2% OF OPTIMUM MOISTURE CONTENT OR NOT LESS THAN 70% DENSITY INDEX FOR COHESIONLESS SOILS. FILL TO SLAB & FOUNDATIONS SHALL BE APPROVED NON-PLASTIC MATERIAL COMPACTED IN MAX 150mm LAYERS TO 95% SRDD AT -5% TO +2% OF OPTIMUM MOISTURE CONTENT OR NOT LESS THAN 70% INDEX FOR COHESIONLESS SOILS.
- * FOOTING TRENCHES SHALL BE CLEAN & DRY AT THE TIME OF CASTING WITH ANY SOFTENED MATERIAL REMOVED. BASE OF FOOTING TO BE FOUNDED ON FIRM NATURAL GROUND WITH MINIMUM SAFE BEARING CAPACITY OF 100kPA.
- * REMOVE GRASS & TOPSOIL CONTAINING ROOTS FROM SLAB SITE PROVIDE COMPACTED SAND BEDDING UNDER SLAB
- * PROVIDE 0.2mm POLYTHENE MOISTURE BARRIER UNDER SLAB & FOOTINGS
- * CONCRETE TO SLAB & FOOTINGS TO BE N20, 80mm SLUMP, 20mm AGGREGATE.
- * VIBRATE ALL CONCRETE, CURE SLAB 7 DAYS MINIMUM.
- * CONCRETE COVER TO BE MAINTAINED BY THE USE OF APPROVED CHAIRS SPACED AT APPROX 750mm CRS. CONDUITS & PIPES SHALL NOT BE PLACED WITHIN COVER CONCRETE.
- * LAPS SHALL BE-N12-450mm, N16-600mm, FABRIC-1 COMPLETE MESH OVERLAP BETWEEN SHEETS.
- * CAST-IN ITEMS SHALL BE HOT DIPPED GALVANISED.
- * FOOTINGS SHALL NOT BE LOCATED CLOSER TO THE NEAREST EDGE OF A STORMWATER/SEWER TRENCH THAN THE DEPTH OF THE TRENCH.
- * SITE AREA TO BE GRADED TO READILY REMOVE SURFACE WATER & PREVENT PONDING ADJACENT TO FOUNDATIONS & DRIVEWAY
- * EXECUTION & CONTROL TESTING OF EARTHWORKS & ASSOCIATED SITE PREPARATION WORKS SHALL COMPLY WITH A.S. 3798

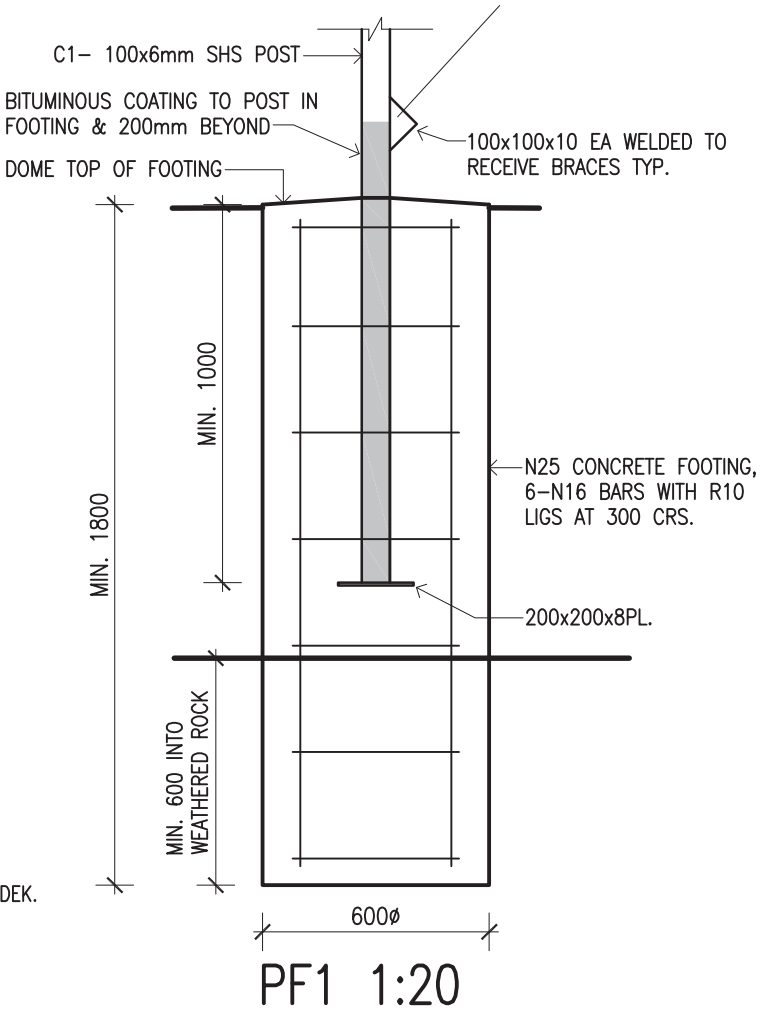


SUSPENDED SLAB / FOOTING PLAN

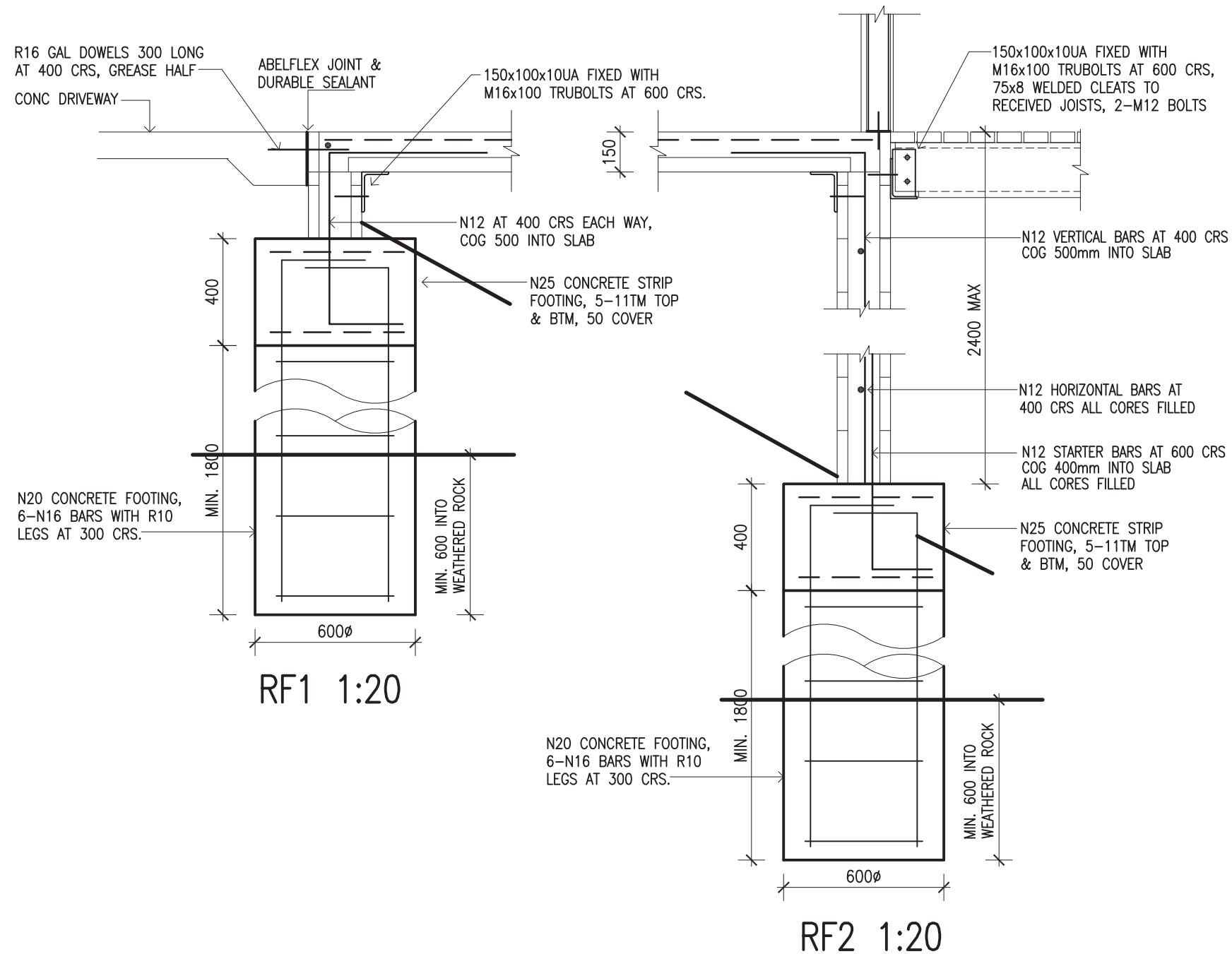
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NOTE: PROVIDE 1 ROW OF TEMPORARY PROPPING TO BONDEK.

SEE SHEET 4 FOR RF1-RF2 FOOTING DETAILS



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Date:	16/5/18
Job No:	K-4944
Signed:	
RPEQ No:	5711
CLIENT:- JUERGEN KOENIG	
PROJECT:- PROPOSED GARAGE AT- LOT 31 HIBISCUS COURT, ROCKY POINT	
DRAWN:- T.GOUGH	
BUILDER:- T.B.A.	
DATE:- MAR 2018	
ISSUE:-	
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COURT, ROCKY POINT**

DRAWN:-
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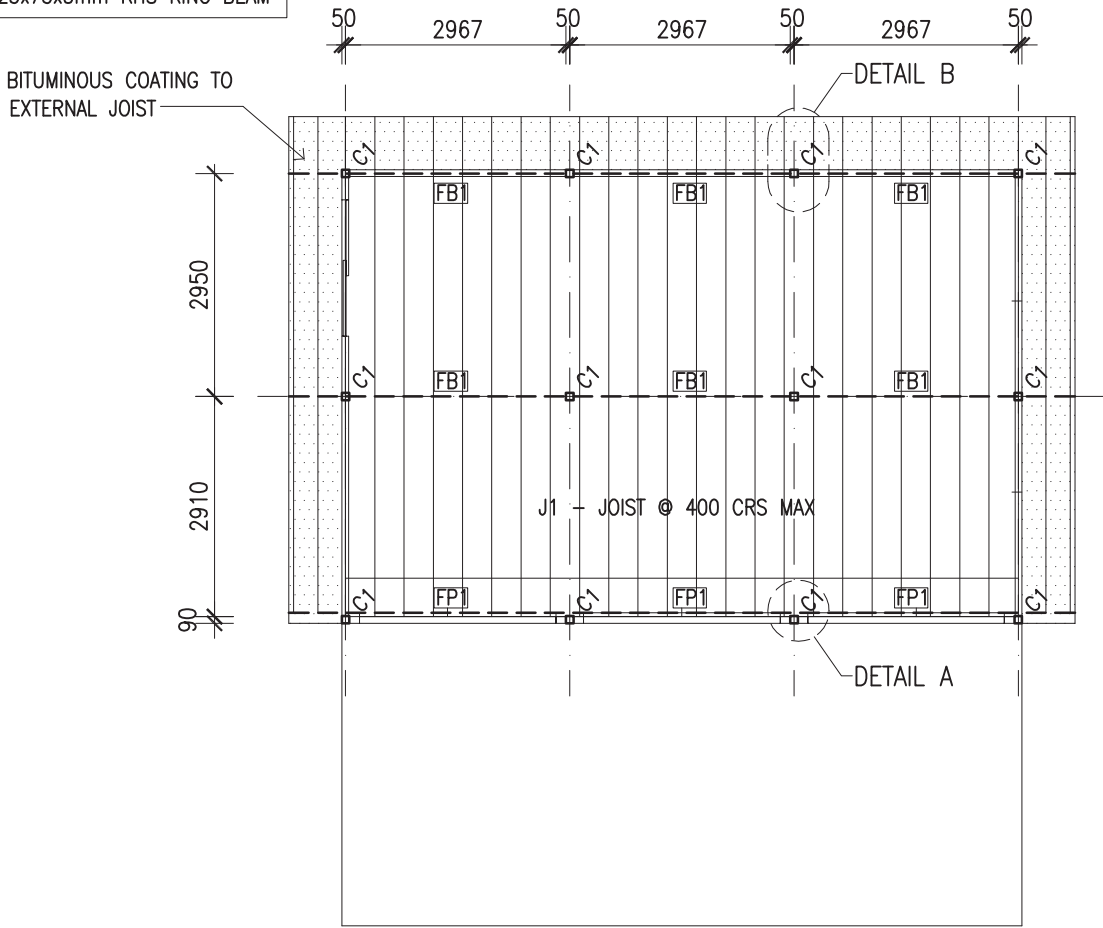
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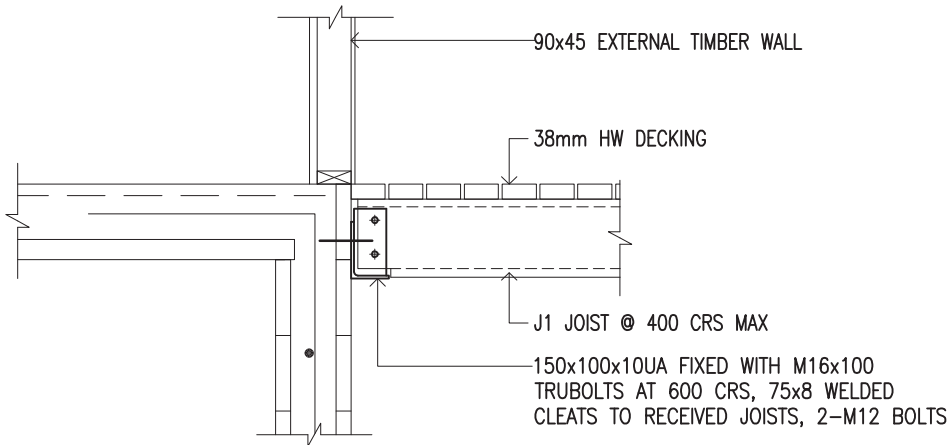
SHEET No:-
4 - 7

- LEGEND
- FB1 - 200x100x6mm RHS BEARER
 - FP1 - 150x100x10 UA FIXING PLATE
 - J1 - C20019 JOIST @ 400 CRS
 - C1 - 100x6mm SHS COLUMNS
 - P1 - 75x5mm SHS COLUMNS
 - RB1 - 125x75x5mm RHS RING BEAM

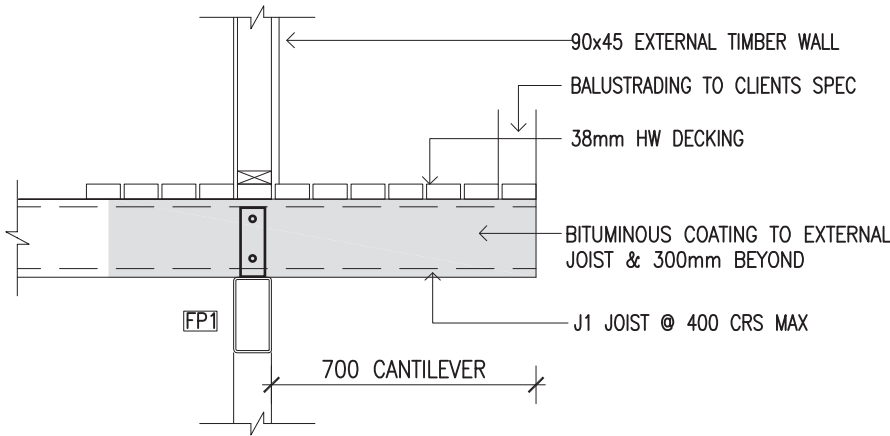


FLOOR FRAMING PLAN

SCALE 1:100 AT A3



DETAIL A 1:20



DETAIL B 1:20

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P1 – 75x5mm SHS COLUMNS
RB1 – 125x75x5mm RHS RING BEAM

GENERAL NOTES

- * TIMBER MEMBER SIZES & CONNECTIONS NOT SHOWN ON PLANS SHALL COMPLY WITH AS 1684.3
- * ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT S.A.A. CODES & THE BY-LAWS & ORDINANCES OF THE RELEVANT BUILDING AUTHORITY EXCEPT WHERE VARIED BY THE PROJECT SPECIFICATION
- * ALL DIMENSIONS SHOWN SHALL BE VERIFIED ON SITE
- * IF ANY DISCREPANCY OCCURS ON THE ENGINEERING DRAWINGS THE CONTRACTOR SHALL ASSUME THE LARGER/GREATER. ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH ANY WORK. SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER

WIND CLASSIFICATION	MAXIMUM DESIGN GUST WIND SPEED	
	MAXIMUM DESIGN GUST WIND SPEED (M/S)	
	PERMISSIBLE STRESS	ULT. LIMIT STATE
C1	41 (W41C)	50
C2	50 (W50C)	61
C3	60 (W60C)	74

ULTIMATE & SERVICEABILITY LIMIT STATE DESIGN WIND PRESSURES FOR GLAZING & WINDOWS

WIND CLASSIFICATION	DESIGN GUST WIND SPEED (M/S)		DESIGN PRESSURES (kPa)			
	V _{h,u}	V _{h,s}	GREATER THAN 1.2M FROM CORNERS		UP TO 1.2M FROM THE CORNER	
	ULS	SLS	ULS	SLS	ULS	SLS
C1	50	32	±1.80	±0.55	-2.70	-0.83
C2	61	39	±2.68	±0.82	-4.02	-1.23
C3	74	47	±3.94	±1.19	-5.91	-1.79

SEE SHEET 4 FOR RF1-RF2
FOOTING DETAILS

SEE SHEET 3 FOR PF1
FOOTING DETAILS

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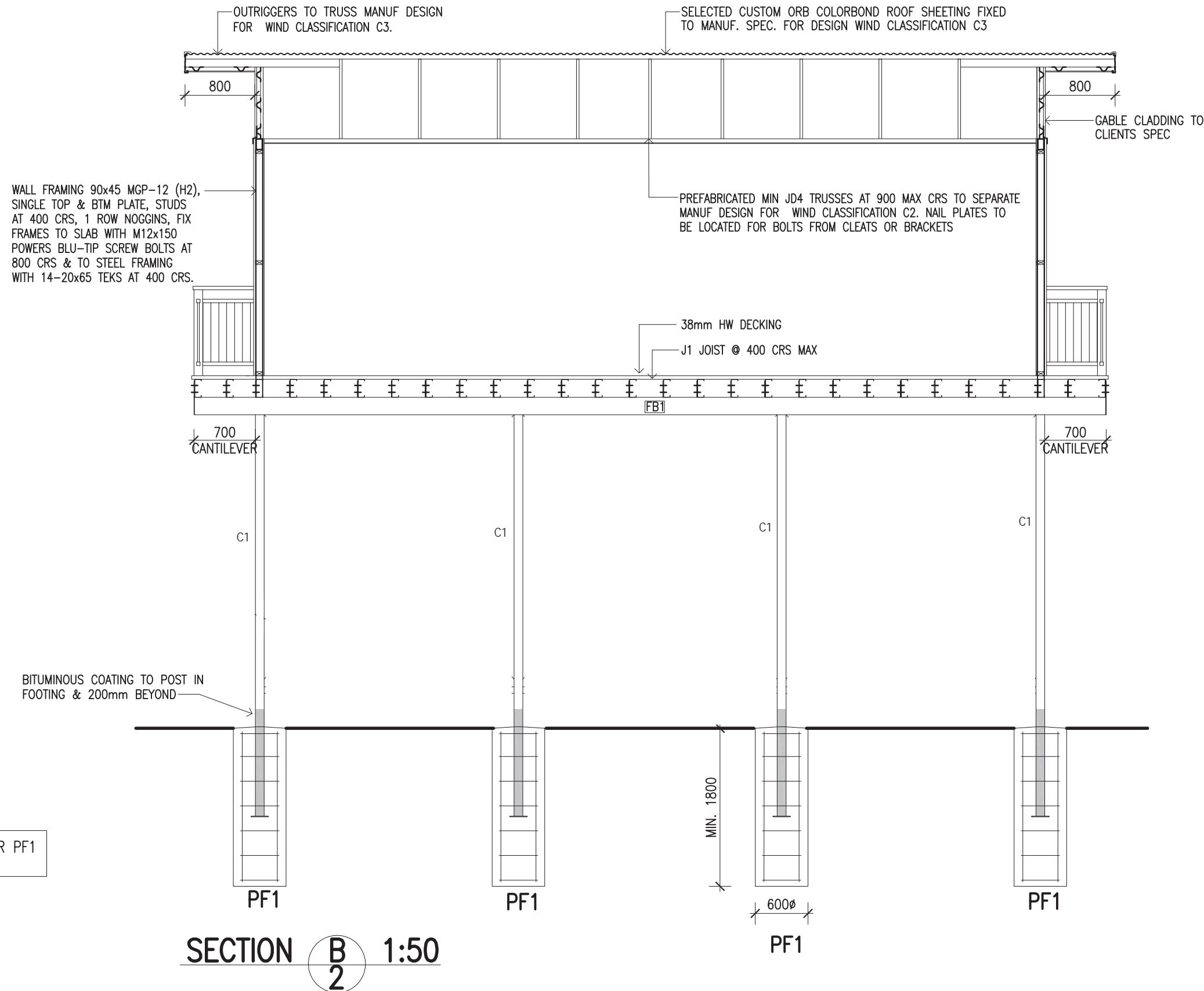
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6 - 7

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