Civil & Structural

1/38-42 Pease St, Caims | PO Box 927, Caims Q 4870 P: 07 40320492 | F: 07 40320092 | E: email@kfbeng.com.au

Our Ref:

K-6633-LTR-001

Your Ref:

RAL/19/0016

Date:

26/11/20

The Chief Executive Officer Mareeba Shire Council PO Box 154 MAREEBA QLD., 4880 By email: info@msc.qld.gov.au

Attention:

Brian Millard - Senior Planner

Dear Sir

Re:

G. Owen and C. Retter

Reconfiguring a Lot (1 Lot into 6 Lots and Access Easements and Environmental Covenants) in 5 Stages
Lot 2 on RP734383, 19 Kullaro Close, Kuranda

# APPLICATION FOR OPERATIONAL WORKS PERMIT

On behalf of G. Owen & C. Retter we are forwarding an Application for Operational Works Permit for a six (6) lot subdivision at 19 Kullaroo Close, Kuranda.

We have assessed the Application fee as \$2,280 made up as:

Base Fee \$1,500 + 6 lots x \$130 = \$2,280.

Yours faithfully

Euan Bruce RPEQ No. 00491



ABN 73 618 014 261

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# G OWEN & C RETTER

Reconfiguring a Lot (1 Lot into 6 Lots and Access Easements) in 5 stages

Lot 2 on RP734383

19 Kullaroo Close, Kuranda

# APPLICATION FOR OPERATIONAL WORKS PERMIT

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- 1.0 K-6633-LTR-001 Covering letter to Mareeba Shire Council
- 2.0 DA Form 1 Development application details
- 3.0 FNQROC Operational Works Receipting Checklist
- 4.0 FNQROC -Statement of Compliance Operational Works Design
- 5.0 RAL/19/0016, Mareeba Shire Council Decision Notice, 25 July 2019
- 6.0 Design Report
- 7.0 K-6633- Specification
- 8.0 Summary of Operational Works Costs (Estimate of Quantities & Rates)
- 9.0 Associated Drawings: K-6633 Sheets C01 to C10 (inclusive) and SK1; all Issue A

Date: 26 November 2020

# DA Form 1 – Development application details

Approved form (version 1.2 effective 7 February 2020) 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 only 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** (i.e. material change of use, operational work or reconfiguring a lot), 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.

ice on the	s form to include all the necessary information.	
	the U.S. Company of the Planning Act 2016 the Plan	pring Regulation 2017, or the Development

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)	G Owen and C Retter
Contact name (only applicable for companies)	
Postal address (P.O. Box or street address)	C/- KFB Engineers, PO Box 927
Suburb	:   Cairne
State State	Queensland
Postcode	4870
Country	Australia
Contact number	07 4032 0492
Email address (non-mandatory)	euan@kfbeng.com.au
Mobile number (non-mandatory)	0408 772 105
Fax number (non-mandatory)	07 4032 0492
Applicant's reference number(s) (if applicable)	K-4331

2) Owner's consent					
2.1) Is written consent of the owner required for this development application?		4.00		4= 5=	 
Yes – the written consent of the owner(s) is attached to this development application	n		187		
X No – proceed to 3)	84	:5.	<u> </u>	<u> </u>	 -3'-



# PART 2 – LOCATION DETAILS

Note: F	ation of the p Provide details b Guide: Relevant	elow and attach a	plete 3.1) or 3.2), and 3.3 a site plan for any or all p	3) as applicable) remises part of the developmen	t application. For further information, see <u>DA</u>					
3.1) S	3.1) Street address and lot on plan									
☐ Str	eet address	AND lot on pl	n (all lots must be listed), an for an adjoining o nd e.g. jetty, pontoon. Al	or adjacent property of the	e premises (appropriate for development in					
	Unit No.	Street No.	Suburb							
J.		19	Kullaroo Close		Kuranda					
a)	Postcode	Lot No.	Plan Type and Nu	mber (e.g. RP, SP)	Local Government Area(s)					
		2	RP 734383		Mareeba Shire Council					
	Unit No.	Street No.	Street Name and	Type	Suburb					
b)	Postcode	Lot No.	Plan Type and Nu	mber (e.g. RP, SP)	Local Government Area(s)					
Note: I	g, channel dred Place each set o	dging in Moreton of coordinates in a	Bay)		a lot or in water not adjoining or adjacent to land					
	tude(s)		ıde(s)	Datum	Local Government Area(s) (if applicable)					
				☐ WGS84 ☐ GDA94 ☐ Other:						
□ C	oordinates of	1 37 27 27	easting and northing	The second secon	The second secon					
Easti	ng(s)	Northing(s)	Zone Ref.	Datum  WGS84 GDA94 Other:	Local Government Area(s) (if applicable)					
□ A at X No	tached in a s t required	mises are rele schedule to thi	s development appl	ication	details of these premises have been					
☐ Ir Nam	or adjacent e of water bo	to a water boody, watercou	dy or watercourse o rse or aquifer:	mises and provide any re r in or above an aquifer	levant details					
	n strategic p	ort land under	r the <i>Transport Infra</i>	structure Act 1994						
Lot o	on plan descr	iption of strate	egic port land:							
Nam	ne of port aut	hority for the l	ot:	VA 170						
□ lı	n a tidal area		THE THE STATE OF T							
Nam	ne of local go	vernment for t	the tidal area (if applic	cable):						
			area (if applicable):	vii 44 1	<u> </u>					
	On airport lan	d under the A	irport Assets (Restr	ucturing and Disposal) Ac	t 2008					
Nam	ne of airport:		<u>ija ja j</u>	3, 3						

Listed on the Environmental Management Register (EMR) under the Environmental Protection Act	t 1994	-
EMR site identification:		
Listed on the Contaminated Land Register (CLR) under the Environmental Protection Act 1994	era eras Lati eras	4
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 how they may affect the proposed development, see <u>DA Forms Guide</u> .		
☐ Yes – All easement locations, types and dimensions are included in plans submitted with this deve <b>X</b> No	elopmen	t

# PART 3 - DEVELOPMENT DETAILS

Section 1 – Aspects of development

ection 1 – Aspects of de	sveiohiueiir		
6.1) Provide details about th	e first development aspect		
a) What is the type of develo	opment? (tick only one box)		
☐ Material change of use	☐ Reconfiguring a lot	X Operational work	Building work
b) What is the approval type	? (tick only one box)		
X Development permit	☐ Preliminary approval	☐ Preliminary approval t	that includes a variation approval
c) What is the level of asses	ssment?		
XCode assessment	☐ Impact assessment (req	uires public notification)	
lots):			nit dwelling, reconfiguration of 1 lot into 3
Operational work associate	ted with the subdivision of	one (1) lot into six (6) res	sidential lots
<u>Relevant plans.</u>			ther information, see <u>DA Forms quide:</u>
X Relevant plans of the prop	posed development are attac	hed to the development app	blication
6.2) Provide details about the	ne second development aspe	ct	
a) What is the type of devel	opment? (tick only one box)		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
☐ Material change of use	☐ Reconfiguring a lot	☐ Operational work	☐ Building work
b) What is the approval type	e? (tick only one box)		
☐ Development permit	☐ Preliminary approval	☐ Preliminary approval	that includes a variation approval
c) What is the level of asses	ssment?		- St
☐ Code assessment	☐ Impact assessment (req	uires public notification)	
d) Provide a brief description lots):	on of the proposal (e.g. 6 unit ap	artment building defined as multi-u	nit dwelling, reconfiguration of 1 lot into 3
Relevant plans.			her information, see <u>DA Forms Guide:</u>
Relevant plans of the pr	oposed development are atta	ached to the development ap	plication
6.3) Additional aspects of d			dea 2.2 2007 open Special
Additional aspects of de that would be required to X Not required	evelopment are relevant to thi under Part 3 Section 1 of this	s development application a form have been attached to	and the details for these aspects this development application

Section 2 - Further deve	elopment d	etails							
7) Does the proposed deve	lopment app	lication involve any	of the follo	wing?			and offi	7.44	1.0
Material change of use	☐ Yes	<ul> <li>complete division</li> </ul>	1 if assess	sable again	st a loca	l planning	g instrume	ent	1
	VVoc	complete division 2	Military sugar		47 .5			0.41	- 35

Material change of use	☐ Yes – complete division 1	if asses	ssable	against	a local	plann	ing ins	trumer	nt
Reconfiguring a lot	XYes – complete division 2	ever ugov Alik ugov				4			45 E
Operational work	X Yes – complete division 3		1850 601				33	AG -	
Building work	☐ Yes – complete DA Form	2 – Bui	lding v	vork det	ails	asi a	* (*) - (*)	11 14	

# 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) Desc				d mate	erial ch												N		5.00
Provide a general description of the proposed use					(incl	vide th ude eac	e plan h definit	ining tion in a	schen a new r	ne de ow)	finitio		lumbe nits <i>(i</i>		lwellin :able)	Ĭ (	Gross area (i (if appli	m²)	
<u> </u>	110		44	2647	<u> </u>	4 97	<u>श्रीक्षतिः </u>	1.6(-)	. 7%	27/3	1,716.5	75.							
																	_		
8.2) Does				in.	ملة ميراد	2 1100 0	foviati	na hui	ildinge	on t	ae pre	amise	s?	•					
1000	the p	ropo	sea u	se inve	oive uii	e use o	existi	ng bu	lullige	S OII II	ie pre			77.81	1000	- W.S.		1777	
☐ Yes	W.	28	1	377	- 4	14.1	10,94		146	46	42	26. 2000	1,5491	No.	- 100 E	- 14 750	<u>- 44</u>		<u>57.</u> 
☐ No	Terra Terra	** **	and the second	nap najeno	- 10-1-		- 163. - 164.	1.37	740 48 <sub>0</sub>	augi.		7.2.	45. <u>42.</u>	.buly.	14.		320		23

# Division 2 – Reconfiguring a lot

Mata:	This division is only required to b	e completed if any part of the	development application	involves reconfiguring a lot.
NOTE:	THIS DIVISION IS ONLY LEGANED TO D	e completed if any part of the	do to to princing apprica	0 0

lote: This division is only required to be completed if any part of ar								
9.1) What is the total number of existing lots making	up the premises?							
One (1)								
9.2) What is the nature of the lot reconfiguration? (tid	9.2) What is the nature of the lot reconfiguration? (tick all applicable boxes)							
X Subdivision (complete 10))	☐ Dividing land into parts by agreement (complete 11))							
☐ Boundary realignment (complete 12))	☐ Creating or changing an easement giving access to a lot from a constructed road (complete 13))							

10) Subdivision				
10.1) For this development, how	many lots are bein	g created and wha	nt is the intended use	of those lots:
Intended use of lots created	Residential	Commercial	Industrial	Other, please specify:
Number of lots created	Six (6)			
10.2) Will the subdivision be sta	ged?			- India
X Yes – provide additional detail ☐ No	ls below			
How many stages will the works	s include?	Maximum of fiv	ve (5) stages	
What stage(s) will this developm apply to?		All stages		

11) Dividing land into parts by ag parts?	reement – how mar	ny parts are being	created and w	hat is	
Intended use of parts created	Residential	Commercial	Industrial		Other, please specify:

Number of parts or  12) Boundary realig  12.1) What are the  Lot on plan descrip	gnment current and Current	National Artist - Art - Artis	s for each lo	t comprising	the premises?		
12.1) What are the	current and Current	lot	s for each lo	t comprising	the premises?		
12.1) What are the	current and Current	lot	s for each lo	t comprising	the premises?		
Lot on plan descrip	10 day 1 mars 16	V			p	,	
Lot on plan descrip	otion A	rea (m²)		10 10 10 10 10 10 10 10 10 10 10 10 10 1	. Pr	oposed lot	500 M
	1	irea (iii ) 🚌	er Huggere 1 euen	Lot on plan	description	Area (m²)	GUADA P
	20 mg m			184			
12.2) What is the re	eason for the	e boundary rea	lignment?				
					****	<u></u>	
13) What are the d	imensions a	nd nature of an	y existing ea	sements bei	ng changed a	nd/or any propo	sed easement?
(attach schedule if there	e are more than	two easements)			- System dyster	The second secon	
Existing or proposed?	Width (m)	Length (m)	pedestrian a	of the easeme ccess)	ent? (e.g.	Identify the I benefitted by	and/lol(s) y the easement
proposed: telesco	****	- states in	A - 12/2-27 1-	PART TANKS		t to send the con-	
14.1) What is the r X Road work X Drainage work XLandscaping	nature of the	)	rk? (Stormwater ( Earthworks ( Signage		<b>X</b> Sewage	nfrastructure e infrastructure g vegetation	
<b>X</b> Other – please s <sub>l</sub>	pecify:	Electrical 8	Telecomm	unications S	ervices		
14.2) Is the operat	ional work n	ecessary to fac	ilitate the cre	eation of new	lots? (e.g. suba	livision)	
XYes – specify nu	mber of new	lots: six (6)			10 M St. Vo., 15.		41 5 6
□ No	47 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
14.3) What is the r	monetary val	ue of the propo	sed operation	onal work? (in	clude GST, mate	rials and labour)	
\$110,578.00	- MACOUNT						

# PART 5 - REFERRAL DETAILS

17) Does this development application include any aspects that have any referral requirements? **Note**: A development application will require referral if prescribed by the Planning Regulation 2017.

X No, there are no referral requirements relevant application – proceed to Part 6	int to any de	evelopm	ent aspe	ects ident	tified in th	is develop	oment	7.75 2.43
Matters requiring referral to the Chief Executive	e of the Pl	anning	Act 201	6:	7 95			1571
☐ Clearing native vegetation								8 7
☐ Contaminated land (unexploded ordnance)					gW.			
☐ Environmentally relevant activities (ERA) (or	nly if the ERA	has not be	en devolv	ed to a loca	al governme	nt)		
☐ Fisheries – aquaculture					N.S.	****		
☐ Fisheries – declared fish habitat area								
Fisheries – marine plants								1
☐ Fisheries – waterway barrier works								
☐ Hazardous chemical facilities								
☐ Heritage places – Queensland heritage place	e (on or near	a Queen	sland herita	age place)				
☐ Infrastructure-related referrals – designated		u quoon		-30,7,	120			
☐ Infrastructure-related referrals — state transp		ucture						2.5
☐ Infrastructure-related referrals — State trans	nort corrido	r and fu	ture Stat	e transni	ort corrido	۱r		
☐ Infrastructure-related referrals – State traits	port corrido ollod transr	ort tunr	iale and	futura ets	ote-contro	lled trans	nort tuni	nels
☐ Infrastructure-related referrals – State-conti					ate-contro	ilica trario	port turn	1010
					e outeide	koala nrid	arity are:	26
☐ Koala habitat in SEQ region – interfering wi		oilat iri r	oala nat	Jilal alea	s outside	roala pric	Jilly ale	25
☐ Koala habitat in SEQ region – key resource				C1-1- I		corridor		a a
Ports – Brisbane core port land – near a Sta					transport	corridor		
Ports – Brisbane core port land – environme								
☐ Ports – Brisbane core port land – tidal work			al mana	gement o	district			
☐ Ports – Brisbane core port land – hazardou								
☐ Ports – Brisbane core port land – taking or i		vith wate	er					
☐ Ports – Brisbane core port land – referable	dams							
☐ Ports – Brisbane core port land – fisheries								
Ports – Land within Port of Brisbane's port I	imits (below	high-wate	r mark)					
☐ SEQ development area								
☐ SEQ regional landscape and rural production recreation activity							t and	
SEQ regional landscape and rural production	on area or S	SEQ rura	al living a	area – co	mmunity	activity		
SEQ regional landscape and rural production	on area or S	SEQ rura	al living a	area – inc	door recre	ation		
SEQ regional landscape and rural production	on area or S	SEQ rura	al living a	area – url	oan activi	ty		er Total
SEQ regional landscape and rural production								
☐ Tidal works or works in a coastal managem			· <del>-</del>					* **
Reconfiguring a lot in a coastal manageme	The Street Street	for a ca	anal		10 m			
Erosion prone area in a coastal manageme			119.745					
Urban design	in diotilot							
☐ Water-related development – taking or inter	foring with	water						
Water-related development – removing qua			uatoroauro	o or lake)				
■	1.5.15.1	i (ilolli a	valercours	e or jane)				
Water-related development – referable dan								
Water-related development –levees (categor	y 3 levees onl	y) :						
☐ Wetland protection area	applid 4	400	520 Av		100 May 2 g 1		24 (1 ************************************	<u></u>
Matters requiring referral to the local governm	nent:			***	2.4			
☐ Airport land						ANG.		
Environmentally relevant activities (ERA) (o	nly if the ERA	has been	devolved	to local gov	vemment)			
☐ Heritage places – Local heritage places					rebe.		45,4	
Matters requiring referral to the Chief Executi	ve of the d	istribut	ion entit	v or tran	smissio	n entity:	eder to	74
☐ Infrastructure-related referrals – Electricity								

Matters requiring referral to:	, and						
The Chief Executive of the holder of the licence							
• The holder of the licence, if the holder of the lice		ndividua	l				
☐ Infrastructure-related referrals – Oil and gas infrast	tructure	40	ds.	<u> </u>	1-5,1.	- 10 mg / 10 m	- 11
Matters requiring referral to the Brisbane City Counc	:il:	.00		1.35	*		
Ports – Brisbane core port land	2 To 10 To 1				1		
Matters requiring referral to the Minister responsible	for admini	stering	the Tra	nsport	Infrastr	ucture Ac	t 1994:
Ports – Brisbane core port land (where inconsistent with						far . H	
Ports – Strategic port land	발발 - 기계	.44			ere. Line		
Matters requiring referral to the relevant port operator	or if applica	nt is not	nort or	erator:	7-14	ting	75
Ports – Land within Port of Brisbane's port limits (b)	60.00.00		, po., -,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
编 (A)	200.0	-40.00	42651 848411	3 (3) 	1,345 2,450	1981	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Matters requiring referral to the Chief Executive of the		port au	thority				
Ports – Land within limits of another port (below high	-water mark)	1. 115 <u>1</u>		e equal eq	14,350		-5.7
Matters requiring referral to the Gold Coast Waterwa	ys Authorit	ty:	- Tente et a	:00,5		7974	
☐ Tidal works or work in a coastal management distr		11.1	s)			u.A. Mala	
		413874		region for		e. Detected VEL 180	- 10 0k. 
Matters requiring referral to the Queensland Fire and					-! horthall		
☐ Tidal works or work in a coastal management distr	TCT (involving a	а таппа (	more trial	1 SIX Vesse	ei beruis))	<u> </u>	-y 3 +
18) Has any referral agency provided a referral respon	nse for this	develop	ment a	plicatio	n?		
18) Has any referral agency provided a referral response Yes – referral response(s) received and listed belo				5 mg 5 5 c		tion	2 - 2
				5 mg 5 5 c		tion	
☐ Yes – referral response(s) received and listed belo☐ No	ow are attacl		nis deve	5 mg 5 5 c	t applica	tion of referral	respons
Yes - referral response(s) received and listed belo	ow are attacl	hed to th	nis deve	5 mg 5 5 c	t applica	<u> </u>	respons
☐ Yes – referral response(s) received and listed belo☐ No	ow are attacl	hed to th	nis deve	5 mg 5 5 c	t applica	<u> </u>	respons
☐ Yes – referral response(s) received and listed belo ☐ No Referral requirement	ow are attack	hed to th	nis deve	elopmen	t applica Date	of referral	
☐ Yes – referral response(s) received and listed belo ☐ No Referral requirement  Identify and describe any changes made to the propose	Refer	ned to the ral agen	nis deve	elopmen	Date	of referral	he
Yes – referral response(s) received and listed belouded No Referral requirement  Identify and describe any changes made to the proportion referral response and this development application , or	Refer	ned to the ral agen	nis deve	elopmen	Date	of referral	he
☐ Yes – referral response(s) received and listed belo ☐ No Referral requirement  Identify and describe any changes made to the propose	Refer	ned to the ral agen	nis deve	elopmen	Date	of referral	he
Yes – referral response(s) received and listed belo No Referral requirement  Identify and describe any changes made to the proporeferral response and this development application , or	Refer	ned to the	nis deve	elopmen	Date	of referral	he
☐ Yes – referral response(s) received and listed belo ☐ No  Referral requirement  Identify and describe any changes made to the proportion of the proportio	Refer	ned to the	nis deve	elopmen	Date	of referral	he
☐ Yes – referral response(s) received and listed belo ☐ No  Referral requirement  Identify and describe any changes made to the proportion of the proportio	Refer	ned to the	nis deve	elopmen	Date	of referral	he
☐ Yes – referral response(s) received and listed belo ☐ No  Referral requirement  Identify and describe any changes made to the proportion of the proportio	Refer	ned to the	nis deve	elopmen	Date	of referral	he
Yes – referral response(s) received and listed belo No Referral requirement  Identify and describe any changes made to the propore referral response and this development application, of (if applicable).  PART 6 – INFORMATION REQUEST	Refer Refer sed develop r include de	ned to the	nis deve	elopmen	Date	of referral	he
☐ Yes – referral response(s) received and listed belo ☐ No  Referral requirement  Identify and describe any changes made to the proporeferral response and this development application, of (if applicable).  PART 6 – INFORMATION REQUEST  19) Information request under Part 3 of the DA Rules	Refer Refer sed develop or include de	ral agen	nis deve ocy oplication a sched	on that w	Date Date vas the s	of referral	he
Yes – referral response(s) received and listed below No  Referral requirement  Identify and describe any changes made to the proportereral response and this development application, of (if applicable).  PART 6 – INFORMATION REQUEST  19) Information request under Part 3 of the DA Rules XI agree to receive an information request if determine	Refer Refer Resed developer include de	ral agen	nis deve	on that wolle to the	Date Date vas the s	of referral	he
☐ Yes - referral response(s) received and listed belo     ☐ No  Referral requirement  Identify and describe any changes made to the propore referral response and this development application , of (if applicable).  PART 6 - INFORMATION REQUEST  19) Information request under Part 3 of the DA Rules XI agree to receive an information request if determin     ☐ I do not agree to accept an information request for	Reference Refere	ral agen  pment apetails in  ry for th pment a	nis deve	on that wolle to the	Date Date vas the s	of referral	he
☐ Yes - referral response(s) received and listed beloged No  Referral requirement  Identify and describe any changes made to the propose referral response and this development application, of (if applicable).  PART 6 - INFORMATION REQUEST  19) Information request under Part 3 of the DA Rules XI agree to receive an information request if determin ☐ I do not agree to accept an information request I, the application of the proposed in the	Refer Refer sed develop r include de	ral agen  pment apetails in  ry for th pment a	pplication a schedule	on that wolle to the	Date  /as the sais development	of referral	he oplication
☐ Yes – referral response(s) received and listed belo ☐ No  Referral requirement  Identify and describe any changes made to the proporeferral response and this development application, of (if applicable).  PART 6 – INFORMATION REQUEST  19) Information request under Part 3 of the DA Rules XI agree to receive an information request if determin ☐ I do not agree to accept an information request for Note: By not agreeing to accept an information request I, the application will be assessed and decident.	Refer Refer  sed develop or include de  ded necessa or this develo cant, acknowle	ral agen  ment apetails in  ry for th  pment a  doge:	pplication provided	on that wolule to the comment on	Date Date  /as the sais development  applicat	of referral	he pplication
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# PART 7 - FURTHER DETAILS

20) Are there any associated development applications or current approvals? (e.g. a preliminary approval)

X Yes - provide details below or include details in a schedule to this development application

□No	TOTAL TO SERVE THE TOTAL TOTAL SERVE		
List of approval/development application references	Reference number	Date	Assessment manager
X Approval  Development application	RAL/19/0016	25 July 2019	Mareeba Shire Council
☐ Approval ☐ Development application	8		
21) Has the portable long serv	ice leave levy been paid? (c	only applicable to development application:	s involving building work or
No – I, the applicant will provide assessment manager decide give a development approvided to the control of th	le evidence that the portable les the development applicate al only if I provide evidence	to this development application e long service leave levy has beer ation. I acknowledge that the asse that the portable long service leaves than \$150,000 excluding GST)	ssment manager may
Amount paid	Date paid (dd/mm/yy)	QLeave levy number	er (A, B or E)
\$	***************************************		
23) Further legislative requirer			
Environmentally relevant ac			
23.1) Is this development appl Environmentally Relevant A	ication also taken to be an a ctivity (ERA) under section	application for an environmental a 115 of the <i>Environmental Protect</i>	uthority for an ion Act 1994?
Yes – the required attachm accompanies this developed	ent (form ESR/2015/1791)	for an application for an environm are provided in the table below	
X No Note: Application for an environmental requires an environmental authority to	al authority can be found by search o operate. See <u>www.business.gld.c</u>	ning "ESR/2015/1791" as a search term at gov.au for further information.	www.qld.gov.au. An ERA
Proposed ERA number:		Proposed ERA threshold:	
Proposed ERA name:			
☐ Multiple ERAs are applicate this development application	A STATE OF THE STA	ication and the details have been	attached in a schedule to
Hazardous chemical facilitie	28		
23.2) Is this development app			Amounts represent the control of the
☐ Yes – Form 69: Notification	or Transplace Transplace (Million	JOHN THE PROPERTY OF THE PROPE	
	n of a facility exceeding 10%	6 of schedule 15 threshold is attac	hed to this development
application X No	n of a facility exceeding 10%	6 of schedule 15 threshold is attac	hed to this development

Clearing native vegetation
23.3) Does this development application involve clearing native vegetation that requires written confirmation that
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 includes written confirmation from the chief executive of the <i>Vegetation</i>
Management Act 1999 (s22A determination)
X No Note: 1. Where a development application for operational work or material change of use requires a s22A determination and this is not included,
the development application is prohibited development.  2. See <a href="https://www.ald.gov.au/environment/land/vegetation/applying">https://www.ald.gov.au/environment/land/vegetation/applying</a> for further information on how to obtain a \$22A determination.
Environmental offsets
23.4) Is this development application taken to be a prescribed activity that may have a significant residual impact on a <b>prescribed environmental matter</b> under the <i>Environmental Offsets Act 2014?</i>
☐ 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
XNo Note: The environmental offset section of the Queensland Government's website can be accessed at <a href="https://www.qid.gov.au">www.qid.gov.au</a> for further information on
environmental offsets.
Koala habitat in SEQ Region
23.5) Does this development application involve a material change of use, reconfiguring a lot or operational work which is assessable development under Schedule 10, Part 10 of the Planning Regulation 2017?
Yes – the development application involves premises in the koala habitat area in the koala priority area
Yes – the development application involves premises in the koala habitat area outside the koala priority area
XNo XXI III III III III III III III III II
<b>Note</b> : If a koala habitat area determination has been obtained for this premises and is current over the land, it should be provided as part of this development application. See koala habitat area guidance materials at <a href="https://www.des.gld.gov.au">www.des.gld.gov.au</a> for further information.
Water resources
23.6) Does this development application involve taking or interfering with underground water through an
artesian or subartesian bore, taking or interfering with water in a watercourse, lake or spring, or taking
overland flow water under the <i>Water Act 2000</i> ?
Yes – the relevant template is completed and attached to this development application and I acknowledge that a relevant authorisation or licence under the <i>Water Act 2000</i> may be required prior to commencing development
X No. 1 Page 1 P
Note: Contact the Department of Natural Resources, Mines and Energy at <a href="www.dnrme.gld.gov.au">www.dnrme.gld.gov.au</a> for further information.
DA templates are available from https://planning.dsdmip.gld.gov.au/. If the development application involves:
<ul> <li>Taking or interfering with underground water through an artesian or subartesian bore: complete DA Form 1 Template 1</li> <li>Taking or interfering with water in a watercourse, lake or spring: complete DA Form1 Template 2</li> </ul>
Taking overland flow water: complete DA Form 1 Template 3.
Waterway barrier works
23.7) Does this application involve waterway barrier works?
☐ Yes – the relevant template is completed and attached to this development application
X No
DA templates are available from <a href="https://planning.dsdmip.qld.gov.au/">https://planning.dsdmip.qld.gov.au/</a> . For a development application involving waterway barrier works, complete DA Form 1 Template 4.
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
☐ Yes – an associated <i>resource</i> allocation authority is attached to this development application, if required under the <i>Fisheries Act 1994</i> XNo

Quarry materials from a watercourse or lake	
23.9) Does this development application involve the <b>removal of quarry materials from a watercourse or lake</b> under the <i>Water Act 2000?</i>	
Yes - I acknowledge that a quarry material allocation notice must be obtained prior to commencing development	ent
XNo Note: Contact the Department of Natural Resources, Mines and Energy at <a href="https://www.dnrme.ald.gov.au">www.dnrme.ald.gov.au</a> and <a href="https://www.business.ald.gov.au">www.business.ald.gov.au</a> for further information.	4
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. XNo	ent
Note: Contact the Department of Environment and Science at www.des.qld.gov.au for further information.	3
Referable dams	
23.11) Does this development application involve a <b>referable dam</b> required to be failure impact assessed under section 343 of the <i>Water Supply (Safety and Reliability) Act 2008</i> (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	
XNo Note: See guidance materials at <u>www.dnrme.gld.gov.au</u> 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 distric	t?
☐ Yes – the following is included with this development application:	
Evidence the proposal meets the code for assessable development that is prescribed tidal work (only require application involves prescribed tidal work)	ıired
A certificate of title	
XNo Note: See guidance materials at <u>www.des.gld.gov.au</u> for further information.	i j
Queensland and local heritage places	
23.13) Does this development application propose development on or adjoining a place entered in the Queensla heritage register or on a place entered in a local government's Local Heritage Register?	nd
☐ Yes – details of the heritage place are provided in the table below	
XNo The state of t	
Note: See guidance materials at <a href="https://www.des.gld.gov.au">www.des.gld.gov.au</a> for information requirements regarding development of Queensland heritage places.	
Name of the heritage place: Place ID:	
<u>Brothels</u>	
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 <i>Prostitution Regulation 2014</i>	
Decision under section 62 of the <i>Transport Infrastructure Act</i> 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 <i>Transport Infrastructure Act 1994</i> (subject to the conditions in section 75 of the <i>Transport Infrastructure Act 1994</i> being satisfied)	
XNo	-

### 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  Note: See the Planning Regulation 2017 for referral requirements	<b>X</b> Yes		
If building work is associated with the proposed development, Parts 4 to 6 of <u>DA Form 2 – Building work details</u> have been completed and attached to this development application	☐ Yes <b>X</b> Not app	licable	(***** 
Supporting information addressing any applicable assessment benchmarks is with the 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 <a href="DA">DA</a> Forms Guide: Planning Report Template.	XYes		24
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 <u>DA Forms Guide: Relevant plans.</u>	<b>X</b> Yes	# 1 E 4	a day.
The portable long service leave levy for QLeave has been paid, or will be paid before a development permit is issued (see 21)	Yes <b>X</b> Not app	licable	194 F

### 25) Applicant declaration

XBy making this development application, I declare that all information in this development application is true and correct

X 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 COMPLETION OF THE ASSESSMENT MANAGER - FOR OFFICE **USE ONLY** Reference number(s): Date received: 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 Note: For completion by assessment manager if applicable Description of the work QLeave project number Date paid (dd/mm/yy) Amount paid (\$) Date receipted form sighted by assessment manager Name of officer who sighted the form

# Operational Works Receipting Checklist (To be completed by Consulting engineer making the application)

Name of Council: MAREEBA SHIRE COUNCIL

Development Name and Location:

RECONFIGURING A LOT (1 LOT DUTO 6 LOTS & ACCESS EASEMBLIS) DV 5 STREES

Planning Permit No/Council File No: RAL | 19 | 0016

DESIGN SUBMISSION	CHECK	COMMENT
Completed 'Statement of Compliance' form.     (FNQROC - AP1 – Appendix A)	V	
2. IDAS Forms A ,E & IDAS Assessment Checklist (Available from <a href="https://www.ipa.qld.gov.au">www.ipa.qld.gov.au</a> )	<b>/</b>	DAFORMI - DEVELOPMENT AMPLICATION DETRILS
Payment of Engineering Application Fees     (Copy of receipt to be attached)	V	To be paid by client
Copy of Decision Notice for Development     Application Conditions, inc. explanation of how each condition is to be addressed (Statement of Compliance)	<b>✓</b>	
5. Engineering Design drawings - Complete sets (1 x A1 set, 2 x A3 sets and 1 x electronic copy on compact disc in 'PDF' format)	~	Engineering drawings submitted electronically
6. One copy of Design and Standard Specifications (Unbound Copy Preferable)	~	
7. Written consent from adjoining property owners authorising any works on their property	N.A.	
8. Water reticulation network in electronic format (Engineer to confirm system requirements and compatibility with Cairns Water)	N.A.	
9. Landscape drawings - Complete set (1 x A1 set, 2 x A3 sets and 1 x electronic copy on compact disc in 'PDF' format). These must be accompanied by elements of the stormwater & street ltg. layout design, to avoid conflicts.		Not required



# Operational Works Receipting Checklist (To be completed by Consulting engineer making the application)

DESIGN SUBMISSION	CHECK	COMMENT
Overall network drawings (for staged development) for:		
• Water		
Stormwater		
• Sewer		
Pathways and roads		Plans submitted
Street Lighting		Plans submitted  detail complete  development
Electrical		de velopment.
• Gas		
Public Transport		
Park Reserves		
Drainage Reserves		
11. Pavement design criteria	<b>V</b>	Pavement defilled on Dung K-6633 Sheet CO2
12. Geotechnical reports for proposed earthworks	N.A	
13. Structural and geotechnical certificates for retaining walls etc.	N.A.	
14. Water supply/sewerage pump station design parameters	N.A.	
15. Stormwater drainage calculations		
16. Erosion and Sediment Control Strategy (ESCS)	/	
17. Declared Pest Management Plan (if applicable)	N.A.	
18. The approval of any other Authorities & concurrence agencies likely to be affected by the works.	N.A.	



# Operational Works Receipting Checklist (To be completed by Consulting engineer making the application)

19. Contact details of the Consulting Engineer who is submitting the Application:

Name of Engineer	EWAN BRUCE
Name of Company	KFB ENGINEERS
Telephone Number (s)	Office: 07 4032 0492 Mobile: 0408 772/05
Email address	euan@kfbeng.com.au
RPEQ No.	00 491

20. Date of submission of application 26. / !!.. | 200 2020

(For further information on all of the above refer to the FNQROC Development Manual Section AP1)

# FNQROC DEVELOPMENT MANUAL

Council	Mareeba Shire Council
Council	(INSERT COUNCIL NAME)

# STATEMENT OF COMPLIANCE OPERATIONAL WORKS DESIGN

shall be sub	luly completed and signed by an authorised agent of the Designer omitted with the Operational Works Application for Council Approval.
Name of De	velopment 6 Lot Residential Subdivision of Lot 2 on RP734383
	Development 19 Kullaroo Close, Kuranda
	G Owen & C Retter
Applicant	1655 5
Designer	KFB Engineers
	O vications and related

It is hereby certified that the Calculations, Drawings, Specifications and related documents submitted herewith have been prepared, checked and amended in accordance with the requirements of the FNQROC Development Manual and that the completed works comply with the requirements therein, **except** as noted below.

Compliance with the requirements of the Operational Works Design Guidelines	Non-Compliance refer to non-compliance report / drawing number
Plan Presentation	
Geotechnical requirements	
Geometric Road Design	
Pavements	
Structures / Bridges	
Subsurface Drainage	
Stormwater Drainage	
Site Re-grading	
Erosion Control and Stormwater Management	
Pest Plant Management	
Cycleway / Pathways	

Landscaping	
Water Source and Disinfection/Treatment Infrastructure (if applicable)	
Water Reticulation, Pump Stations and water storages	
Sewer Reticulation and Pump Stations	
Electrical Reticulation and Street Lighting	
Public Transport	
Associated Documentation/ Specification	
Priced Schedule of Quantities	
Referral Agency Conditions	
Supporting Information (AP1.08)	
Other	

	ously believing the above statements to be	e true and correct, signed on
behalf of: Designer	KFB Engineers	RPEQ No
•	ull Euan Fraser Bruce	
	$\sim$	Date 26 Nov- 2020
Signature	Juan Brug	



25 July 2019

G Owen & C Retter C/- Brazier Motti PO Box 1185 CAIRNS QLD 4870

Dear Applicant/s

65 Rankin Street PO Box 154 MAREEBA QLD 4880

1300 308 461 07 4092 3323

W: www.msc.qld.gov.au info@msc.qld.gov.au

Planning Officer:

Carl Ewin

Direct Phone: Our Reference: 4086 4656 RAL/19/0016

Your Reference:

32136



25 JUL 2019

- nennon. id: No

31236-004-01

# **Decision Notice** Planning Act 2016

I refer to your application and advise that on 25 July 2019 under delegated authority, Council decided to approve the application in full subject to conditions.

Details of the decision are as follows:

#### **APPLICATION DETAILS**

Application No:

RAL/19/0016

Street Address:

19 Kullaroo Close, Kuranda

Real Property Description:

Lot 2 on RP734383

Planning Scheme:

Mareeba Shire Council Planning Scheme 2016

#### **DECISION DETAILS**

Type of Decision:

Approval

Type of Approval:

Development Permit for Reconfiguring a Lot - Subdivision (1 into 6

lots and access easements) in 3 stages

Date of Decision:

25 July 2019

## **CURRENCY PERIOD OF APPROVAL**

The currency period for this development approval is four (4) years starting the day that this development approval takes effect. (Refer to Section 85 "Lapsing of approval at end of currency period" of the Planning Act 2016.)

#### INFRASTRUCTURE

Where conditions relate to the provision of infrastructure, these are non-trunk infrastructure conditions unless specifically nominated as a "necessary infrastructure condition" for the provision of trunk infrastructure as defined under Chapter 4 of the Planning Act 2016.

## ASSESSMENT MANAGER CONDITIONS

# (A) ASSESSMENT MANAGER'S CONDITIONS (COUNCIL)

# (a) <u>Development assessable against the Planning Scheme</u>

- Development must be carried out generally in accordance with the approved plans and the facts and circumstances of the use as submitted with the application, subject to any alterations:
  - found necessary by Council's delegated officer at the time of examination of the engineering plans or during construction of the development because of particular engineering requirements; and
  - to ensure compliance with the following conditions of approval.

### 2. Timing of Effect

2.1 The conditions of the development permit must be complied with to the satisfaction of Council's delegated officer prior to the endorsement of the plan of survey for each stage, except where specified otherwise in these conditions of approval.

#### 3. General

- 3.1 The development approval would not have been issued if not for the conditions requiring the construction of infrastructure or the payment of infrastructure charges within the conditions of approval or the Adopted Infrastructure Charges Notice.
- 3.2 The applicant/developer is responsible for the cost of necessary alterations to existing public utility mains, services or installations required by works in relation to the proposed development or any works required by condition(s) of this approval.
- 3.3 All payments or bonds required to be made to the Council pursuant to any condition of this approval must be made prior the endorsement of the plan of survey and at the rate applicable at the time of payment.
- 3.4 The developer must relocate (in accordance with FNQROC standards) any services such as water, sewer, drainage, telecommunications and electricity that are not wholly located within the lots that are being created/serviced where required by the relevant authority, unless approved by Council's delegated officer.

- 3.5 Where utilities (such as sewers on non-standard alignments) traverse lots to service another lot, easements must be created in favour of Council for access and maintenance purposes. The developer is to pay all costs (including Council's legal expenses) to prepare and register the easement documents.
- 3.6 Where approved existing buildings and structures are to be retained, setbacks to any <u>new</u> property boundaries are to be in accordance with Planning Scheme requirements for the relevant structure and/or Queensland Development Code. A plan demonstrating compliance of any existing buildings or structures that are in close proximity to any new property boundary must be submitted prior to endorsement of the plan of survey.
- 3.7 All development works must be designed, constructed and carried out in accordance with FNQROC Development Manual requirements and to the satisfaction of Council's delegated officer.
- 3.8 A suitable kerbside mobile garbage bin placement/collection area is to be provided on Kullaroo Close to the satisfaction of Council's delegated officer.

#### 3.9 Environmental Covenant

The applicant shall be responsible for the preparation and registration of a statutory covenant/s with Council pursuant to S97A of the Land Title Act for the purposes of preserving native animals, plants and their habitat.

The covenant will be of a form that is acceptable to the Registrar of Titles and Council's delegated officer.

The covenant area shall comprise those parts of proposed lots identified as Cov A to D on the approved plans. The covenant area may strictly exclude any areas where vegetation clearing is necessary for stormwater retention purposes only, to the satisfaction of Council's delegated officer.

The covenant shall stipulate that the covenant area must be protected, preserved and conserved, including by strictly adhering to the following non-exhaustive conditions (which may be varied by written agreement between the parties):-

- (a) no existing living vegetation or hereafter existing in the covenant area, may be cut down, damaged or destroyed;
- (b) no buildings or fences may be erected in the covenant area;
- (c) no native animals within the covenant area shall be killed or interfered with;

(d) no other acts may be carried out on or in respect of the covenant area which, in the opinion of the Council, acting reasonably may have a detrimental impact on the covenant area;

Notwithstanding clause (a) to (d), if any living or dead vegetation on the covenant area poses a risk to human safety:-

 The vegetation may be cut down or trimmed with the prior written consent of the Council, not to be unreasonably withheld, so as to remove the risk;

Notwithstanding clause (a) to (e), if any native or indigenous animal on the covenant area poses a risk to human safety the native or indigenous animal may be removed with the prior written consent of the Council and any other approvals which might be required by law.

The covenant agreement shall be signed by the registered owner prior to Council endorsement of the survey plan for each stage containing any of the proposed covenant area, and the signed covenant shall be jointly lodged for registration with the survey plan, in the Department of Natural Resources, Mines and Energy.

The covenant document shall be to the satisfaction of Council's delegated officer, and the applicant shall be responsible for the cost of preparation and registration of the covenant.

#### 3.10 Charges

All outstanding rates, charges and expenses pertaining to the land are to be paid in full prior to the endorsement of a plan of survey.

4. Infrastructure Services and Standards

### 4.1 Access

- 4.1.1 An access crossover must be constructed or upgraded from the edge of the Kullaroo Close road pavement to the proposed access driveway in accordance with the FNQROC Development Manual, to the satisfaction of Council's delegated officer.
- 4.1.2 A bitumen, asphalt or concrete access driveway shall be constructed within the easement servicing Lots 3, 4, 5 and 6 for the respective stage of the development to the satisfaction of Council's delegated officer. The driveway will:
  - have a minimum formation width of:
    - 4 metres within Easement A (Stage 1); and
    - 3 metres within Easements C and D (Stage 3);
  - be constructed for the full length of the easement;

- be formed with one-way crossfall to cater for stormwater drainage such that any stormwater is contained within the easement;
- include service and utility conduits to be provided for the full length of the concrete or bitumen sealed driveway.
- 4.1.3 Prior to works commencing, plans for the works described above must be approved as part of a subsequent application for operational works.

#### 4.2 Access/Services/Drainage Easement

To provide for the shared access driveway mentioned in Condition 4.1, an easement/s must be established for the purposes of access, drainage, maintenance and servicing for Lots 3, 4, 5 and 6.

The registered easement/s must be maintained in perpetuity to ensure Lots 3, 4, 5 and 6 do no become land locked.

The approved easement documents must be submitted at the same time the applicant/developer seeks endorsement of the plan of survey for the respective stage of the development and must be lodged and registered in the Department of Natural Resources, Mines and Energy in conjunction with the plan of survey.

#### 4.3 Stormwater Drainage/Water Quality

- (a) The applicant/developer must take all necessary steps to ensure a nonworsening effect on surrounding land as a consequence of the development.
- (b) Prior to works commencing the applicant must submit a Stormwater Management Plan and Report prepared and certified by a suitably qualified design engineer (RPEQ) that meets or exceeds the standards of design and construction set out in the Queensland Urban Drainage Manual (QUDM) and the FNQROC Development Manual to the satisfaction of Council's delegated officer.

The Stormwater Management Plan and Report must include the design for the completed development and must also demonstrate how this stormwater infrastructure will be staged across the three (3) stages.

- (c) The Stormwater Quality Management Plan must include an Erosion and Sediment Control Plan that meets or exceeds the Soil Erosion and Sedimentation Control Guidelines (Institute of Engineers Australia) to the satisfaction of Council's delegated officer.
- (d) The applicant/developer must construct the stormwater drainage infrastructure in accordance with the approved Stormwater

- Management Plan and/or Stormwater Quality Management Plan and Report.
- (e) Temporary drainage is to be provided and maintained during the construction phase of the development, discharged to a lawful point and not onto the construction site.
- (f) All stormwater channels through private property must be registered, with the easement for drainage purposes in favour of Council. All documentation leading to the registration of the easement must be completed at no cost to Council.
- (g) All stormwater drainage from the site must be discharged to an approved legal point of discharge.

## 4.4 Water Supply

- (a) Where the existing reticulated water supply does not currently service the site or is not at an adequate capacity, the developer is required to extend or upgrade the reticulated water supply infrastructure to connect the site to Council's existing infrastructure at a point that has sufficient capacity to service the development in accordance with FNQROC Development Manual standards (as amended).
- (b) A water service connection must be provided to each proposed allotment in accordance with FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer.
- (c) Fire hydrants are to be located in accessways or private roads at a maximum spacing of 120 metres; and at all intersections of accessways or private roads.

#### 4.5 Sewerage Connection

- 4.5.1 The developer must provide a connection for each proposed allotment to Council's reticulated sewerage system in accordance with FNQROC Development Manual standards (as amended) to the satisfaction of Council's delegated officer.
- 4.5.2 Where sewerage connections are not available to the site, or where existing connections are not satisfactory for the proposed development, the developer is required to extend or upgrade the reticulated sewerage infrastructure to connect the site to Council's existing infrastructure at a point that has sufficient capacity to service the development in accordance with FNQROC Development Manual standards (as amended).

### 4.6 Electricity Provision/Supply

The applicant/developer must ensure that an appropriate level of electricity supply is provided to each allotment in accordance with FNQROC Development Manual standards (as amended), to the satisfaction of Council's delegated officer.

Written advice from an Electricity Service Provider is to be provided to Council indicating that an agreement has been made for the provision of power reticulation to each lot.

#### 4.7 Telecommunications

The applicant/developer must demonstrate that a connection to the national broadband network is available for each allotment, or alternatively, enter into an agreement with a telecommunication carrier to provide telecommunication services to each lot and arrange provision of necessary conduits and enveloping pipes.

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#### REFERRAL AGENCIES

Not Applicable.

#### **APPROVED PLANS**

The following plans are Approved plans for the development:

Plan/Document Number	Plan/Document Title	Prepared by	Dated
31236/003B	Proposed Reconfiguration (Stage 1)	Brazier Motti	28 June 2019
31236/004B	Proposed Reconfiguration (Stage 2)	Brazier Motti	28 June 2019
31236/005A	Proposed Reconfiguration (Stage 3)	Brazier Motti	28 June 2019

#### ADVISORY NOTES

The following notes are included for guidance and information purposes only and do not form part of the assessment manager conditions:

#### (A) ASSESSMENT MANAGER'S ADVICE

- (a) An Adopted Infrastructure Charges Notice has been issued with respect to the approved development. The Adopted Infrastructure Charges Notice details the type of infrastructure charge/s, the amount of the charge/s and when the charge/s are payable.
- (b) The Adopted Infrastructure Charges Notice does not include all charges or payments that are payable with respect to the approved development. A number of

other charges or payments may be payable as conditions of approval. The applicable fee is set out in Council's Fees & Charges Schedule for each respective financial year.

#### (c) Easement Documents

Council has developed standard easement documentation to assist in the drafting of formal easement documents for Council easements. Please contact the Planning Section for more information regarding the drafting of easement documents for Council easements.

#### (d) Endorsement Fees

Council charges a fee for the endorsement of a Survey Plan, Community Management Statements, easement documents, and covenants. The fee is set out in Council's Fees & Charges Schedule applicable for each respective financial year.

#### (e) Compliance with applicable codes/policies

The development must be carried out to ensure compliance with the provisions of Council's Local Laws, Planning Scheme Policies, Planning Scheme and Planning Scheme Codes to the extent they have not been varied by a condition of this approval.

#### (f) Notation on Rates Record

A notation will be placed on Council's Rate record with respect to each lot regarding the following conditions:

- a registered covenant
- a registered easement over the subject site

#### (g) Environmental Protection and Biodiversity Conservation Act 1999

The applicant is advised that referral may be required under the *Environmental Protection and Biodiversity Conservation Act 1999* if the proposed activities are likely to have a significant impact on a matter of national environmental significance. Further information on these matters can be obtained from www.environment.gov.au.

#### (h) Cultural Heritage

In carrying out the activity the applicant must take all reasonable and practicable measures to ensure that no harm is done to Aboriginal cultural heritage (the "cultural heritage duty of care"). The applicant will comply with the cultural heritage duty of care if the applicant acts in accordance with gazetted cultural heritage duty of care guidelines. An assessment of the proposed activity against the duty of care guidelines will determine whether or to what extent Aboriginal cultural heritage may be harmed by the activity. Further information on cultural heritage,

together with a copy of the duty of care guidelines and cultural heritage search forms, may be obtained from www.datsip.qld.gov.au.

### PROPERTY NOTES

Not Applicable.

#### FURTHER DEVELOPMENT PERMITS REQUIRED

Development Permit for Operational Work

#### SUBMISSIONS

Not Applicable.

#### **RIGHTS OF APPEAL**

You are entitled to appeal against this decision. A copy of the relevant appeal provisions from the *Planning Act 2016* is attached.

During the appeal period, you as the applicant may suspend your appeal period and make written representations to council about the conditions contained within the development approval. If council agrees or agrees in part with the representations, a "negotiated decision notice" will be issued. Only one "negotiated decision notice" may be given. Taking this step will defer your appeal period, which will commence again from the start the day after you receive a "negotiated decision notice".

## OTHER DETAILS

If you wish to obtain more information about Council's decision, electronic copies are available on line at www.msc.qld.gov.au, or at Council Offices.

Yours faithfully

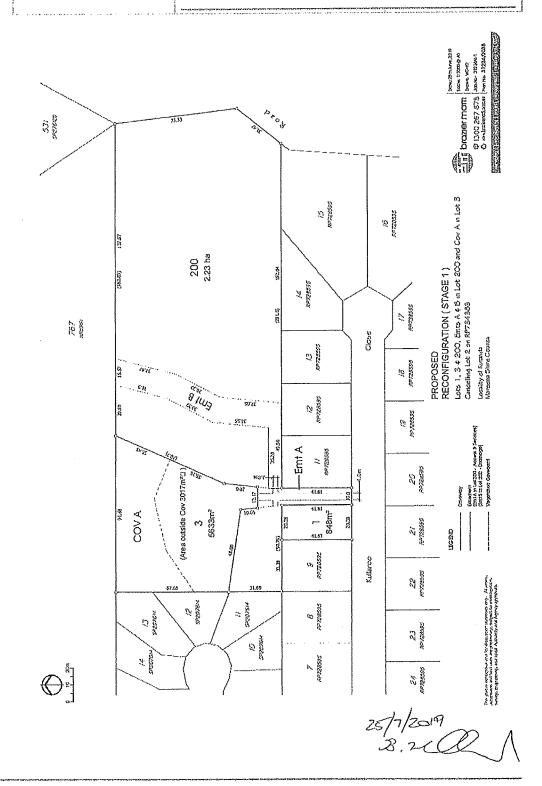
BRIAN MILLARD SENIOR PLANNER

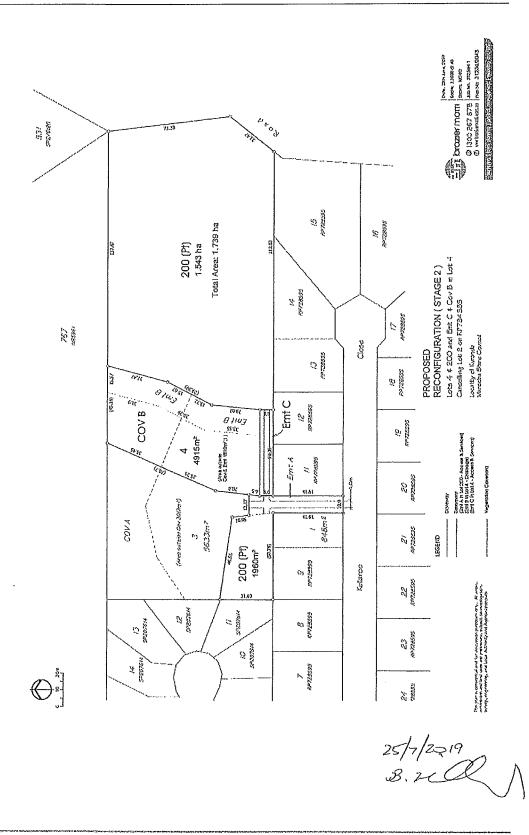
Enc: Approved Plans/Documents

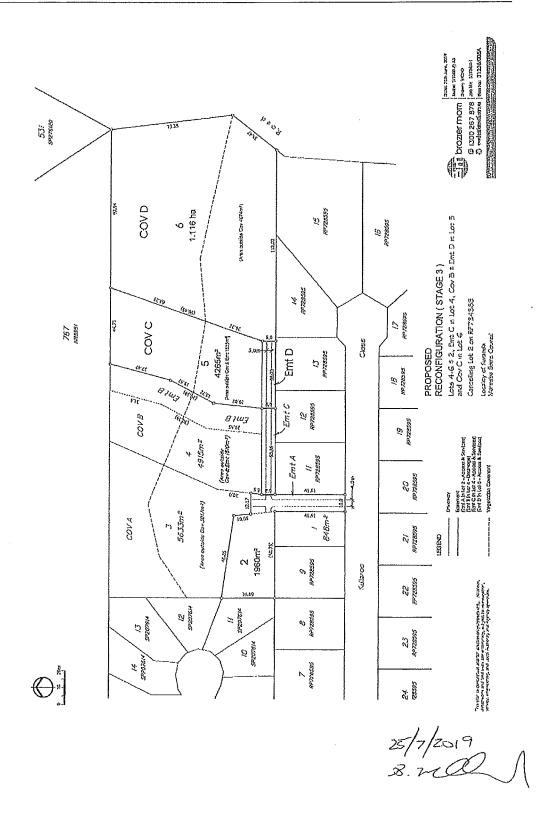
**Appeal Rights** 

Adopted Infrastructure Charge Notice

# **Approved Plans/Documents**







# **Appeal Rights**

PLANNING ACT 2016 & THE PLANNING REGULATION 2017

#### Chapter 6 Dispute resolution

#### Part 1 Appeal rights

#### 229 Appeals to tribunal or P&E Court

- (1) Schedule 1 of the Planning Act 2016 states -
  - (a) Matters that may be appealed to -
    - (i) either a tribunal or the P&E Court; or
    - (ii) only a tribunal; or
    - (iii) only the P&E Court; and
  - (L) The person-
    - (i) who may appeal a matter (the appellant); and
    - (ii) who is a respondent in an appeal of the matter; and
    - (iii) who is a co-respondent in an appeal of the matter; and
    - (iv) who may elect to be a co-respondent in an appeal of the matter.

(Refer to Schedule 1 of the Planning Act 2016)

- (2) An appellant may start an appeal within the appeal period.
- (3) The appeal period is -
  - (a) for an appeal by a building advisory agency 10 business days after a decision notice for the decision is given to the agency; or
  - (b) for an appeal against a deemed refusal at any time after the deemed refusal happens; or
  - (c) for an appeal against a decision of the Minister, under chapter 7, part 4, to register premises or to renew the registration of premises 20 business days after a notice us published under section 269(3)(a) or (4); or
  - (d) for an appeal against an infrastructure charges notice 20 business days after the infrastructure charges notice is given to the person; or
  - (e) for an appeal about a deemed approval of a development application for which a decision notice has not been given – 30 business days after the applicant gives the deemed approval notice to the assessment manager; or
  - (f) for any other appeal 20 business days after a notice of the decision for the matter, including an enforcement notice, is given to the person.

#### Note -

See the P&E Court Act for the court's power to extend the appeal period.

- (4) Each respondent and co-respondent for an appeal may be heard in the appeal.
- (5) If an appeal is only about a referral agency's response, the assessment manager may apply to the tribunal or P&E Court to withdraw from the appeal.
- (6) To remove any doubt. It is declared that an appeal against an infrastructure charges notice must not be about-

- (a) the adopted charge itself; or
- (b) for a decision about an offset or refund-
  - (i) the establishment cost of trunk infrastructure identified in a LGIP; or
  - (ii) the cost of infrastructure decided using the method included in the local government's charges resolution.

#### 230 Notice of appeal

- (1) An appellant starts an appeal by lodging, with the registrar of the tribunal or P&E Court, a notice of appeal that-
  - (a) is in the approved form; and
  - (b) succinctly states the grounds of the appeal.
- (2) The notice of appeal must be accompanied by the required fee.
- (3) The appellant or, for an appeal to a tribunal, the registrar must, within the service period, give a copy of the notice of appeal to
  - (a) the respondent for the appeal; and
  - (b) each co-respondent for the appeal; and
  - (c) for an appeal about a development application under schedule 1, table 1, item 1 each principal submitter for the development application; and
  - (d) for and appeal about a change application under schedule 1, table 1, item 2 each principal submitter for the change application; and
  - (e) each person who may elect to become a co-respondent for the appeal, other than an eligible submitter who is not a principal submitter in an appeal under paragraph(c) or (d); and
  - (f) for an appeal to the P&E Court the chief executive; and
  - (g) for an appeal to a tribunal under another Act any other person who the registrar considers appropriate.
- (4) The service period is -
  - (a) if a submitter or advice agency started the appeal in the P&E Court 2 business days after the appeal has started; or
  - (b) otherwise 10 business days after the appeal is started.
- (5) A notice of appeal given to a person who may elect to be a co-respondent must state the effect of subsection (6).
- (6) A person elects to be a co-respondent by filing a notice of election, in the approved form, within 10 business days after the notice of appeal is given to the person.

#### 231 Other appeals

- (1) Subject to this chapter, schedule 1 and the P&E Court Act, unless the Supreme Court decides a decision or other matter under this Act is affected by jurisdictional error, the decision or matter is non-appealable.
- (2) The *Judicial Review Act 1991*, part 5 applies to the decision or matter to the extent it is affected by jurisdictional error.
- (3) A person who, but for subsection (1) could have made an application under the Judicial Review Act 1991 in relation to the decision or matter, may apply under part 4 of that Act for a statement of reasons in relation to the decision or matter.
- (4) In this section
  - decision includes-
  - (a) conduct engaged in for the purpose of making a decision; and

- (b) other conduct that relates to the making of a decision; and
- (c) the making of a decision or failure to make a decision; and
- (d) a purported decision; and
- (e) a deemed refusal.

non-appealable, for a decision or matter, means the decision or matter-

- (a) is final and conclusive; and
- (b) may not be challenged, appealed against, reviewed, quashed, set aside or called into question in any other way under the Judicial Review Act 1991 or otherwise, whether by the Supreme Court, another court, a tribunal or another entity; and
- (c) is not subject to any declaratory, injunctive or other order of the Supreme Court, another court, a tribunal or another entity on any ground.

#### 232 Rules of the P&E Court

- (1) A person who is appealing to the P&E Court must comply with the rules of the court that apply to the appeal.
- (2) However, the P&E Court may hear and decide an appeal even if the person has not complied with the rules of the P&E Court.

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Our Ref:

K-4331-REP-001

Your Ref:

Date:

24/11/20

# **GOWEN & C RETTER**

RECONFIGURING A LOT ( 1 LOT INTO 6 LOTS AND ACCESS EASEMENTS ) IN 5 STAGES

LOT 2 on RP734383; 19 KULLAROO CLOSE, KURANDA

APPLICATION FOR OPERATIONAL WORKS PERMIT

# **DESIGN REPORT**

# 1. **GENERAL**

# 1.1 Lot 2 on RP 734383 – Reconfiguration Approval

Mareeba Shire Council (MSC) Decision Notice RAL/19/0016 dated 25 July 2019 approved the "reconfiguring of a lot (1 lot into 6 lots and access easements) in 3 stages".

In subsequent discussions MSC advised that the staging of the development could involve up to 5 stages. On that basis the Operational Works Plans detail 5 stages of development but in practice the Reconfiguration may be competed in a lesser number of stages.

#### 1.2 **Project Drawings**

KFB Drawings K-6633 , Sheets C01-C10 and SK1, all issue A detail the proposed Operational Works.

# 1.3 <u>Compliance with Assessment Manager Conditions of MSC Decision Notice</u> <u>RAL/19/0016</u>

In general all the particular conditions of MSC Decision Notice RAL/19/0016 have been complied with as detailed in the following summary.

The numbering is in accordance with that of the Decision Notice.

#### **Conditions 1., 2., 3.**

Conditions noted and accepted.

### 4. Infrastructure Services and Standards

#### 4.1 Access

- 4.1.1 Commercial Crossover detailed onto Kullaroo Close
- 4.1.2 Driveways detailed as specified including one-way crossfall, stormwater management and service and utility conduits.

### 4.2 Access/ Services/ Drainage Easment

Access Easements A., C., D., detailed.

#### 4.3 Stormwater Drainage/ Water Quality

The following drawings collectively make up the Stormwater Management Plan:

- C02 A Setout
- C03 A Typical Sections
- C04 A Typical Sections and Details
- C05 A Stormwater Details
- C06 A Longitudinal Section Along Stormwater Lines A & C

SK1 A Stormwater Calculations.

Stormwater management is such as to contain all stormwater within Lot 2 RP734383 and the Point of Lawful Discharge is detailed as Drainage Easement B.

#### 4.4 Water Supply

#### 4.5 Sewerage Connection

Dwg C10 A details Water and Sewerage Reticulation.

An internal 100mm water main, connected to the existing 100mm Kullaroo Close main serves lots 2., 3., 4., with hydrants as required.

A 50mm water main, constructed through lot 5 serves lots 5 and 6.

Sewage connection for all six (6) lots is provided to an existing gravity sewer. A notation on lots 4 and 5 details that a sewage pump may be required if the residences on those lots are located such that a gravity connection is not possible.

#### 4.6 Electricity Provision/Supply

#### 4.7 Telecommunications

An Application will be lodged with Ergon to provide electricity to the 6 lots.

An application will be lodged with the appropriate authority to provde telecommunications service to the development.

Conduits are detailed in the drawings for the electrical and telecommunication services.

Designer: Euan Fraser Bruce RPEQ: 00491

Date: 26 November 2020

## **SPECIFICATION**

G OWEN AND C RETTER

LOT 2 ON RP734383, (19 KULLAROO CLOSE, KURANDA)
RECONFIGURING 1 LOT INTO 6 LOTS & ACCESS
EASEMENTS

**OPERATIONAL WORKS** 

CONSULTING ENGINEERS: KFB ENGINEERS 1/38 – 42 PEASE STREET, CAIRNS

**CONTENTS** 

#### **DETAILS**

#### **COVER SHEET**

#### CONTENTS

- 1. PRELIMINARIES AND CONSTRUCTION GENERAL
- 2. ROADWORKS
- 3. STORMWATER DRAINAGE
- 4. WATER RETICULATION
- 5. SEWERAGE
- 6. LANDSCAPING
- 7. CONCRETE WORKS
- 8. EROSION AND SEDIMENT CONTROL

### **DRAWING INDEX**

#### Job No K-6633

Sheet No	Drawing Title
C01 A	General Arrangement
C02 A	Set Out
C03 A	Typical Sections
C04 A	Typical Sections & Details
C05 A	Stormwater Details
C06 A	Longitudinal Sections Along Stormwater Line A & C
C07 A	Longitudinal Sections Along Driveway
C08 A	Cross Sections Along Driveway Ch 10 - 100
C09 A	Cross Sections Along Driveway Ch 110 – 149.150
C10 A	Water & Sewer Reticulation
SK1 A	Stormwater Calculations

### **ASSOCIATED DRAWINGS**

1. Electrical Drawings & Telecommunications Drawings To be issued

ii

#### 1.1 APPLICATION

- 1.1.1 This Specification has been developed in accordance with the requirements of the FNQROC Development Manual, Issue 7 (2017).
- 1.1.2 The Contractor should familiarise himself with the requirements of the FNQROC Development Manual, Issue 7 (2017) including that section that details the specific requirements of the Mareeba Shire Council. Where this specification differs with the requirements of the FNQROC Development Manual that manual will take precedence.
- 1.1.3 After amendment for use in other jurisdictions, some references to certain Standard Drawings and/or Standard Specifications may remain. If the Contractor does not have access to this material, it may be obtained from the Superintendent on request.

#### 1.2 QUALITY ASSURANCE FOR CONTRACTORS

- 1.2.1 The required Standard to be applied to the whole of the Contract is AS/NZS ISO 9001:2016 Quality Management Systems .
- 1.2.2 Specific requirements for quality assurance are outlined in Schedule B to this Specification.

#### 1.3 EXTENT OF WORK

1.3.1 The work to be executed under this Contract includes the supply of all labour and materials and the performance of all operations of whatever kind necessary for the complete and proper construction of the Works described in the tender documents. Work shall be performed to the complete satisfaction of the Superintendent.

#### 1.4 NATURE OF CONTRACT

- 1.4.1 This is a Lump Sum Contract not subject to adjustment for Rise and Fall.
- 1.4.2 The Schedule of Quantities and Prices, contained in Schedule A to this Specification, and to be completed by Tenderers in calculating their tender, shall <u>not</u> form part of the Contract. It may, however, be used for the assessment of Progress Payments.

#### 1.5 SCHEDULE OF DRAWINGS

1.5.1 The following drawings shall accompany this Specification: refer to Drawing Index on Contents page.

Page 1.

1.5.2 Any further drawings that may be required will, when supplied by the Superintendent, have the same standing as those supplied with this Contract.

#### 1.6 PROVISIONAL SUMS

1.6.1 There are no Provisional Sums

#### 1.7 TIME OF COMPLETION

- 1.7.1 The time of completion for the Works shall be as stated in the attached Annexure to General Conditions of Contract (AS 4000-1997) Part A.
- 1.7.2 Further to Clause 34.6 of the General Conditions of Contract AS 4000-1997, the Superintendent will issue the Contractor with a Certificate of Practical Completion when:
  - a) construction work is completed to the satisfaction of the Superintendent;
  - b) the Local Authority have formally agreed to accept the Works onto maintenance; and
  - c) as-constructed drawings for stormwater drainage, sewage reticulation and water reticulation are submitted to the Superintendent.

#### 1.8 INSURANCE

#### 1.8.1 General

1.8.1.1 The Contractor's insurance requirements are as described in Clauses 16 to 19 (inclusive) in the General Conditions of Contract AS 4000-1997 as supplemented by the attached Annexure to General Conditions of Contract (AS 4000-1997) - Part A.

#### 1.8.2 Works

1.8.2.1 The Contractor shall insure the Works in accordance with Clause 16 of the General Conditions of Contract AS 4000-1997 as supplemented by the attached Annexure to General Conditions of Contract (AS 4000-1997) - Part A and to the satisfaction of the Principal. Such insurance shall include the risk of loss and damage by fire, theft, explosion, lightning, storm, tempest and flood.

#### 1.8.3 Construction Plant

1.8.3.1 The Contractor shall insure against fire, theft, explosion, lightning, storm, tempest and flood all plant brought onto the Site for the purpose of works by itself or by subcontractors.

Page 2.

#### 1.8.4 Public Liability Insurance

1.8.4.1 Requirements for public liability insurance are specified in Clause 17 of the General Conditions of Contract AS 4000-1997 as supplemented by the attached Annexure to General Conditions of Contract (AS 4000-1997) - Part A.

#### 1.9 DISPUTE RESOLUTION

1.9.1 Dispute resolution shall proceed in the manner described in Clause 42 of the General Conditions of Contract AS 4000-1997, as supplemented by the attached Annexure to General Conditions of Contract (AS 4000-1997) - Part A.

#### 1.10 CONSTRUCTION SECURITY BOND

1.10.1 Refer to clause 10.0 of the attached "Information to Tenderers and Conditions of Tendering".

#### 1.11 RETENTION MONEYS

1.11.1 Retention moneys shall be dealt with in the manner described in Clause 5 of the General Conditions of Contract AS 4000-1997, as supplemented by the attached Annexure to the General Conditions of Contract (AS 4000-1997) - Part A.

#### 1.12 LIQUIDATED DAMAGES

1.12.1 Further to Clause 34.7 of the General Conditions of Contract AS 4000-1997, liquidated damages shall be struck at the rates specified in the attached Annexure to General Conditions of Contract (AS 4000-1997) - Part A.

#### 1.13 DEFECTS LIABILITY PERIOD

- 1.13.1 A defects liability period shall operate in the manner described in Clause 35 of the General Conditions of Contract AS 4000-1997, as supplemented by the attached Annexure to General Conditions of Contract (AS 4000-1997) Part A.
- 1.13.2 The Works will only be released from the defects liability period after they have been accepted off-maintenance by the Local Authority.
- 1.13.3 During the defects liability period, the Contractor shall:
  - a) make no less than four (4) visits to inspect the works and carry out necessary maintenance works as authorised by the Superintendent; and
  - b) repair, at no cost to the Principal, all defects, imperfections, shrinkages and other faults or damage due to any source or cause.
- 1.13.4 At the conclusion of the defects liability period, the Contractor shall ensure that all works are completed in accordance with the Local Authority's off-maintenance inspection checklist.

  Page 3.

#### 1.14 ALTERNATIVE MATERIALS

1.14.1 The Contractor may offer alternative materials to those specified or nominated on the drawings. The Contractor shall nominate any alternative materials at the time of tendering.

#### 1.15 DOCUMENTS AND SITE SHED

1.15.1 The Contractor shall maintain on site a copy of this Specification and two sets of Contract drawings together with a copy of all written instructions issued by the Superintendent.

#### 1.16 SITE INFORMATION AND INSPECTION OF SITE

- 1.16.1 The Contractor is notified that Clause 25 of the General Conditions of Contract AS 4000-1997 is amended as indicated in the attached Annexure to General Conditions of Contract (AS 4000-1997) Part B.
- 1.16.2 The Contractor will be held to have included in their tender every item necessary for the full and proper completion of their work. Therefore, the Contractor shall be deemed to have taken into account in their tender the presence of water and mineral substances, and the geological structure of the soil and rock, and the existence of surface and underground services.
- 1.16.3 Any failure to do so will be at their own risk.
- 1.16.4 No extra will be allowed on the plea of want of information.

#### 1.17 WEATHER CONDITIONS

- 1.17.1 The Contractor shall have made due allowance for the average weather pattern prevailing during the course of the project in compiling their tender.
- 1.17.2 Extensions for wet weather shall be based on the following:
  - a) at least 10mm must fall on a day before a one day extension will be considered (the Contractor shall supply and maintain a rain gauge on site):
  - b) boggy conditions shall be determined on site each day by the Superintendent;
  - c) extensions shall be calculated on the basis of a five day working week.

#### 1.18 GOODS AND SERVICES TAX (GST)

1.18.1 Goods and Services Tax is applicable.

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#### 1.19 PAYROLL TAX

1.19.1 The Contractor shall have allowed for Payroll Tax on all wages in submitting its tender.

#### 1.20 BY-LAWS, FEES AND NOTICES

1.20.1 The Contractor shall comply with all by-laws and regulations of the Local Authority and other statutory authorities having jurisdiction over the Works, and be responsible for the payment of fees and customary charges and the giving and receiving of all necessary notices.

#### 1.21 MATERIALS AND WORKMANSHIP

1.21.1 Unless otherwise specified, materials, manufactured articles, and workmanship shall be new, the best of their respective kinds, conform to best trade practices and comply with relevant standards, codes and regulations.

#### 1.22 INTERPRETATION OF TERMS

1.22.1 Unless otherwise specified, all references to the need for direction or approval in this Specification shall mean that the direction or approval of the Superintendent is required.

#### 1.23 NOTICE BOARD AND PUBLIC NOTICE

As negotiated with Principal.

#### **1.24 WATER**

1.24.1 The Contractor shall make his own arrangements for water and pay all charges.

#### 1.25 LIGHT AND POWER

1.25.1 The Contractor shall make his own arrangements for temporary light and power and pay all charges.

#### 1.26 DAMAGE TO SERVICES

1.26.1 The Contractor shall check with the Superintendent and all relevant authorities regarding the position of existing services such as Telecom cables, electrical power cables, water, gas, sewerage and stormwater pipes and shall be responsible for all damage. The Contractor shall notify the Superintendent and the relevant authority immediately such damage occurs.

Page 5.

#### 1.27 REMOVAL OF RUBBISH AND FINAL CLEAN-UP

- 1.27.1 The Contractor shall remove all rubbish and debris from the site from time to time.
- 1.27.2 On completion, the Contractor shall ensure that the site is cleaned of surplus materials, debris, etc. The whole of the site is to be left in a state to the satisfaction of the Superintendent and fit for immediate occupation and/or use.

#### 1.28 SAMPLES, TESTING AND INSPECTIONS

- 1.28.1 Test samples required by the Superintendent shall be supplied at the times and in the manner set out elsewhere in this Specification.
- 1.28.2 All testing associated with this Contract shall be carried out in accordance with the standard test procedures prescribed by the controlling Local Authority.

Details of these test procedures may be obtained on application to the Superintendent.

1.28.3 The requirements identified in Section CP 1.16 the FNQROC Manual, shall be adhered to where applicable.

#### 1.29 TREE CONSERVATION

- 1.29.1 Trees that are to be conserved will be marked on site. Every effort should be made to avoid damage to tree roots, trunks and foliage.
- 1.29.2 Where excavation for roadworks, stormwater drainage and other services are located in the vicinity of trees marked for conservation excavation should be carried out by means that does not damage the root system.

#### 1.30 ORDER OF CONSTRUCTION AND CO-OPERATION

1.30.1 The Principal has arranged for works on site to be carried out by others under the following Contracts:

Contract No Description		Description	Contractor	Contact
		Telecommunications	To be advised	
		Electrical cable laying	To be advised	

- 1.30.2 The Contractor shall co-operate with any other Contractor or Subcontractors on the Site in order to minimise inconvenience and disruption.
- 1.30.3 The Principal shall not be responsible for any extras claimed where Contractors or Subcontractors have not co-operated and co-ordinated construction.
- 1.30.4 Damage caused in the course of the Works shall be made good by the appropriate trades and surfaces finished to match adjacent surfaces.

Page 6.

#### 1.31 NOTICES

- 1.31.1 The Contractor shall give all notices and pay all fees required by statutory authorities.
- 1.31.2 The Contractor shall give 48 hours clear notice in writing to the owners and tenants of the land of its intention to enter private property and shall obtain written permission from the owners/tenants before entering.

#### 1.32 PROVISION OF TRAFFIC

- 1.32.1 The Contractor shall provide and maintain all necessary temporary bridges, footpaths, drains, supports over or around open excavations, side tracks, roads, footpaths, cables and pipes so as to ensure continuity and safety of all services and vehicular and pedestrian traffic.
- 1.32.2 The Contractor shall provide and maintain all necessary temporary barriers and night lights necessary to thoroughly protect the general public and to provide for safe passage of all traffic.
- 1.32.3 All signs, lights, barriers and barricades shall be provided, erected and maintained in accordance with Section A.5 of the Manual of Uniform Traffic Control Devices.
- 1.32.4 Where sewers or culverts are being constructed on private property, the Contractor shall provide at its own cost all things necessary to give the owner of the property, safe and unobstructed access to buildings, driveways, etc, within the property.

#### 1.33 DEMOLITION

#### **1.33.1** No requirement.

#### 1.34 SETTING OUT

- 1.34.1 The Contractor shall be responsible for all setting out of the Works in accordance with the Contract drawings and/or in accordance with instructions from the Superintendent.
- 1.34.2 In order to facilitate setting out by the Contractor, the authorised surveyors responsible for the cadastral survey shall provide such boundary pegs necessary, in the opinion of the Superintendent, for the Contractor to establish the position of sewer manholes, stormwater manholes, kerb and channel alignments, water service alignments and connections, etc.
- 1.34.3 The Contractor shall be responsible for the pegging of kerb and channel alignments, which shall be carried out by the authorised surveyor.
- 1.34.4 All pegs and/or marks established by the surveyor or Superintendent shall be carefully preserved.
- 1.34.5 Where construction necessitates the removal of pegs/marks, off-set pegs/marks shall be provided and their positions recorded on a set of *Page 7*.

contract drawings such that the original pegs/marks can be accurately re-established if required.

1.34.6 The Contractor shall be liable to pay an amount for full restoration of pegs/marks established by the surveyor or Superintendent that are displaced, removed, knocked out or covered by the Contractor.

#### 1.35 CLEARING

- 1.35.1 Retain and protect existing vegetation as directed.
- 1.35.2 Trees that are to be preserved will be marked by the Superintendent. All other vegetation shall be cleared and mulched or otherwise satisfactorily removed from the site.

#### 1.36 EARTHWORKS

- 1.36.1 The Contractor shall cut to fill as described in the Contract drawings or as otherwise directed by the Superintendent. The Standard Specification for Earthworks (S1) contained in the FNQROC Development Manual shall be read in conjunction with this section.
- 1.36.2 Earthworks shall conform to AS 3798-1990 "Guidelines on earthworks for commercial and residential developments".
- 1.36.3 All earthwork quantities are solid measure. The Contractor is to make its own allowance for bulking and compaction of material even though this has been taken into consideration in the design process.

#### 1.37 COMPACTION

1.37.1 Unless noted otherwise, the following standards of compaction shall apply:

Element	Compaction (Min. Dry Density Ratio per AS 1289) (Cohesive Soils)	Compaction (Min. Density Index per AS 1289) (Cohesionless Soils)
Pavement Bed (Subgrade)	98%	80
Pavement Base Course	100%	
Pavement Sub-Base Course	100%	
Filling beneath pavement (fill to be placed and compacted in 150mm layers)	98%	
Footpaths Subgrade	95%	65
Allotment Fill	95%	65

Page 8.

- 1.37.2 Compaction tests shall be in accordance with AS 1289 "Testing soils for engineering purposes".
- 1.37.3 Unless noted otherwise, the conduct of compaction tests shall be in accordance with "Level 2" as defined in AS 3798-1990 "Guidelines on earthworks for commercial and residential developments".

#### 1.38 ALLOTMENT AND FOOTPATH GRADING

- 1.38.1 Allotments shall be constructed to achieve the overall detail indicated on drawings.
- 1.38.2 Footpaths shall be neatly finished to the grades shown in typical cross-sections.

#### 1.39 INTERSECTION OF SERVICES

- 1.39.1 Where stormwater sewers and water mains intersect at the same level, the water main shall be lowered to pass under the stormwater sewer.
- 1.39.2 The Contractor shall carry out the work at no extra cost.

#### 1.40 EROSION AND SEDIMENT CONTROL

- 1.40.1 The cost of temporary erosion and sediment control measures required by construction shall be borne by the Contractor.
- 1.40.2 These measures shall be as detailed in the Erosion and Sediment Control Plan provided as part of the design drawings.
- 1.40.3 If no such plan is provided then any measures adopted by the Contractor must be:
  - a) consistent with the methods detailed in the FNQROC Development Manual, and
  - b) approved by the Superintendent.

#### 1.41 AS-CONSTRUCTED DETAILS

- 1.41.1 The Contractor is to employ licensed surveyors to prepare as-constructed drawings in hardcopy and digital format in accordance with the FNQROC Development Manual.
- 1.41.2 These drawings shall be submitted to the Superintendent.

#### 1.42 ACTS AND REGULATIONS

- 1.42.1 The Contractor shall comply with the requirements of:
  - a) the Workplace Health and Safety Act No. 63 of 1989; and Page 9.

b)	the requirements of any other acts, regulations, codes, etc, of authorities having jurisdiction over the Works.

#### 2. ROADWORKS

#### 2.1 APPLICATION

- 2.1.1 The Standard Specification for Earthworks (S1) ,Road Pavements (S2) and Segmental Paving (S3) contained in the FNQROC Development Manual shall be read in conjunction with this Section.
- 2.1.2 The Contractor shall also comply with all relevant Australian Standards.

### 2.2 INSTALLATIONS UNDER ROAD PAVEMENTS

#### 2.2.1 General

- 2.2.1.1 All pipe and conduit installations under road pavements, shoulders and kerb and channel shall be constructed before any pavement construction is commenced.
- 2.2.1.2 The Contractor shall install underground power and telephone cable conduits under road pavements and footpaths in locations and to dimensions specified in approved Drawings issued by SPA Consulting and Telstra.
- 2.2.1.3 After approval by the Superintendent or the relevant Authority, trenches shall be backfilled to subgrade level with sand, crusher dust or other granular material approved by the Superintendent. The backfill shall be compacted to min. 95% of the standard maximum dry density.

#### 2.2.2 Electricity Conduits

- 2.2.2.1 Conduits shall be uPVC Class 6, orange in colour complying with AS 2053-1984. Draw wire shall be nylon, not less than 1.5mm in diameter.
- 2.2.2.2 The Contractor shall supply and install the conduits in locations and to depths as detailed on approved SPA Consulting Drawings. Joints shall be properly glued and the ends of the conduits closed with styrene plugs. A draw wire shall be installed in each conduit and caution tape placed above the conduits.
- 2.2.2.3 Prior to backfilling the conduit trenches, the Contractor shall arrange for a approved SPA Consulting inspector to inspect and certify that the conduits are correctly installed and that their locations are marked in the approved manner.
- 2.2.2.4 Permanent markers shall be installed as required by the approved drawings

#### 2.2.3 Telephone Conduits

- 2.2.3.1 The Contractor shall install telephone cable conduits in the locations and at the depths shown in the approved Telstra drawings. The conduits, which are supplied by Telstra, shall be uPVC pressure pipe Class 9 to AS 1477 with solvent welded joints and coloured white.
- 2.2.3.2 The joints shall be properly made and the ends of the conduits shall be sealed with polythene sheeting adequately secured to prevent the ingress of sand or soil.

  Page 11

- 2.2.3.3 Prior to backfilling the conduit trenches, the Contractor shall arrange for a Telstra officer to inspect and certify that the conduits are correctly installed and that their locations are marked in the approved manner for subsequent installation of permanent marker plates.
- 2.2.3.4 Permanent markers can be obtained from Telstra and shall be installed as required by Telstra.
- 2.2.3.5 In addition to the conduits shown on the Contract drawings, certain other conduits may also be required to be installed by Telstra.
- 2.2.3.6 It shall be the Contractor's responsibility to notify Telstra of the programme of works before commencing work and to liaise with Telstra to ensure that it installs its conduits without any interruption to the Contractors activities and prior to the placing of pavement material.

#### 2.2.4 Segmental Paving

2.2.4.1 No requirement

#### 2.3 ROAD SIGNS AND STREET NAME SIGNS

- 2.3.1 Road signs generally shall comply with Qld Department of Transport Standard Specification MRS11.14 "Road Furniture".
- 2.3.2 Street name signs shall comply with the FNQROC Manual.

#### 3. STORMWATER DRAINAGE

#### 3.1 APPLICATION

- 3.1.1 The Standard Specification for Stormwater Drainage (S4) contained in the FNQROC Development Manual shall be read in conjunction with this Section.
- 3.1.2 The Contractor shall also comply with all relevant Australian Standards.
- 3.1.3 If and to the extent that any inconsistency is observed between this Specification generally and the materials specified in this Clause, that inconsistency shall be brought to the attention of the Superintendent who shall make a direction.
- 3.1.4 All underground stormwater pipe drainage (between 375mm and 2000mm) shall be inspected using CCTV camera in accordance with FNQROC Specification S4.

#### 4. WATER RETICULATION

#### 4.1 APPLICATION

- 4.1.1 The Standard Specification and Drawings for Water Reticulation (S5) contained in the FNQROC Development Manual shall be read in conjunction with this Section.
- 4.1.2 The Contractor shall also comply with all relevant Australian Standards and all other Codes, Regulations, Standard Specifications, etc, applicable in the jurisdiction.
- 4.1.3 If and to the extent that any inconsistency is observed between this Specification generally and the materials specified in this Clause, that inconsistency shall be brought to the attention of the Superintendent who shall make a direction.

#### 4.2 LOCAL AUTHORITY INSPECTOR

4.2.1 The Contractor shall allow the Local Authority's Inspector access to the Works at all times and shall provide him with any facilities he may require for inspecting the work. All necessary instructions will be issued by the Superintendent or his representative.

#### 5. SEWERAGE RETICULATION

#### 5.1 APPLICATION

- 5.1.1 The Standard Specification and Drawings for Sewerage (S6) contained in the FNQROC Development Manual shall be read in conjunction with this Section.
- 5.1.2 The Contractor shall also comply with all relevant Australian Standards and all other Codes, Regulations, Standard Specifications, etc., applicable in this jurisdiction.
- 5.1.3 If and to the extent that any inconsistency is observed between this Specification generally and the materials specified in this clause, that inconsistency shall be brought to the attention of the Superintendent who shall make a direction.

#### 5.2 LOCAL AUTHORITY INSPECTOR

5.2.1 The Contractor shall allow the Local Authority's Inspector access to the works at all times and shall provide him with any facilities he may require for inspecting the work. All necessary instructions will be issued by the Superintendent or his representative.

#### 5.3 CCTV INSPECTION

5.3.1 All constructed sewers shall be inspected by CCTV camera in accordance with FNQROC Specification S6.

### 6. LANDSCAPING

#### 6.1 GENERAL REQUIREMENTS

- 6.1.1 The Standard Specification for Landscaping (S8) contained in the FNQROC Development Manual shall be read in conjunction with this Section and applied where applicable.
- 6.1.2 Tree species shall be as approved by the Mareeba Shire Council.
- 6.1.3 The landscape work, is as detailed/scheduled in in the Bill of Quantities.

### 7. CONCRETE WORKS

#### 7.1 APPLICATION

7.1.1 The Standard Specification for Concrete Works (S7) contained in the FNQROC Development Manual shall be read in conjunction with this Section

#### 8. EROSION AND SEDIMENT CONTROL

#### 8.1 SEQUENCE OF WORKS

8.1.1 The construction work is to be arranged in such a way that erosion and sediment control is maintained throughout and during all phases of the works. The scale of the works opened up at any one time must be such that when the site is vacated at the end of each day it is secure from the aspect of erosion and sediment control.

#### 8.2 PROGRAMME OF WORK

- 8.2.1 The contractor shall prepare a Programme of Works and submit it to the Superintendent for approval prior to the commencement of works.
- 8.2.2 The Programme of Works shall incorporate erosion and sediment controls for pre-construction, during construction and post construction.

#### 8.3 PRE CONSTRUCTION

- 8.3.1 The following are required to be included in the pre construction process
- 1. Identify any natural gullys or water courses that require diversion drains or other appropriate works.

#### 8.4 DURING CONSTRUCTION

8.4.1 Maintain regular maintenance of all erosion and sediment control structures during the construction period.

#### 8.5 POST CONSTRUCTION

8.5.1 Upon practical completion the works will be inspected and accepted by Council onto maintenance for a period of 12-months. It will be the Contractors responsibility to maintain any revegetation works and as well maintain all erosion and sediment control measures.

## **ESTIMATE OF QUANTITIES AND RATES**

## Reconfiguring a Lot (1 Lot into 6 lots and Access Easements)

## 19 Kullaroo Close, Kuranda Lot 2 on RP734383

#### **SUMMARY**

SCHEDULE	DESCRIPTION	AMOUNT
A B C D	Stage 1 & 2 Stage 3 Stage 4 Stage 5	\$45,308.00 \$40,743.00 \$13,674.00 \$800.00
	Subtotal (Excl. GST) \$	100,525
	GST (10%) \$	10,053
	TOTAL (Incl. GST) \$	110,578

#### Excludes

Electrical and telecommunications Infrastructure.

## **BILL OF QUANTITIES - A**

STAGE 1 & 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PRELIMINARIES				
1	Site Establishment and Disestablishment	item			500
2	Erosion and Sediment Control	item			500
	EARTHWORKS				
3	Stripping Topsoil (50mm Nom.) (Provisional)	m <sup>3</sup>	27	12	324
4	Excavate Unsuitable Material Below Subgrade (Provisional, If Ordered)	m <sup>3</sup>	20		ş.
5	Backfill Unsuitable Material Below Subgrade with Type 2.5 (Provisional, If Ordered)	m <sup>3</sup>	20		
6	Excavation	m <sup>3</sup>	30	12.00	360
7	Embankment	m <sup>3</sup>	30	12.00	360
8	Base Type 2.2	m <sup>3</sup>	36	140	5,040
9	Subbase Type 2.3	m <sup>3</sup>	40	130	5,200
10	Respread Topsoil	m <sup>2</sup>	163	2	326
	BITUMEN SURFACING				
11	Prime	m <sup>2</sup>	360	:	
12	14mm Seal	m <sup>2</sup>	360	15	5,400
13	7mm Seal	m <sup>2</sup>	360		
	DRAINAGE	ļ			
14	Barrier Kerb and Channel	m	44.6	70	3,122
15	Commercial Vehicle Crossing	each	1		1,500
16	Bin Slab	m <sup>2</sup>	5.4		540
17	Rock Protection At end of Stage 1 Kerb and Channel (Including Geotextile	m <sup>3</sup>	1		50
	REVEGETATION				
18	Grass Seed	m <sup>2</sup>	163	2	326
	WATER RETICULATION		i		
19	100mm Dia. uPVC Water Main Class 16 (RRJ)	m	78	80	6,240
20	Sluice Valve	each	1		720
21	End Cap  /V0294 BOQ Page 2 of 7	each	1		250

# BILL OF QUANTITIES - A STAGE 1 & 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
22	Connect to Existing Main	each	1		2,000
ļ					
	SEWER RETICULATION				
23	Property Connection Branch (Type A2)	each	1		700
	SERVICES				
24 25	Electrical conduits and draw wire Telecommunications conduits and draw wire	m	390	10	3,900
25 26	Excavation, backfilling and maeking for services	m m	390 78	10 60	3,900 4,880
			:		
			Subtotal	(Excl. GST) \$	45,308
				GST (10%) \$	4,531
			TOTAL	(Incl. GST) \$	49,839

## BILL OF QUANTITIES - B STAGE 3

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PRELIMINARIES				
1	Site Establishment and Disestablishment	item			500
2	Erosion and Sediment Control	item			500
	EARTHWORKS				
3	Stripping Topsoil (50mm Nom.) (Provisional)	m <sup>3</sup>	21	12	252
4	Excavate Unsuitable Material Below Subgrade (Provisional, If Ordered)	m <sup>3</sup>	20		
5	Backfill Unsuitable Material Below Subgrade with Type 2.5 (Provisional, If Ordered)	m <sup>3</sup>	20	5	
6	Excavation	m <sup>3</sup>	18	12.00	216
7	Embankment	m³	25	12.00	300
8	Base Type 2.2	m³	30	140	4,200
9	Subbase Type 2.3	m³	11	130	1,430
10	Respread Topsoil	m²	183	2	366
	BITUMEN SURFACING				
11	Prime	m²	210		
12	14mm Seal	m²	210	15	3,150
13	7mm Seal	m²	210		
	DRAINAGE				
14	Barrier Kerb and Channel	m	47	70	3,290
15	Cast In-Situ Concrete Pit	each	6	600	3,600
16	Modified Field Inlet Pit (Type 2) Double Gully	each	1	1,500	1,500
17	225 uPVC Stormwater Pipe	m	6.05	100	605
18	300 uPVC Stormwater Pipe	m	30.59	120	3,671
19	2/300 uPVC Stormwater Pipe	m	6.10	240	1,464
20	375 RC Pipe (Class 3)	m	10.58	160	1,693
21	Rock Protection (Including Geotextile Underlay)	m³	11	50	550
	WATER RETICULATION				
22	100mm Dia. uPVC Water Main Class 16 (RRJ)	m	53	80	4,240
23	Fire Hydrant	each	2	720	1,440
TV	VV0294 BOQ Page 4 of 7			.3	- ,

# BILL OF QUANTITIES - B STAGE 3

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
24	End cap	each	1		250
	SEWER RETICULATION				
25	Property Connection Branch (Type E2)	each	1		800
26	Lower/Realign Existing Rising Sewer Main (Provisional, If Ordered)	item	:		
	REVEGETATION		:		
27	Grass Seed	m²	183	2	366
28 29 30	SERVICES Electrical conduits and draw wires Telecommunications conduits and draw wires Excavation, backfilling and marking for services	m m m	159 159 53	10 10 60	1,590 1,590 3,180
			Culatatal	(Excl. GST) \$	40 743

Subtotal (Excl. GST) \$ 40,743 GST (10%) \$ TOTAL (Incl. GST) \$ 4,075 44,818

 $\mathbb{N} = p_{\underline{z}} e$ 

## **BILL OF QUANTITIES - C**

### STAGE 4

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PRELIMINARIES				
1	Site Establishment and Disestablishment	item		:	300
2	Erosion and Sediment Control	item			300
	EARTHWORKS				
3	Stripping Topsoil (50mm Nom.) (Provisional)	m <sup>3</sup>	10	12	120
4	Excavate Unsuitable Material Below Subgrade (Provisional, If Ordered)	m³	20		
5	Backfill Unsuitable Material Below Subgrade with Type 2.5 (Provisional, If Ordered)	m <sup>3</sup>	20		
6	Excavation	m³	5	12.00	60
7	Embankment	m³	8	12.00	96
8	Base Type 2.2	m <sup>3</sup>	19	140	2,660
9	Respread Topsoil	m²	67	2	134
	BITUMEN SURFACING				
10	Prime	m <sup>2</sup>	120		
11	14mm Seal	m²	120	15	1,800
12	7mm Seal	m <sup>2</sup>	120		
	WATER RETICULATION				
13	50mm Dia HDPE Main Class 12	m	40	60	2,400
14	End Cap	each	1	150	150
	SEWER RETICULATION				
15	Property Connection Branch (Type E2)	each	1	800	800
	REVEGETATION				
16	Grass Seed	m²	67	2	134
17 18 19	SERVICES  Electrical conduits and draw wire  Telecommunications conduits and draw wire  Excavation , backfilling and marking for services	m m m	80 80 40	10 10 78	800 800 3,120
	 	l l			

 Subtotal (Excl. GST) \$
 13,674

 GST (10%) \$
 1,368

 TOTAL (Incl. GST) \$
 15,042

# BILL OF QUANTITIES - D STAGE 5

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	PRELIMINARIES				
1	Site Establishment and Disestablishment	item			
	SEWER RETICULATION				
2	Property Connection Branch (Type E2)	each	1		800
					:
				-	
:					
2					
			C. ht-t-1	(Excl. GST) \$	800

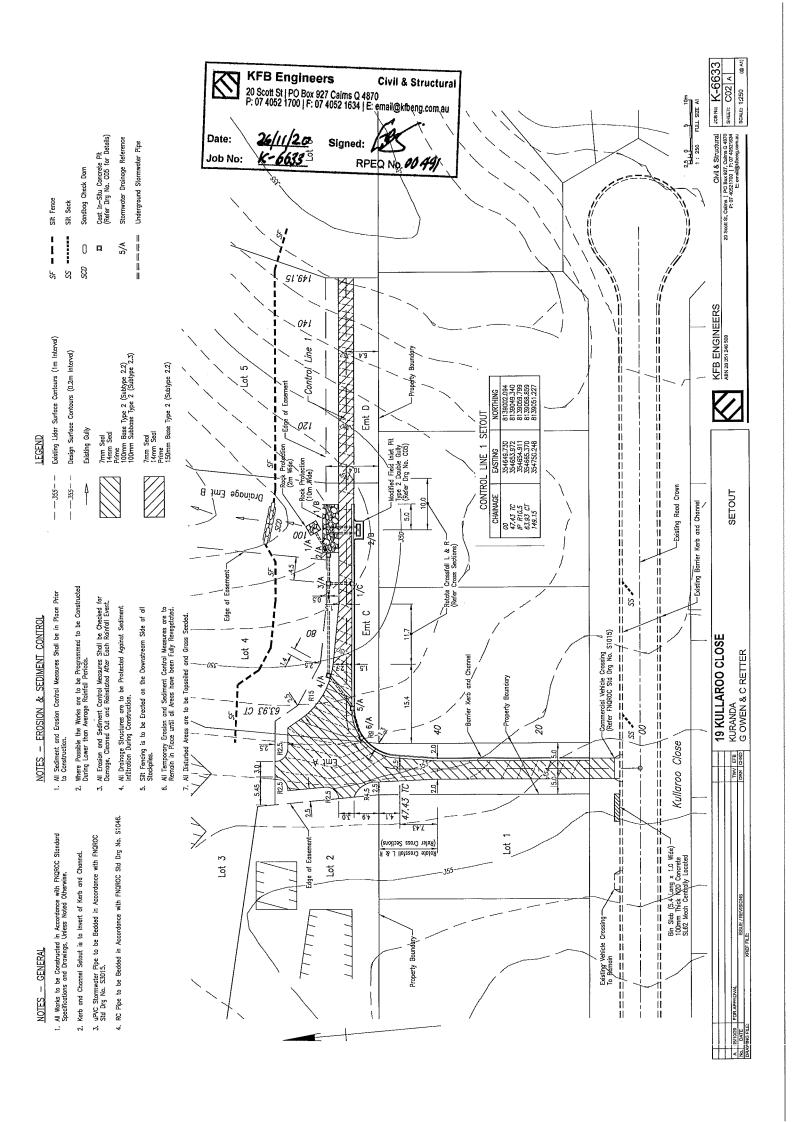
Subtotal (Excl. GST) \$ 800 GST (10%) \$ 80 TOTAL (Incl. GST) \$ 880

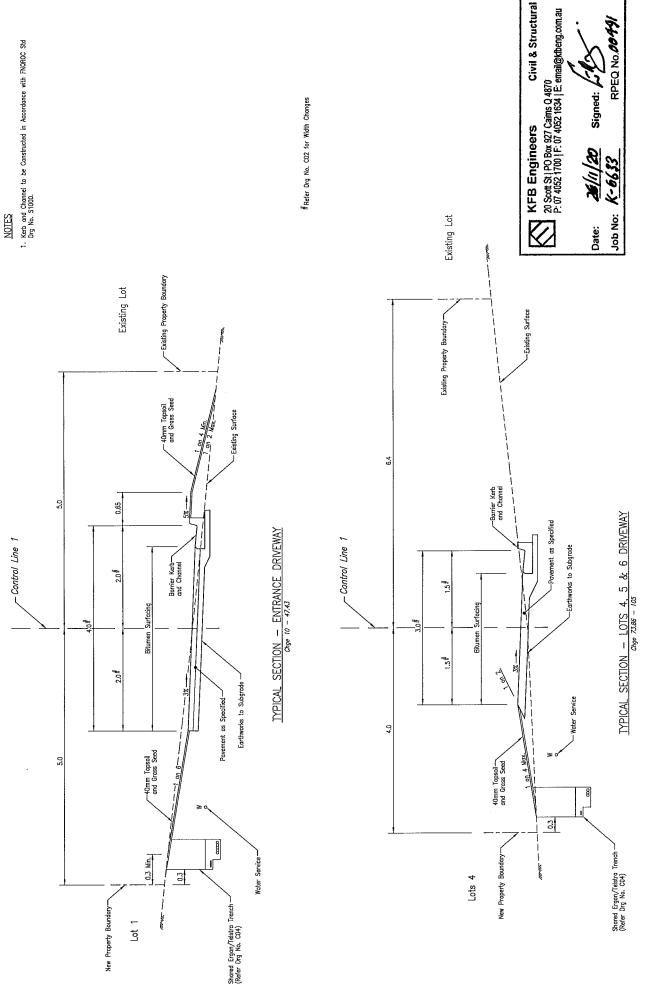
JOB No: K-6633 SHET: C01 A FULL SIZE AT Existing Open Drain/Gully Existing Sewer Manhole Existing Fire Hydrant Existing Power Pole Stage Boundaries 200 표 픖 암 Existing Above Ground Electricity Line Existing Lidar Surface Contours (1m Interval) 15131--5131--5131-75131--7531--7531--7531--7531--Existing Gravity Sewer Main Existing Rising Sewer Main Existing Stormwater Pipe Existing Water Main Existing Optic Fibre / 6 to) LEGEND ---OF--355--- - SRI STAGE 5 Civil & Structural 20 Scott St | PO Box 927 Caims Q 4870 P. 07 4052 1703 | f.: 07 4052 1634 | E. email@ktheng.com.au RPEQ No**6019** RP734383 Control/Ling 1 /49. Signed: -Emt KFB Engineers K-6633 Job No: Date: Ę 47.43 TC THE STATE OF THE S 10 56 59 Coverant A Existing Electrical and Telecommunications Services to Existing Dwellings to Lats 2 and 3 to be Relocated into Driveway Easement. NOTES

1. The Location of Services Shown are Given for Guidance Only. Locations way Not be Accuracy Represented and Other Services May Exist on Site, it is the Responsibility of the Contractor to Verify the Position of all Services on Site. ing Barrier Kerb and Channe Existing Road Crow Lot 2/ Existing Access Lot 3 STAGE 2 Edge Carport Existing House WHE SEE STRING

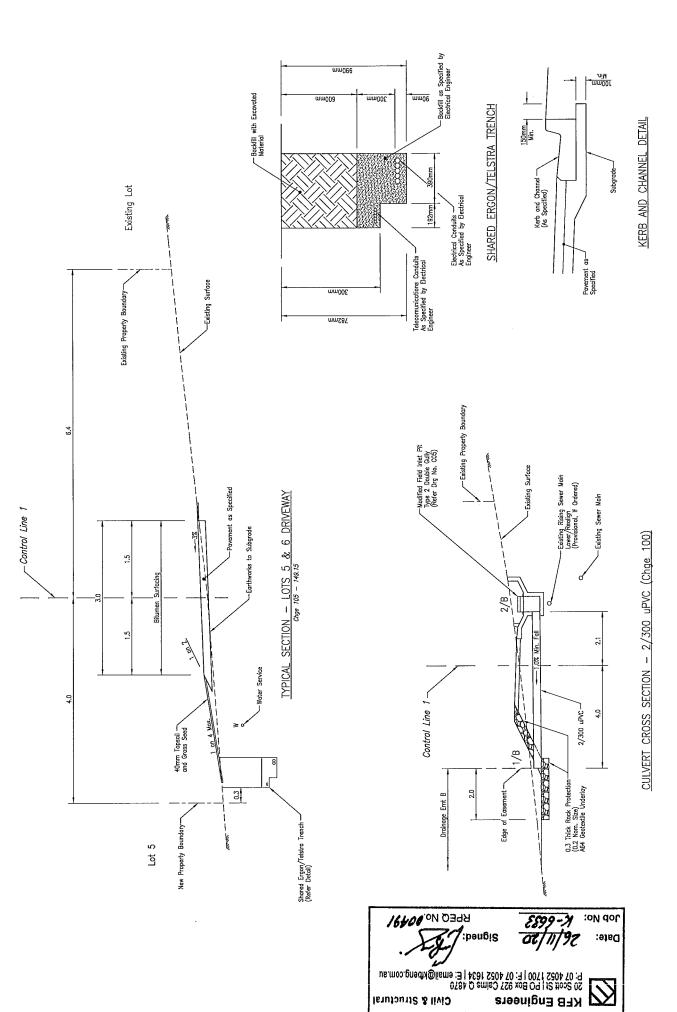
Civil & Structural
20 Scott St, Calms | PO Box 927, Calms G 4870
P; 07 40527700 | F; 07 405271634
E: omai@klbong.com.au KFB ENGINEERS ABN 28 351 246 509 GENERAL ARRANGEMENT 19 KULLAROO CLOSE KURANDA G OWEN & C RETTER TWV EFB DRN CHKD

SCALE: 1:500





JOB NG: K-6633 SHET: C03 A SCALE: N.T.S. CIVII & Structural
20 Scott St, Calms | PO Box 927, Calms Q 4870
P; 07 4052/100 | P; 07 4052/100
E; ontall@ktborg.com.au KFB ENGINEERS
ABN 28 351 246 508 TYPICAL SECTIONS 19 KULLAROO CLOSE
KURANDA
KURANDA
G OWEN & C RETTER ISSUE / REVISIONS



TYPICAL SECTION AND DETAILS

19 KULLAROO CLOSE
KURANDA
G OWEN & C RETTER

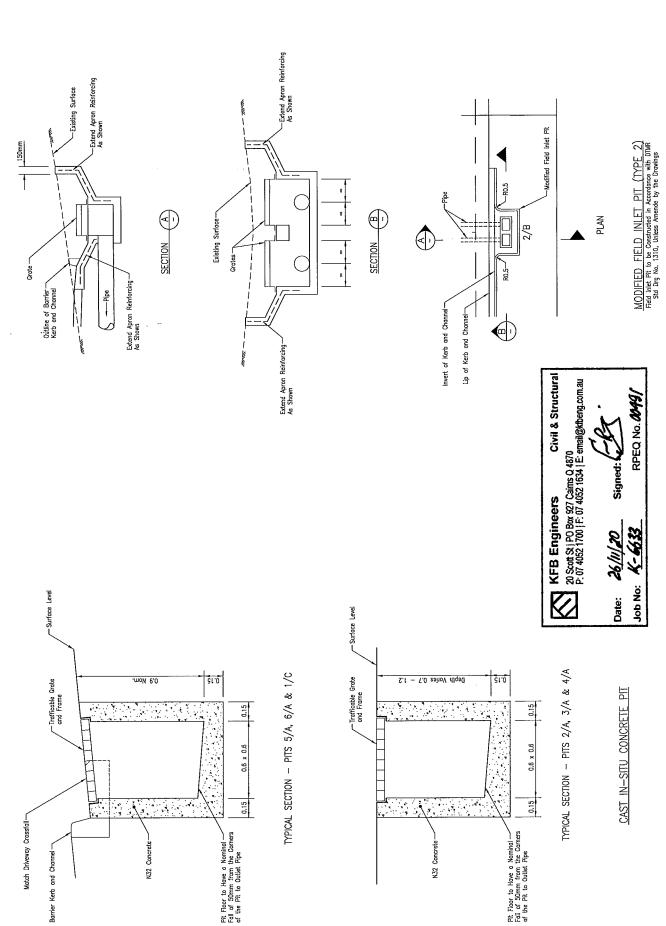
TWV EFB DRN CHKD

KFB ENGINEERS ABN 28 351 246 509

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20 Scott St, Calms | PO Box 927, Calms 0.4870
P; 07 4952/100 | P: 07 4052/103
E; omali@ichorg.com.au

JOB NC: K-6633 SHEET: C04 A

SCALE: N.T.S.



19 KULLAROO CLOSE KURANDA G OWEN & C RETTER

STORMWATER DETAILS

KFB ENGINEERS
ABN 28 351 246 508

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20 Scott St, Calms | PO Box 927, Calms Q 4870
P: 07 40521700 | P: 07 40521934
E: email@kbong.com.au

JOB NO: K-6633 SHEET: C05 A SCALE N.T.S. (@ A1)

1/c 3/A 300 uEVC 0.15 -1.06477 4.701m 2£8.8M 816.848 1.051 \$8Z.7\$E 00 EXISTING SURFACE DESIGN SURFACE Pipe Size/Type Pipe Capacity (m³/s) PIPE INVERT Pipe Grade (%) Pipe Length (m) DATUM R.L. 335.000 CHAINAGE DEPTH

375 RCP 375 RCP Closs 3 Closs 3 0.25 0.25 -2.00% -2.00% 5.026m

300 uPVC 0.29 -9.207% 17.921m

225 uPVC 300 uPVC 0.17 0.32 -13.908% -10.937% 6.047m 7.964m

Pipe Size/Type Pipe Capacity (m³/s) Pipe Grade (%) Pipe Length (m)

Civil & Structural

20 Scott St | PO Box 927 Cains Q 4870 P: 07 4052 1700 | F: 07 4052 1634 | E: email@ktbeng.com.au

KFB Engineers 20 Scott St PO Box 927 Ca

RPEQ No. 00 49/

Signed:

Date: 26/11/20 Job No: K-6633

1/A

3/A 2/A

4/A

5/A

LONGITUDINAL SECTION ALONG LINE C

1017

61977

164.75

\$1.933

14.012

00

LONGITUDINAL SECTION ALONG LINE A

\$72.7\$E

2£9.7‡£

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PIPE INVERT

DEPTH

CHAINAGE

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EXISTING SURFACE

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DESIGN SURFACE

DATUM R.L. 334.000

069°Z≯Σ

0.902

172.848

LONGITUDINAL SECTION ALONG STORMWATER LINE A & C

19 KULLAROO CLOSE
TINN BESS
KURANDA
G OWEN & C RETTER

TWV EFB DRN CHKD

ISSUE / REVISIONS

A 3310220 FOR APPROVAL.
No. DATE
DRAVANG FILE:

KFB ENGINEERS
ABN 28 351 246 509

JOB NG: K-6633 SHETT: CO6 A SCALE AS SHOWN (@ A1) CIVIÍ & Structural
20 Scott St, Calma | PO Box 827, Calma Q 4870
P: 07 40521700 | F: 07 40521634
E: omal@ktbong.com.au 1.25 1.25

2.5m 5m FULL SIZE A1

Harizontal Scale 25.40 5 19m 1: 250 FULL SIZE A1

Vertical Scale



KURANDA G OWEN & C RETTER

19 KULLAROO CLOSE TWV EFB DRN CHKD

Civil & Structural 20 Scott St | PO Box 927 Caims Q 4670 P. 07 4052 1700 | F. 07 4052 1634 | E. email@ktbeng.com.au RPEQ No 00 49 Signed: Job No: Date:

KFB Engineers

2117455

767.235

349.923

748.527

282.64E

220.277

64E.12E

352,302

352.830

225.964

021.22

\$54,459 \$54,430 \$54,430 \$54,430 \$54,430

354.270

EXISTING SURFACE

DATUM R.L. 338.000

Vertical Geometry Grade (%)
Vertical Grade Length (m)
Vertical Curve Length (m)
Vertical Curve Radius (m)

Horiz Curve Data

-0.085

060.0-

0.005 742.648 743.648

000'0

941.0-

651,0-

-0,137

101.0-

9£0.0-

/ FILL DEPTH

CUT

000'0- +55'151 000'0 998'151 550'0- 041'151 10'0- 894'151 000'0- 654'151

14.259% 34.365m

20.896m 6.986m 17.829m

L 15 R 181.665

149,152 354,150 -0.033

800.02E

Z48.617

350.277

352,461

352.946 352.946

590.556

991'595

DESIGN SURFACE

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7782.701 782.701 782.701

202.202

08 875.08

265.27

126.23

966'99

984.74

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CHAINAGE

01

SECTION ALONG CONTROL LINE

LONGITUDINAL

Along Surface Line 1

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CH.107.287

- CH'103'50L-

CH:148:125-

008.84E.JA

BL 348.555

KL348.617

S66'SS'HJ

Z#S'6#£"78 775.028.JR

Z0Z°E1°HЭ

Z0Z'B'H2

BC'325'481

946'792'78

951.555.156

455.255.JA

045.435.18

89+"+9£"78

Kullaroo Close

61E'09E'78

051.45E.JA

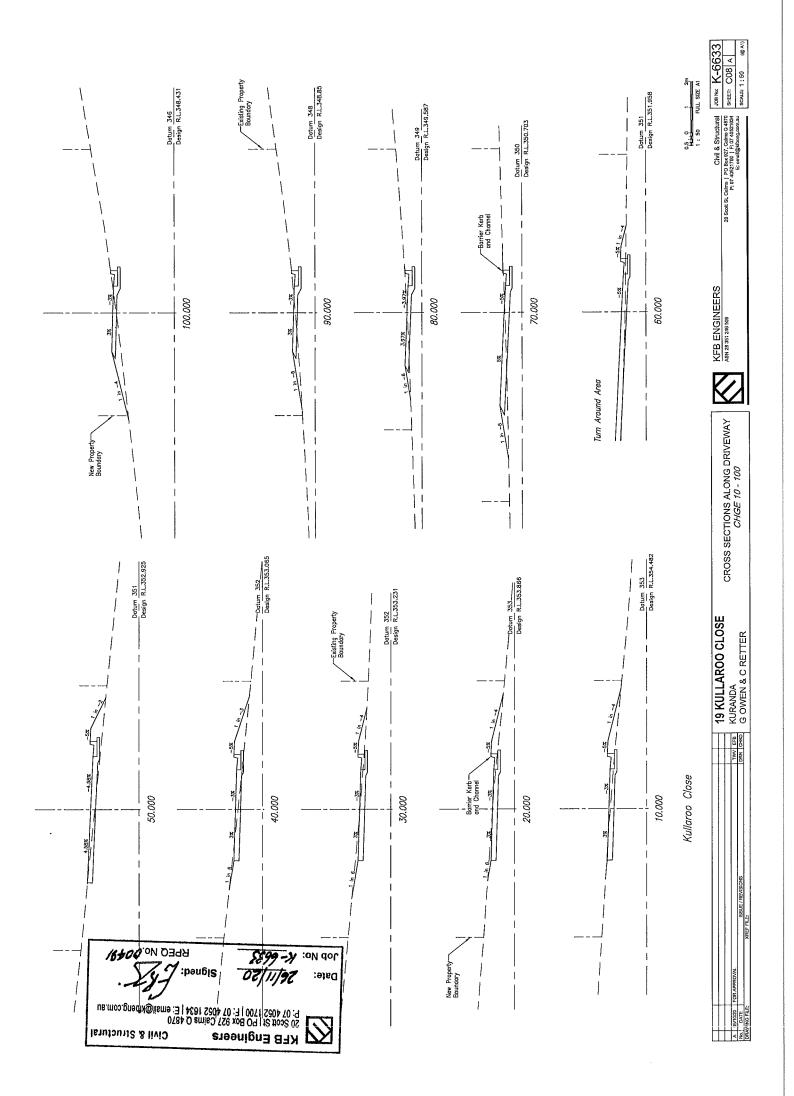
K-6633

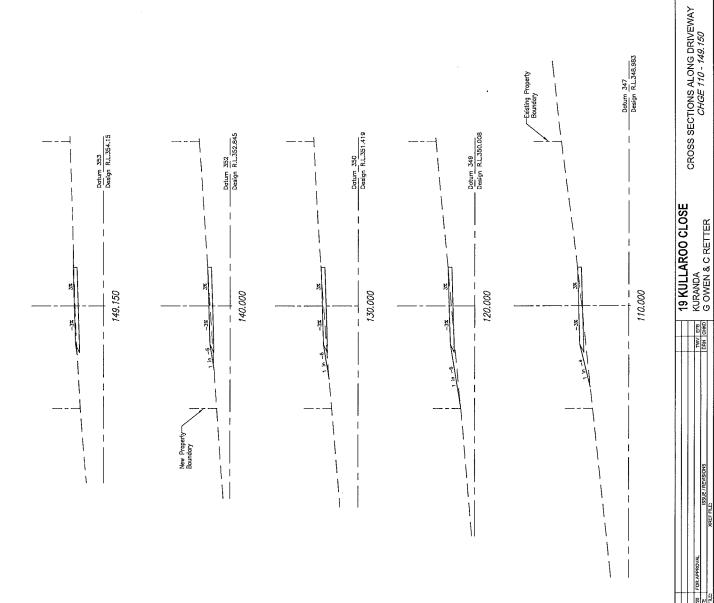
10 20m FULL SIZE AI 1:500

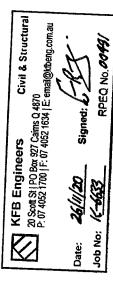
JOB NG: K-6633 SHEET: CO7 A SCALE: 1:500 (@ A1)

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0.5 0 1 2m 1 : 50 FULL SIZE A1

JOB No: K-6633
SHEET: C09 A
SCALE: 1:50 (@ A1)

