APPLICATION

FORM BA2

Application for building permit – uncertified

	3			
Building Act 2011, section Building Regulations 201			PERMIT AUTHORITY USE ONLY	Reference number
Permit authority	MERK	RRIN	SHIRK	
1. Property this a	pplication relates t	0		COMPLETE STREET
Property street address (provide lot	Unit no	Street no 80	Level	Lot no
number where street number is not known)	Street name SA 18		Street type	Street suffix
	Suburb		State	Postcode 7/5
Certificate of title (if known)	Volume		Folio	
Local government area from permit authority)	a (if different			
Is this lot vacant?	Yes	V No		
2. Details of build	ing work			
Project name (if any)	GAR.	AGE,		
Description of the building(s) and building work	STEE L VEHICLE	FRAN	1 E , STER	L CLAD VAN COVER.
Main use of building(s)				TR MAINTENANCE
Building Code of Australia (BCA) class of the building(s)	town house or Class 10a (gar Class 10b (fer the like)	villa unit) rage, carport, shed	or the like) retaining or free stand	house, terrace house, ling wall, swimming pool or
	Secondary BCA class (for multi- purpose buildings)		Third BCA class multi-purpose buildings)	(for

Type of work	New bui	lding/structure		Alteration/addi	ition	Refurbishment/fit out
	Relocati building	on of a to this site		Change of use	conversion	
Type of building or incidental structure (if a Class 10)	Swimmi Carport	ng pool/spa		Garage Shed		Patio Fence/wall
	Retainin	g wall		Water tank		Other
Number of dwellings ro		NA.				
Type of structure		Detached	(free s	tanding)	Attached to	another structure
Number of residential to be created	dwellings	NA.			storeys of the Iding (above	MA
Number of basement s building (below ground		NA		Estimated work (include	value of buildinq ding GST)	\$ 25000 MOOK
Floor area to be create	ed (m²)	1 120	m ²	Site (lot) ar	ea (m²)	A 8000 m2.
What are the main materials used in the building work?	Floor Concrete Timber Steel Other	Exterior walls Brick (vector) Concrete Fibre cee Timber Curtain of Steel Aluminic	ouble) eneer) e/stone ment glass	Fibr	s ncrete e cement el minium	Wall frame Brick/block Concrete Timber Steel Aluminium Other
If 'other' please specify						
Intended owner of the completed building	the completed Government sector of a multi-stage building					
s an alternative solution to a building standard Yes No						

3. Owner details

Where there are multiple owners, please attach a list with the names and signatures of each owner. If each of those owners requires a copy of the building permit, please also provide forwarding details for each owner.

Owner's name	RUSSELL	AND	JEA	tw	CLOE	> /< .
Street address (provide lot number	Unit no	Street no	30	Leve	ı	Lot no
where street number is not known)	Street name	5		Stree	et type	Street suffix
	Suburb		State W/	4	Postcode 415	Country (if not Australia)
OR						
PO Box address	PO Box no					
	Suburb		State		Postcode	Country (if not Australia)
Email address			·			
Phone/fax	Phone no				Fax	
Owner's signature*			*			Date 7/3/23_
application. Owner's	to sign on behalf of the signature is not require efore 31 December 20	d for Class	ease provi	ide you s 10 bu	ur written legal a uildings or incide	authorisation with your ental structures with
4. Builder details						
Builder's name	BPH	JA	RDI	N	E PT	1 LTD
Street address (provide lot number	ALA JA	Streetho	E	16	JANT	VI at not AVC
where street number is not known)	Street name	-M,	47 A	16	eet type	Street suffix
	Suburb		State		Postcode	Country (if not Australia)
OR						
PO Box address	PO Box no					
	Suburb		State		Postcode	Country (if not Australia)
Email address						
Phone/fax	Phone no				Fax	

BA2

Type of builder			••	e registration numb		
		Approved owner-builder (attach owner-builder approval from the Building Services Board and provide owner-builder approval number below)				
	Public Authority					
	Other (building v	work under	\$20,000, o	r where registered	building contractor not	
Registration number	Registration / approval					
or owner builder approval number	BC	103	240	6		
Builder's signature	Name (print)	JARS	INE			
	Signature	84.38.00			Date. 7/03/23	
5. Applicant detai	de //		513			
5. Applicant detai						
Who is the applicant? (Tick one box)	Owner		Builder		Other	
	If 'Other' was selected a	above, com	olete the fol	lowing details:		
Applicant's name						
Street address (provide lot number	Unit no	Street no		Level	Lot no	
where street number is not known)	Street name			Street type	Street suffix	
	Suburb		State	Postcode	Country (if not Australia)	
OR).		
PO Box address	PO Box no					
	Suburb		State	Postcode	Country (if not Australia)	
Email address						
Phone/fax	Phone no			Fax		

6. Sta	tement by applicant
l unde	stand that a building permit cannot be granted unless:
1.	All the prescribed information is provided with this application.
2.	All consents or court orders have been obtained if part of a building or incidental structure is proposed to be placed beyond the boundaries of the works land.
	Does the proposed work encroach on other land?
	If yes, has consent or a court order been obtained?
	Attach a copy of each consent (form BA20) or court order obtained.
3.	All consents or court orders have been obtained if the building work may adversely affect land beyond the boundaries of the works land.
	Does the proposed work adversely affect other land? Yes No
	If yes, has consent or a court order been obtained?
	Attach a copy of each consent (form BA20) or court order obtained.
4.	If the proposed building work is for a Class 1 or Class 10 building or incidental structure that includes alternative solutions to building standards, details have been provided with this application.
	Provide details of each alternative solution not shown on the plans and specifications.

RUBBELL CROOK

Applicant's signature

Name (print)

Signature

Peter Zenni

Executive Manager of Development Services

Shire of Merredin

Re: Application to erect shed at 80 Bates Street Merredin, ie height requirement

As requested, following is a description of use of the shed.

No. 1 Storage of Caravan that requires 4 meter clearance.

No. 2 Storage and workshop for vintage vehicle rebuild, including a Willys Jeep and a International 4 wheel drive Scout. These are private and personal projects.

No. 3 To enable the above, a 2.5 meter vehicle hoist will be installed. This requires approximately 4.2 meters of clearance to operate effectively.

No. 4 Space for work benches and tools.

Hoping this is sufficient for your requirements, Peter.

Yours faithfully,

16th May 2023.

Kerry Hunter

To: WHOM IT MAY CONCERN

Russell Crook next door neighbour at 80 Bates Street Merredin has advised me that he is building a 12mx10mx4m high shed at the back of his property and has to get approval/notify me of the height of his shed.

I have no objections to the height of the shed. Will not interfere with my property at all.

GO FOR IT!!!

Signed: Kerry Hunter

16/5/2023 Spoken with be ray thurer, ADungs har of the proposed sheds Dimensions Idealing 4.279 in sterner theight of the Condition that the has no suffection.
To the sled Stelly excited on the

To whom This Concern

72-74 Bates St has no problems
With Hos Bates St building a
With Shed shat 15 high.

Regards

CAHICL RESIDENTS

16/5/2023 spoken with DAM CALIN & Contined that they have no defection to prepared RM X 10m X 4.80 Shed on the property In question.

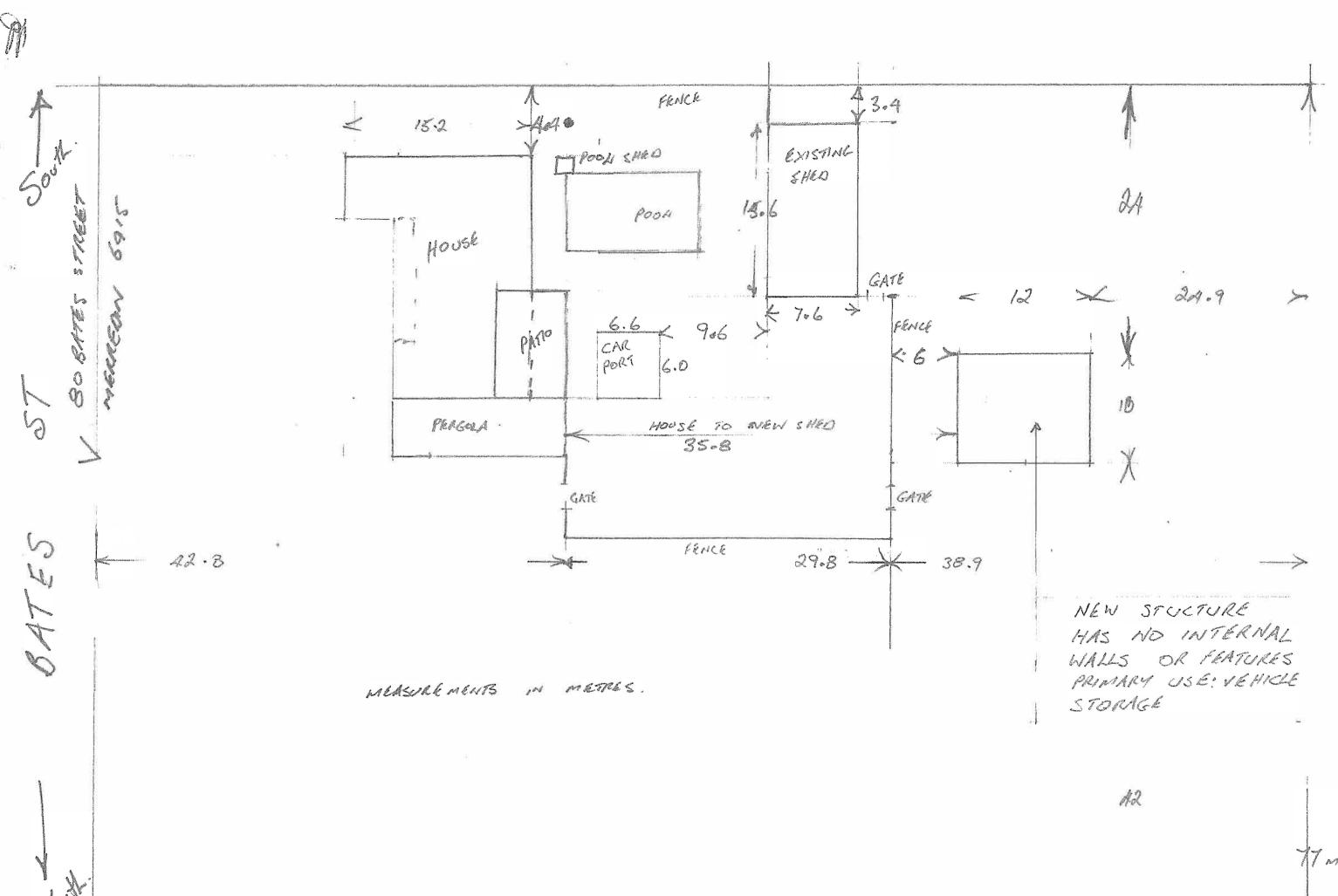
LISSELL CROOK. SITES BO GATES ST MERSKESIN.



© Copyright 2005 Water Corporation

The Water Corporation has taken due care in the preparation of the data comprised on this map but accepts no responsibility for any inaccuracy of facility, cadastral or other information provided nor inappropriate use of this information. The user is reminded that under no circumstances can the information herewith displayed be copied, altered, modified or otherwise published in any form including the Internet without express permission of the Water Corporation. The Water Corporation should be advised of any intention to carry out any physical activities within proximity to facilities displayed on this map. If any inaccuracies are found with this information please contact the Help Desk on (08) 9420 3090.

FINSTING SEWERAGE LINES NO SEVERAGE EXTENSION LEQUIRED





Enquiries to: Alexander Filonov

3th March 2023

The Manager Ranbuild PO Box 170 HAMILTON NSW 2303

Dear Sir/Madam,

Re: STRUCTURAL ADEQUACY OF STEEL FRAMED BUILDING

Client Russell Crook Ranbuild Job No.: 422736

Type: Big G

Location: 80 Bates Street MERREDIN WA 6415

Plans: 422736-GA, ENG1/1-422736, ENG2/1-422736, ENG3/1-422736, ENG3/2-422736, ENG4/1-422736, ENG4/1-422736, ENG5/1-422736, ENG5/1-422736, ENG6/1-422736, ENG

ENG6/2-422736, ENG7/1 422736

Being a professional engineer within the meaning of the Building Code of Australia 2019, Amend 1 (A2.2) with Ranbuild we have undertaken a structural analysis of the steel framed building as described above. These plans were analysed in accordance with BCA2019, Volume 2, Amend 1, Under Section A5.2 as Evidence of Suitability a AS/NZS 1170.1, AS/NZS 1170.2, AS/NZS 1170.4, AS4100, AS2870 and AS/NZS 4600.

Building Class 10a

Based on our structural analysis, we are satisfied that the standard engineering drawings attached are suitable for the above project with the following modification.

- Nested girts over PA door

Yours faithfully,

Alexander Filonov

MIEAust, CPEng, NPER 1296608 (Structural), RPEQ 8094, CC4719P, PE 0003374

Engineering Manager

Lysaght Building Solutions

BlueScope is a trademark of BlueScope Steel Limited



27 Sterling Road Minchinbury NSW 2770
Telephone +612 4962 4311
Facsimite +612 4962 3421
www.bluescoyesteel.com

BlueScupe Steel Limited ABN 16 000 011 058

SITE SPECIFIC DESIGN CRITERIA ANALYSIS



Prepared for:

Russell Crook 80 Bates Street MERREDIN WA 6415

Supplier:

Tompkin Engineering

Assessment Ref: BSC23030066HO

Issued:

03/03/2023

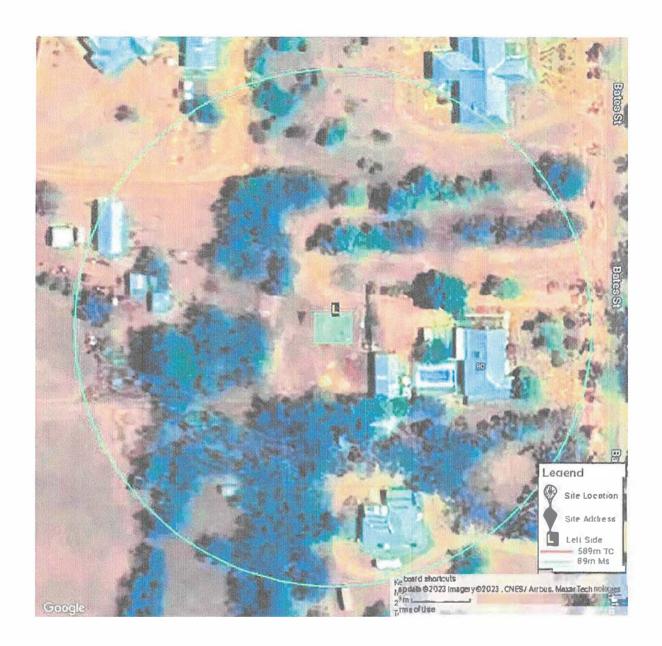
Building Details:

Span: 9.96 Length: 12.24

Avg. Height: 4.439

Certified by:

Alex Filonov



Site Location:
Geographic coordinates of
-31.47236,118.27766
Generally described as:
80 Bates Street MERREDIN WA 6415

Executive Summary - Site Specific Analysis

The design analysis of the building has not been considered for each of the 4 orthogonal directions. Hence the maximum wind speed in any of the 8 cardinal directions has been used as the design wind speed. This is a conservative approach.

Each cardinal direction has been considered and the results are summarised below

Factor	N	NE	Е	SE	S	SW	W	NW
Wind Region			te n	Α	1			
Importance level (IL)				2	<u>)</u>			
Regional Wind Speed (Vr)				45	.0			
Terrain Category (TC)	2.43	2.49	2.5	2.47	2.5	2.38	2.39	2.3
Terrain Category Multiplier (Mz)	0.88	0.87	0.87	0.87	0.87	0.88	0.88	0.89
Shielding Multiplier (Ms)	1	1	1	1	1	1	1	1
Topographic Multiplier (Mt)	1	1	1	1	1	1	1	1
Wind Direction Multiplier 1 (Md1)	0.9	0.8	8.0	8.0	0.85	0.95	1	0.95
Site specific design wind speed (Vsite1)	35.5	31.3	31.3	31.4	33.3	37.6	39.5	37.9
Wind Direction Multiplier 2 (Md2)	0.9	8.0	8.0	8.0	0.85	0.95	1	0.95
Site specific design wind speed (Vsite2)	35.5	31.3	31.3	31.4	33.3	37.6	39.5	37.9

Design Wind Speed 39.5 m/s (Vsite1)

for the resultant forces and overturning moments on the complete building and wind actions on major structural elements.

Design Wind Speed (Vsite2)

39.5 m/s

for all other cases, including cladding and immediate supporting members (Purlins and Girts)

Snow Load 1

Nil

Hazard

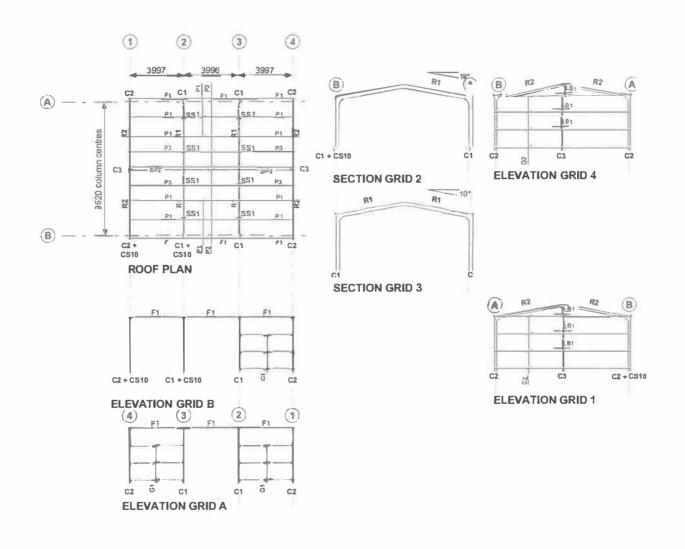
Seismic Factor

Factor Z

= 0.08

Durability Alert Yes

It is likely that the building is subject to a Marine Influence and Industrial Influence. You should satisfy yourself that any BlueScope or other warranties specific for your site are satisfactory for your purpose. Amongst other sources, you should contact BlueScope on 1800 800 789.





Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBULD

REFERENCE DRAWINGS
STEEL FRAME DIAGRAMS
STEEL FRAME SCHEDUILE
FRAME CORNECTIONS
RC FLOOR & BORED PIER
ISOLATED BORED PIER
RC FLOOR & INTEGRAL PADS
RC FLOOR & INTEGRAL PADS
RC SLAB DETS.CONC SPEC. & SITE NOTES

ENG1-422736 ENG2-422736 ENG3-122738 ENG4-122736 ENG5-422736 ENG6-422736 ENG7-422736

CLIENT
RUSSEll Crook

SITE
80 Bates Street
MERREDIN WA 6415

BUILDING TYPE

Big G

BUILDING DIMENSION

9960S x 4000E x 12240L

TITLE STEEL FRAME DIAGRAMS APPROVED 03-Mar-23

DRAWN REV

MICAUSI, CPERO, NI 1296808 SCALE DRAWING NUMBER 1:250 ENG1/1-422736

4

STRUC	TURAL STEELWORK SCH	DULE	CONNE	CONNECTIONS		
MARK	DESCRIPTION	SECTION	BASE	EAVES	TOP	
CS10	COLUMN - STIFFNER	C15015				
C1	COLUMN - MAIN	C25024	FB3	KN3		
C2	COLUMN - CORNER	C15010	FB1	KN1		
C3	COLUMN - E/W, PARTITON	C20019	EB2	ER1		
CS10	COLUMN - STIFFNER	C10010				
R1	RAFTER - MAIN	C25024		KN3	AP3	
R2	RAFTER - END WALL	C15012		KN1	AP1	
Be	BRACING - END WALL	DIAPHRAGM				
Br	BRACING - ROOF	DIAPHRAGM				
Bw	BRACING - SIDE WALL	DIAPHRAGM				
SS1	BRACE - LATERAL FLY	100x0.4 STRAP +	SS1			
LB1	BRACE - LATERAL FLY	100×0.4 STRAP	LB1			
F1	FASCIA	C15012		FK1		
P1	PURLIN - PERIPHERY	TS96075 @ 1400	BC1, 2			
P2	PURLIN - INTERNAL	TS96075 @ 1400	BC1, 2			
P3	PURLIN - END	TS96075 @ 1400	BC1, 2			
G1	GIRT - END BAY	TS96075 @ 1600	BC1. 2			
G2	GIRT - END WALL / INT. BAY	TS96075 @ 1600	BC1.2			

GENERAL

- THIS IS A STANDARDISED DESIGN SUITABLE FOR LIGHT INDUSTRIAL, COMMERCIAL & RURAL BUILDINGS TO STANDAROS & REQUIREMENTS DECMINED BY DANBIELD
- THESEDRAWINGS WILL BE READ IN CONJUNCTION WITHALL ARCHITECHTURAL & OTHER CONSULTANTS DRAWINGS & SPECIFICATIONS & WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURINGTHE COURSE OF THECONTRACT
- ANY DISCREPANCY SHALL BEREFERED TOTHE ENGINEER BEFORE PROCEEDING WITH WORK.
- ALL MATERIALS & WORKMANSHIP SHALL BE IN ACCORDANCE WITHRELEVANT & CURRENT SAA CODES & WITH BY-LAWS & ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES EXCEPT WHEREVARIED BY THE PROJECT SPECIFICATION
- . ALL DIMENSIONS SHOWN SHOULD BE VERIELED BY THE BUILDING ON SITE ENGINEERS DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS.
- DURINGCONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION A NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING. SHALL BE PROVIDED BY THE BUILDERTOKEEPTHE WORKS & EXCAVATIONS STARLE AT ALL TIMES
- A UNITESS NOTED OTHERWISE ALL LEVELS ARE IN METRES & ALL DIMENSIONS. ARE IN WILLIMETRES
- . THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT SAA CODES & NORMAL ENGINEERING PRACTICE.
- . ARCHITECTURAL ELEMENTS 10 HAVE A MINIMUMOF 20mm CLEARANCE OF
- THE STRUCTURE & ARETO BE ARTICULATED.

 IT IS COMMON SENSETO WORK SAFELY AND TO PROTECTY OURSELF AND OTHERS FROM ACCIDINATION SITE, TO DOTHIS, YOU MUST ENSURE YOU HAVE IN PLACE SAFE WORK PRACTICES AND APPROPRIATE EQUIPMENT. SAFETY INVOLVES PERSONAL PROTECTION OF EVES, 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 FAMILYAREE YOURSELF WITH APPLICABLE LAWS, REGULATIONS, RULES, GUIDELINES CODES OF PRACTICE AND STANDARDS AND THAT YOU ADHERE STRICTLY TO

STRUCTURAL STEEL SPECIFICATION

- ALL STRUCTURAL STEELWORK TO BE CARRIED OUT INACCORDANCE WITH THE LATESTED OTTONS OF THE FOLLOWING SAA CODES & SPECIFICATIONS. AS4100 STEEL STRUCTI/RES CODE AS/NZS 4600 COLD FORMED STEEL STRUCTURES COOF. AS 1511 HIGH STRENGTH STRUCTURAL BOLTING. AS 1111 COMMERCIAL BOLTS & SCREWS AS 2897 EARLISTRUCTURES (WHERE APPLICABLE)
- PROPRIETARY PRODUCTS ARE TO BE IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURERS INSTRUCTIONS.

HIGH STRENGTH BOLTS

- CONNECTIONS WITH 8.8S BOLTS SPECIFIED ARE DESIGNED AS FRICTION YPE JOINTS & BOLTS, MUTS & WASHERS SHALL COMPLY WITH THE RELEVANT REQUIREMENTS OF AS1252.

 HIGH STRENGTH FRICTION GRIP BOLTS TO BE INSTALLED IN ACCORDANCE.
- WITH AS 1511 & TENSIONED BY AN APPROVED METHOD TO PRODUCE THE FOLLOWING SHANK TENSIONS. SHANK TENSION (kN)

BOI T SIZE

• FOR THIS DESIGN AN ACCEPTABLE TENSIONING METHOD IS SNUG TIGHT (POOGER SPANNER TIGHT) PLUS HALF A TURN.

COLD FORMED STEEL FRAMING

. ALL STRUCTURAL STEEL FRAMING TO BE MANUFACTURED FROM HOTDIP ZINC COATED STEEL CONFORMINGTO AS1397 U.N.O.

. MATERIAL GRADES SHALL BE AS FOLLOWS GRADE GSS0, 2350 1 O BMT

-GRADE G500, Z350 **1.2 BMT** GRADE G450. 2350

 PURUNIGIRI ARRANGEMENT - TOPHAT TYPE RATTENS TEK SCREWED DIRECTLYTO THE FRAME SECTIONS WITH FLY BRACES AS SPECIFIED

FRAME ASSEMBLY

- A CORRECT FRAME ASSEMBLY IS IMPORTANT TO ACHIEVE OPTIMALIM PERFORMANCE OF THE STRUCTURE
- . FULLY (ENSION BOLTS AT KNEE & APEX JOINTS AS SPECIFIED BEFORE STANDING FRAMES
- FULLY TENSION BOLTSAT BASE CONNECTIONS AS SPECIFIED IMMEDIATELY AFTER
- STANDING THE FRAME.

 ROOF & WALL BRACING PROVIDE STRUCTURAL STABILITY WHERE SPECIFIED & MUST BE INSTALLED BEFORE THE CLADDING.

ROOF & WALL CLADDING

- ROOF & WALL CLADDING TO BE INSTALLED IN ACCORDANCE WITHAS 1562 & THE MANUFACTURERS INSTRUCTIONS TO THE SAME WIND LOAD RATING AS THE BUILDING.
- THE ROOF & WALL CLADDING FORMS AN INTEGRAL PART OF THE STRUCTURE & SHALL NOT BE REMOVED WITHOUT THE APPROVAL OF A STRUCTURAL ENGINEER WHO ASSUMES FULL RESPONSIBILITY FOR THE DESIGN.

DOORS & WINDOWS

ALL DOORSAND WINDOWS SHALL HAVE THE SAME CYCLONIC WIND LOAD RATING AS THE REST OF THE BUILDING ENVELOPE, INCLUDING RESISTANCE TO FLYING DEBRIS AS SPECIFIED IN AS1 1702:2011 ANDASINZS 4505-2012.000RS AND WINDOWS SHALL BE CLOSED DURING STORMS, DOORS SHALL BE INSTALLED WITH WIND LOCKS IN CYCLONIC AREAS SUPPORTING DOCUMENTATION INCLUDING TEST REPORTS SHALL BE AVAILABLE FROM DOORS AND WINDOWS MANUFACTURERS TO CONFIRM LOAD RATING AND ENSURE COMPLANCE WITH ABOVE MENTIONED STANDARDS AND BCA. DOORS AREALSO REQUIRED. TO BE SUPPLIED WITH ASTICKERTHAT SHOWS A RANGE OF INFORMATION INCLUDING THE DESIGN PRESSURE OF THE DOOR ACCORDING TO ASM2S 4505-2012 REQUIREMENTS.

DESIGN LOADING

• THE STRUCTURAL COMPONENTS SHOWN ON THESE DRAWINGS HAVE BEEN DESIGNED FOR THE FOLLOWING LOAD CONDITIONS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS INCLUDINGAS AND 1170,2:2011

IMPORTANCE LEVEL	2	
AS 1170.2 REGION	A	
TERRAIN CATEGORY	2.5	
Ms	1.0	
Mt	1.0	
INTERNAL PRESSURE ON	-0.85 or +0.7 (OPEN)	
ROOF DEAD LOAD	SELF WEIGHT ONLY	
ROOF LIVE LOAD	0.25 kPa PLUS 1.4 kN	
FLOOR LIVE LOAD	LIGHT INDUSTRIAL SkPa	
SITECIASS	M (CLAY)	

CERTIFICATION

I CERTIFY THAT THE DESIGN OF THIS STEELFRAMED BUILDING IS STRUCTURALLY ADECIATE MEETS SERVICABILITY REQUIREMENTS AND COMPLIES WITH THE RELEVANT REGULATIONS WITH ALL AMENDMENTS CURRENT TO DATE. I RIRTHER CERTIFY THE PROPOSED STEEL FRAMED BUILDING WILL BE STRUCTURALLY ADEQUATE WHEN CONSTRUCTED TO GOOD BUILDING PRACTISES, IN ACCORDANCE TO RANBUR DASSEA(RLY GLEDE AND THESE DRAWINGS





Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS STEEL FRAME DIAGRAMS FNG1-422736 STEEL FRAME SCHEDULE ENG2-422736 FRAME CONNECTONS ENG3-422736 RC ELOOR & RORED PIER ENG4-422736 ISOLATED BORRO PIER ENGS-422736 RC FLOOR & INTEGRAL PADS ENG8-422736 RC SLAB DET'S, CONC. SPEC. & STIE NOTES ENG7-422736

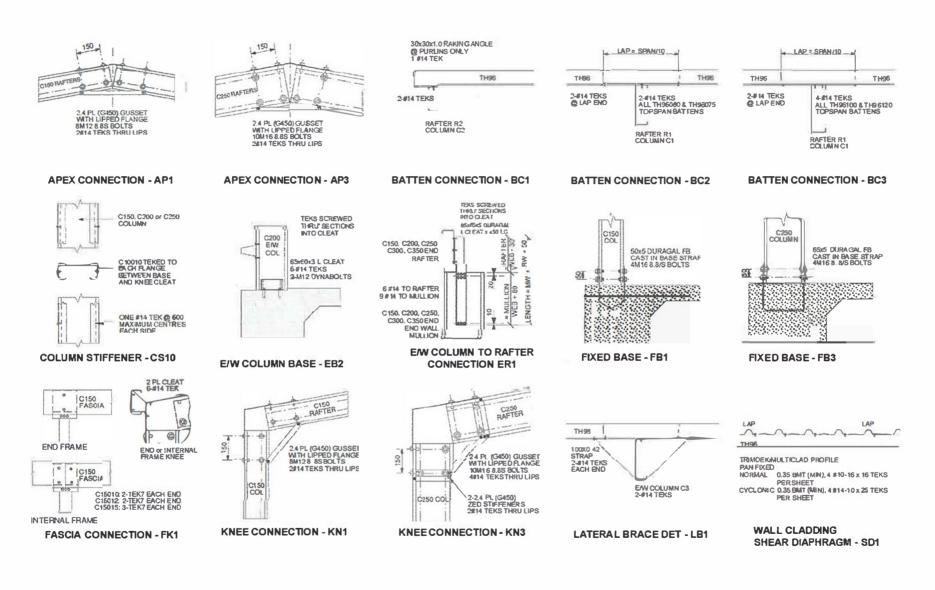
CLIENT BUILDING TYPE Russell Crook Big G SITE HILE **80 Bates Street MERREDIN WA 6415** NOES

BUILDING DIMENSION BOOK A TOWNER I SETTLE STEIL FRAME SCHEDULE AND

APPROVE 03-Mar-23

RDS

CPEng, NPER 129660 DRAWN REV DRAWING NUMBER FNG2H-422736





Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS FRAME CONNECTONS I SOLATED BORED PIER

STEEL FRAME CHAIRRAMS STEEL FRAME SCHEDULE RC FLOOR & BORED PIER RC FLOOR & INTEGRAL PAOS RC SLAB DET'S.CONC. SPEC. & SITE NOTES

ENG1-422736 ENG2-422736 ENG3-422736 ENG4-422736 ENG5-422736 ENG6-422738 ENG7-422736

CL ENT Russell Crook **80 Bates Street MERREDIN WA 6415**

BUILDING TYPE BUILDING DIMENSION 99003 x 4000E x 12240L TITLE CONNECTION DETAILS

APPROVED 03-Mar-23 CPERO NPI 1296608 DRAWN REV SCALE DRAWING NUMBER RDS A 1:28 ENG3/1-422736

LAP
TH96

CREST FIXED
MORAMAL 0 3S BMT (MIN) 4-\$12-14 x 45 TEXS
PER SHEET

CYCLONIC 0.42 BMT (MIN) 4-\$14-10 x 65 TEKS
PER SHEET

RAFTER R1
COLUMN C1
2914 TEKS

ROOF CLADDING SHEAR DIAPHRAGM - SD2

SECTION STABILISER DET - SS1



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS
STEEL FRAME DUGRAMS
STEEL FRAME SCHEDULE
FRAME CONNECTONS
RC FLOOR & BORED PIER
ISOLATED BORED PIER
RC FLOOR & MITEGRAL PADS
RC SLAD BOTTS.COMC. SPEC. & SITE NOTES

ENG1-422736 ENG2-422736 ENG3-422736 ENG4-422736 ENG6-422736 ENG6-422736 CLIENT
Russell Crook

SITE
80 Bates Street
MERREDIN WA 6415

BUILDING TYPE

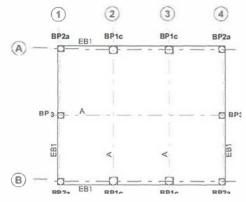
18UILDING UMENSION

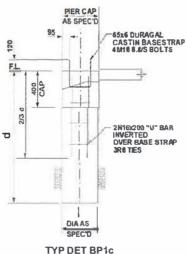
94605 x 4000E x 12240
Tim:

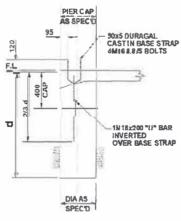
CONNECTION DETAILS

APPROVED 03-Mar-23

DRAWN REV SCALE DRAWING NUMBER
RDS A 1:20 ENG3/2-422735









TYP DET BP3

PIER CAP

AS SPECT

BORED PIERS WITH RC FLOOR

BORED PIERS CAST WITH RC FLOOR AND EDGE BEAM. AND ARE ECONOMICALLY SUITED FOR SHEDS ON CLAYEY GROUND, THE DESIGNS SHOWN ARE SUITABLE ONLY WITH THE CONCRETE FLOOR AND EDGE BEAMS, ANDARE NOT SUITABLE FOR ISOLATED PIERS WITH ANEARTH FLOOR OR SIMILAR.

- . PIERS TO BE TAKENTHROUGH ANY FILL MATERIAL AND FOUNDED IN STIFF CLAY WITH A MINIMUM SAFE BEARING CAPACITY OF 100 kPa AND A SHAFT ADHESION OF 20 kPa,
- . PROVIDE REINFORCEMENT AS SPECIFIED AND LOCATE COLUMN BASE CONNECTORS ACCURATELY AS SHOWN.

REFERENCE

SEE SLAB DETAIL DRAWING FOR-

- . SITE FOUNDATION CLASSIFICATION NOTES
- . MINIMUM SITE PREPARATION NOTES
- CONCRETE SPECIFICATION NOTES
- CONCRETE REINFORCEMENT NOTES
- . SLAB ON GRADE NOTES
- . DETAIL STEB1 SLAB EDGE TYPE 1
- DETAIL St/EB2 SLAB EDGE TYPE 2
- DETAIL S 1/A
 DETAIL S 1/C
 SLAB CONTROL JOINT
 SLAB CONSTRUCTION JOINT



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS STEEL FRAME DIAGRAMS STEEL FRAME SCHEDIJLE FRAME CONNECTONS RC FLOOR & SORED PIER ISOLATED BORED PIER RC R.OOR & INTEGRAL PADS RC SLAB DE PS.CONC SPEC & SITE NOTES

ENG1 422736 ENG2-472736 ENG3-422738 ENG4-422736 ENGS-422738 ENGS-422736

TYP DET BP2a

CLIENT Russell Crook 80 Bates Street **MERREDIN WA 6415** BUILDING TYPE BUILDING DIMENSION 9960S x 4000E x 12240m RDS A RC FLOOR PLAN & BORED PIER **DETAILS**

APPROVED 03-Mar-23 DRAWN REV

MICAUST, CPEng, NPER 1296608 SCALE DRAWING NUMBER 1:40, ENGA/1_422776 1:250

BORED PIER WITH RC FLOOR SCHEDULE

CENTRE LINE REFERENCE	FRAME REFERENCE(S)	LABEL	STRAP	PIER CAP (b x b)	DIA x DEPTH
A	1, 4	BP2a	SGBS15	450 x 450	300 x 600
A	2, 3	BP1c	SGBS25	450 x 450	300 x 750
AB	1, 4	BP3		450 x 450	300 x 600
В	1, 4	BP2a	SGBS15	450 x 450	300 x 600
В	2,3	BP1c	SGBS25	450 x 450	300 x 750



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS
STIEL FRAME DIAGRAMS
STEEL FRAME SCHEDULE
FRAME CONNECTORS
RC FLOOR & BORED PIER
ISOLATED BORED PIER
RC FLOOR & INTEGRAL PADS
RC SLAB DET'S.CONC. SPEC. & SITE NOTES

ENG 1-422736 ENG2-422736 ENG3-422736 ENG3-422736 ENG6-422736 ENG6-422736 ENG6-422736

Russell Crook
SITE
80 Bates Street
MERREDIN WA 6415

CLIENT

BUILDING TYPE
Rin G

BUILDING DIMENSION
9960S x 4000E x 12240L

TITLE
RC FLOOR PLAN & B ORED PIER

DETAIL

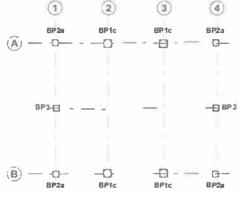
APPROVED 03-Mar-23

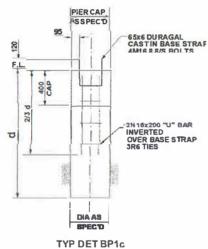
MICRUST, CPEng. NPER 1296608

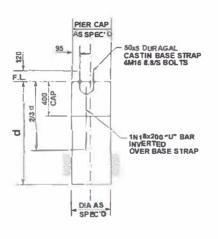
DIGAVIN REV SCALE DRAWING NUMBER

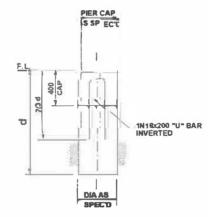
A 1:40, ENG4/2-422736

1:250









ISOLATED BORED PIERS

ISOLATED BORED PIERS ARE ECONOMICALLY SUITED FORSHEDS ON CLAYEY GROUND. THE DESIGNS SHOWN ARE SUITABLE FOR ISOLATED PIERS WITH AN EARTH FLOOR OR SIMILAR.

- . PIERS TO BE TAKEN THROUGH ANYFILL MATERIAL AND FOUNDED IN STIFF CLAY WITH A MINIMUM SAFE BEARING CAPACITY OF 100 kPa AND A SHAFT ADHESION OF 20 kPa.
- . PROVIDE REINFORCEMENT AS SPECIFIED AND LOCATE COLUMN BASE CONNECTORS ACCURATELY AS SHOWN.

REFERENCE

REFER TO THE FOLLOWING NOTES -

- SITE FOUNDATION CLASSIFICATION NOTES
 MINIMUM SITE PREPARATION NOTES
- CONCRETE SPECIFICATION NOTES
- CONCRETE REINFORCEMENT NOTES

TYP DET BP3



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS STEEL FRAME DIAGRAMS STEEL FRAME SCHEDULE FRAME CONNECTONS RC FLOOR & BORED PIER ISOLATED BORED PIER RC FLOOR & INTEGRAL PADS RC SLAB DE 1'S.CONC. SPEC. & SITE NOTES

ENG1-422736 ENG2-422736 ENG3-4Z2736 ENG4-422736 ENGS-422736

TYP DET BP2a

CLIENT Russell Crook SITE 80 Bates Street **MERREDIN WA 6415** BUILDING TYPE Bia G **BUILDING DIMENSION** 9960S x 4000E x 12240L RDS ISOLATED BORED PIER DETAILS

APPROVED 03-Mar-23 DRAWN REV

MIEAust, CPEng, NPER 1296608 SCALE DRAWING NUMBER 1:40, ENG5/1-422736

1;250

ISOLATED BORED PIER SCHEDULE

CENTRE LINE REFERENCE	FRAME REFERENCE(S)	LABEL	STRAP	PIER CAP (b x b)	DIA x DEPTH
A	1, 4	BP2a	SGBS15	450 x 450	300 x 750
A	2, 3	BP1c	SGBS25	450 x 450	300 x 1200
AB	1, 4	BP3		450 x 450	300 x 600
В	1, 4	BP2a	SGBS15	450 x 450	300 x 750
В	2,3	BP1c	SGBS25	450 x 450	300 x 1200



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS

CLIENT SITE

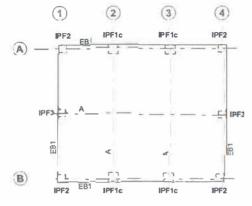
Russell Crook 80 Bates Street **MERREDIN WA 6415**

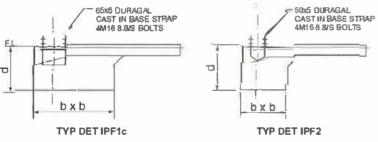
BUILDING TYPE Big G BUILDING MENSION 99605 4000E x 12240L ISOLATED BORED PIER DETAILS

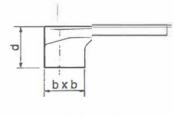
APPROVED 03-Mar-23

RDS

SCALE DRAWING NUMBER 1:40, ENGS/2-422736 DRAWN REV 1:40, 1:250







TYP DET IPF3

INTEGRAL PAD FOOTINGS

MASS CONCRETE FOOTINGS CAST INTEGRAL WITH FLOOR & EDGE BEAM ARE ECONOMICALLY SUITED FOR SHEDS ON SANDY GROUND.

- THIS DESIGN MAY ALSO BE USED FOR CLAYEY SOIL OR WHERE ROCK IS ENCOUNTERED.
- . ALL PAD FOOTINGS TO BE FOUNDED IN NATURAL GROUND WITH A SAFE BEARING CAPACITY OF 100 kPa AT DEPTH INDICATED.

THE DEPTH "d" MAY BE REDUCED TO A MINIMUM OF 400mm PROVIDED THAT "b" DIMENSIONS ARE AJUSTED TO MAINTAIN THE SAME VOLUME OF CONCRETE.

REFERENCE

SEE SLAB DETAIL DRAWING FOR:-

- . MINIMUM SITE PREPARATION NOTES
- . MINIMUM SITE PREPARATION NOTES
- CONCRETE SPECIFICATION NOTES
 CONCRETE REINFORCEMENT NOTES
- . SLAB ON GRADE NOTES
- DETAIL SIVEB 1 SLAB EDGE TYPE 1
- DETAIL SIVEB2 SLAB EDGETYPE 2
- DETAIL ST/A SLAB CONTROL JOINT
- DETAIL S VC SLAB CONSTRUCTION JOINT



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

REFERENCE DRAWINGS STEEL FRAME DIAGRAMS STEEL FRAME SCHEDULE FRAME CONNECTONS RC FLOOR & BORED PIER ISOLATED BORED PIER RC FLOOR & INTEGRAL PADS RC SLAB DET'S.CONC. SPEC. & SITE NOTES

ENG1-422736 ENG2-422738 ENG3-422736 ENG4-422736 ENG5-422736 CLIENT Russell Crook **80 Bates Street**

MERREDIN WA 6415

BUILDING TYPE BUILDING DIMENSION 9960S x 4000E x 12240L RC FLOOR PLAN & INTEGRAL

PAD FOOTING DETAILS

APPROVED 03-Mar-23

DRAWN REV SCALE DRAWING NUMBER RDS A 1:40, ENG6/1-422736 1:250

INTEGRAL PAD FOOTING SCHEDULE

CENTRE LINE REFERENCE	FRAME REFERENCE(S)	LABEL	STRAP	dxbxb
A	1, 4	IPF2	SGBS15	400 x 400 x 400
A	2, 3	IPF1c	SGBS25	300 x 450 x 450
AB	1, 4	IPF3		300 x 400 x 400
В	1, 4	IPF2	SGBS15	400 x 400 x 400
В	2.3	IPF1c	SGBS25	300 x 450 x 450



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

 CLIENT Russell Crook

SITE 80 Bates Street MERREDIN WA 6415 BUILDING TYPE

BUILDING DIMENSION

960S × 4000E × 12240L

TITLE

DRAWN REV

APPROVEI 03-Mar-23

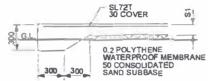
MIRAUSI, CPEOQ, NPER 129660

SCALE DRAWING NUMBER
1:40, ENG6/2-422736

es Street RC FLOOR PLAN & INTEGRAL EDIN WA 6415 PAD FOOTING DETAILS



DET S1/EB1 NOT SUITABLE AT OPENINGS SUBJECT TO VEHICLE TRAFFIC



DET S1/EB2 REQUIRED AT OPENINGS SUBJECT TO VEHICLE TRAFFIC



DET S1/A CONTROL JOINT



DET S1/C **CONSTRUCTION JOINT**

SLAB THICKNESS (S1) = 120mm

PROVIDE CONSTRUCTION JOINTS SO THAT THE MAXIMUMUNBROKEN RUNOF CONCRETE IS 20m IN EITHER DIRECTION

SITE FOUNDATION CLASSIFICATION

TWO COMMON FOUNDATION CONDITIONS & SITE CLASSIFICATIONS IN ACCORDANCE WITH AS2870 ARE USED FOR THE STANDARDISED FOOTING DESIGNS AS FOLLOWS:-

- . STIFF CLAY CONFORMING TO AS2870 CLASS M. MINIMUM SAFE BEARING CAPACITY - 100 kPa. SHAFT ADHESION - 20 kPa
- DENSE SAND CONFORMING TO AS2870 CLASS A/S. MINIMUM SAFE BEARING CAPACITY - 100 kPa.
- · A SITE SPECIFIC GEOTECHNICAL INVESTIGATION IS RECOMMENDED & IF CONDITIONSOTHER THAN ASSUMED ARE ENCOUNTERED A DIFFERENT FOOTING DESIGN MAY BE REQUIRED & SHOULD BE REFERED TO A QUALIFIED LOCAL ENGINEER
- . ALL FOOTINGS TO BE FOUNDED IN NATURAL GROUND.
- . NO FOOTING TO BE FOUNDED ON FILL MATERIAL.
- REFERENCESHOULD BE MADE TO CSIRO PUBLICATION 10.91. GUIDE TO HOME OWNERS ON FOUNDATION MAINTENANCE & FOOTING PERFORMANCE

MINIMUM SITE PREPARATION

- . STRIP SITE OF ALL TOP SOIL & DISCARD TO SPOIL. THE EXPOSED SURFACE TO BE PROOF ROLLED & AREAS REMAINING SOFT OR SPONGY ARE TO BE EXCAVATED TO SPOIL
- · PLACE APPROVED GRANULAR FILL MATERIAL TO THE REQUIRED BUILDING PLATFORM LEVEL IN LAYERS NOT EXCEEDING 200mm AND COMPACT BY ROLLING WITH SUITABLE EQUIPMENT TO ACHIEVEA DRY DENSITY RATIO OF 98% STANDARD COMPACTION TO AS1289 - E1.1 AT OPTIMUM MOISTURE CONTENT, THE TOP 200mm TO BE COMPACTED TO 100% STANDARD DRY DENSITY.
- . THE COMPACTION OF ALL FILL MATERIAL TO BE INSPECTED AND APPROVED BY ARESPONSIBLEGEOTECHNICAL CONSULTANT.

CONCRETE REINFORCEMENT

- REINFORCEMENT IS REPRESENTED DIAGRAMATICALLY & NOT NECESSARILY IN TRUE PROJECTION.
- REINFORCEMENT NOTATION:-
- N DENOTES HOT ROLLED DEFORMED BAR.
- DENOTES HARD DRAWN WELDED WIRE FABRIC. THE NUMBER IMMEDIATELY FOLLOWING BAR NOTATION IS THE NOMINAL DIAMETER IN mm.
- PROVIDE BAR SUPPORTS OR SPACERS TO GIVE THE FOLLOWING. COVER TO ALL RIENFORCEMENT UNLESS NOTED OTHERWISE.

80 BOTTOM, 65 TOP & SIDES 30 BOTTOM, 20 TOP 40 BOTTOM & SIDES TO STIRRUPS, TOP COVER AS BEAMS DETAILED

 PROVIDE 2N12DIAGONAL CORNER BARS 900 LONG AT ALL RE-ENTRANT CORNERS OF OPENINGS IN SLABS AND THESE BARS TO BE POSITIONED 30mm FROM THE CORNER.

CONCRETE SPECIFICATION

- · CARRY OUT ALL WORK IN ACCORDANCE WITH THE CURRENT ISSUE OF AS3600 & THE SPECIFICATION.
- · CONCRETE SIZES SHOWN DO NOT INCLUDE FINISH & MUST NOT BE REDUCED OR HOLED IN ANY WAY WITHOUT THE ENGINEERS APPROVAL, DEPTH OF BEAMS INCLUDE SLAB THICKNESS.
- SLABS & BEAMS ARE TOBE POURED TOGETHER.
- · CONSOLIDATE BY VIRRATION
- SLAB CONCRETE TO BEAS SHOWN IN SLAB ON GRADE CRITERIA
- · BORED PIER CONCRETE SHALL HAVE F'c = 25 MPa. MAXIMUM AGGREGATE SIZE = 20 mm, SLUMP = 100 mm, EXCEPT FOR BCA CLASSES 2 TO 9 BUILDINGS CONCRETE SHALLHAVE F'c = 32MPa.

SLABS ON GRADE

- SLABS TO BE PLACED OVER 25 CONSOLIDATED SAND OVER PREPARED SUBGRADE.
- PROVIDED, 2POLYTHENE FORTICONWATERPROOFMEMBRANE LINDER ALL SLARS WITH LAPPED & TAPED JOINTS
- PLACE PUMPMIX CONCRETE AS SPECIFIED BELOW TO ACCURATE LEVELS AS PER ARCHITECTS SPECIFICATION.
- · PROVIDE CONTROL JOINTS AS INDICATED BY NEATLY SAW CUTTING 40x 6 GROOVES WITHIN 12 HOURS OF THE FINAL FLOAT OF THE CONCRETE.
- CURE SLAB FOR 7 DAYS AFTER PLACEMENT BY MAINTAINING A CONTINUOUSLY WET SURFACE BY APPROVED METHODS. FLOODING & COVERING WITH POLYTHENE IMMEDIATLY AFTER FINISHING IS AN APPROVEDMETHOD.
- SEALING OF JOINTS TO BE CARRIED OUT ONE MONTH MINIMUM. AFTER CURING IS COMPLETE.
- PROVIDE PROPER STORMWATER DRAINAGE AWAY FROM THE BUILDING.

CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (MPa	25
FLEXURAL STRENGHT AT 90 DAYS (MPa)	5
SLUMP (mm)	100
AGGREGATE MAXIMUM SIZE (MM)	20
CEMENT TYPE	SL
CEMENT CONTENT (kg/cubic metre) MIN	320
FLY ASH CONTENT (kg/cubic metre) MAX	70
WATER / CEMENT RATIO (MAX)	0.45
MICROSTRAIN AT 56 DAYS	600
FLOOR FINISH - BURNISHED STEEL TROWEL -	NON SLIF
FLOOR TOLERANCE	CLASS B

 FOR OTHER LOAD CONDITIONS A DIEGRALATION IS REQUIRED & SHOULD BE REFERED TO A QUALIFIED LOCAL



Copyright 2023 Lysaght Building Solutions Pty Ltd trading as RANBUILD

STEEL FRAME DIAGRAMS STEEL FRAME SCHEDULE FRAME CONNECTONS RC FLOOR & BORED PIER ISOLATINO SORED PER

REFERENCE DRAWINGS RC FLOOR & INTEGRAL PADS RC SLAB DEST.CONC. S PE CITS SETTES

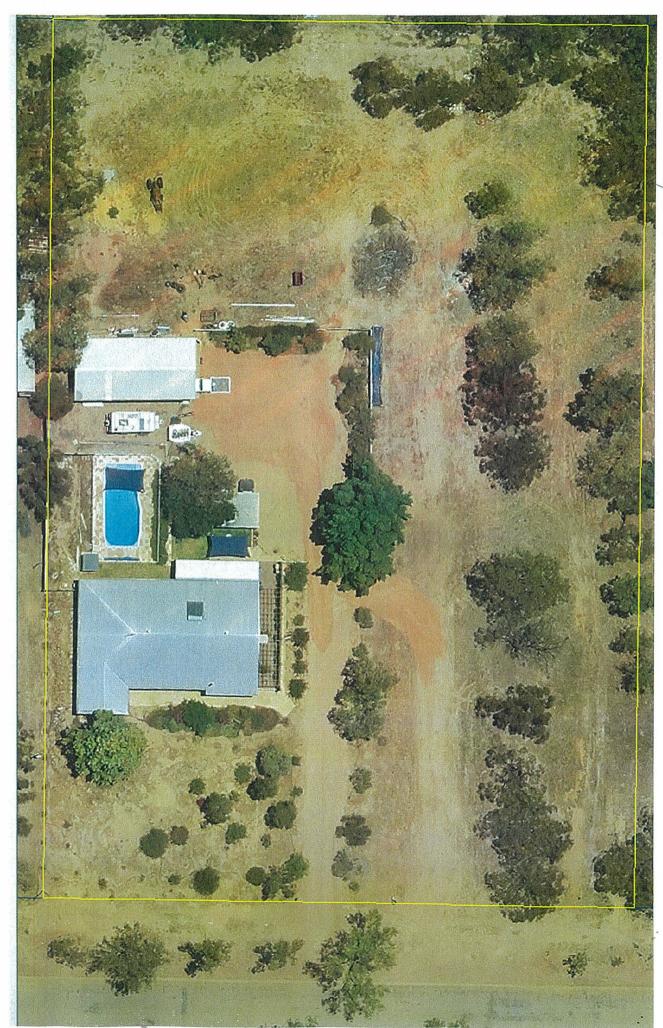
FNG1-422736 ENG2-422736 ENG3-422736 ENG-1-422735 ENG5-422736 FNG6-422736

CLIENT Russell Crook

80 Bates Street **MERREDIN WA 6415** BUILDING TYPE Big G. **BUILDING DIMENSION** 9960S x 4000E x 12240L TITLE RC SLAB PLAN

APPROVED 03-Mar-23

Ust. CPEng, NPER 12966C DRAWN REV 20,1 DRAWING NUMBER RDS 1:40 ENG7/1-422735



POLICY NUMBER

8.22

POLICY SUBJECT

8.22 Outbuildings in Residential Areas

ADOPTED

- 19 August 2003 (CMRef 27163)

AMENDED

- 17 July 2012 (CMRef 30919)

AMENDED

20 December 2016

Objectives:

To ensure a level of consistency with the size, the height and setbacks of outbuildings in residential areas, to minimise any adverse impact on the amenity to neighbouring property owners and to contribute towards the aesthetics of the streetscape.

Definitions:

Residential Areas:

Any Residential, Special Residential and Rural Residential zones.

Outbuilding:

Any Class 10a building under the current National Construction Code (BCA) which is not connected or abutted to a dwelling.

Reflective Materials:

Not limited to, but includes the following:

- Zincalume® or similar product;
- Any shiny metallic finish; and
- White coloured metallic

materials.

Maximum single outbuilding m²:

The maximum floor area of any single outbuilding measured from the external edges of the wall cladding or in the case of an unenclosed building where the external edges of the wall cladding would be if the structure was enclosed.

Aggregate total of all outbuildings m²:

The total floor area of all outbuildings located on the site and measured from the external edges of the wall cladding or in the case of an unenclosed building where the external edges of the wall cladding would be if the structure was enclosed.

Policy:

Outbuildings that satisfy the following development criteria may be approved by the Executive Manager of Development Services.

- a) Outbuildings which are enclosed are to be located behind the primary street setback in accordance with the Shire of Merredin Local Planning Scheme No 6 (as amended) and the State Planning Policy 3.1 Residential Design Codes;
- b) All enclosed outbuildings to have a minimum setback of 1500mm from any secondary street, right of way or private street frontage;
- c) Supports to an open carport, may be placed up to a boundary, other than a primary street, secondary street, right of way or private street provided they are of non-combustible material and the roof-line of the carport is setback a minimum of 500mm from that boundary in accordance with the National Construction Codes (BCA).
- d) Outbuildings comply with the current National Construction Code (BCA).
- e) An application that indicates that reflective materials are to be used for wall and or roof cladding and in the opinion of the Executive Manager of Development Services, is likely to cause a nuisance to neighbouring property owners may be refused.
- f) If in the opinion of the Executive Manager of Development Services, an application that indicates the use of reflective materials for wall and or roof cladding is likely to cause a nuisance to neighbouring property owners,
 - May be refused; or
 - The applicant may wish to provide clear and fully detailed documentation to show how any reflective issues will be addressed so as not to cause a nuisance to neighbouring property owners; or
 - In the opinion of the Executive Manager of Development Services, any reflective issues that may arise and to cause a nuisance to neighbouring property owners is likely to be minimal, the property owner/s may enter into an

agreement with Council, at the Chief Executive Officers discretion and at the property owner's expense, that should there be a valid complaint, that the owner/s will immediately do such things to minimize the nuisance, by, but not limited to painting or screening with Council's prior approval.

1

- g) Outbuildings are constructed of all new materials; or
- h) Where pre used materials are proposed to be used,
 - The applicant will be required to provide sufficient detail, specifications and photos to demonstrate to the Executive Manager of Development Services that the appearance of the proposed pre used materials will not detract from the streetscape; or
 - The applicant may need to provide detail of how they intend to treat the used materials so that the finish will meet an acceptable standard; and
 - The applicant may be required to provide Certification from a Practising Structural Engineer as to the structural adequacy of the design and or materials proposed to be used.
- i) Out buildings are not for habitable or commercial purposes;
- j) The construction of an outbuilding does not reduce the amount of open space required by the Residential Design Codes to less than the prescribed amount;
- k) Outbuildings are of size in area, or the aggregate total of size in area of all the outbuildings on the lot and the wall and ridge heights comply with the values contained in Policy Table 8.22 Outbuildings in Residential Areas.
- I) For minor variations the Executive Manager of Development Services may consider Code Variations in accordance with the Residential Design Codes of Western Australia (RDC) and view such applications on the proposed project's merits as detailed within the RDC.

Policy Table 8.22 Outbuildings in Residential Areas

LOT AREA (m²)	MAXIMUM SINGLE OUTBUILDING (m²)	AGGREGATE TOTAL OF ALL OUTBUILDINGS (m²)	MAXIMUM WALL HEIGHT	MAXIMUM RIDGE HEIGHT
500 – 749	46	62	2.4	3.6
750 999	73	97	3.0	3.6
1000 1249	94	125	3.0	3.6
1250 – 1699	117	156	3.0	3.9
1700 – 2049	130	202	3.0	3.9
2050 – 2999	143	262	3.3	4.2
3000 – 5000	157	375	3.6	4.5