

— Ex. SEWER —

SEWER AND MANHOLE

SEWER AND EZI PIT WITH TYPE E CONNECTION

— SWD —

EXISTING STORMWATER

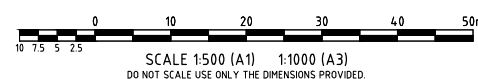
STAGE BOUNDARY

SUB-STAGE BOUNDARY

— 26.0 —


FINISHED SURFACE CONTOURS

SEWER MANHOLE (MH) OR EZI PIT (MS)



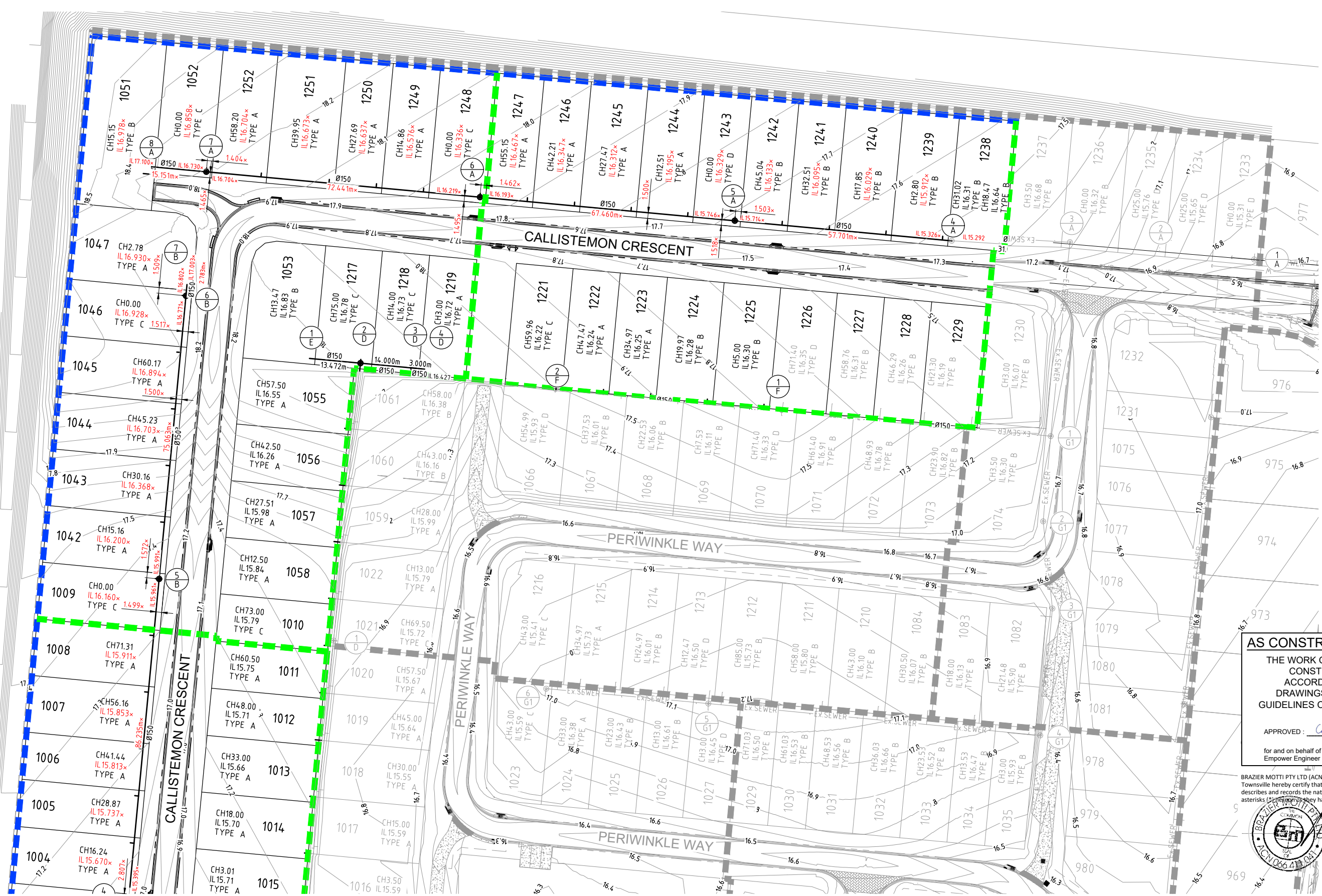
BRAZIER MOTTI PTY LTD (ACN 066 411 041), 595 Flinders Street,
Townsville hereby certify that this Drawing accurately and correctly
describes and records the nature and location of the works depicted by
asterisks (*) ~~and~~ ~~where~~ they have been constructed for subdivision.

Date 22-10-20

Client	URBEX PTY LTD	Date	
Project	KALYNDA CHASE STAGE 11B2, 11C3 AND 11C4	AHD PSM 131651 RL 19.248M (MGA) COORD	
Title	SEWERAGE RETICULATION LAYOUT (SHEET 1 OF 2)	AS CONSTRUCTED	
		Project No. CT1521-CS301	Drawing No. 1

User: MARTY LATORRE File Name: C:\Users\marty\Documents\CT1521_4114_CIVIL-DWG-ALL AS CON Stage 1B2_11C3 and 11C4\CT1521-ASCON-SEP

Plot Date: 20/10/2020 8:10:34 AM




NOTE:-
REFER TO DRAWING CT1521-CS301 FOR
LEGEND, NOTES AND LOCALITY PLAN.


FOR CONTINUATION REFER DRAWING CT1521-CS301

AS CONSTRUCTED CERTIFICATION

THE WORK ON THIS DRAWING HAS BEEN
CONSTRUCTED GENERALLY IN
ACCORDANCE WITH THE DESIGN
DRAWINGS AND THE INTENT OF THE
GUIDELINES OF TOWNSVILLE CITY COUNCIL

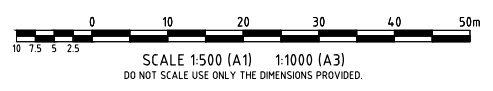
APPROVED:  RPEQ: 12732

for and on behalf of
Empower Engineer & Project Managers



BRAZIER MOTTY PTY LTD (ACN 066 411 041), 595 Flinders Street,
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Director: 
Date: 22-10-20



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Registered Engineer
22/10/2020
Date
Register
12732

ENGINEERING CERTIFICATION

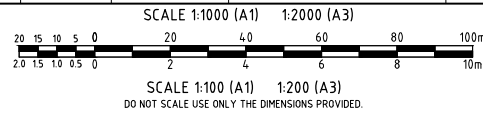

ENGINEERS &
PROJECT MANAGERS
ABN 23 018 743 692

Client	URBEX PTY LTD		Datum	AHD
Project	KALYNDIA CHASE STAGE 1B2, 11C3 AND 11C4		PSM	131651
Title	SEWERAGE RETICULATION LAYOUT (SHEET 2 OF 2)		RL	19.248M (MGA) COORD
		AS CONSTRUCTED	Project No.	Drawing No.
			CT1521-CS302	1

DocuSign Envelope ID: 5ED473D3-826D-4E3B-9039-32AF0A094783

User: MARTY LATORE File Name: C:\Users\marty\Documents\1521_414_CIVIL-DROPS\4.4_AS CON Stage 11B2_11C3 and 11C4\TSS1-ASCON-SEPL
Plot Date: 22/10/2020 8:10:42 AM

	(1/A)	(2/A)	(3/A)	(4/A)	(5/A)	(6/A)	(7/A)	(8/A)
MANHOLE TYPE/DROP	S1050	SEWER MS Drop 0.004	S1050 Drop 1653	S1050 Drop 0.040	S1050 Drop 0.030	S1050 Drop 0.030	S1050 Drop 0.030	END
MANHOLE COVER		Cover Bolt	Cover Bolt	Cover Bolt	Cover Bolt	Cover Bolt	Cover Bolt	Cover Bolt
JUNCTION LINE No.			Drop 0.088 Line G1					
JUNCTION DROP			Drop 0.088					
HC DEPTH	1.4	1.34	0.987	1.165	1.4	1.4	1.4	1.33
HC TYPE	Type D	Type D	Type B	Type B	Type C	Type C	Type B	Type B
HC IL	IL 15.309	IL 15.645 IL 15.760	IL 16.325 IL 16.676	IL 16.310 IL 15.912*	IL 16.324* IL 16.467*	IL 16.516* IL 16.631*	IL 16.673* IL 16.704*	IL 16.978*
HC LOT No.	EX 1233	EX 1234 EX 1235	EX 1236 EX 1237	EX 1238 EX 1239	EX 1240 EX 1241	EX 1242 EX 1243	EX 1244 EX 1245	EX 1246 EX 1247
NOTE:- REFER TCC STD DWGS. SD-455 TO SD-475 FOR DETAILS OF SEWER MANHOLES, COVERS, FRAMES, INLETS, OUTLETS, HOUSE CONNECTIONS AND PIPELINE CONSTRUCTION.								
NOTE:- TOP OF MANHOLE RINGS ARE SET 150mm ABOVE FSL AS PER TCC STD DWG SD-475.								
MANHOLE DROP NOTE:- INTERNAL MH. DROPS ARE AS PER TCC STD DWG SD-474.								
LEGEND								
×	ALLOTMENT CONTROL LEVEL							
◁	HOUSE CONNECTION							
Conc	CONCRETE COVER							
C.I.	CAST IRON COVER							
Bolt	BOLT DOWN COVER							
PROP. DESCRIPTION		LOT			LOT			
DIAMETER/TYPE		φ150uPVC SN8			φ150 uPVC SN8			
GRADE (1 in)		175	14.8	148.71	150.92	149.36	40.95	
LENGTH		24.998	24.001	31.016	57.701*	67.460*	72.441*	15.151*
DATUM (m)		2.0						
JUNCTION INVERT LEVEL			13.504					
DEPTH BELOW F.S.L.		3.615 3.569	3.702 3.698	3.888 2.235	2.169 2.140	1.778 1.752	1.510 1.484	1.115
INVERT LEVEL		13.094 13.140	13.283 13.287	13.424 15.077	15.286 15.326*	16.193* 16.219*	16.704* 16.730*	17.100*
FINISHED SURFACE LEVEL		16.709	16.985	17.312	17.466*	17.701*	18.214*	18.215*
CHAINAGE		0.000	24.998	49.000	80.016	137.516	205.016	277.486
LINE	A							



AS CONSTRUCTED CERTIFICATION

THE WORK ON THIS DRAWING HAS BEEN
CONSTRUCTED GENERALLY IN
ACCORDANCE WITH THE DESIGN
DRAWINGS AND THE INTENT OF THE
GUIDELINES OF TOWNSVILLE CITY COUNCIL

APPROVED: *Chiffa Wicks* RPEQ: 12732

for and on behalf of
Empower Engineer & Project Managers

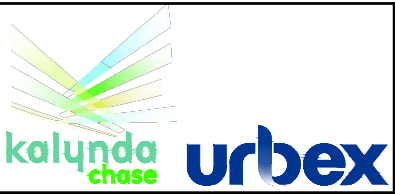
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Townsville hereby certify that this Drawing accurately and correctly
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asterisks (*) and that they have been constructed for subdivision.

Director: *Chiffa Wicks* Date: 22-10-20

	(1/B)	(2/B)	(3/B)	(4/B)	(5/B)	(6/B)	(7/B)
MANHOLE TYPE/DROP	S1050	S1050 Drop 0.072	S1050 Drop 0.030	S1050 Drop 0.080	S1050 Drop 0.030	S1050 Drop 0.030	END
MANHOLE COVER		Cover Bolt	Cover Bolt	Cover Bolt	Cover Bolt	Cover Bolt	Cover Bolt
JUNCTION LINE No.			Drop 0.072 Line D	Drop 0.081 Line C			
JUNCTION DROP			Drop 0.072	Drop 0.081			
HC DEPTH		1.457	1.455	1.245	1.26	1.4	1.35
HC TYPE		Type B	Type C	Type C	Type A	Type C	Type A
HC IL		IL 15.363 IL 15.718	IL 15.451 IL 15.454	IL 15.813 IL 15.911*	IL 16.204* IL 16.368*	IL 16.928* IL 16.894*	IL 16.930*
HC LOT No.		EX 989 EX 1086	EX 1000 EX 1001	EX 1003 EX 1004	EX 1009 EX 1042	EX 1043 EX 1044	EX 1046 EX 1047
NOTE:- REFER TCC STD DWGS. SD-455 TO SD-475 FOR DETAILS OF SEWER MANHOLES, COVERS, FRAMES, INLETS, OUTLETS, HOUSE CONNECTIONS AND PIPELINE CONSTRUCTION.							
NOTE:- TOP OF MANHOLE RINGS ARE SET 150mm ABOVE FSL AS PER TCC STD DWG SD-475.							
MANHOLE DROP NOTE:- INTERNAL MH. DROPS ARE AS PER TCC STD DWG SD-474.							
LEGEND							
×	ALLOTMENT CONTROL LEVEL						
◁	HOUSE CONNECTION						
Conc	CONCRETE COVER						
C.I.	CAST IRON COVER						
Bolt	BOLT DOWN COVER						
PROP. DESCRIPTION		LOT			LOT		
DIAMETER/TYPE		φ150uPVC SN8			φ150uPVC SN8		
GRADE (1 in)		166	170	188	152.36	96.23	13.85
LENGTH		38.399	35.500	47.500	86.235*	75.063*	2.783*
DATUM (m)		3.0					
JUNCTION INVERT LEVEL			15.093	15.465*			
DEPTH BELOW F.S.L.		1.847 1.847	1.993 1.921	1.885 1.855	1.773* 1.678	1.406 1.376	1.553 1.522
INVERT LEVEL		14.509 14.509	14.740 14.812	15.021 15.051	15.300* 15.395*	15.961* 15.991*	16.771* 16.802*
FINISHED SURFACE LEVEL		16.733	16.906	17.073*	17.367*	18.324*	18.181*
CHAINAGE		38.399	73.899	121.399	207.829	282.829	285.879
LINE	B						

HOUSE CONNECTION TYPES					
TYPE A DIRECT CONN. (+0.5m)			TYPE C DIRECT CONN. MH (+0.5m)		
TYPE B JUMP-UP (+0.44m)			TYPE D INTERNAL DROP (-0.44m)		

1	AS CONSTRUCTED	JT	MM	CH	CH	13/10/20	12732
No.	Amendments	Drawn	Design	Design	Appd	Date	Register
ENGINEERING CERTIFICATION							22/10/2020
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Client	URBEX PTY LTD	Datum	AHD
Project	KALYNDIA CHASE STAGE 11B2, 11C3 AND 11C4	PSM	131651
Title	SEWER RETICULATION LONGITUDINAL SECTION (SHEET 1 OF 2)	RL	19.248M
		(MGA) COORD	
		Project No.	CT1521-CS303
		Drawing No.	
		Rev	1

Plot Date: 21/10/2020 8:10:43 AM User: MARTY LATORRE File Name: C:\12

		(4/B)	1/C
MANHOLE TYPE/DROP	S1050 Drop 1.081	END	
MANHOLE COVER	Cover Bolt	Cover Bolt	
JUNCTION LINE No.			
JUNCTION DROP			
HC DEPTH		1.35	
HC TYPE		Type B	
HC IL		IL 15.689	
HC LOT No.		Lot 1002	

NOTE:-

REFER TCC STD DWGs. SD-455 TO SD-475
FOR DETAILS OF SEWER MANHOLES, COVERS,
FRAMES, INLETS, OUTLETS, HOUSE
CONNECTIONS AND PIPELINE CONSTRUCTION.

NOTE:-

TOP OF MANHOLE RINGS ARE SET 150mm
ABOVE FSL AS PER TCC STD DWG SD-475.

MANHOLE DROP NOTE:-

INTERNAL MH. DROPS ARE AS PER
TCC STD DWG SD-474.

LEGEND

- | | |
|------|-------------------------|
| X | ALLOTMENT CONTROL LEVEL |
| ◁ | HOUSE CONNECTION |
| Conc | CONCRETE COVER |
| C.I. | CAST IRON COVER |
| Bolt | BOLT DOWN COVER |

PROP. DESCRIPTION	LOT	
DIAMETER/TYPE	Ø150uPVC S/N8	
GRADE (1 in)	62.13	
LENGTH	13.855×	
DATUM (m)	1.0	
JUNCTION INVERT LEVEL		
DEPTH BELOW F.S.L.	1.769×	1.604
INVERT LEVEL	15.300×	15.465×
FINISHED SURFACE LEVEL	17.069×	16.913×
CHAINAGE	0.000	
LINE	C	

LINE

[illegible]

<i>Client</i>	URBEX PTY LTD	<i>Datum</i> AHD	
<i>Project</i>	KALYNDA CHASE STAGE 11B2, 11C3 AND 11C4	PSM 131651 RL 19.248M (MGA) COORD	
<i>Title</i>	SEWER RETICULATION LONGITUDINAL SECTION (SHEET 2 OF 2)	AS CONSTRUCTED	
		<i>Project No.</i> CT1521-CS304	<i>Drawing No.</i> 1

AS CONSTRUCTED CERTIFICATION







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GUIDELINES OF TOWNSVILLE CITY COUNCIL

APPROVED: Chris Hahn RPEQ: 12732

for and on behalf of
Empower Engineer & Project Managers

BRAZIER MOTTI PTY LTD (ACN 066 411 041), 595 Flinders Street,
Townsville hereby certify that this Drawing accurately and correctly
describes and records the nature and location of the works depicted by
asterisks (*) hereon as they have been constructed for subdivision.



HOUSE CONNECTION TYPES		
TYPE A DIRECT CONN. (+0.5m)		
TYPE B JUMP-UP (+0.4-6m)		
TYPE C DIRECT CONN. MH (+0.5m)		
TYPE D INTERNAL DROP (+0.4-6m)	