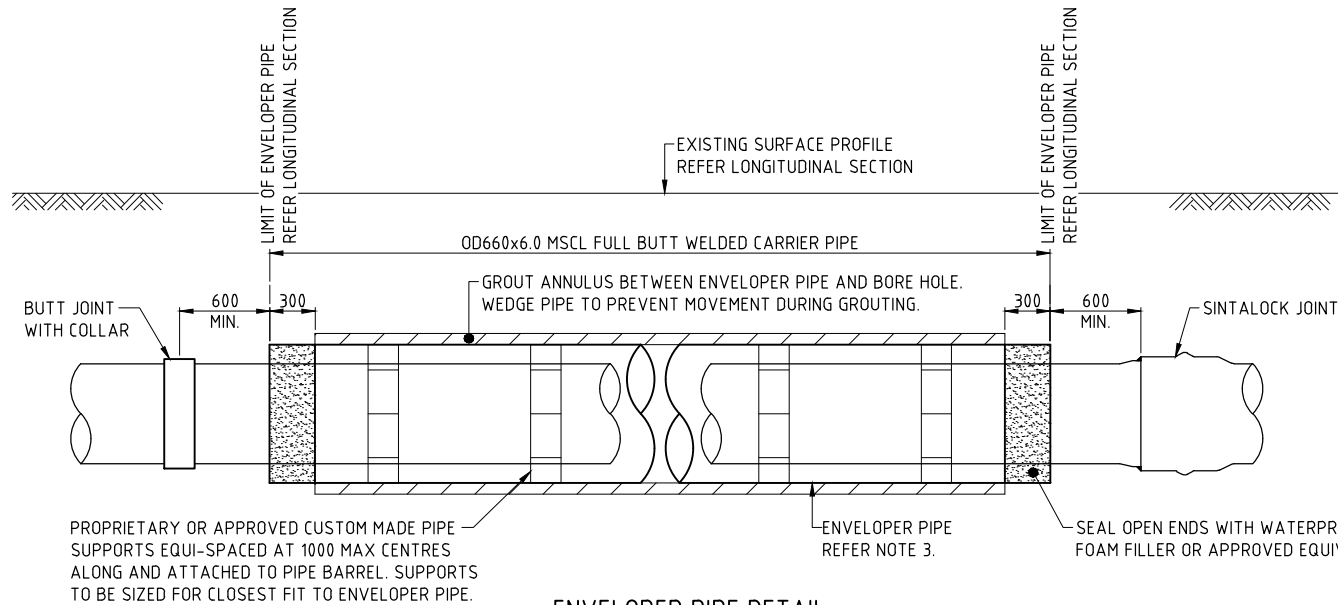


SETOUT TABLE

CHAINAGE	EASTING	NORTHING	BEARING	DEF ANGLE
13.269	361468.657	8132583.674	337d28'35"	
60.000	361450.756	8132626.841	337d28'35"	
68.122	361447.645	8132634.343	337d28'35"	67d26'19"
92.372	361423.394	8132634.359	90d00'00"	
92.372	361423.394	8132634.359	270d02'17"	
120.000	361397.843	8132623.851	247d38'37"	
148.896	361371.119	8132612.860	247d38'37"	34d01'35"
157.168	361363.018	8132614.533	281d40'13"	34d12'19"
180.000	361347.122	8132630.922	315d52'32"	
206.029	361329.000	8132649.607	315d52'32"	1d59'47"
218.210	361320.220	8132658.050	313d52'45"	2d24'48"
230.391	361311.092	8132666.116	311d27'56"	2d00'09"
240.000	361303.674	8132672.223	309d27'47"	
256.657	361290.814	8132682.810	309d27'47"	2d01'10"
277.649	361274.147	8132695.573	307d26'37"	2d22'49"
298.642	361256.954	8132707.633	305d03'48"	2d00'03"
300.000	361255.826	8132708.374	303d03'45"	
360.000	361205.542	8132741.107	303d03'45"	
401.829	361170.486	8132763.927	303d03'45"	2d07'50"
420.000	361155.636	8132774.400	305d11'35"	
480.000	361106.803	8132808.980	305d11'35"	
540.000	361057.570	8132843.560	305d11'35"	
600.000	361008.538	8132878.140	305d11'35"	
660.000	360959.505	8132912.720	305d11'35"	
681.444	360941.980	8132925.078	305d11'35"	0d17'04"
720.000	360910.582	8132947.456	305d28'39"	
780.000	360861.722	8132982.279	305d28'39"	
840.000	360812.861	8133017.102	305d28'39"	
900.000	360764.001	8133051.925	305d28'39"	
960.000	360715.140	8133086.748	305d28'39"	
1020.000	360666.279	8133121.571	305d28'39"	
1023.596	360663.351	8133123.658	305d28'39"	1d08'02"
1026.878	360660.717	8133125.615	306d36'41"	1d05'21"
1032.877	360655.970	8133129.284	307d42'03"	1d05'41"
1038.877	360651.294	8133133.043	308d47'44"	1d00'19"
1044.877	360646.684	8133136.884	309d48'02"	0d59'43"
1050.877	360642.142	8133140.804	310d47'46"	0d13'25"
1056.877	360637.615	8133144.742	311d01'11"	0d23'13"
1060.176	360635.140	8133146.924	311d24'24"	14d32'59"
1076.357	360620.705	8133154.234	296d51'25"	15d26'47"
1080.000	360618.011	8133156.686	312d18'12"	
1095.008	360606.911	8133166.787	312d18'12"	45d20'27"
1108.654	360606.350	8133180.422	357d38'39"	35d07'41"
1140.000	360587.275	8133205.295	322d30'57"	
1143.782	360584.973	8133208.297	322d30'57"	11d30'22"
1167.018	360567.440	8133223.544	311d00'36"	14d51'51"
1200.000	360548.937	8133250.847	325d52'27"	
1260.000	360515.276	8133300.515	325d52'27"	
1320.000	360481.615	8133350.184	325d52'27"	
1380.000	360447.954	8133399.852	325d52'27"	
1440.000	360414.294	8133449.521	325d52'27"	
1478.099	360392.920	8133481.059	325d52'27"	40d26'18"
1500.000	360395.328	8133502.827	6d18'45"	
1560.000	360401.925	8133562.464	6d18'45"	
1620.000	360408.522	8133622.100	6d18'45"	
1680.000	360415.119	8133681.736	6d18'45"	
1720.000	360419.517	8133721.494	6d18'44"	
1740.000	360421.716	8133741.373	6d18'44"	
1746.994	360422.485	8133748.324	6d18'44"	0d00'01"
1755.947	360423.469	8133757.223	6d18'45"	18d14'01"
1799.644	360441.622	8133796.971	24d32'46"	18d32'24"
1800.000	360441.659	8133797.325	6d00'22"	
1851.376	360447.035	8133848.419	6d00'22"	15d19'45"
1860.000	360445.638	8133856.929	350d40'37"	
1873.212	360443.498	8133869.967	350d40'37"	30d43'59"
1881.518	360438.153	8133876.324	319d56'38"	39d32'06"
1920.000	360400.304	8133883.277	280d24'32"	
1931.480	360389.012	8133885.351	280d24'32"	13d57'52"
1980.000	360340.586	8133882.342	266d26'40"	
2040.000	360280.701	8133878.621	266d26'40"	
2060.112	360260.628	8133877.373	266d26'40"	17d10'56"
2100.000	360221.863	8133886.771	283d37'36"	
2112.734	360209.488	8133889.771	283d37'36"	9d31'05"
2160.000	360162.343	8133893.157	274d06'31"	
2220.000	360102.497	8133897.456	274d06'31"	



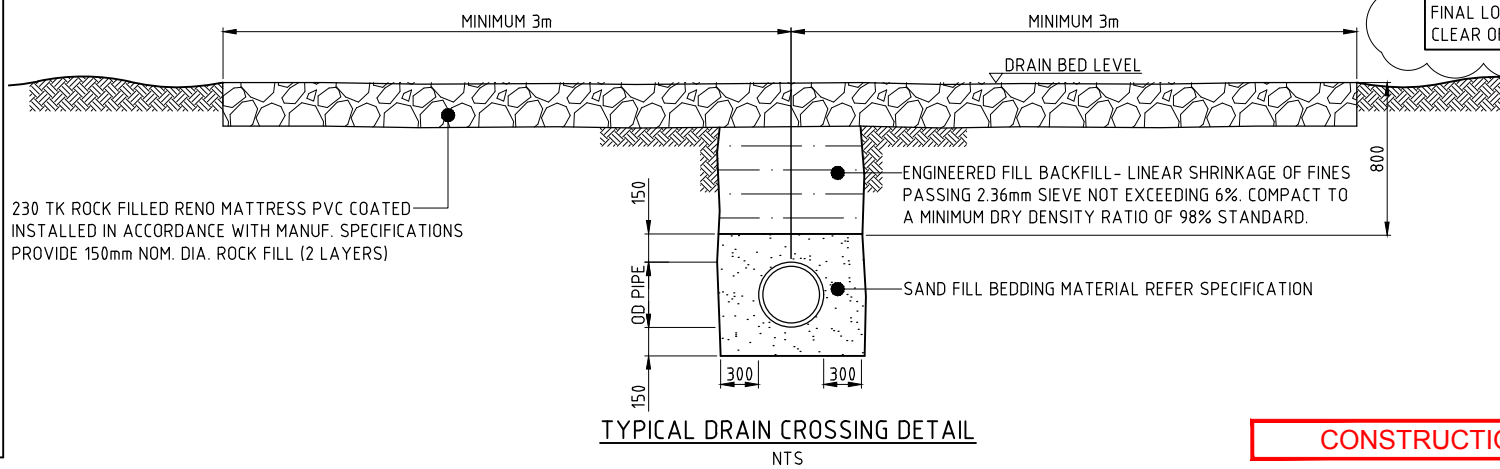
ENVELOPER PIPE DETAIL
N.T.S.

SETOUT TABLE

CHAINAGE	EASTING	NORTHING	BEARING	DEF ANGLE
2222.114	360100.388	8133897.608	274d06'31"	20d52'50"
2280.000	360044.965	8133880.904	253d13'41"	
2307.338	360018.790	8133873.015	253d13'41"	52d30'13"
2328.604	360011.264	8133853.125	200d43'29"	160d08'15"
2340.000	360011.436	8133864.520	0d51'43"	
2400.000	360012.339	8133924.513	0d51'43"	
2460.000	360013.241	8133984.506	0d51'43"	
2520.000	360014.144	8134044.500	0d51'43"	
2580.000	360015.046	8134104.493	0d51'43"	
2618.080	360015.619	8134142.569	0d51'43"	

SETOUT TABLE - PIPE FARM CONNECTION

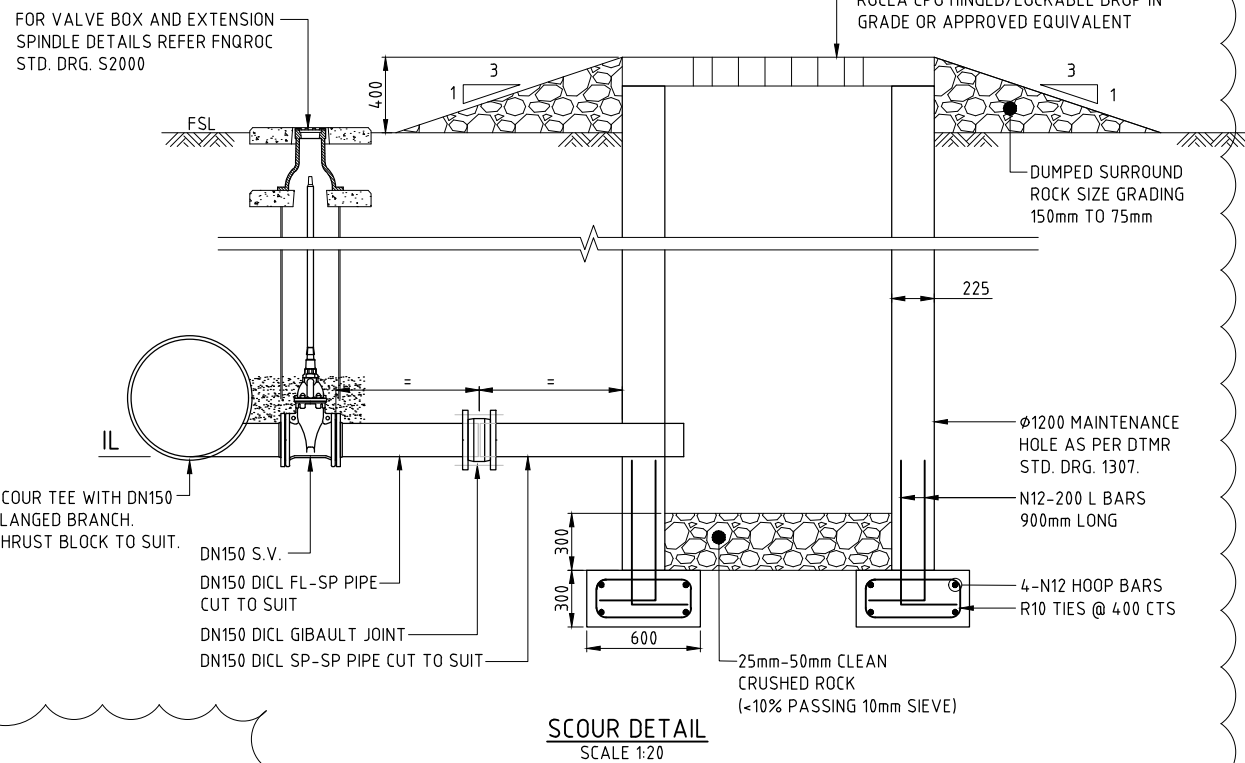
CHAINAGE	EASTING	NORTHING	BEARING	DEF ANGLE
0.000	360836.337	8133000.370		
74.222	360793.259	8132939.928		



TYPICAL DRAIN CROSSING DETAIL
NTS

TRENCHLESS INSTALLATION NOTES

1. THE PIPELINE SHALL BE CONSTRUCTED BY TRENCHLESS INSTALLATION OF AN APPROVED ENVELOPER PIPE UNDER THE CROSSING. THE TRENCHLESS INSTALLATION SHALL BE DONE WITH OUT DISTURBANCE TO EXISTING STRUCTURES, WORKS OR SERVICES.
2. THE CONTRACTOR SHALL ASSESS GROUND CONDITIONS, SELECT PROPOSED TRENCHLESS INSTALLATION METHOD, DESIGN (INCLUDING TEMPORARY WORKS) THE PROPOSED WORKS AND SUBMIT FOR APPROVAL PRIOR TO CONSTRUCTION.
3. ENVELOPER PIPE TO BE MINIMUM ID 810mm, MATERIAL TYPE AND INSTALLATION TECHNIQUE TO BE CONFIRMED BY CONTRACTOR AND APPROVED BY CAIRNS REGIONAL COUNCIL, DEPARTMENT OF TRANSPORT AND MAIN ROADS AND QUEENSLAND RAIL.
4. THE CONTRACTOR IS TO DEMONSTRATE STRUCTURAL ADEQUACY OF THE PIPE FOR THE INSTALLATION METHOD SELECTED.
5. FOR ROAD CROSSINGS THE WATER MAIN AND ENVELOPER PIPE IS TO BE INSTALLED IN ACCORDANCE WITH MAIN ROADS STD. DRG. QP3 AND DETAIL SHOWN ON THIS DRAWING.
6. EACH END OF THE ENVELOPER PIPE SHALL BE CAPPED TO PREVENT INGRESS OF MATERIAL.
7. THE CONTRACTOR SHALL CONSIDER ALL PHYSICAL CONSTRAINTS ON SITE IN ORDER TO INSTALL THE PROPOSED CARRIER PIPE AND PROVIDE A PLAN OF THE SETDOWN AREA REQUIREMENTS TO UNDERTAKE THE WORKS.
8. LAUNCH AND RECEIVING PITS TO BE BULK BACKFILLED WITH MATERIAL WITH LINEAR SHRINKAGE OF FINES PASSING 2.36mm SIEVE NOT EXCEEDING 6% COMPACT TO A MINIMUM DRY DENSITY RATIO OF 98% STANDARD IN ACCORDANCE WITH SPECIFICATION.



ISSUED FOR CONSTRUCTION
FGF DEVELOPMENTS

RECEIVED
By Lauren McKew at 9:29 am, Aug 11, 2020

CONSTRUCTION ISSUE

SCALE 1:20 (A1) 0 0.4 0.8 1.2 1.6 2.0m



JACOBS

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Web: www.jacobs.com

CLIENT	CAIRNS REGIONAL COUNCIL
PROJECT	KAMERUNGA ROAD TO LAKE PLACID
DRAWN	LDH
DRAWING CHECK	PSD
REVIEWED	P.DENNIS
APPROVED	L.HINSPIETER
DESIGNED	LDH
DATE	15.02.19
DATE	15.02.19

TITLE	MISCELLANEOUS DETAILS
SHEET	1 OF 6
SCALE	AS SHOWN
DRAWING No	CB00694-ECC-DG-0035
REV	1