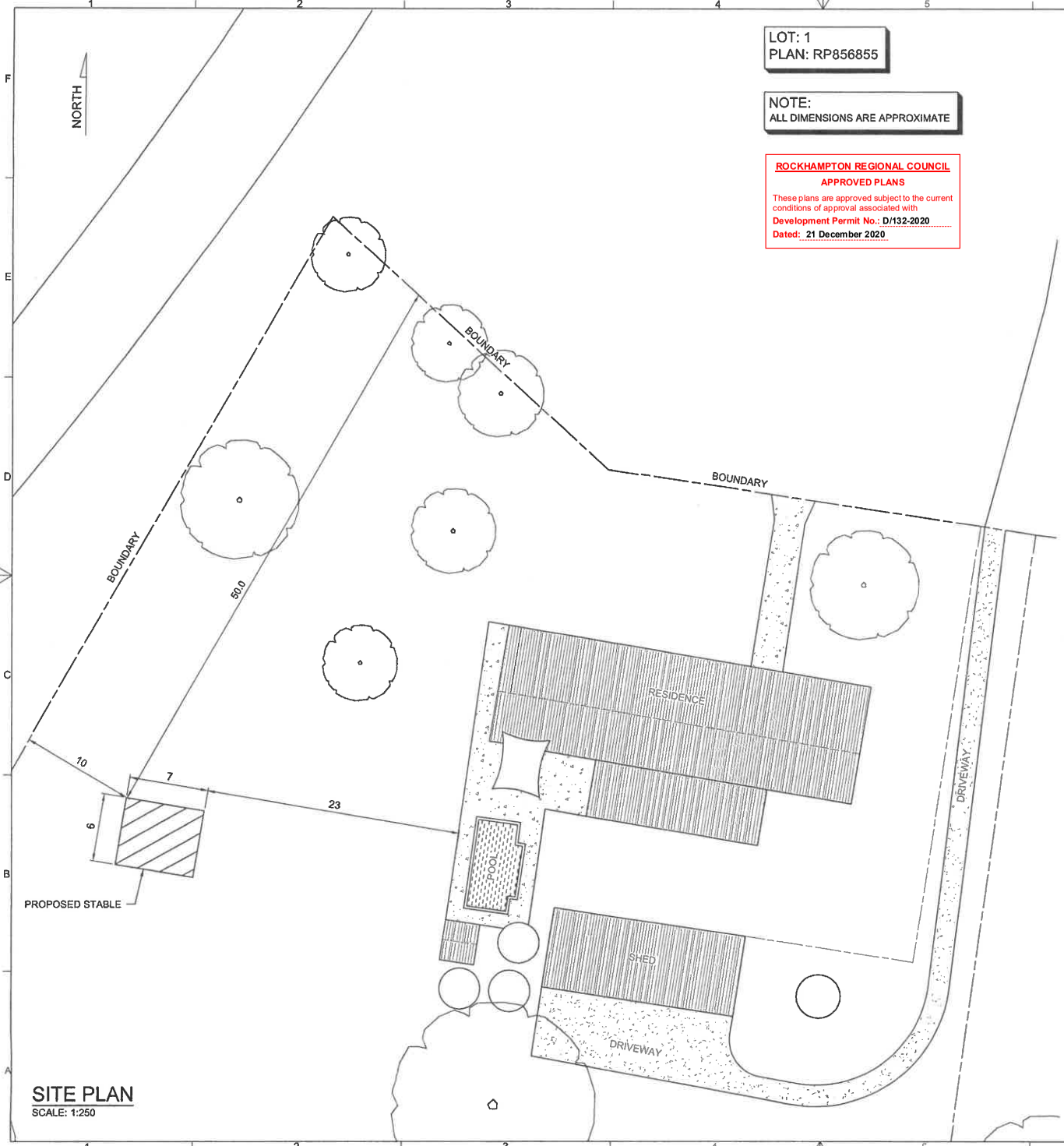
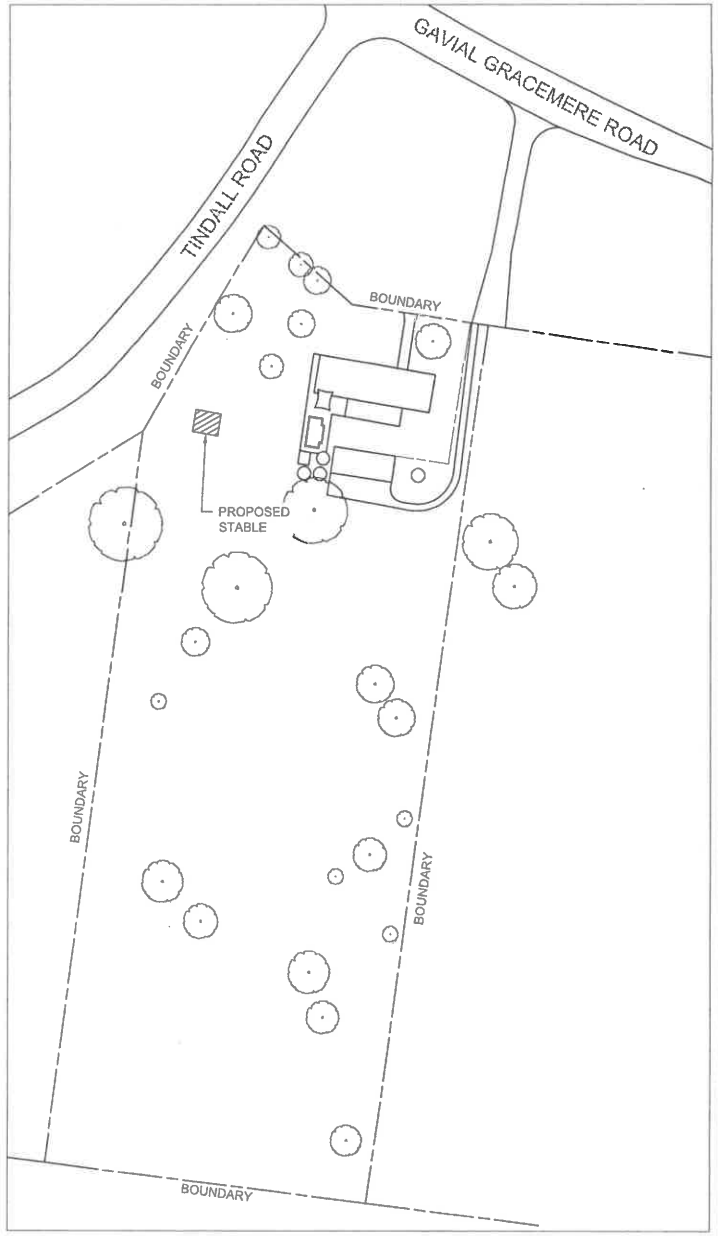
LOT: 1
PLAN: RP856855

NOTE:
ALL DIMENSIONS ARE APPROXIMATE

ROCKHAMPTON REGIONAL COUNCIL
APPROVED PLANS
These plans are approved subject to the current conditions of approval associated with
Development Permit No.: D/132-2020
Dated: 21 December 2020



SITE PLAN
SCALE: 1:250



SITE PLAN - TOTAL
SCALE: 1:1000

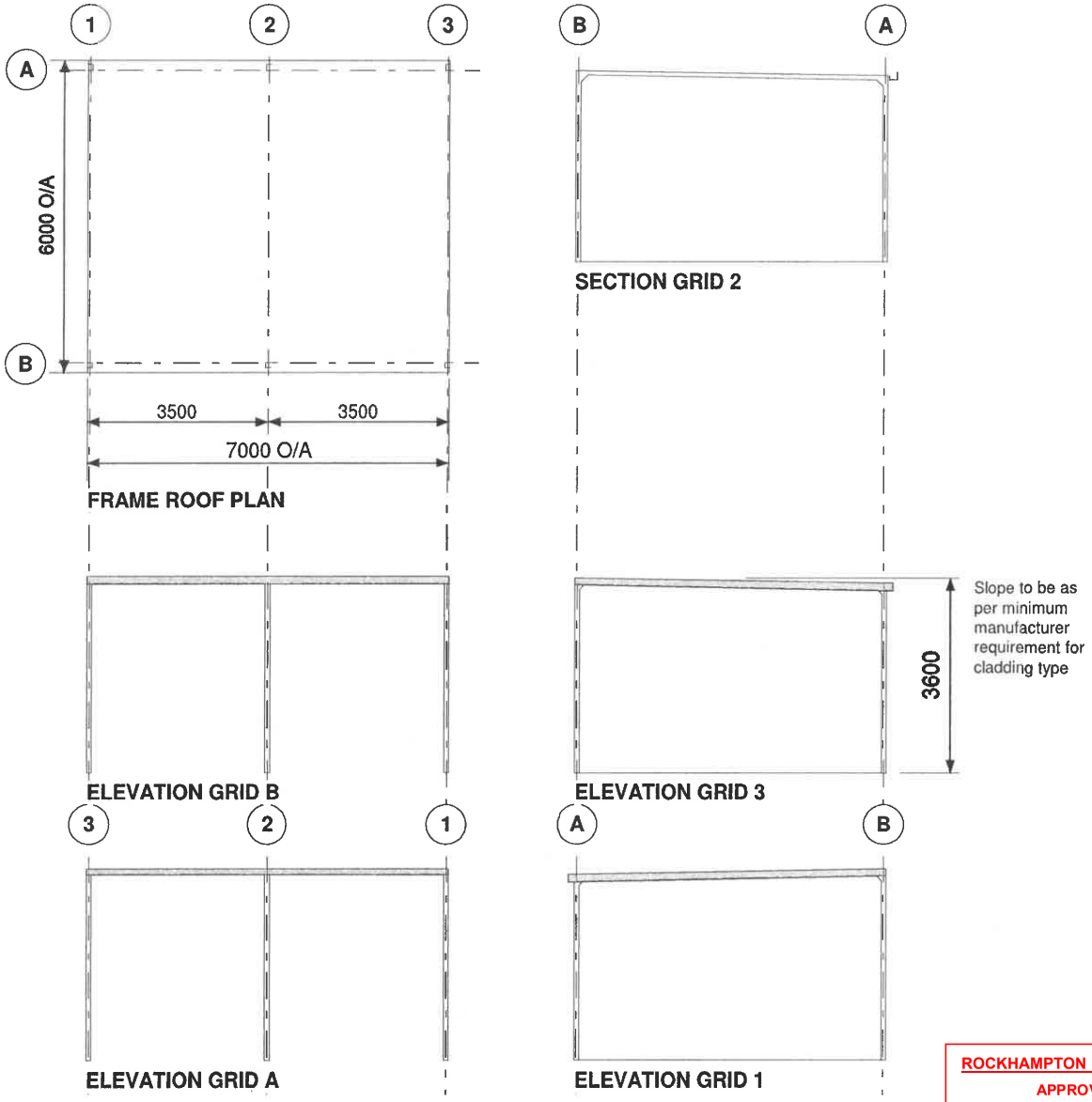
NOTE:
BOUNDARY IS INDICATIVE ONLY IT SHOULD NOT AND CANNOT BE USED AS A BASIS OF TRUE BOUNDARY LOCATION.

TITLE: PROPOSED STABLE

NAME AND ADDRESS:
NAOMI FISHER
579 GAVIAL GRACEMERE ROAD
GRACEMERE, QLD. 4702

SCALE: 1:250
DRAWN DATE: 16/11/20
SITE PLANS ONLINE
www.siteplansonline.com.au

SHEET:	SHEET SIZE:	DRAWING No:	REV:
1 OF 1	A2	201149	1



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CLADDING

ITEM	PROFILE (min)	FINISH	COLOUR
ROOF	CUSTOM ORB 0.42	COLORBOND	CC
WALLS	-		
CORNERS	-		
BARGE	-	COLORBOND	CC

0.35bmt=0.40tct; 0.42bmt=0.47tct; 0.48bmt=0.53tct

ACCESSORY SCHEDULE & LEGEND

QTY	MARK	DESCRIPTION

ARCHITECTURAL DRAWING ONLY, NOT FOR CONSTRUCTION USE

WIND DESIGN

IMPORTANCE LEVEL	REGION	TERRAIN	Ms
2	C	2.5	1.0

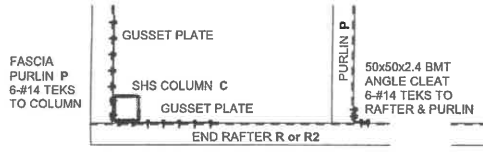
CLIENT
Naomi Fisher

SITE
17 Hardy Road
BOULDERCOMBE QLD 4702

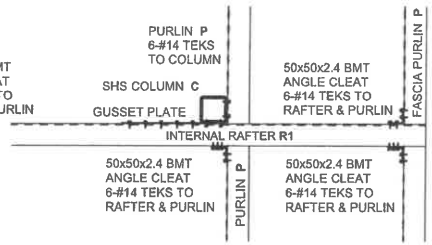
BUILDING
SKILLION CARPORT
6000 SPAN x 3600 EAVE x 7000 LONG

TITLE
FLOOR PLAN & ELEVATION

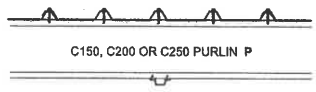
SCALE	DRAWING NUMBER	PAGE
A4 SHEET 1:125	ROCKH2-7091	1/1



TYP PLAN AT CORNER COLUMN

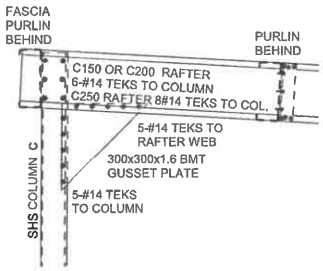


TYP PLAN AT INTERNAL COLUMN

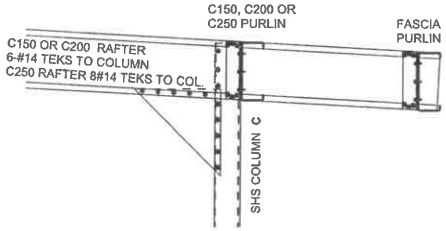


LYSAGHT TS2242 BRIDGING BATTEN @ MID-SPAN
2-#10 TEKS TO UNDERSIDE OF EACH PURLIN

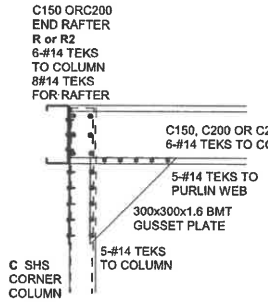
BRIDGING BATTEN DETAIL
C/2.5 BAYS OVER 7500mm ONLY



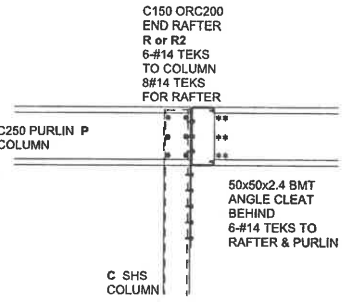
DETAIL 1
HIGH COLUMN KNEE CONNECTION
SKILLION SHOWN, CANTILEVER SIMILAR



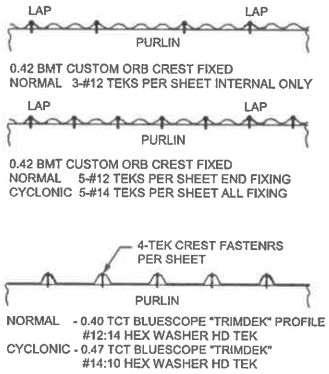
DETAIL 2
LOW COLUMN KNEE CONNECTION
CANTILEVER SHOWN, SKILLION SIMILAR



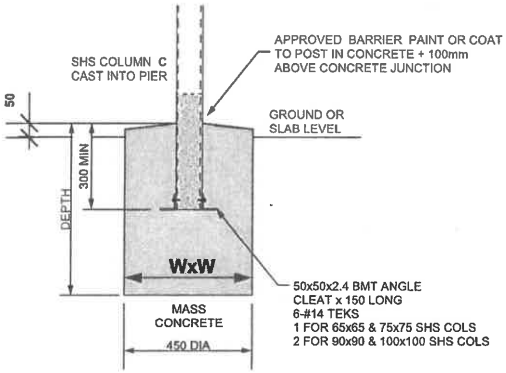
DETAIL 3
CORNER COLUMN TO PURLIN CONNECTION



DETAIL 5
INTERNAL COLUMN TO PURLIN CONNECTION



ROOF CLADDING SHEAR DIAPHRAGM



DETAIL 4
COLUMN BASE AND BORED PIER

ROCKHAMPTON REGIONAL COUNCIL
APPROVED PLANS
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Dated: 21 December 2020

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I CERTIFY THE DESIGN OF THIS STEEL FRAMED BUILDING IS STRUCTURALLY ADEQUATE, MEETS SERVICEABILITY REQUIREMENTS AND COMPLIES WITH THE RELEVANT REGULATIONS, WITH ALL AMMENDMENTS CURRENT TO DATE. I FURTHER CERTIFY THE PROPOSED STEEL STRUCTURE WILL BE STRUCTURALLY ADEQUATE WHEN CONSTRUCTED TO GOOD BUILDING PRACTISES, IN ACCORDANCE TO RANBUILD ASSEMBLY GUIDES AND THESE DRAWINGS. APPROVED 05/12/2008.

Alexander Filonov.
MIEAust, CPEng, NPER 1296608 (STRUCTURAL)
RPEQ 8094, CC4719p, EC27759, 24332ES

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REV	DATE	DESCRIPTION	INITIAL
	13/11/2008		
1	29/07/2009	Post In Pier Details	NJC

BLUESCOPE LYSAGHT

DESCRIPTION: CONSTRUCTION DETAILS

PROJECT: SKILLION CARPORT + CANTILEVERED CARPORT

DRAWN: NJC-03/12/2008

SCALES: 1 : 25

DRAWING: SKCPCON

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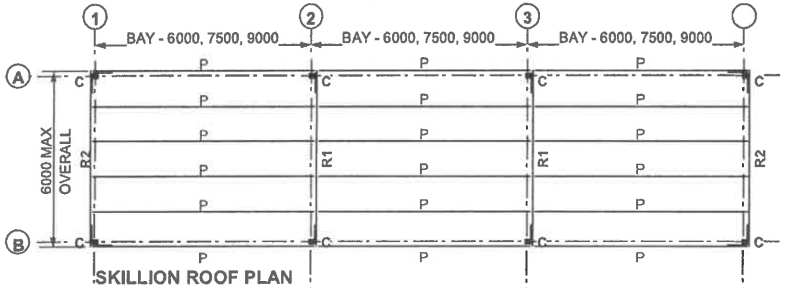
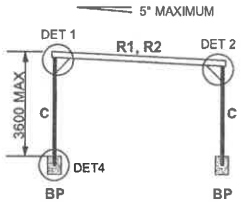
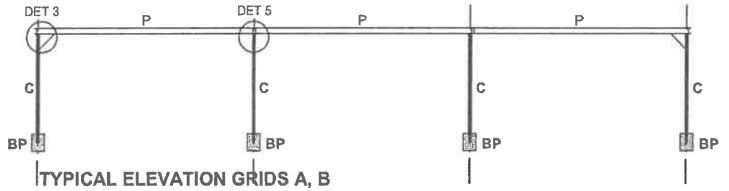


SKILLION ROOF PLAN



TYPICAL ELEVATION
SKILLION GRIDS 1, 2



TYPICAL ELEVATION GRIDS A, B

ROCKHAMPTON REGIONAL COUNCIL

APPROVED PLANS

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Development Permit No.: D/132-2020

Dated: 21 December 2020

REFERENCE DRAWING

SKCPCON CONNECTION AND CONCRETE DETAILS

PURLINS
MAXIMUM PURLIN SPACING TO BE 1250mm.
PURLINS IN 9000mm BAYS FOR REG C, CAT 2.5 TO HAVE BRIDGING BATTENS FITTED AT MIDSPAN.

DESIGN LOADING

ROOF DEAD LOAD	SELF WEIGHT ONLY
ROOF LIVE LOAD	(1.8/A+0.12) BUT NOT LESS THAN 0.25 kPa OR 1.40 kN
SNOW LOAD	0.5kPA
CONDITION	OPEN-ROOF ONLY

I CERTIFY THE DESIGN OF THIS STEEL FRAMED BUILDING IS STRUCTURALLY ADEQUATE, MEETS SERVICEABILITY REQUIREMENTS AND COMPLIES WITH THE RELEVANT REGULATIONS, WITH ALL AMMENDMENTS CURRENT TO DATE. I FURTHER CERTIFY THE PROPOSED STEEL STRUCTURE WILL BE STRUCTURALLY ADEQUATE WHEN CONSTRUCTED TO GOOD BUILDING PRACTISES, IN ACCORDANCE TO RANBUILD ASSEMBLY GUIDES AND THESE DRAWINGS APPROVED 05/12/2008.

Alexander Filonov.
MIEAust, CPEng, NPER 1296608 (STRUCTURA RPEQ 8094, CC4719p, EC27759, 24332ES

CERTIFICATION
THIS DRAWING IS VALID ONLY WHEN ENDORSED BY A SEPARATE DESIGN CERTIFICATE FROM LYSAGHT TECHNOLOGY THAT IS VALID FOR THE DATE OF ISSUE & CONSTRUCTION.

GENERAL
THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND ENGINEERING DRAWINGS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
DIMENSIONS SHALL NOT BE OBTAINED BY SCALING DRAWINGS. ANY DISCREPANCY SHALL BE REFERRED TO RANBUILD BEFORE PROCEEDING WITH THE WORKS.
DIMENSIONS SHOWN ON THESE DRAWINGS ARE THE MAXIMUM ALLOWED FOR THE ENGINEERING TABLES.
DIMENSIONS FOR INDIVIDUAL PROJECTS ARE TO BE VERIFIED BY THE BUILDER BEFORE CONSTRUCTION.
MAXIMUM ROOF SLOPE TO BE 5 DEGREES.
DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER STRESSED.
ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH RELEVANT S.A.A. CODES AND BUILDING REGULATIONS.
SUBSTITUTIONS ARE TO BE MADE ONLY WITH THE APPROVAL OF THE ENGINEER.
IT IS COMMON SENSE TO WORK SAFELY AND TO PROTECT YOURSELF AND OTHERS FROM ACCIDENTS ON SITE. TO DO THIS, YOU MUST ENSURE YOU HAVE IN PLACE SAFE WORK PRACTICES AND APPROPRIATE EQUIPMENT. SAFETY INVOLVES PERSONAL PROTECTION OF EYES, OF SKIN (FROM SUNBURN) AND OF HEARING (FROM NOISE). FALL PROTECTION MUST ALSO BE IN PLACE AS APPLICABLE INCLUDING SAFETY MESH, PERSONAL HARNESSES AND PERIMETER GUARDRAILS. IT IS RECOMMENDED THAT YOU FAMILIARIZE YOURSELF WITH ALL APPLICABLE LAWS, REGULATIONS, RULES, GUIDELINES, CODES OF PRACTICE AND STANDARDS AND THAT YOU ADHERE STRICTLY TO THEM.

SITE DESCRIPTION
BORED PIER FOOTINGS ARE SUITABLE FOR ALL AS2870 SITE CLASSIFICATIONS EXCEPT CLASS P.
IF CLASS P CONDITIONS ARE ENCOUNTERED THE CLIENT SHALL OBTAIN ADVICE FROM A PRACTISING STRUCTURAL ENGINEER.

CONCRETE
ALL CONCRETE WORK TO BE IN ACCORDANCE WITH AS3600.
CONCRETE STRENGTH F'c TO BE 20 MPa WITH 75mm SLUMP.
SLAB DESIGN INCLUDING REINFORCEMENT AND THICKNESS BY OTHERS

STRUCTURAL STEEL FRAMING
ALL STRUCTURAL STEEL CEE SECTION FRAMING TO BE MANUFACTURED FROM HI TENSILE STEEL CONFORMING TO SAA SPECIFICATION FOR HOT DIPPED ZINC COATED STEEL SHEET AS1397 AND TO HAVE A YIELD STRESS OF 550 MPa FOR 1.0mm OR THINNER, 500MPa FOR 1.2mm & 450MPa FOR 1.5mm OR THICKER BASE MATERIAL.
ALL STEELWORK TO BE INSTALLED TO THE MANUFACTURERS INSTRUCTIONS. STRUCTURAL STEEL FRAMING HAS BEEN DESIGNED IN ACCORDANCE WITH SAA COLD FORMED STEEL STRUCTURES CODE AS/NZS 4600 & AS4100, AS1170 PARTS 1, 2 & 3 AND DESIGN TAKES DIAPHRAGM ACTION OF ROOF CLADDING INTO ACCOUNT.

STRUCTURAL FRAMING SCREWS
QUALITY AND MECHANICAL PROPERTIES OF STRUCTURAL SCREWS MUST COMPLY WITH AS3566. THE MINIMUM DISTANCE OF EDGE/END SCREWS MUST HAVE AN EDGE DISTANCE OF 1.5 x SCREW DIAMETER FROM EDGE. THE MINIMUM DISTANCE OF SCREW SPACING MUST NOT BE LESS THAN 3 x SCREW DIAMTER BETWEEN ANY SCREWS.

ROOF CLADDING
ROOF CLADDING TO BE INSTALLED IN ACCORDANCE WITH AS1562 & THE MANUFACTURERS INSTRUCTIONS TO THE SAME WIND LOAD RATING AS THE BUILDING STRUCTURE.
ROOF CLADDING IS A STRUCTURAL BRACE, AND UNDER NO CIRCUMSTANCES SHOULD THIS CLADDING BE REMOVED UNLESS WITH WRITTEN APPROVAL FROM A PRACTICING STRUCTURAL ENGINEER

STEELWORK & CONCRETE SCHEDULE

BAY mm	MARK	WIND CONDITION						
		REG A, CAT 3	REG B, CAT 3 REG A, CAT 2.5	REG A, CAT 2	REG B, CAT 2.5	REG B, CAT 2	REG C, CAT 3	REG C, CAT 2.5
MULTIPLE 6000	C	75x75x2.5 SHS	75x75x2.5 SHS	75x75x2.5 SHS	75x75x3.0 SHS	75x75x3.0 SHS	89x89x3.5 SHS	89x89x3.5 SHS
	R1	C15015	C15019	C15019	C15024	C15024	C20019	C20024
	R2	C15012	C15012	C15012	C15015	C15015	C20012	C20012
	P	C15012	C15012	C15012	C15012	C15012	C20012	C20012
	BP	450 DIAx600	450 DIAx600	450 DIAx600	450 DIAx750	450 DIAx750	450 DIAx750	450 DIAx1250
MULTIPLE 7500	C	75x75x2.5 SHS	75x75x2.5 SHS	75x75x3.0 SHS	89x89x3.5 SHS	89x89x3.5 SHS	89x89x3.5 SHS	89x89x3.5 SHS
	R1	C15019	C15024	C15024	C20019	C20019	C20024	C20019
	R2	C15012	C15012	C15012	C20012	C20012	C20012	C20012
	P	C15015	C15019	C15019	C20012	C20012	C20012	C20012
	BP	450 DIAx600	450 DIAx750	450 DIAx600	450 DIAx750	450 DIAx750	450 DIAx750	450 DIAx1250
MULTIPLE 9000	C	75x75x2.5 SHS	75x75x2.5 SHS	75x75x2.5 SHS	89x89x3.5 SHS	89x89x3.5 SHS	75x75x3.0 SHS	89x89x3.5 SHS
	R1	C20015	C20015	C20019	C20024	C20024	C20019	C20024
	R2	C20012	C20012	C20012	C20012	C20012	C20012	C20015
	P	C20015	C20015	C20015	C20012	C20012	C20015	C20015
	BP	450 DIAx600	450 DIAx1250	450 DIAx600	450 DIAx1250	450 DIAx1250	450 DIAx750	450 DIAx1050

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			INITIAL
3	15/07/2011	GENERAL REVISION	NJC
2	13/07/2011	GENERAL REVISION	NJC
REV 1	22/03/2011	REMOVED CANTILEVER CARPORT REFERENCE	NJC

BLUESCOPE LYSAGHT

DESCRIPTION: SKILLION CARPORT
MULTIPLE BAY
6.0m SPAN x 3.6m EAVES MAX
FOR 6.0, 7.5 & 9.0m BAYS

TITLE: STRUCTURAL LAYOUT
SPECIFICATION
SCHEDULE
CONSTRUCTION DETAILS

DRAWN: NJC-03/12/2008

SCALES: 1 : 250

DRAWING: SKCP6.0M

mcmurtrie
CONSULTING ENGINEERS

TECHNICAL MEMORANDUM

Project No. 060-20-21

Date: 09-Dec-2020

ROCKHAMPTON REGIONAL COUNCIL
APPROVED PLANS
These plans are approved subject to the current conditions of approval associated with
Development Permit No.: D/132-2020
Dated: 21 December 2020

To:
Naomi Fisher
naomi.fisher@my.jcu.eud.au

From:
Lachlan McMurtrie
Director
McMurtrie Consulting Engineers
lachlan@mcmengineers.com

Re: 579 Gavial Gracemere Road – Flood Statement

Introduction

McMurtrie Consulting Engineers (MCE) has been engaged by Ms. Naomi Fisher to undertake a Flood Statement to support the proposed development of a stable on her property at 579 Gavial Gracemere Rd, Bouldercombe (Lot 1 RP856855) adjoining Tindall Road, refer Figure 1. The subject site is located in the Rural Zone and is affected by Teatree Creek Local Catchment Flooding. The flood hazard overlay map depicts that the site is situated in the high to extreme flooding zone (refer Attachment B).

The proposed stable (detailed in Attachment A) does not have any walls. The structure will not be habitable and will be used as a shelter for the horses on the property. The stable provides an open layout as such moving floodwaters (rising and receding) would create less turbulence and disruption and relatively unimpeded flow would be permitted. The existing flood risks are not made worse in this instance by the minor alteration to the flow characteristics of the floodplain. Insignificant increase in impervious area in the post-development due to the stable roof will have very negligible impact on the peak discharge and stormwater quality. Therefore this development would not create any actionable nuisance to surrounding properties.

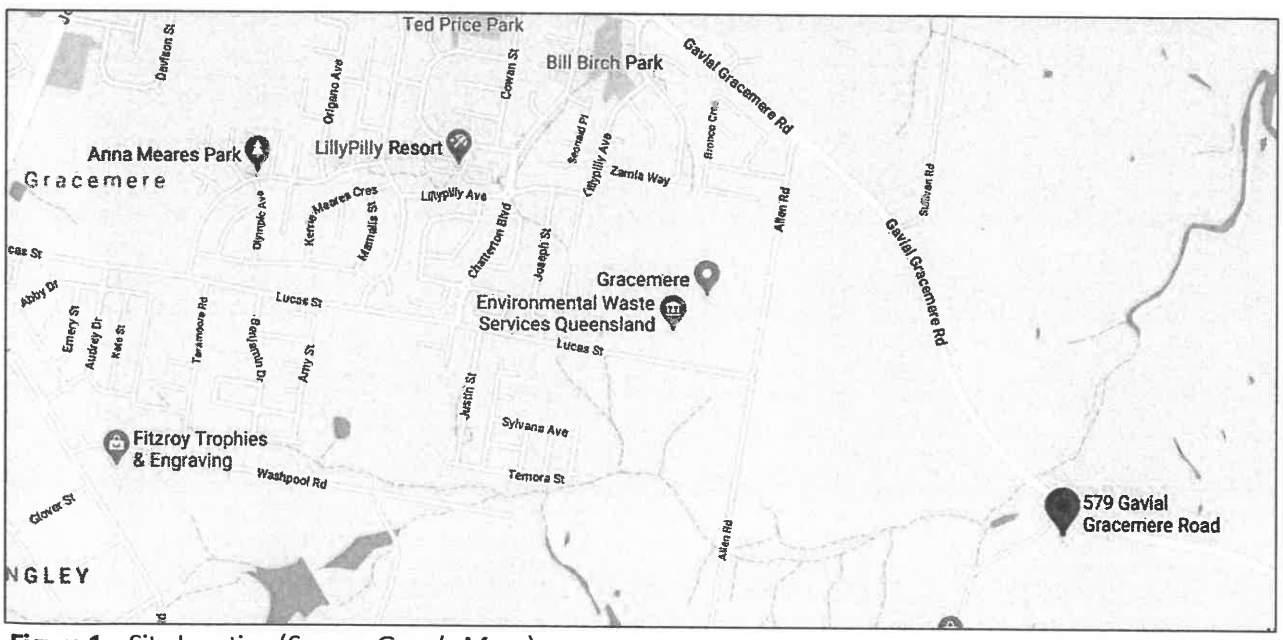


Figure 1 – Site Location (*Source: Google Maps*)

Summary of Existing Conditions

The site has an existing habitable dwell and shed in the north eastern corner of the property and is approximately 22150 m^2 in land area. It is understood the intention is for the site to remain largely unchanged, aside from the construction of the proposed stable. The site is situated in the Gracemere Catchments Floodplain. Council's Designated Flood Event (DFE) is a flood with a once in a hundred-year probability or 1% Annual Exceedance Probability (AEP).

The below image , Figure 2, is an extract from the *Aurecon, 10 May 2013, "Gracemere Catchments Flood Study, Rockhampton Regional Council"*. It is evident the site is inundated to depths of up to 2.0 to 2.5m based on the Aurecon mapping for 100 year ARI.

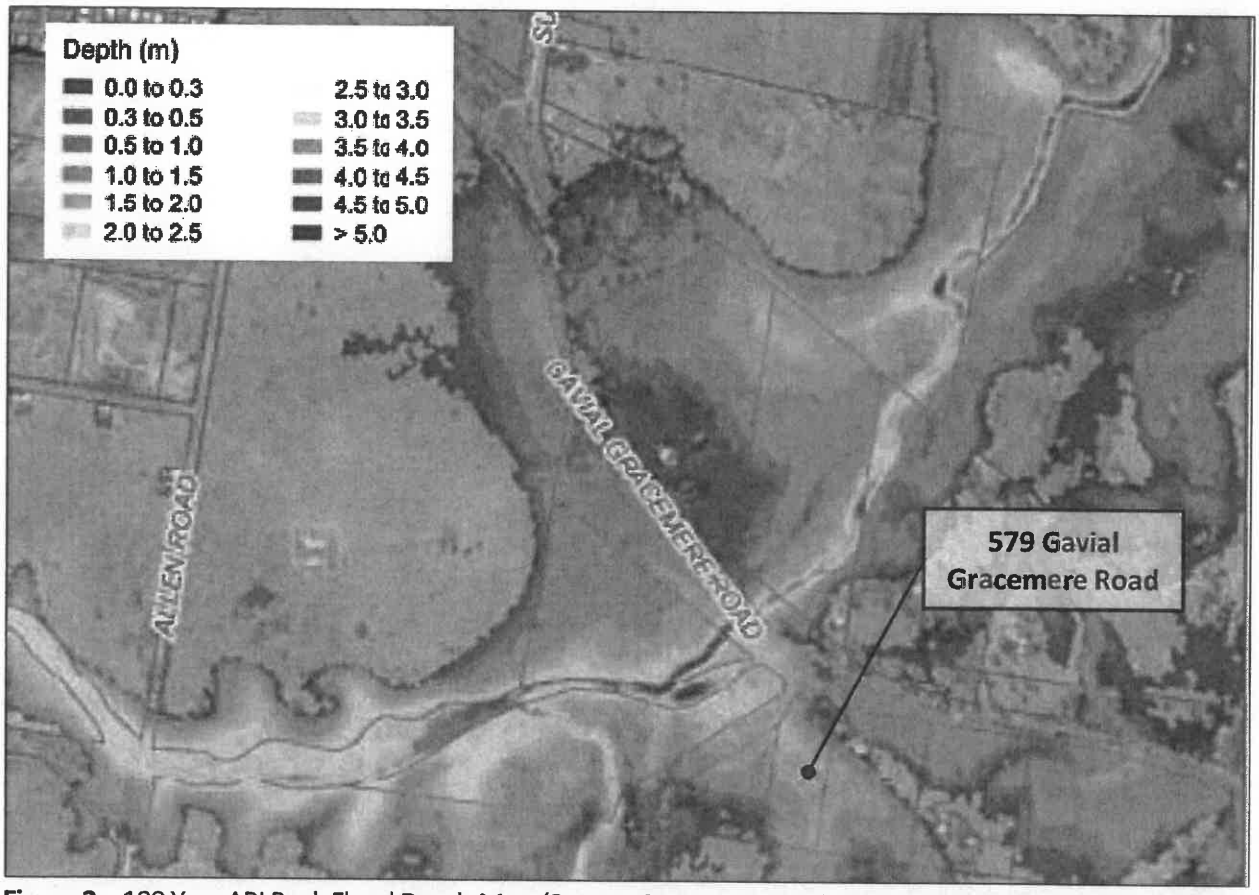


Figure 2 – 100 Year ARI Peak Flood Depth Map *(Source: Gracemere Catchments Flood Study, Aurecon, 2013)*

Development Generated Impacts and Risks

If managed *correctly and constructed generally (max 100mm above) on natural ground level*, it is considered the proposed stable will cause negligible effect to the capacity and function of the flood storage areas. It is the owner's responsibility to ensure appropriate flood management measures are implemented, however, it is expected that given the structure is not habitable or a commercial facility these will be limited to management of the following:

- Monitoring flood warnings via appropriate media and Bureau of Meteorology (BOM) website data to plan for flood events, and in the case of a potential flood event;
- Remove all debris, loose materials (i.e. potential hazards) from site;
- Relocate plant/equipment stored in the stable off site;
- Relocate all livestock from site;

Limitations:

1. MCE has relied upon third party sources of information to prepare the document which may not have been able to be fully verified. MCE has taken reasonable endeavours to inform itself of the parameters and project and has taken reasonable steps to ensure that the works and document is as accurate as possible given the information upon which it has been based including information that may have been provided or obtained by any third party or external sources which has not been independently verified.
2. MCE reserves the right to review and amend any aspect of the works performed including any opinions and recommendations from the works included or referred to in the works if:
   a. Additional sources of information not presently available (for whatever reason) are provided or becomes known to MCE; or
   b. MCE considers it prudent to revise any aspect of the works in light of any information which becomes known to it after the date of submission.
   c. MCE does not give any warranty nor accept any liability in relation to the completeness or accuracy of the works. If any warranty would be implied whether by law, custom or otherwise, that warranty is to the full extent permitted by law excluded. All limitations of liability shall apply for the benefit of the employees, agents and representatives of MCE to the same extent that they apply for the benefit of MCE.
3. MCE take no responsibility for the structural integrity of the stable, or the final placement (vertical or horizontal) of the structure. As previously noted, the stable should be built on or at a maximum of 100mm above natural ground level so the development does not materially impede the flow of floodwaters through the site or worsen flood flows external to the site.
4. It is the land owner's responsibility to implement appropriate flood management strategies. The above noted advice is indicative of a development of this nature. It is the land owner's responsibility to implement, maintain and operate the site specific strategy.

Lachlan McMurtrie
Director
RPEQ 15243

APPENDIX A – PROPOSED SHED LAYOUTS

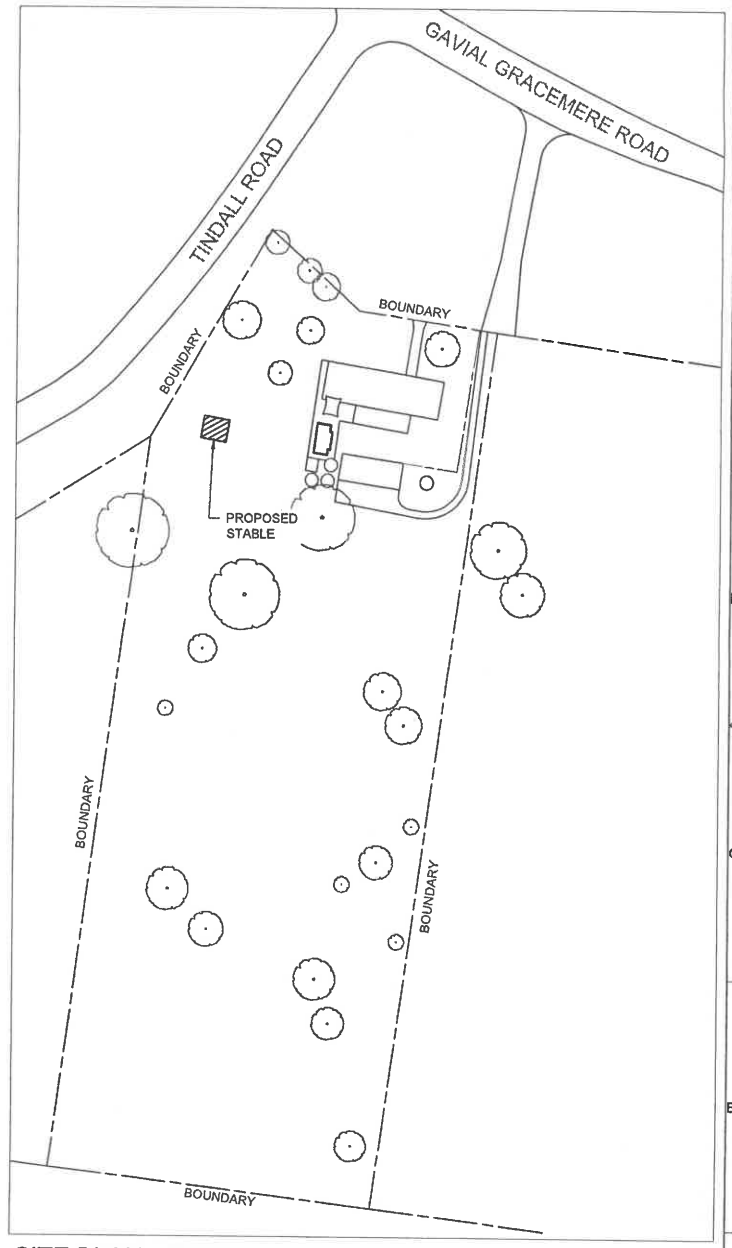
LOT: 1
PLAN: RP856855

NOTE:
ALL DIMENSIONS ARE APPROXIMATE

NORTH

BOUNDARY
BOUNDARY
BOUNDARY
50.0
10
7
23
6
PROPOSED STABLE
RESIDENCE
POOL
SHED
DRIVEWAY
DRIVEWAY

SITE PLAN
SCALE: 1:250



SITE PLAN - TOTAL
SCALE: 1:1000

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TITLE: PROPOSED STABLE

NAME AND ADDRESS:
NAOMI FISHER
579 GAVIAL GRACEMERE ROAD
GRACEMERE, QLD. 4702

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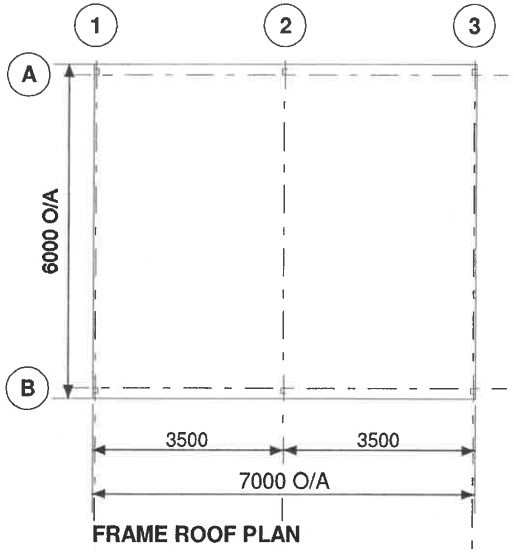
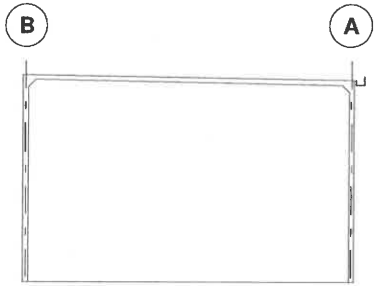
SHEET:	SHEET SIZE:	DRAWING No:	REV:
1 OF 1	A2	201149	1



FRAME ROOF PLAN



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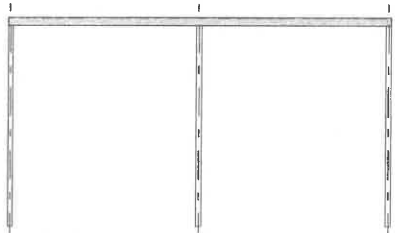
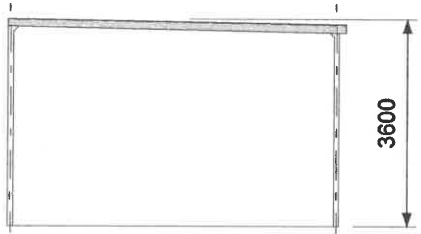
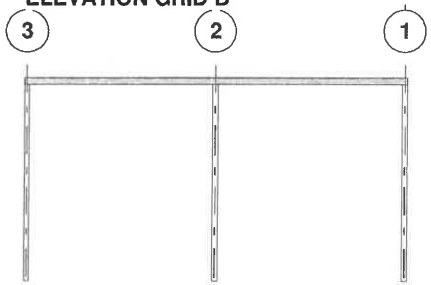


ELEVATION GRID B

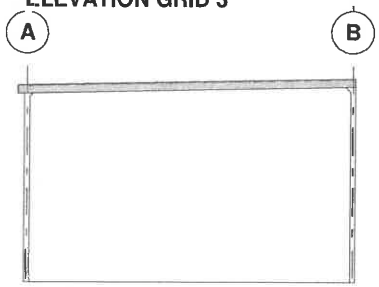


Slope to be as per minimum manufacturer requirement for cladding type

ELEVATION GRID 3



ELEVATION GRID A



ELEVATION GRID 1

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CLADDING

ITEM	PROFILE (min)	FINISH	COLOUR
ROOF	CUSTOM ORB 0.42	COLORBOND	CC
WALLS	-		
CORNERS	-		
BARGE	-	COLORBOND	CC

0.35bmt=0.40tct; 0.42bmt=0.47tct; 0.48bmt=0.53tct

ACCESSORY SCHEDULE & LEGEND

QTY	MARK	DESCRIPTION

ARCHITECTURAL DRAWING ONLY, NOT FOR CONSTRUCTION USE

WIND DESIGN

IMPORTANCE LEVEL	REGION	TERRAIN	Ms
2	C	2.5	1.0

CLIENT
Naomi Fisher

SITE
17 Hardy Road
BOULDERCOMBE QLD 4702

BUILDING
SKILLION CARPORT
6000 SPAN x 3600 EAVE x 7000 LONG

TITLE
FLOOR PLAN & ELEVATION

SCALE	DRAWING NUMBER	PAGE
A4 SHEET 1:125	ROCKH2-7091	1/1

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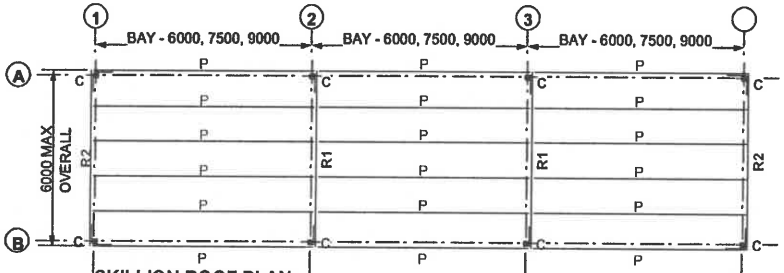
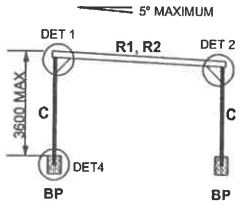
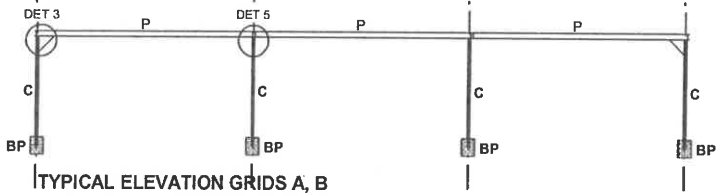


SKILLION ROOF PLAN



TYPICAL ELEVATION SKILLION GRIDS 1, 2



TYPICAL ELEVATION GRIDS A, B

STEELWORK & CONCRETE SCHEDULE

BAY mm	MARK	WIND CONDITION						
		REG A, CAT 3	REG B, CAT 3 REG A, CAT 2.5	REG A, CAT 2	REG B, CAT 2.5	REG B, CAT 2	REG C, CAT 3	REG C, CAT 2.5
MULTIPLE 6000	C	75x75x2.5 SHS	75x75x2.5 SHS	75x75x2.5 SHS	75x75x3.0 SHS	75x75x3.0 SHS	89x89x3.5 SHS	89x89x3.5 SHS
	R1	C15015	C15019	C15019	C15024	C15024	C20019	C20024
	R2	C15012	C15012	C15012	C15015	C15015	C20012	C20012
	P	C15012	C15012	C15012	C15012	C15012	C20012	C20012
	BP	450 DIAx600	450 DIAx600	450 DIAx600	450 DIAx750	450 DIAx750	450 DIAx750	450 DIAx1250
MULTIPLE 7500	C	75x75x2.5 SHS	75x75x2.5 SHS	75x75x3.0 SHS	89x89x3.5 SHS	89x89x3.5 SHS	89x89x3.5 SHS	89x89x3.5 SHS
	R1	C15019	C15024	C15024	C20019	C20019	C20024	C20019
	R2	C15012	C15012	C15012	C20012	C20012	C20012	C20012
	P	C15015	C15019	C15019	C20012	C20012	C20012	C20012
	BP	450 DIAx600	450 DIAx750	450 DIAx600	450 DIAx750	450 DIAx750	450 DIAx750	450 DIAx1250
MULTIPLE 9000	C	75x75x2.5 SHS	75x75x2.5 SHS	75x75x2.5 SHS	89x89x3.5 SHS	89x89x3.5 SHS	75x75x3.0 SHS	89x89x3.5 SHS
	R1	C20015	C20015	C20019	C20024	C20024	C20019	C20024
	R2	C20012	C20012	C20012	C20012	C20012	C20012	C20015
	P	C20015	C20015	C20015	C20012	C20012	C20015	C20015
	BP	450 DIAx600	450 DIAx1250	450 DIAx600	450 DIAx1250	450 DIAx1250	450 DIAx750	450 DIAx1050

REFERENCE DRAWING

SKCPCON CONNECTION AND CONCRETE DETAILS

PURLINS

MAXIMUM PURLIN SPACING TO BE 1250mm.
PURLINS IN 9000mm BAYS FOR REG C, CAT 2.5 TO HAVE BRIDGING BATTENS FITTED AT MIDSPAN.

DESIGN LOADING

ROOF DEAD LOAD	SELF WEIGHT ONLY
ROOF LIVE LOAD	(1.8/A+0.12) BUT NOT LESS THAN 0.25 kPa OR 1.40 kN
SNOW LOAD	0.5kPA
CONDITION	OPEN-ROOF ONLY

I CERTIFY THE DESIGN OF THIS STEEL FRAMED BUILDING IS STRUCTURALLY ADEQUATE, MEETS SERVICEABILITY REQUIREMENTS AND COMPLIES WITH THE RELEVANT REGULATIONS, WITH ALL AMMENDMENTS CURRENT TO DATE. I FURTHER CERTIFY THE PROPOSED STEEL STRUCTURE WILL BE STRUCTURALLY ADEQUATE WHEN CONSTRUCTED TO GOOD BUILDING PRACTISES, IN ACCORDANCE TO RANBUILD ASSEMBLY GUIDES AND THESE DRAWINGS APPROVED 05/12/2008.

Alexander Filonov.
MIEAust, CPEng, NPER 1296608 (STRUCTURA
RPEQ 8094, CC4719p, EC27759, 24332ES

CERTIFICATION
THIS DRAWING IS VALID ONLY WHEN ENDORSED BY A SEPARATE DESIGN CERTIFICATE FROM LYSAGHT TECHNOLOGY THAT IS VALID FOR THE DATE OF ISSUE & CONSTRUCTION.

GENERAL
THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND ENGINEERING DRAWINGS, SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.
DIMENSIONS SHALL NOT BE OBTAINED BY SCALING DRAWINGS. ANY DISCREPANCY SHALL BE REFERRED TO RANBUILD BEFORE PROCEEDING WITH THE WORKS.
DIMENSIONS SHOWN ON THESE DRAWINGS ARE THE MAXIMUM ALLOWED FOR THE ENGINEERING TABLES.
DIMENSIONS FOR INDIVIDUAL PROJECTS ARE TO BE VERIFIED BY THE BUILDER BEFORE CONSTRUCTION.
MAXIMUM ROOF SLOPE TO BE 5 DEGREES.
DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER STRESSED.
ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH RELEVANT S.A.A. CODES AND BUILDING REGULATIONS. SUBSTITUTIONS ARE TO BE MADE ONLY WITH THE APPROVAL OF THE ENGINEER.
IT IS COMMON SENSE TO WORK SAFELY AND TO PROTECT YOURSELF AND OTHERS FROM ACCIDENTS ON SITE. TO DO THIS, YOU MUST ENSURE YOU HAVE IN PLACE SAFE WORK PRACTICES AND APPROPRIATE EQUIPMENT. SAFETY INVOLVES PERSONAL PROTECTION OF EYES, OF SKIN (FROM SUNBURN) AND OF HEARING (FROM NOISE). FALL PROTECTION MUST ALSO BE IN PLACE AS APPLICABLE INCLUDING SAFETY MESH, PERSONAL HARNESSES AND PERIMETER GUARDRAILS. IT IS RECOMMENDED THAT YOU FAMILIARIZE YOURSELF WITH ALL APPLICABLE LAWS, REGULATIONS, RULES, GUIDELINES, CODES OF PRACTICE AND STANDARDS AND THAT YOU ADHERE STRICTLY TO THEM.

SITE DESCRIPTION
BORED PIER FOOTINGS ARE SUITABLE FOR ALL AS2870 SITE CLASSIFICATIONS EXCEPT CLASS P.
IF CLASS P CONDITIONS ARE ENCOUNTERED THE CLIENT SHALL OBTAIN ADVICE FROM A PRACTISING STRUCTURAL ENGINEER.

CONCRETE
ALL CONCRETE WORK TO BE IN ACCORDANCE WITH AS3600.
CONCRETE STRENGTH F'c TO BE 20 MPa WITH 75mm SLUMP.
SLAB DESIGN INCLUDING REINFORCEMENT AND THICKNESS BY OTHERS

STRUCTURAL STEEL FRAMING
ALL STRUCTURAL STEEL CEE SECTION FRAMING TO BE MANUFACTURED FROM HI TENSILE STEEL CONFORMING TO SAA SPECIFICATION FOR HOT DIPPED ZINC COATED STEEL SHEET AS1397 AND TO HAVE A YIELD STRESS OF 550 MPa FOR 1.0mm OR THINNER, 500MPa FOR 1.2mm & 450MPa FOR 1.5mm OR THICKER BASE MATERIAL.
ALL STEELWORK TO BE INSTALLED TO THE MANUFACTURERS INSTRUCTIONS. STRUCTURAL STEEL FRAMING HAS BEEN DESIGNED IN ACCORDANCE WITH SAA COLD FORMED STEEL STRUCTURES CODE AS/NZS 4600 & AS4100, AS1170 PARTS 1, 2 & 3 AND DESIGN TAKES DIAPHRAGM ACTION OF ROOF CLADDING INTO ACCOUNT.

STRUCTURAL FRAMING SCREWS
QUALITY AND MECHANICAL PROPERTIES OF STRUCTURAL SCREWS MUST COMPLY WITH AS3566. THE MINIMUM DISTANCE OF EDGE/END SCREWS MUST HAVE AN EDGE DISTANCE OF 1.5 x SCREW DIAMETER FROM EDGE. THE MINIMUM DISTANCE OF SCREW SPACING MUST NOT BE LESS THAN 3 x SCREW DIAMTER BETWEEN ANY SCREWS.

ROOF CLADDING
ROOF CLADDING TO BE INSTALLED IN ACCORDANCE WITH AS1562 & THE MANUFACTURERS INSTRUCTIONS TO THE SAME WIND LOAD RATING AS THE BUILDING STRUCTURE.
ROOF CLADDING IS A STRUCTURAL BRACE, AND UNDER NO CIRCUMSTANCES SHOULD THIS CLADDING BE REMOVED UNLESS WITH WRITTEN APPROVAL FROM A PRACTICING STRUCTURAL ENGINEER

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			INITIAL
3	15/07/2011	GENERAL REVISION	NJC
2	13/07/2011	GENERAL REVISION	NJC
REV 1	22/03/2011	REMOVED CANTILEVER CARPORT REFERENCE	NJC

BLUESCOPE LYSAGHT

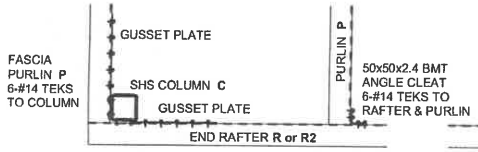
DESCRIPTION: SKILLION CARPORT MULTIPLE BAY 6.0m SPAN x 3.6m EAVES MAX FOR 6.0, 7.5 & 9.0m BAYS

TITLE: STRUCTURAL LAYOUT SPECIFICATION SCHEDULE CONSTRUCTION DETAILS

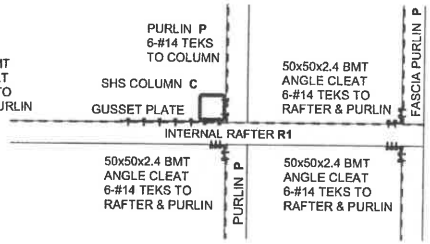
DRAWN: NJC-03/12/2008

SCALES: 1 : 250

DRAWING: SKCP6.0M



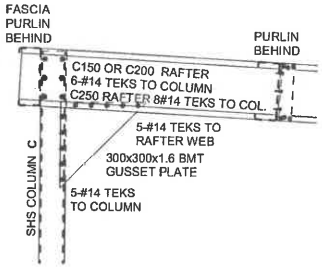
TYP PLAN AT CORNER COLUMN



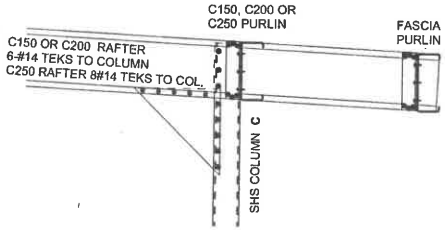
TYP PLAN AT INTERNAL COLUMN

LYSAGHT TS2242 BRIDGING BATTEN @ MID-SPAN
2-#10 TEKS TO UNDERSIDE OF EACH PURLIN

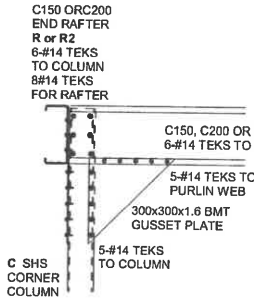
BRIDGING BATTEN DETAIL
C/2.5 BAYS OVER 7500mm ONLY



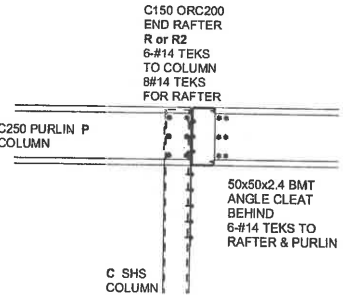
DETAIL 1
HIGH COLUMN KNEE CONNECTION
SKILLION SHOWN, CANTILEVER SIMILAR



DETAIL 2
LOW COLUMN KNEE CONNECTION
CANTILEVER SHOWN, SKILLION SIMILAR



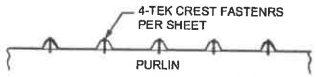
DETAIL 3
CORNER COLUMN TO PURLIN CONNECTION



DETAIL 5
INTERNAL COLUMN TO PURLIN CONNECTION

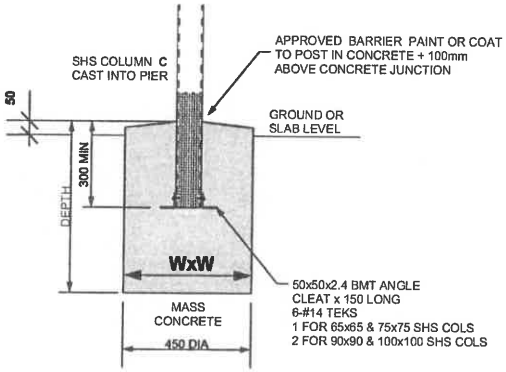
0.42 BMT CUSTOM ORB CREST FIXED
NORMAL 3-#12 TEKS PER SHEET INTERNAL ONLY

0.42 BMT CUSTOM ORB CREST FIXED
NORMAL 5-#12 TEKS PER SHEET END FIXING
CYCLONIC 5-#14 TEKS PER SHEET ALL FIXING



NORMAL - 0.40 TCT BLUESCOPE "TRIMDEK" PROFILE
#12:14 HEX WASHER HD TEK
CYCLONIC - 0.47 TCT BLUESCOPE "TRIMDEK"
#14:10 HEX WASHER HD TEK

ROOF CLADDING SHEAR DIAPHRAGM



DETAIL 4
COLUMN BASE AND BORED PIER

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Alexander Filonov.
MIEAust, CPEng, NPER 1296608 (STRUCTURAL)
RPEQ 8094, CC4719p, EC27759, 24332ES

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REV	DATE	DESCRIPTION	INITIAL
	13/11/2008		
1	29/07/2009	Post in Pier Details	NJC

BLUESCOPE LYSAGHT

DESCRIPTION	CONSTRUCTION DETAILS
PROJECT	SKILLION CARPORT + CANTILEVERED CARPORT
DRAWN	NJC-03/12/2008
SCALES	1 : 25
DRAWING	SKCPCON

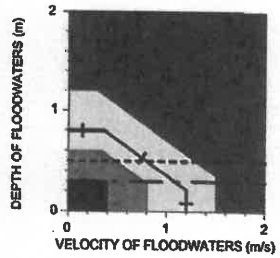
APPENDIX B – FLOOD HAZARD MAP

aurecon

Legend

Cadastre

TUFLOW Model Extents



Hazard Categories	Hazard Thresholds
Extreme	Safe to Use Small Cars
High	Safe to Use 4WDs
Medium	Wading Limit - Children
Low	Wading Limit - Adults

Notes:

1. This map must not be used without consideration of, or reference to, the Explanatory Notes and Disclaimers which are provided on the Gracemere Catchments Flood Study Figure 25 so as to understand the important limitations and conditions on such use.
2. This mapping considers local catchment flooding only. No consideration of Neerkol Creek or Padgo e Lagoon flooding has been made.
3. This mapping shows inundation within the Gracemere Catchments Flood Study TUFLOW model extents only. Flood inundation continues beyond the downstream extents of this mapping.

Date: 31/03/2012 Version: 1

0 1000 (m)

Scale 1:20 000 (m) (@ A3 size)

Projection: MGA Zone 56

Gracemere Catchments Flood Study

Figure 24: Sheet 2 - 100 Year ARI Peak Hazards