

EARTHWORKS NOTES:

1. ALL DESIGN LEVELS SHOWN ARE FINISHED SURFACE LEVELS.
2. ALL DIMENSIONS ON THE JOB ARE IN METRES UNLESS SHOWN OTHERWISE.
3. NOTWITHSTANDING THE LIMITS OF CUTTING AND FILLING SHOWN ON THE DRAWINGS, THE ACTUAL LIMITS SHALL BE DETERMINED ON SITE BY THE SUPERINTENDENT DURING CONSTRUCTION. SIMILARLY, FINISHED SURFACE CONTOURS FOR ALLOTMENTS MAY BE ADJUSTED BY A WRITTEN DIRECTION OF THE SUPERINTENDENT DURING CONSTRUCTION. (REFER JOB SPECIFICATION).
4. ALL STRUCTURAL FILL MATERIAL PLACED SHALL BE COMPACTED TO THE FOLLOWING MINIMUM DENSITY IN ACCORDANCE WITH THE PROJECT SPECIFICATION : : 65% DENSITY INDEX FOR NON-COHESIVE MATERIAL : 95% FOR COHESIVE MATERIALS
5. THE CONTRACTOR IS TO ENSURE THAT NO PONDING OCCURS DURING CONSTRUCTION AND IN THE FINAL PROFILE.

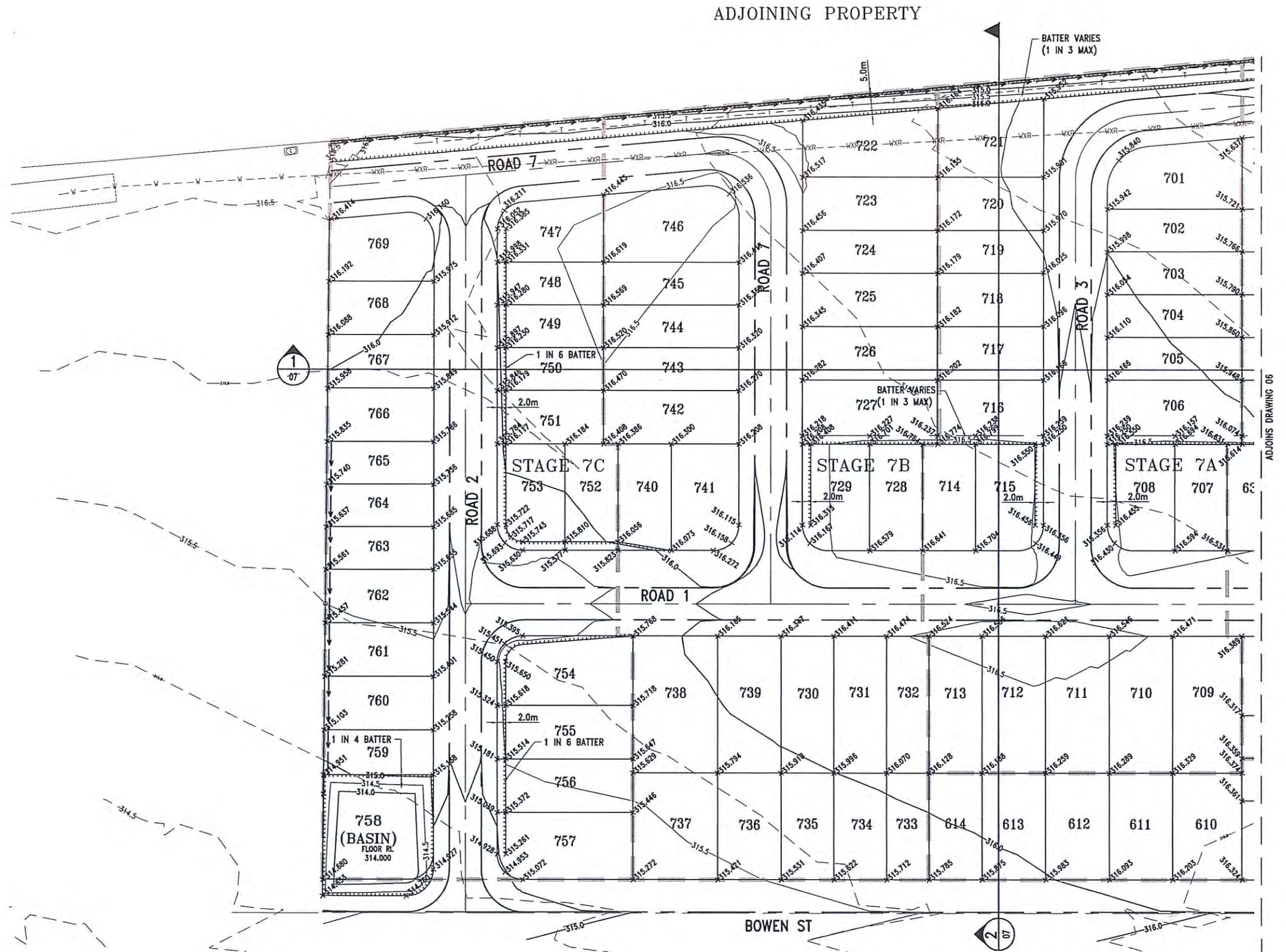
LEGEND

- 30 — EXISTING SURFACE CONTOURS
- 15 — DESIGN SURFACE CONTOURS
- — — — — NOMINAL KERB LINE
- — — — — TOP OF BATTER
- +310.817 FINISHED SURFACE LEVEL
- — — — — PROPOSED SWALE DRAIN
- SW - - - - - EXISTING STORMWATER
- W - - - - - EXISTING WATER
- S - - - - - EXISTING SEWER
- G - - - - - EXISTING GAS
- E - - - - - EXISTING ELECTRICAL
- E V - - - - - EXISTING ELECTRICAL OVERHEAD
- T - - - - - EXISTING TELSTRA
- RM - - - - - EXISTING SEWER RISING MAIN
- — — — — LIMIT OF EARTHWORKS
- — — — — STAGE BOUNDARY

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ



REVDESCRIPTIONBYAPPDATE AORIGINAL ISSUENWJH01/08/14					SURVEYOR FYFC INTERNATIONAL SURVEYING & MAPPING		RPEQ 5023  Approved by, for and on behalf of Bradlees This drawing has been produced for the exclusive use of the client (nominated on this document). No third party is to rely on this document without written permission from Bradlees. This drawing is not to be constructed from unless "issued for construction" is displayed and only where signed by an RPEQ. © Copyright		SCI QUAL INTERNATIONAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REGD. NO. 233 Bradlees Part of the Macquarie Group Bradford Lees Pty Ltd ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradlees@mhfi.hardit.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994					CLIENT ECONOMIC DEVELOPMENT QUEENSLAND TITLE EARTHWORKS LAYOUT PLAN - SHEET 1 OF 2		PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL STATUS ISSUE FOR APPROVAL <table><tr><td>DESIGNED</td><td>DRAWN</td><td>APPROVED</td><td>DATE</td><td>SCALE @ A1</td><td>SHEET</td></tr><tr><td>AR</td><td>JW</td><td>JH</td><td>01/08/14</td><td>1:500</td><td>1 OF 2</td></tr><tr><td colspan="3">PROJECT No</td><td colspan="3">REV</td></tr><tr><td colspan="3">14-732</td><td colspan="3">A</td></tr></table>										DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET	AR	JW	JH	01/08/14	1:500	1 OF 2	PROJECT No			REV			14-732			A		
DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET																																												
AR	JW	JH	01/08/14	1:500	1 OF 2																																												
PROJECT No			REV																																														
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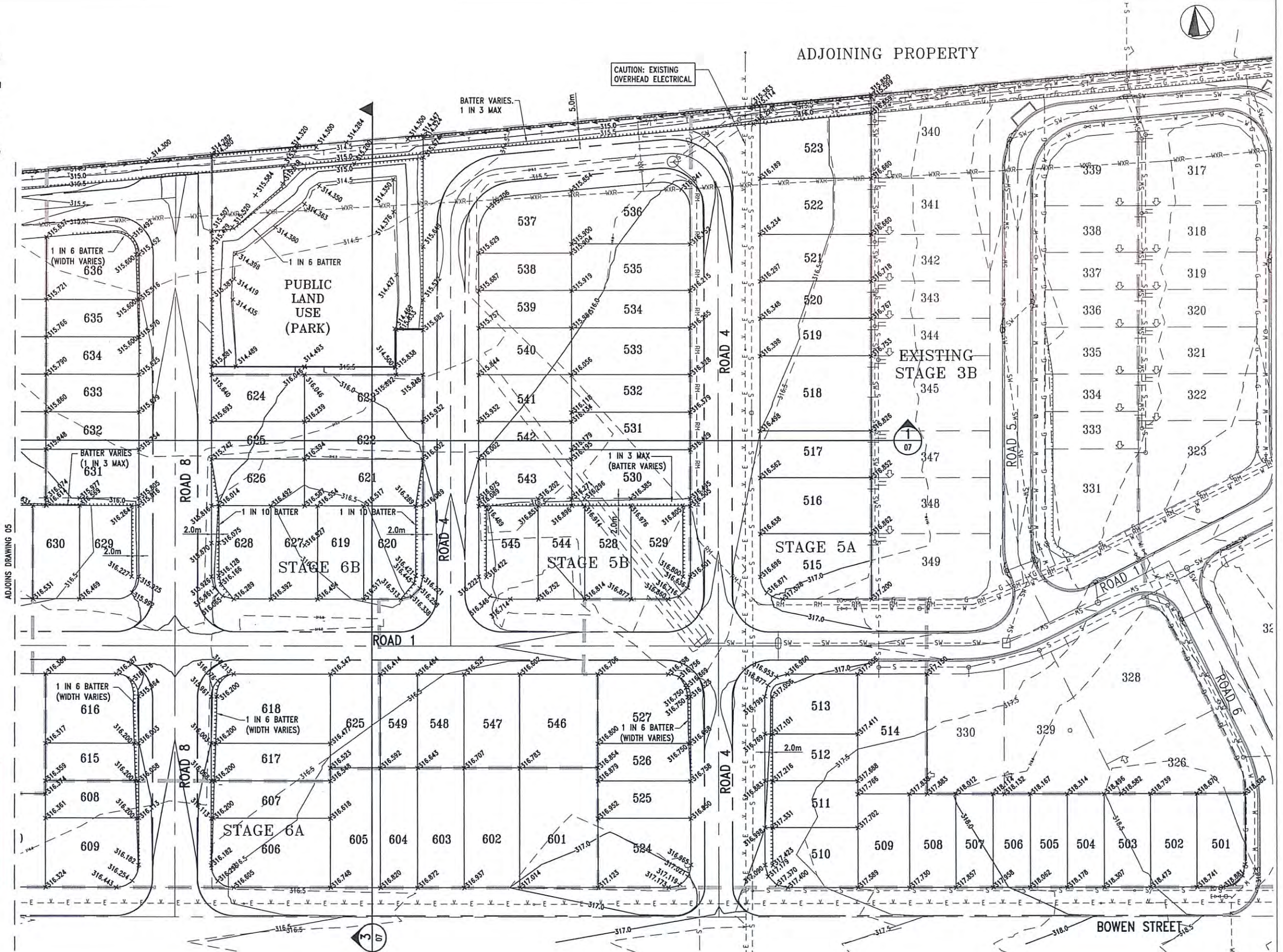
LEGEND

- 30 — EXISTING SURFACE CONTOURS
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PLANS AND DOCUMENTS referred to in the PDA APPROVAL

10 OCT 2014

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REV	DESCRIPTION	BY	APP	DATE
A	ORIGINAL ISSUE	JW	31	01/08/14

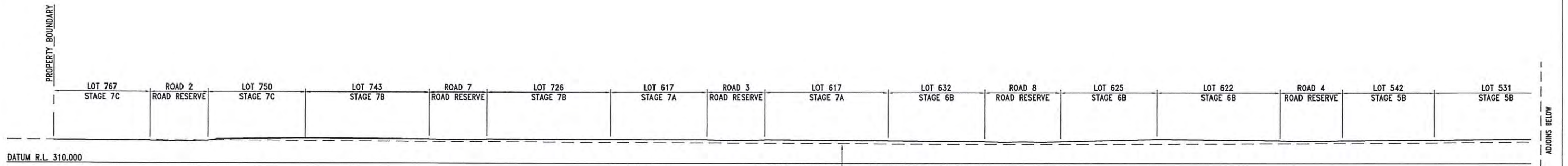
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1 : 500 (FULL SIZE A1)

FYFE

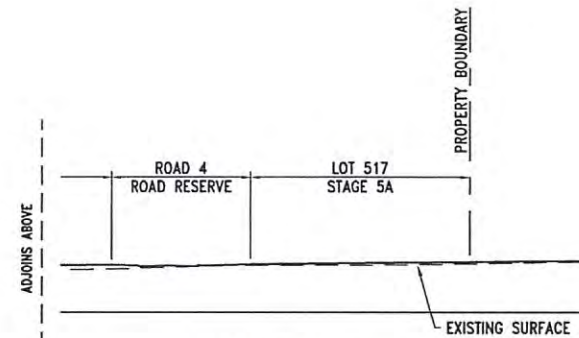
RPEQ 5023
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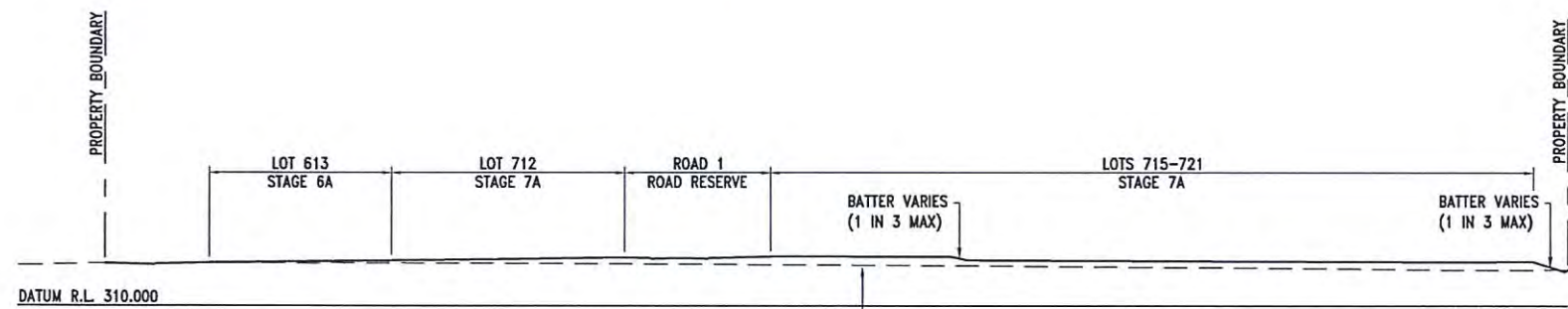
CLIENT
ECONOMIC DEVELOPMENT
QUEENSLAND
PROJECT
CLEARVIEW RISE
STAGE 5, 6 & 7 - BULK EARTHWORKS
MARANOVA REGIONAL COUNCIL
TITLE
EARTHWORKS LAYOUT PLAN -
SHEET 2 OF 2
STATUS
ISSUE FOR APPROVAL
DESIGNED
AR
DRAWN
JW
APPROVED
JH
DATE
01/08/14
SCALE @ A1
1:500
SHEET
2 OF 2
PROJECT No
14-732
DRAWING No
06
REV
A



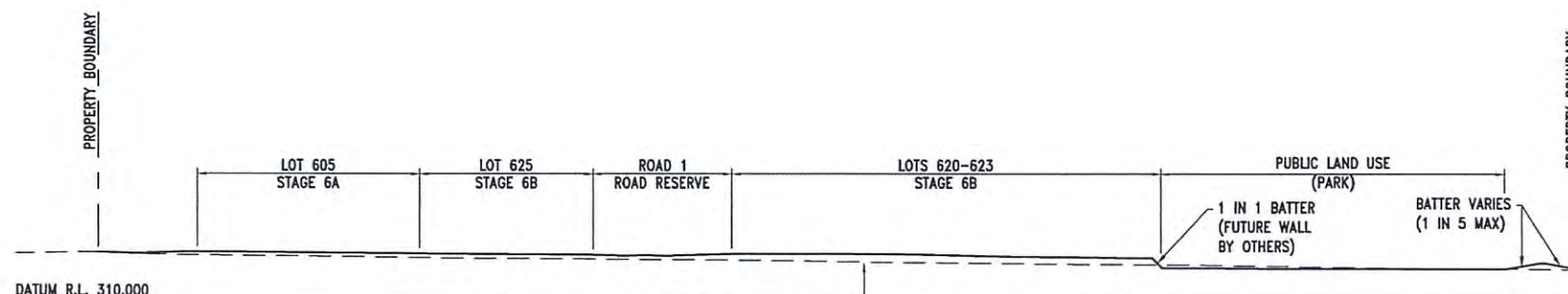
SECTION 1
SCALE 1:500
05



SECTION (CONTINUED) 1
SCALE 1:500
05



SECTION 2
SCALE 1:500
05



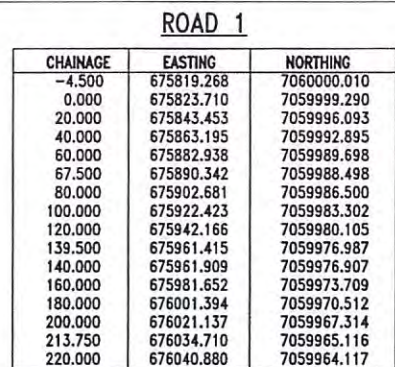
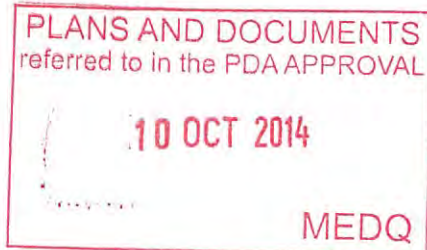
SECTION 3
SCALE 1:500
06

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

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REV	DESCRIPTION	BY	APP	DATE	SURVEYOR	RPEQ 5023	QUALITY ASSURED COMPANY	CLIENT	PROJECT	STATUS	DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET
A	ORIGINAL ISSUE	JW	JH	01/08/14		Approved by, for and on behalf of Bradlees	SCI QUAL	ECONOMIC DEVELOPMENT QUEENSLAND	CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL	ISSUE FOR APPROVAL	AR	JW	JH	01/08/14	1:500	1 OF 1
											PROJECT No		DRAWING No		REV	
											14-732		07		A	



ROAD 2

CHAINAGE	EASTING	NORTHING
0.00	675807.698	7059928.573
20.00	675810.895	7059948.316
40.00	675814.093	7059968.059
60.00	675817.291	7059987.801
72.368	675819.268	7060000.010
80.00	675820.488	7060007.544
100.00	675823.686	7060027.287
120.00	675826.883	7060047.030
140.00	675830.081	7060066.772
160.00	675833.279	7060086.515
172.787	675835.323	7060099.137

ROAD 3

CHAINAGE	EASTING	NORTHING
0.00	675961.415	7059976.987
20.00	675964.613	7059996.730
40.00	675967.811	7060016.472
60.00	675971.008	7060036.215
80.00	675974.206	7060055.958
99.526	675977.328	7060075.233
120.00	675981.455	7060087.819
121.755	675983.209	7060087.796
140.00	676011.407	7060086.489
160.00	676031.356	7060085.056
180.00	676051.304	7060083.623
182.577	676053.874	7060083.439

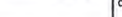
ROAD 7

CHAINAGE	EASTING	NORTHING
0.000	675890.342	7059988.498
20.000	675893.539	7060008.241
40.000	675896.737	7060027.984
60.000	675899.934	7060047.727
80.000	675903.132	7060067.469
93.171	675905.238	7060080.471
100.000	675904.480	7060087.173
113.917	675893.794	7060094.937
120.000	675887.726	7060095.373
140.000	675867.778	7060096.806
160.000	675847.829	7060098.239
172.539	675835.323	7060099.137
180.000	675827.881	7060099.672
200.000	675807.932	7060101.105
204.165	675803.778	7060101.403

ROAD 8

CHAINAGE	EASTING	NORTHING
0.000	676023.140	7059893.679
20.000	676026.338	7059913.422
40.000	676029.535	7059933.165
60.000	676032.733	7059952.907
72.368	676034.710	7059965.116
80.000	676035.931	7059972.650
100.000	676039.128	7059992.393
120.000	676042.326	7060012.135
140.000	676045.523	7060031.878
160.000	676048.721	7060051.621
180.000	676051.919	7060071.364
192.233	676053.874	7060083.439
197.704	676054.749	7060088.840

CURVE DATA		
ARC	RADIUS	ARC LENGTH
1	50.000	17.955
2	50.000	5.534
3	50.000	23.492
4	12.500	20.746
5	15.000	22.229
6	15.000	22.229
7	12.500	20.746

REV	DESCRIPTION	BY	APP	DATE	SURVEYOR	RPEQ 5023	  QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REG. NO. 233	 Bradlees Part of the Meinhardt Group	CLIENT	PROJECT						
A	ORIGINAL ISSUE	JW	JH	01.08.14	 FYFE Earth Protection PO Box 100 100 St Johns Road Brisbane QLD 4001	Approved by, for and on behalf of Bradlees			ECONOMIC DEVELOPMENT QUEENSLAND	CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOA REGIONAL COUNCIL						
					 1 : 500 (FULL SIZE A1)				TITLE	STATUS	DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET
									ROAD ALIGNMENT AND SETOUT DETAILS - SHEET 1 OF 2	ISSUE FOR APPROVAL	AR	JW	JH	01.08.14	1:500	1 OF 2
									PROJECT No	DRAWING No	REV					
									14-732	08	A					



ADJOINING PROPERTY

ROAD 1

CHAINAGE	EASTING	NORTHING
220.000	676040.880	7059964.117
240.000	676060.623	7059960.919
260.000	676080.365	7059957.721
280.000	676100.108	7059954.524
288.000	676108.005	7059953.245
300.000	676119.850	7059951.323
320.000	676139.592	7059948.120
340.000	676159.334	7059944.917
359.999	676179.074	7059941.714
380.000	676198.818	7059938.515
400.000	676218.561	7059935.316
401.299	676219.844	7059935.108

ROAD 4

CHAINAGE	EASTING	NORTHING
0.000	676108.005	7059953.245
20.000	676111.203	7059972.987
40.000	676114.400	7059992.730
60.000	676117.598	7060012.473
80.000	676120.796	7060032.216
100.000	676123.993	7060051.958
112.758	676126.033	7060064.552
120.000	676128.839	7060071.152
134.987	676141.915	7060077.115
140.000	676146.915	7060076.756
160.000	676166.864	7060075.323
179.890	676186.703	7060073.898
200.000	676198.232	7060060.062
200.637	676198.146	7060059.431
220.000	676195.050	7060040.317
240.000	676191.851	7060020.574
260.000	676188.652	7060000.832
280.000	676185.454	7059981.089
300.000	676182.255	7059961.347
319.889	676179.074	7059941.714
340.000	676175.859	7059921.861
360.000	676172.662	7059902.119
380.000	676169.465	7059882.376
392.237	676167.509	7059870.297

ROAD 8

REFER DRG 14-732 08

CURVE DATA

ARC	RADIUS	ARC LENGTH
1	50.000	17.955
2	50.000	5.534
3	50.000	23.492
4	12.500	20.746
5	15.000	22.229
6	15.000	22.229
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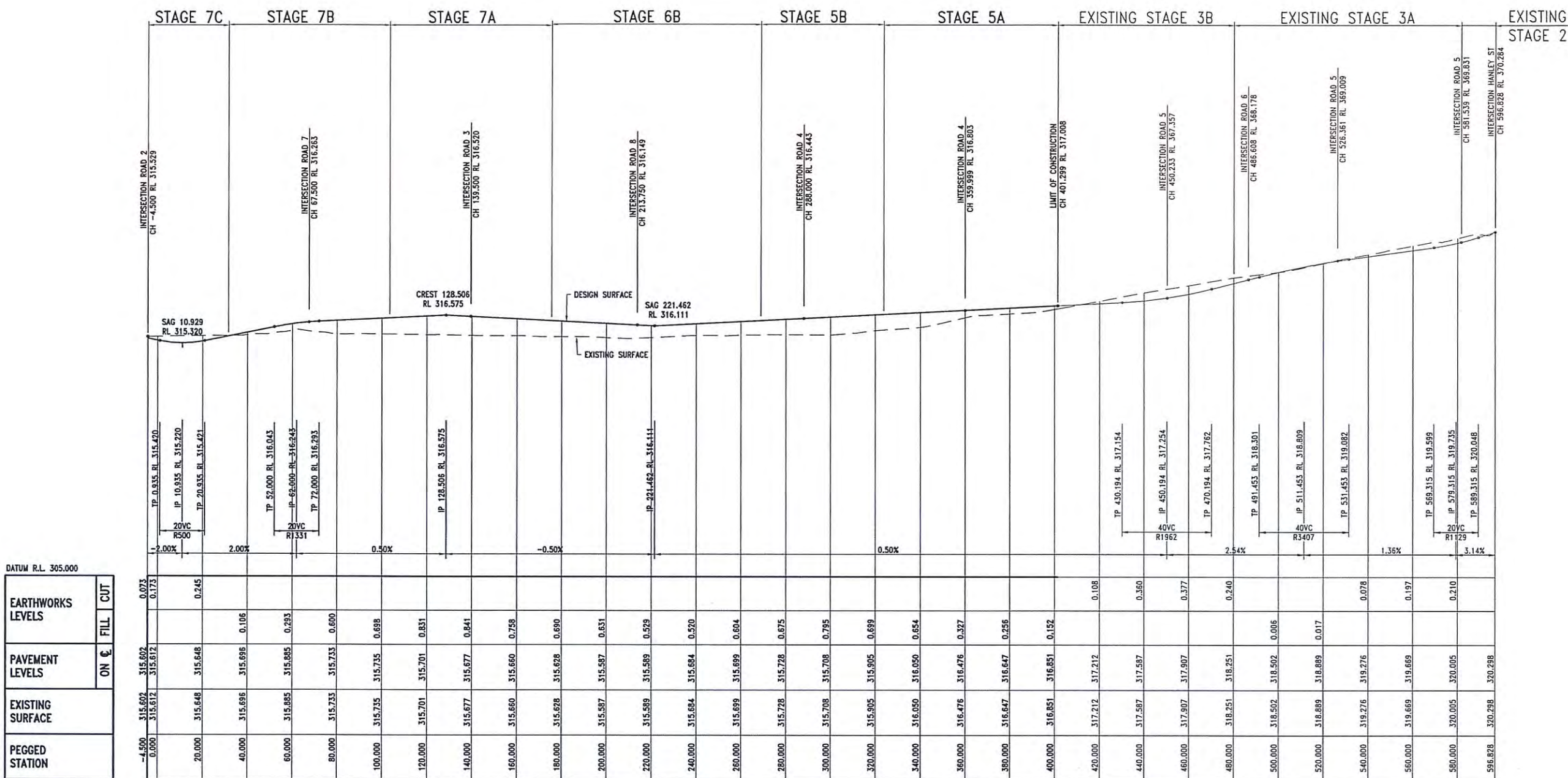
PLANS AND DOCUMENTS
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MEDQ



REV A ORIGINAL ISSUE	DESCRIPTION	BY JH DATE 01/08/14	APP JH	DATE 01/08/14	SURVEYOR RPEQ 5023 Approved by, for and on behalf of Bradlees This drawing has been produced for the exclusive use of the client (nominated on this document). No third party is to rely on this document without written permission from Bradlees. This drawing is not to be constructed from unless "Issued for construction" is displayed and only where signed by an RPEQ. © Copyright	SCIOQUAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REG. NO. 235	Bradford Lees Pty Ltd ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail@bradleesmeinhardt.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994	Bradlees Part of the Meinhardt Group	CLIENT ECONOMIC DEVELOPMENT QUEENSLAND TITLE ROAD ALIGNMENT AND SETOUT DETAILS - SHEET 2 OF 2	PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL STATUS ISSUE FOR APPROVAL	DESIGNED AR PROJECT No 14-732	DRAWN JW DRAWING No 09	APPROVED JH DATE 01/08/14	SCALE @ A1 1:500	SHEET 2 OF 2 REV A
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DATUM R.L. 305.000

EARTHWORKS LEVELS	PAVEMENT LEVELS		EXISTING SURFACE	PEGGED STATION
	ON	CUT		
0.073	315.602	315.612	315.602	-4,500
0.173	315.612	315.648	315.612	0.000
0.245	315.648	315.696	315.648	20,000
	315.696	315.885	315.696	40,000
	315.885	315.733	315.885	60,000
	315.733	315.735	315.733	80,000
	315.735	315.701	315.735	100,000
	315.701	315.677	315.701	120,000
	315.677	315.660	315.677	140,000
	315.660	315.628	315.660	160,000
	315.628	315.587	315.628	180,000
	315.587	315.589	315.587	200,000
	315.589	315.684	315.589	220,000
	315.684	315.699	315.684	240,000
	315.699	315.728	315.699	260,000
	315.728	315.708	315.728	280,000
	315.708	315.905	315.708	300,000
	315.905	316.050	315.905	320,000
	316.050	316.476	316.050	340,000
	316.476	316.647	316.476	360,000
	316.647	316.851	316.647	380,000
	316.851	317.212	316.851	400,000
0.108	317.212	317.587	317.212	420,000
0.360	317.587	317.907	317.587	440,000
0.377	317.907	318.251	317.907	460,000
0.240	318.251	318.502	318.251	480,000
	318.502	318.889	318.502	500,000
	318.889	319.276	318.889	520,000
0.078	319.276	319.669	319.276	540,000
0.197	319.669	320.005	319.669	560,000
0.210	320.005	320.298	320.005	580,000
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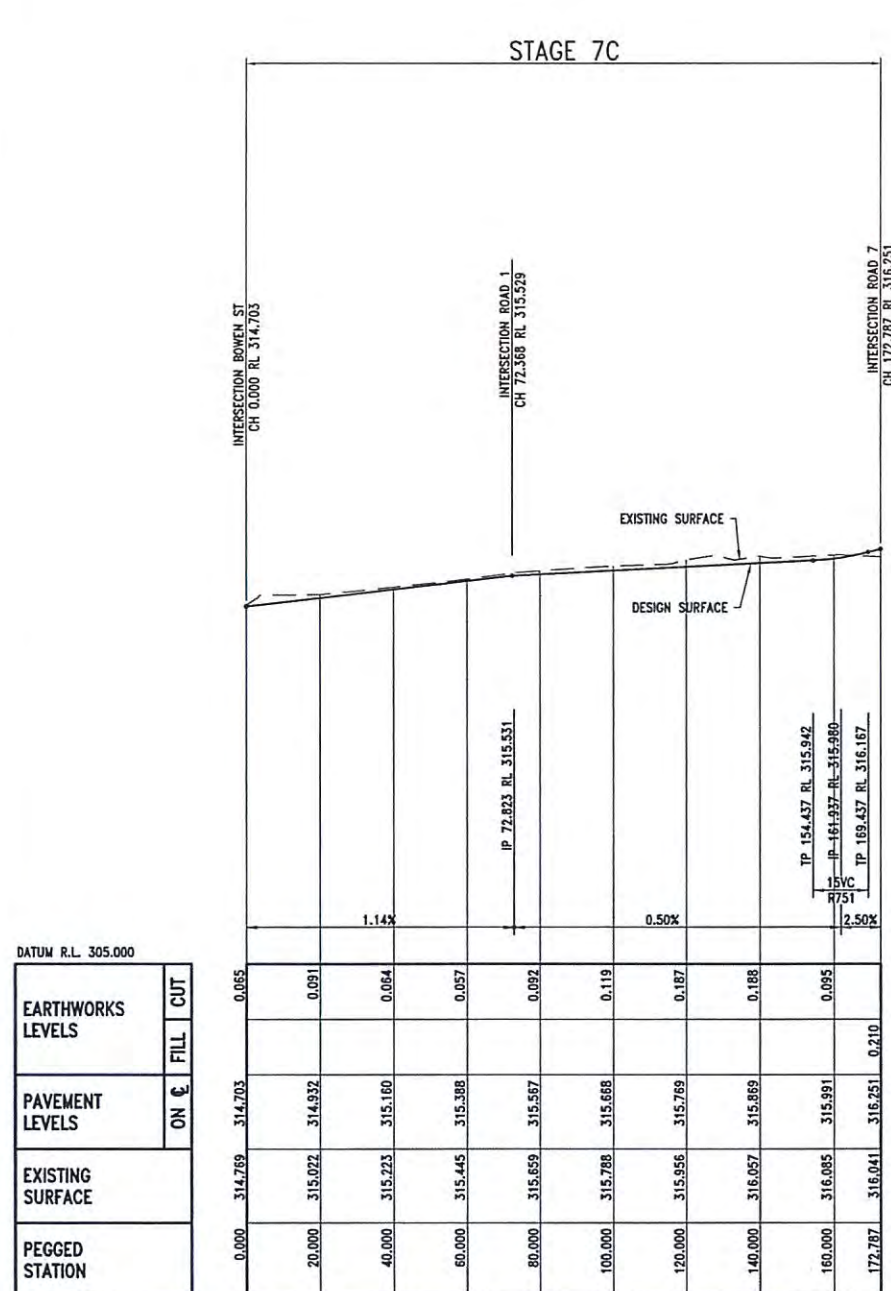
ROAD 1

PLANS AND DOCUMENTS
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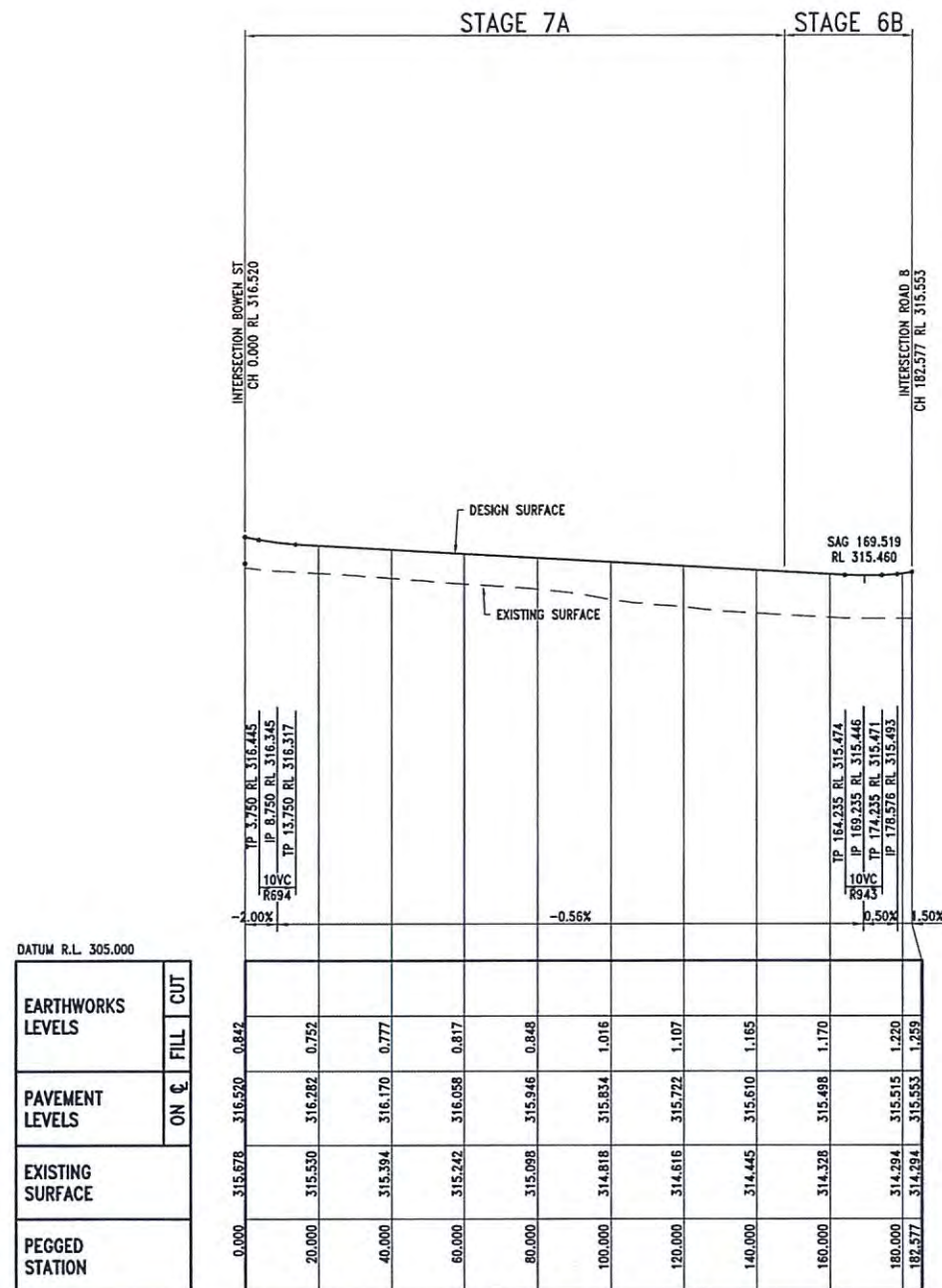
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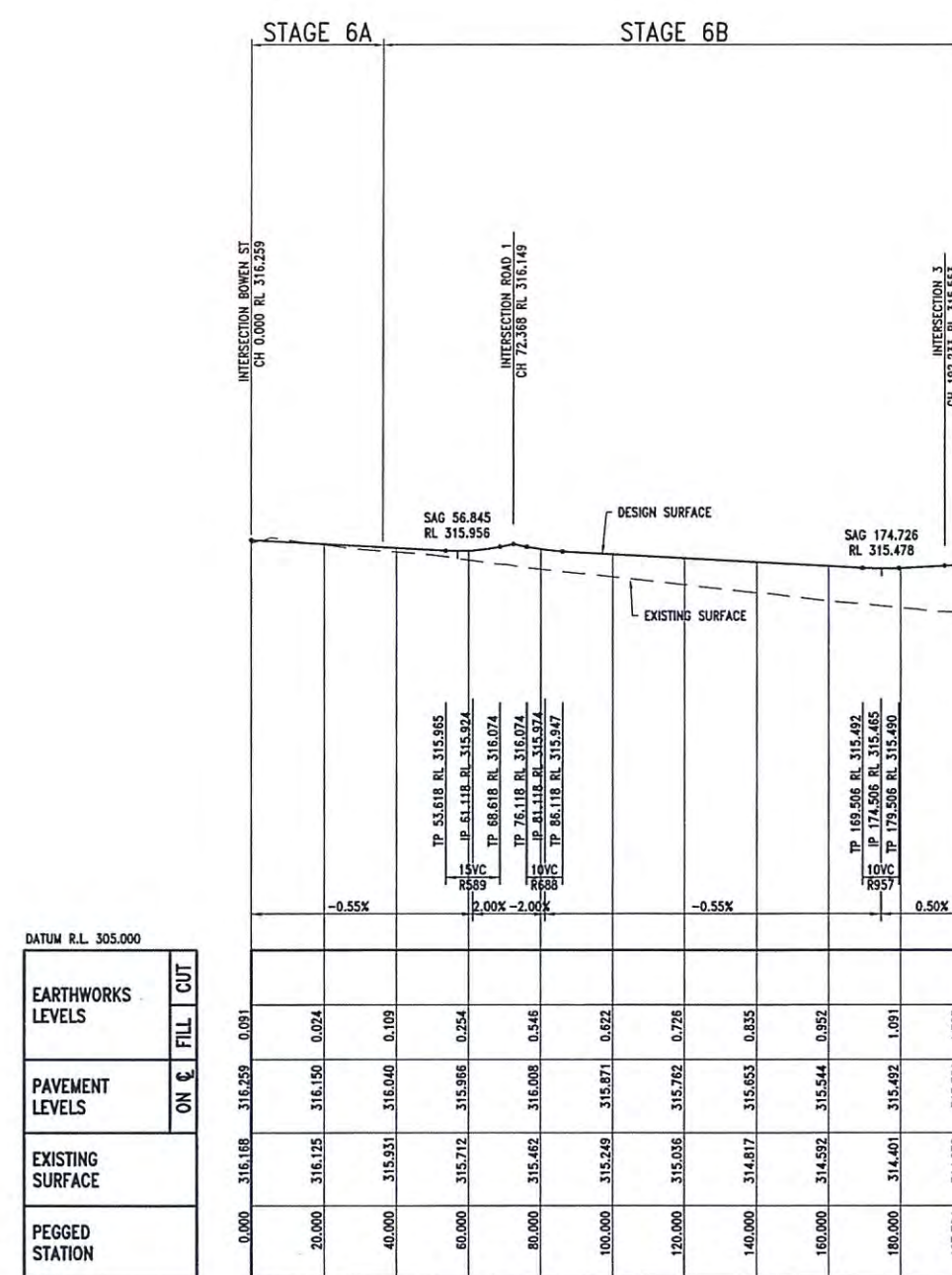
REV A	DESCRIPTION ORIGINAL ISSUE	BY JW	APP JH	DATE 01/08/14
RPEQ 5023 Approved by, for and on behalf of Bradlees				
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CLIENT ECONOMIC DEVELOPMENT QUEENSLAND				
PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANO REGIONAL COUNCIL				
STATUS ISSUE FOR APPROVAL				
DESIGNED AR				
DRAWN JW				
APPROVED JH				
DATE 01/08/14				
SCALE @ A1 1 OF 3				
PROJECT No 14-732				
DRAWING No 10				
REV A				



ROAD 2



ROAD 3

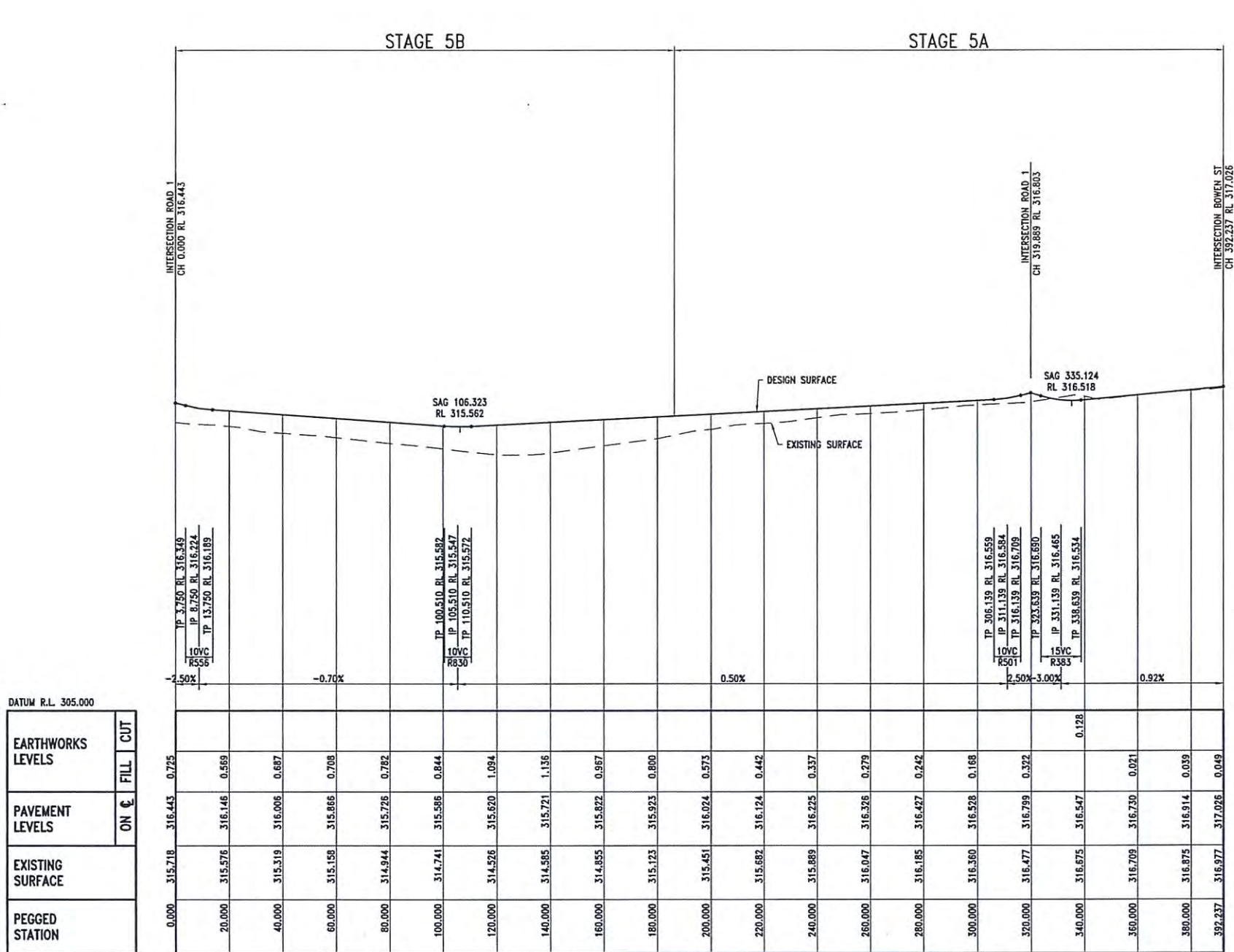


ROAD 8

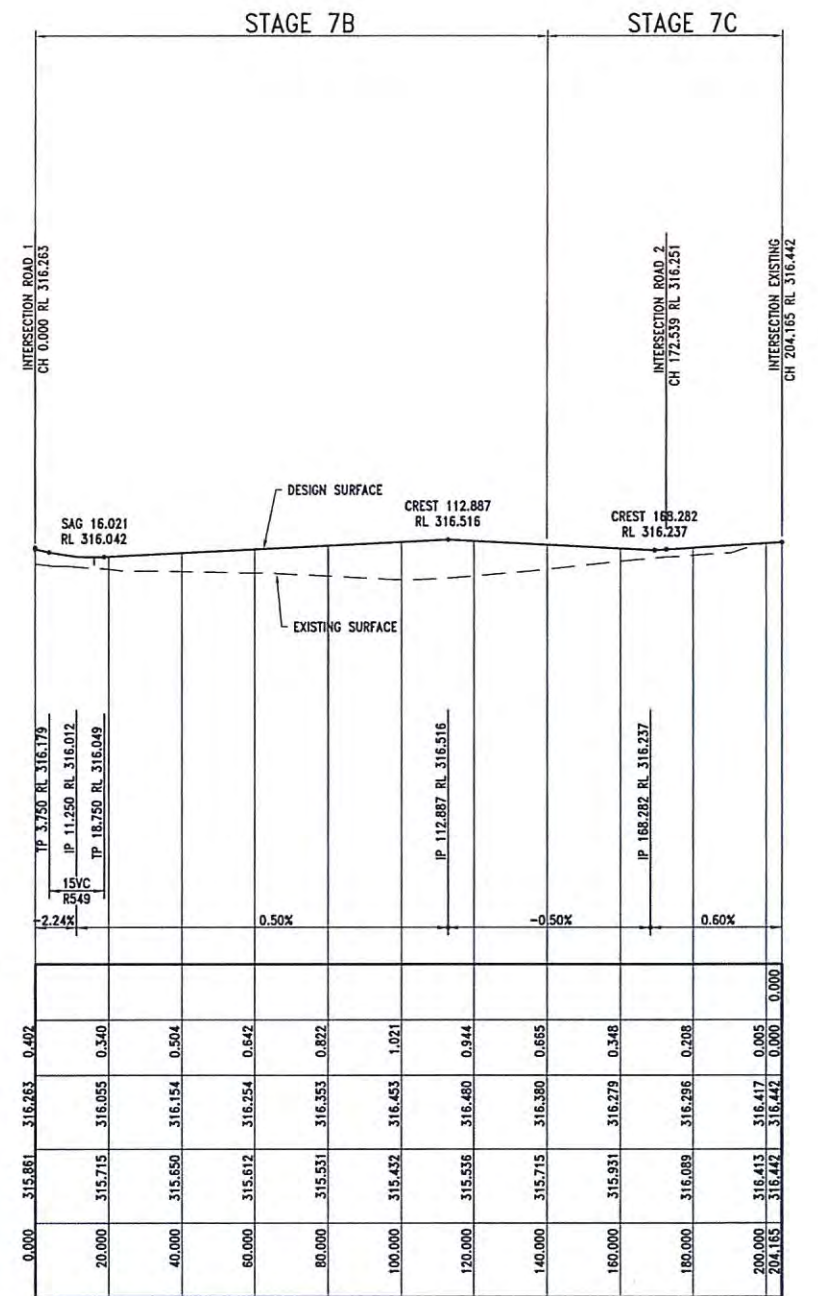
PLANS AND DOCUMENTS
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ROAD 4



ROAD 7

PLANS AND DOCUMENTS
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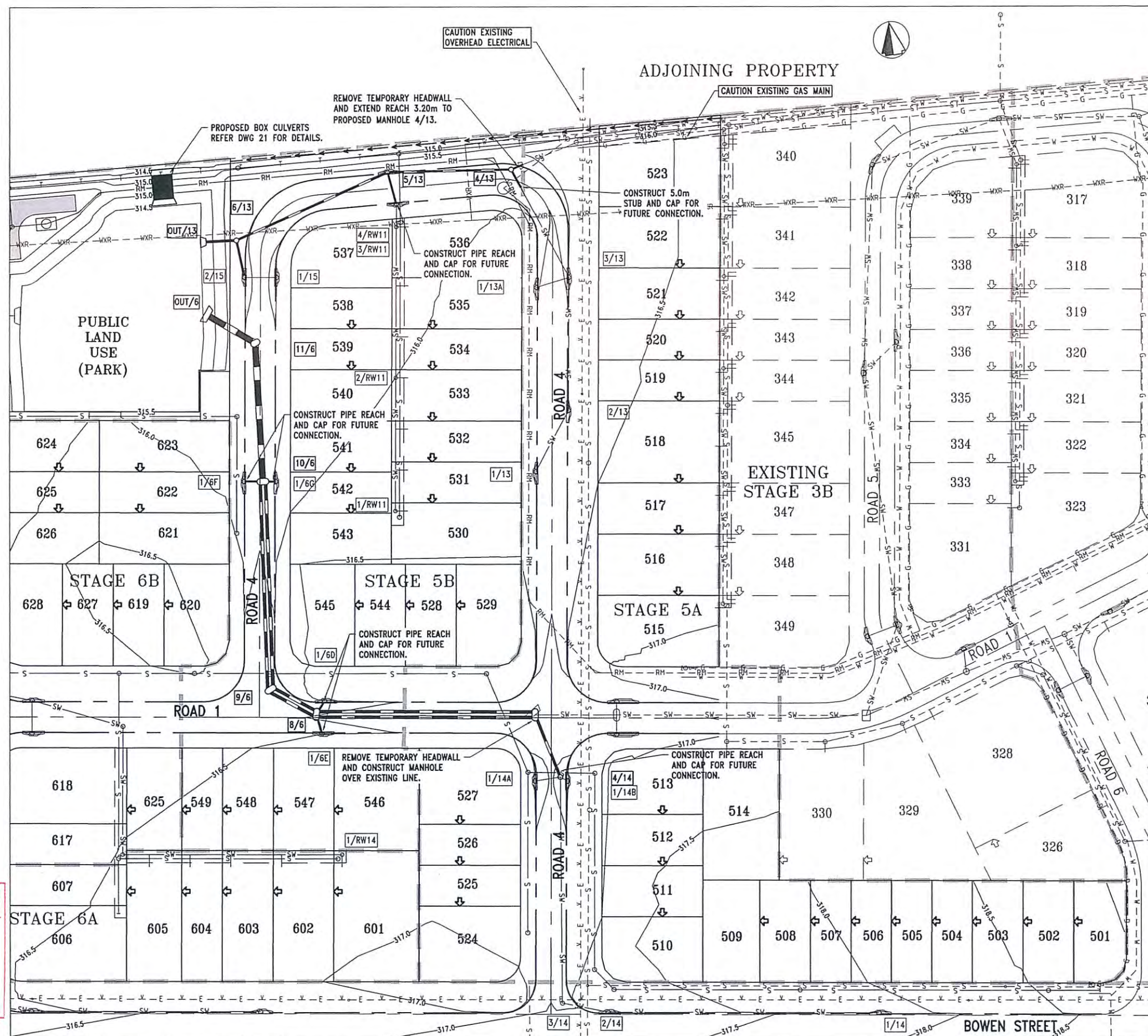
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PROJECT No 14-732	DRAWING No 12	REV A													

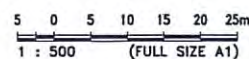
1. READ IN CONJUNCTION WITH DRAWING 01 GENERAL NOTES.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN THE LOCATION OF ALL EXISTING SERVICES PRIOR TO EXCAVATION. THE CONTRACTOR SHALL CO-ORDINATE THE WORKS WITH ANY RELEVANT AUTHORITIES AND SHALL BE RESPONSIBLE FOR THE PROTECTION OF AND REINSTATEMENT OF ANY OF THE EXISTING SERVICES WHICH MAY BE UNCOVERED AND OR DAMAGED IN THE COURSE OF THE WORKS.
3. THE LOCATION OF ALL STORMWATER OUTLETS ARE INDICATIVE ONLY AND MUST BE VERIFIED IN THE FIELD AND CONFIRMED BY THE SUPERINTENDENT PRIOR TO CONSTRUCTION OF DISCHARGE LINE AND OUTLET.
4. ALL EXCAVATION, BEDDING AND BACKFILLING OF STORMWATER PIPES TO BE IN ACCORDANCE WITH CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES STD. DRG. CMDG-D-010.
5. ALL TOPSOIL AREAS TO BE RECOVERED BY GRASS SEEDING.
6. CONTRACTOR TO LIAISE WITH RELEVANT AUTHORITIES FOR THE RELOCATION / PROTECTION OF EXISTING SERVICES, INCLUDING THE PROVISION FOR EXISTING POWER POLES TO BE HELD DURING TRENCH EXCAVATION, OBTAINING THE NECESSARY APPROVALS FROM ASSOCIATED AUTHORITIES INCLUDING APPLICATION FEES.
7. ALL STORMWATER INLET PITS TO BE IN ACCORDANCE WITH MANUFACTURER'S DETAILS AND SPECIFICATIONS.

_____ 12 _____	FINISHED SURFACE CONTOURS
_____	NOMINAL KERB LINE
	STORMWATER DRAIN MANHOLE 4 ON LINE 1
→ → →	PROPOSED SWALE DRAIN
_____	PROPOSED DRAINAGE EASEMENT
_____ S _____	PROPOSED SEWER MAIN
_____ RM _____	PROPOSED SEWER RISING MAIN
	ZERO LOT BOUNDARY
_____ SW _____	FUTURE STORMWATER
_____ S _____	FUTURE SEWER MAIN
-WXR- - -WXR- - -	EXISTING WATER TO BE REMOVED
-SW- - -SW- - -	EXISTING STORMWATER
-W- - -W- - -	EXISTING WATER
-S- - -S- - -	EXISTING SEWER
-E - -E - -E - -E - -	EXISTING OVERHEAD ELECTRICAL
-E - - -E - - -E - - -E - -	EXISTING ELECTRICAL
-G - - -G - - -G - - -G - -	EXISTING GAS
-T - - -T - - -T - - -T - -	EXISTING TELSTRA
-RM - - -RM - - -RM - - -RM - -	EXISTING SEWER RISING MAIN

MEDQ



REV	DESCRIPTION	BY	APP	DATE
A	ORIGINAL ISSUE	JW	JH	01.02.14



TYPE

RPFQ 5023

Approved by: for and on behalf of Bradco

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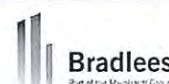


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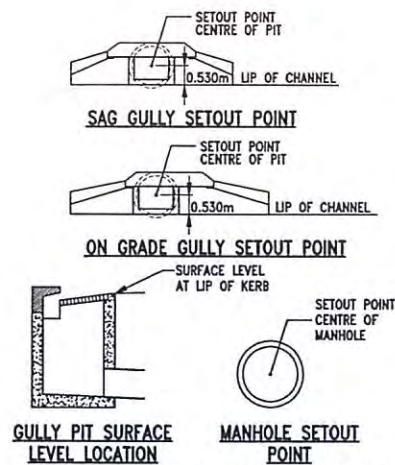
QUEST	ECONOMIC DEVELOPMENT QUEENSLAND
TITLE	STORMWATER DRAINAGE PLAN

PROJECT	CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOA REGIONAL COUNCIL
---------	--

ISSUE FOR APPROVAL

DESIGNED AR	DRAWN JW	APPROVED JH	DATE 01.08.14	SCALE @ A1 1:500	SHEET 1 OF
PROJECT No 14-732		DRAWING No 13		REV A	

STRUCTURE NAME
STRUCTURE DESCRIPTION



PIPE SIZE (CLASS)

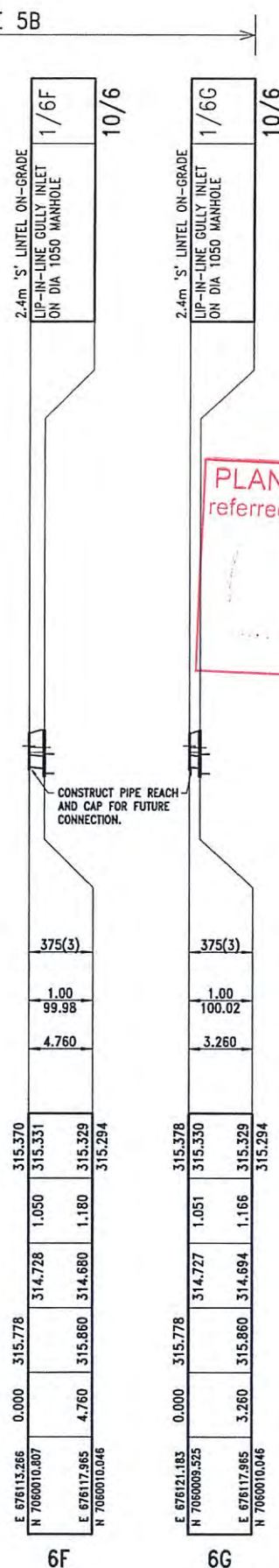
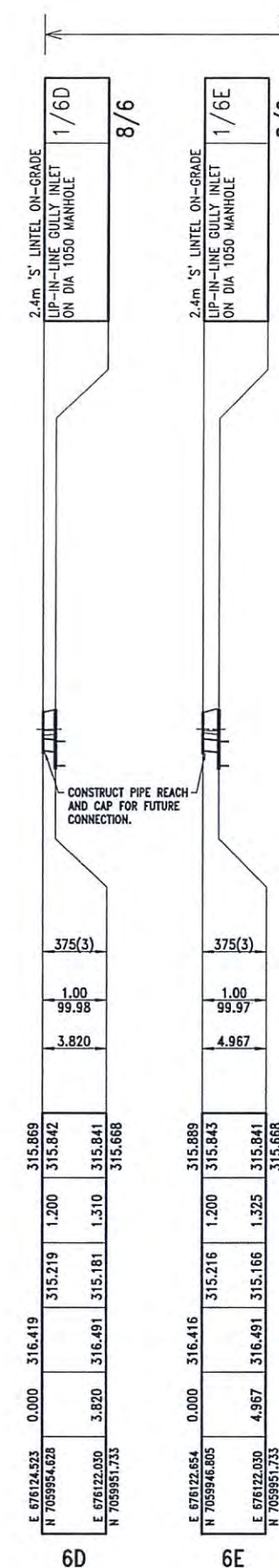
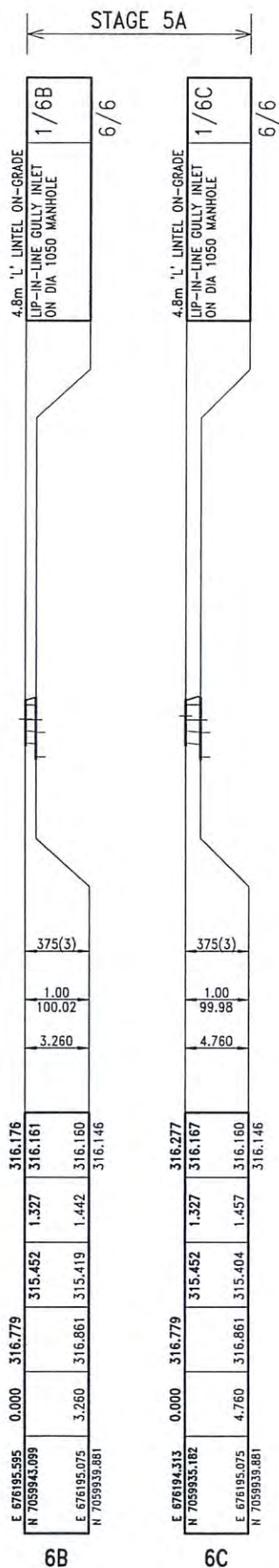
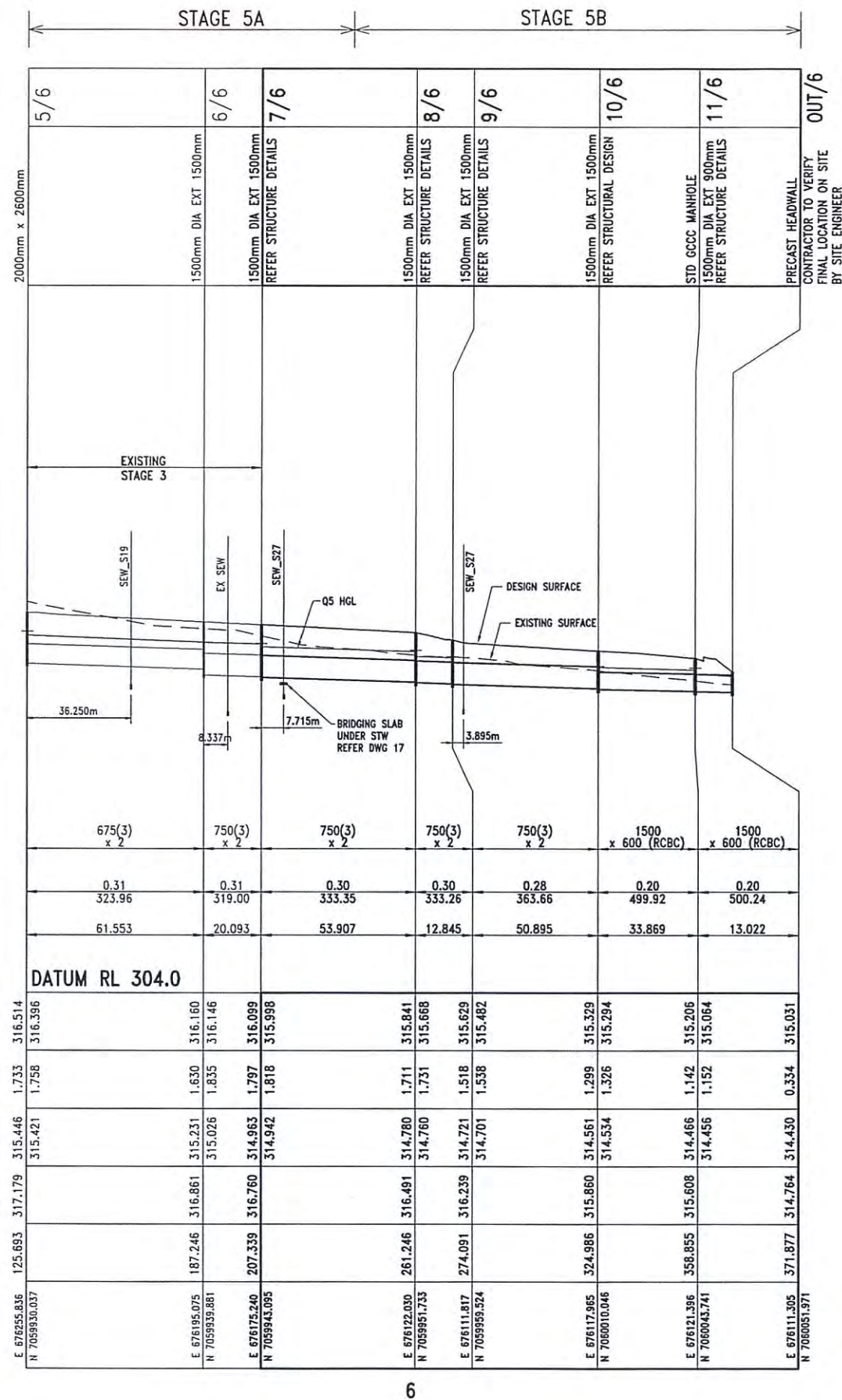
PIPE GRADE %
1 IN

PIPE LENGTH

DATUM

Q5 HYDRAULIC GRADELINE
DEPTH TO INVERT
INVERT LEVEL
FINISHED SURFACE LEVEL
DISTANCE ALONG DRAINLINE
STRUCTURE LOCATION

LINE



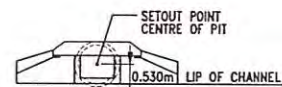
PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

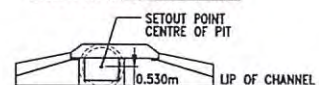
MEDQ

REV A ORIGINAL ISSUE	DESCRIPTION	BY JW	APP JH	DATE 01/08/14	SURVEYOR RPEQ 5023 Approved by, for and on behalf of Bradlees	 	CLIENT ECONOMIC DEVELOPMENT QUEENSLAND TITLE STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 1 OF 3	PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL STATUS ISSUE FOR APPROVAL	DESIGNED AR DRAWN JW APPROVED JH DATE 01/08/14 SCALE @ A1 1 OF 3 PROJECT NO 14-732 DRAWING NO 15 REV A
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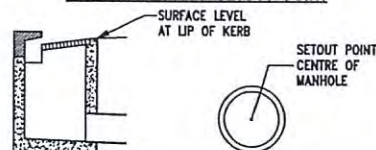
STRUCTURE NAME
STRUCTURE DESCRIPTION



SAG GULLY SETOUT POINT



ON GRADE GULLY SETOUT POINT



GULLY PIT SURFACE LEVEL LOCATION

MANHOLE SETOUT POINT

NOTE: 1. GULLY TYPE TO BE CMDG GRATE AND LINTEL. REFER STD DWG NO: CMDG-D-020.
2. ALL MANHOLES LOCATED IN ROADS TO INCLUDE RISERS IN ACCORDANCE WITH BCC STD DWG UMS 326.

PIPE SIZE (CLASS)

PIPE GRADE %
1 IN

PIPE LENGTH

DATUM

Q5 HYDRAULIC GRADELINE
DEPTH TO INVERT
INVERT LEVEL
FINISHED SURFACE LEVEL
DISTANCE ALONG DRAINLINE
STRUCTURE LOCATION

LINE

STAGE 5A		STAGE 5B	
1/13	2.4m 'S' LINTEL ON-GRADE LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE	2/13	2.4m 'S' LINTEL ON-GRADE LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE
3/13	2.4m 'S' LINTEL ON-GRADE LIP-IN-LINE GULLY INLET ON DIA 1200 MANHOLE	4/13	STD CMDG MANHOLE 1200mm DIAMETER
5/13	2.4m 'S' LINTEL ON-GRADE LIP-IN-LINE GULLY INLET ON DIA 1200 MANHOLE	6/13	STD CMDG MANHOLE 1200mm DIAMETER
OUT/13	PRECAST HEADWALL CONTRACTOR TO VERIFY FINAL LOCATION ON SITE BY SITE ENGINEER		
375(3)	0.50	375(3)	0.50
200.01	17.011	200.06	17.011
375(3)	0.50	375(3)	0.50
199.99	32.499	199.99	32.499
375(3)	0.45	375(3)	0.45
222.24	30.005	222.24	30.005
450(3)	0.30	450(3)	0.30
333.39	30.441	333.32	30.441
525(3)	0.30	525(3)	0.30
333.32	40.831	333.36	40.831
600(3)	0.30	600(3)	0.30
333.36	7.457	333.36	7.457
DATUM RL 304.0		DATUM RL 304.0	
315.591	315.577	315.591	315.577
1.029	1.029	1.029	1.029
315.191	315.191	315.191	315.191
316.220	316.145	316.220	316.145
0.000	17.011	0.000	17.011
E 676184.741	E 676195.057	E 676184.741	E 676195.057
N 7060001.763	N 7060015.029	N 7060001.763	N 7060015.029
49.510	49.510	49.510	49.510
315.981	315.981	315.981	315.981
315.862	315.862	315.862	315.862
79.515	79.515	79.515	79.515
E 676190.323	E 676190.323	E 676190.323	E 676190.323
N 7060075.684	N 7060075.684	N 7060075.684	N 7060075.684
109.956	109.956	109.956	109.956
315.682	315.682	315.682	315.682
150.787	150.787	150.787	150.787
E 676120.770	E 676120.770	E 676120.770	E 676120.770
N 7060068.276	N 7060068.276	N 7060068.276	N 7060068.276
158.244	158.244	158.244	158.244
E 676113.306	E 676113.306	E 676113.306	E 676113.306
N 7060070.077	N 7060070.077	N 7060070.077	N 7060070.077

13

STAGE 5A	
1/13A	2.4m 'S' LINTEL ON-GRADE LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE
3/13	2.4m 'S' LINTEL ON-GRADE LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE
2/14	2.4m 'S' LINTEL ON-GRADE LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE
3/14	STD CMDG MANHOLE 1050mm DIAMETER
4/14	STD CMDG MANHOLE 1200mm DIAMETER REFR STRUCTURE DETAILS
7/6	
375(3)	0.50
200.06	8.401
375(3)	0.50
100.00	66.855
375(3)	0.50
100.00	11.469
450(3)	1.00
100.00	55.231
600(3)	0.50
199.99	16.381
317.005	316.881
1.010	1.010
316.753	316.753
317.099	317.099
66.855	66.855
E 676181.494	E 676181.494
N 7059865.568	N 7059865.568
78.324	78.324
E 676170.735	E 676170.735
N 7059872.540	N 7059872.540
135.555	135.555
E 676178.994	E 676178.994
N 7059927.150	N 7059927.150
149.936	149.936
E 676175.240	E 676175.240
N 7059943.095	N 7059943.095

14

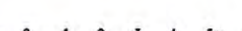
STAGE 5A	
1/14A	2.4m 'S' LINTEL SAG LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE
4/14	2.4m 'S' LINTEL SAG LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE
1/14B	2.4m 'S' LINTEL SAG LIP-IN-LINE GULLY INLET ON DIA 1050 MANHOLE
4/14	
375(3)	1.00
100.02	6.340
375(3)	1.00
100.02	99.93
450(3)	1.00
99.93	2.028
316.213	316.162
1.100	1.100
315.308	315.308
316.408	316.408
0.000	0.000
E 676172.654	E 676172.654
N 7059927.157	N 7059927.157
6.340	6.340
E 676178.994	E 676178.994
N 7059927.150	N 7059927.150
316.245	316.245
316.159	316.159
1.150	1.150
315.256	315.256
316.406	316.406
0.000	0.000
E 676180.570	E 676180.570
N 7059925.875	N 7059925.875
2.028	2.028
E 676178.994	E 676178.994
N 7059927.150	N 7059927.150

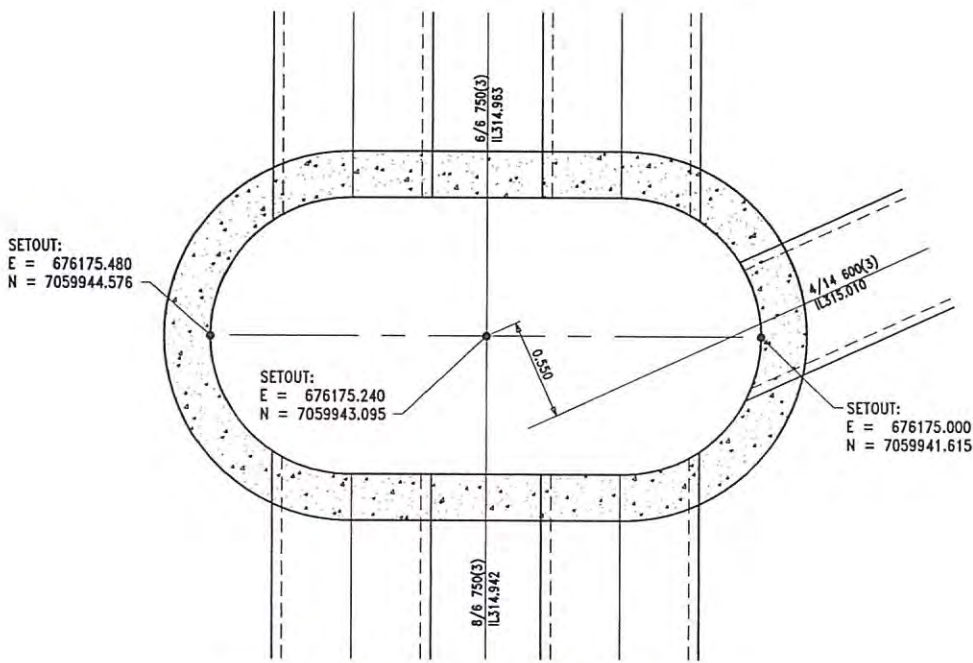
14A

14B

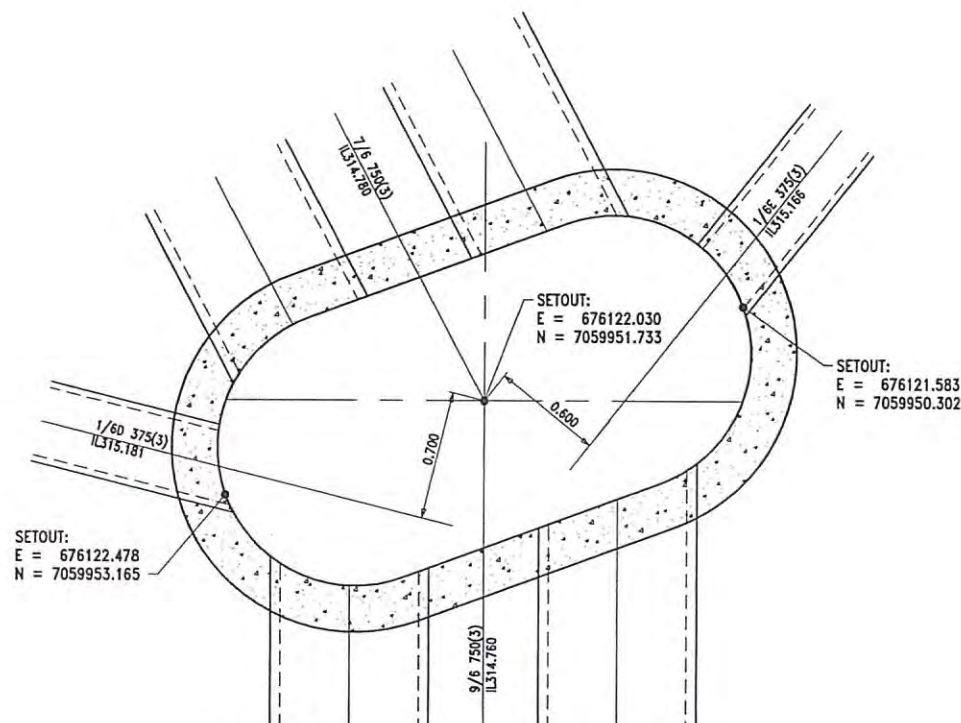
PLANS AND DOCUMENTS referred to in the PDA APPROVAL
10 OCT 2014
MEDQ

REV A	DESCRIPTION ORIGINAL ISSUE	BY JW	APP JH	DATE 01/08/14	SURVEYOR RPEQ 5023	APPROVED Approved by, for and on behalf of Bradlees	BRADFORD LEES PTY LTD ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradleesmeinhart.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994	CLIENT ECONOMIC DEVELOPMENT QUEENSLAND	PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL	STATUS ISSUE FOR APPROVAL	DESIGNED AR	DRAWN JW	APPROVED JH	DATE 01/08/14	SCALE @ A1 2 OF 3	SHEET A
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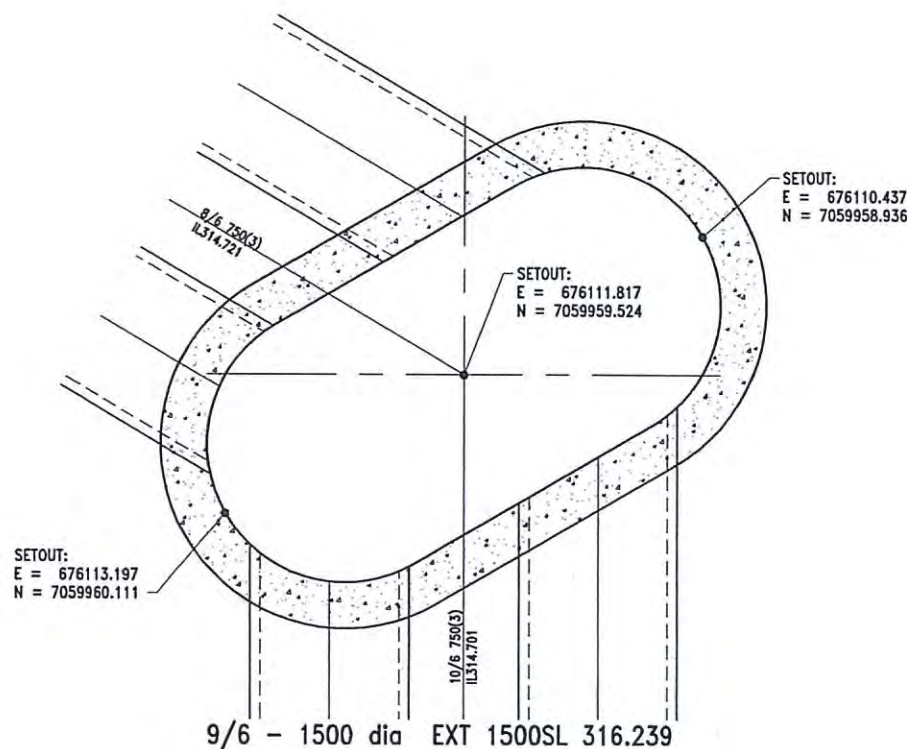
REV		DESCRIPTION		BY	APP	DATE	SURVEYOR		RPEQ 5023		Bradford Lees Pty Ltd ABN 29 064 159 191		CLIENT		PROJECT		SHEET	
A	ORIGINAL ISSUE			JW	JH	01.08.14			Approved by, for and on behalf of Bradlees				ECONOMIC DEVELOPMENT QUEENSLAND		CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL		3 OF 3	
								This drawing has been produced for the exclusive use of the client (nominated on this document). No third party is to rely on this document without written permission from Bradlees. This drawing is not to be constructed from unless "Issued for construction" is displayed and only where signed by an RPEQ. © Copyright		SCI QUAL INTERNATIONAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REGD. NO. 233		Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradlees@meinhardt.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994		TITLE		STATUS		
												STORMWATER DRAINAGE LONGITUDINAL SECTIONS - SHEET 3 OF 3		ISSUE FOR APPROVAL		PROJECT No 14-732		
																DRAWING No 17		
																REV A		



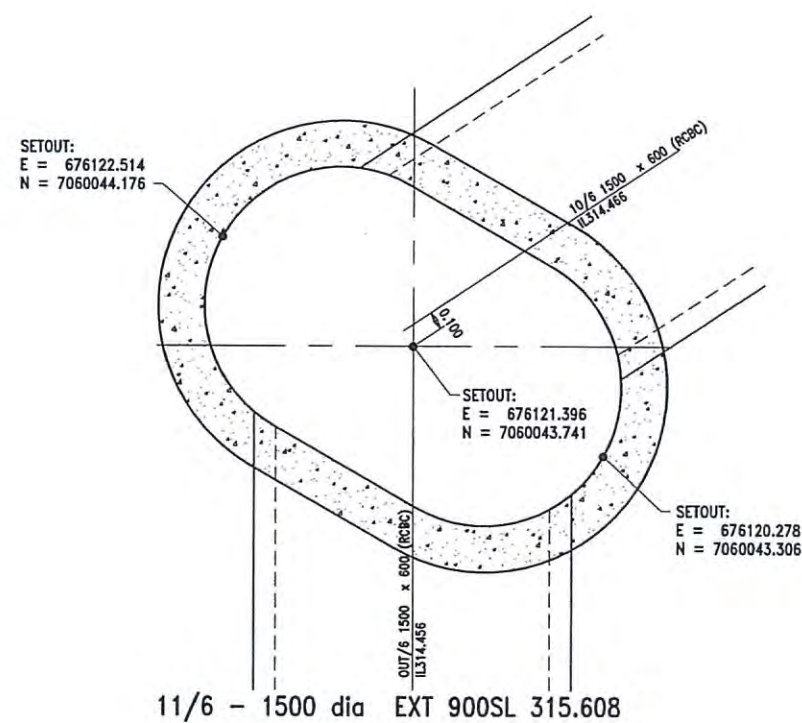
7/6 - 1500 dia EXT 1500SL 316.760



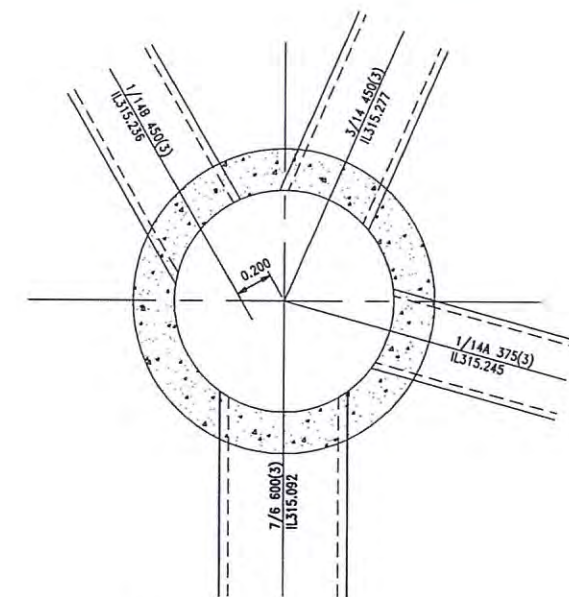
8/6 - 1500 dia EXT 1500SL 316.491



9/6 - 1500 dia EXT 1500SL 316.239



11/6 - 1500 dia EXT 900SL 315.608



4/14 - 1200 dia SL 316.446

CONSTRUCTION NOTES

- ALL STORMWATER DRAINAGE PIPES ARE TO BE CLASS '3' UNLESS NOTED OTHERWISE.
- IF F.R.C PIPES ARE TO BE USED FOR PIPE DIAMETERS LESS THAN 825, THE CONTRACTOR SHALL ISSUE EQUIVALENT F.R.C PIPE CLASSES TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO CONSTRUCTION.
- PIPE CLASSES HAVE BEEN DESIGNED FOR A MINIMUM CONSTRUCTION TRENCH TYPE H2.
- THE FOLLOWING CONSTRUCTION LOADS HAVE BEEN ALLOWED FOR AT THE NOMINATED MINIMUM COVER. THESE LOADS SHALL NOT BE EXCEEDED WITHOUT THE APPROVAL OF THE SUPERINTENDENT:

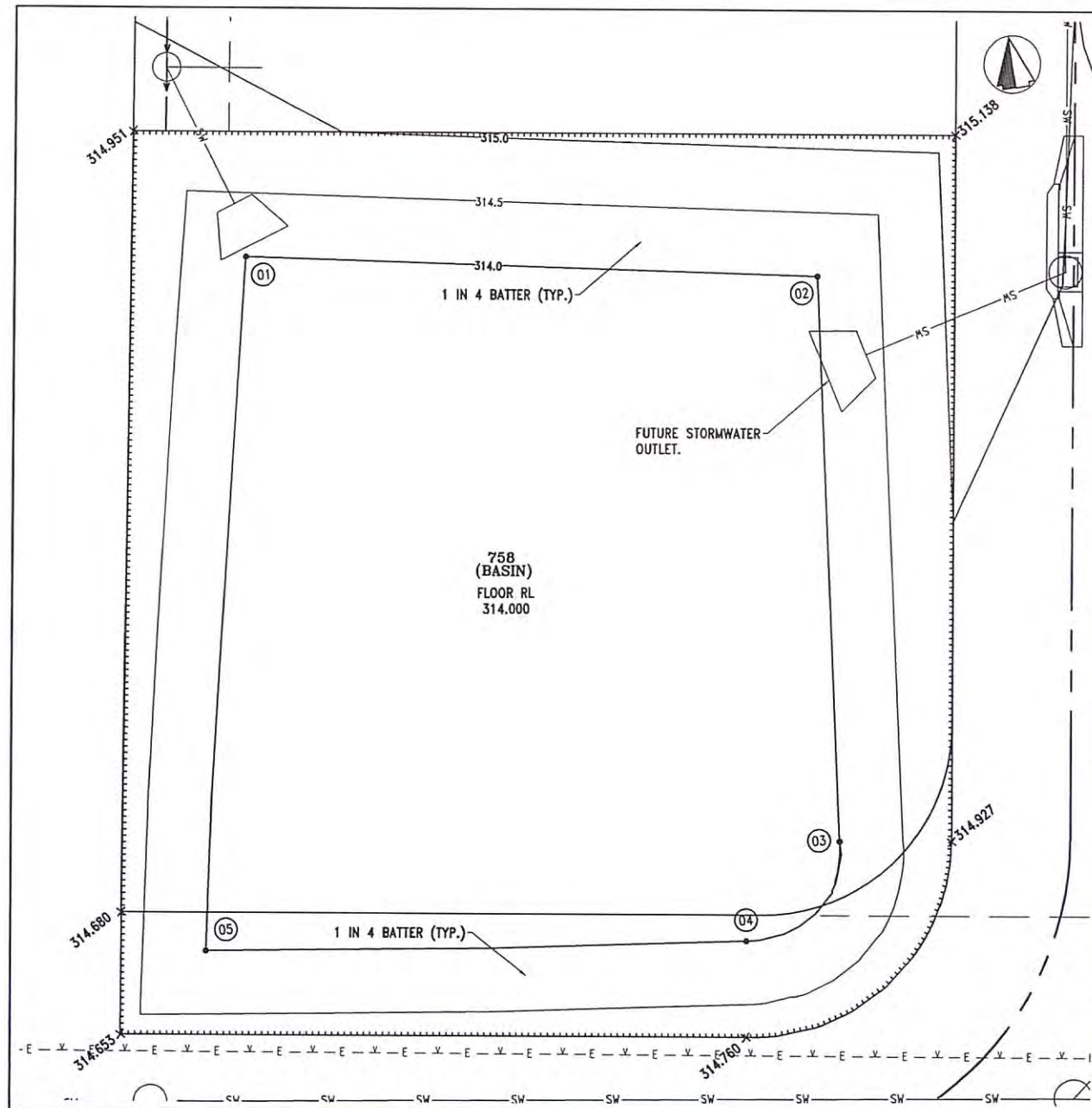
* NAASRA A14 AXLE	950mm
* ASPHALT COMPACTOR CAT PS500	925mm
* VIBRATORY ROLLER 10T	725mm
* VIBRATORY RAMMER (WACKER)	410mm
- UNDER NO CIRCUMSTANCES SHALL AN EXCAVATOR COMPACTION WHEEL BE USED TO COMPACT STORMWATER DRAINAGE TRENCHES.
- MANHOLES 1050mm DIA TO HAVE WALL THICKNESS OF 150mm. MANHOLES 1200mm - 1500mm DIA TO HAVE INCREASED WALL THICKNESS OF 225mm.
- ALL NON-STANDARD STRUCTURES TO BE DESIGNED AND CERTIFIED BY STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

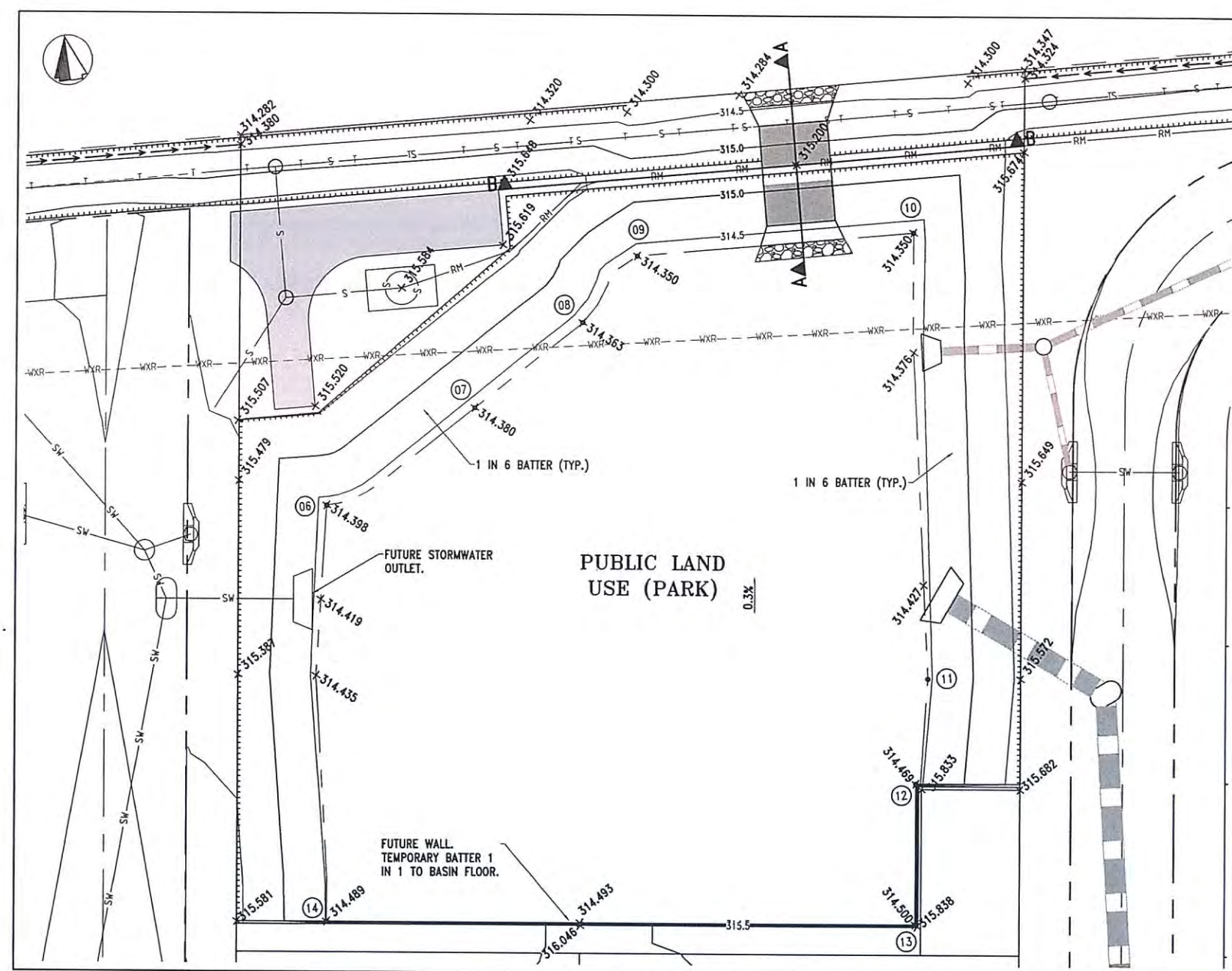
10 OCT 2014

MEDQ

REV	DESCRIPTION	BY	APP	DATE	SURVEYOR	RPEQ 5023	CLIENT	PROJECT	STATUS	DESIGNED	DRAWN	APPROVED	DATE	SCALE	SHEET
A	ORIGINAL ISSUE	JW	JH	01/08/14			ECONOMIC DEVELOPMENT QUEENSLAND	CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL	ISSUE FOR APPROVAL	AR	JW	JH	01/08/14	A1	1 OF 1
						Approved by, for and on behalf of Bradlees	STORMWATER DRAINAGE STRUCTURE DETAILS			PROJECT No: 14-732		DRAWING No: 20		REV: A	



BOWEN STREET BASIN
SCALE 1:100



PARK BASIN
SCALE 1:200

LEGEND

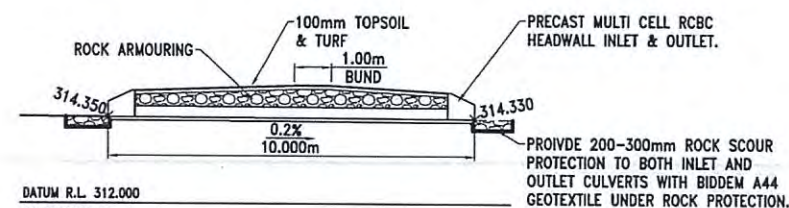
- 12 — FINISHED SURFACE CONTOURS
- — — NOMINAL KERB LINE
- — — PROPOSED STORMWATER
- — — PROPOSED SWALE DRAIN
- S — PROPOSED SEWER MAIN
- RM — PROPOSED SEWER RISING MAIN
- SW — FUTURE STORMWATER
- S — FUTURE SEWER MAIN
- WXR — WXR — EXISTING WATER MAIN TO BE REMOVED
- E — E — EXISTING OVERHEAD ELECTRICAL
- T — T — EXISTING TELSTRA

**BOWEN STREET BASIN
SETOUT POINTS**

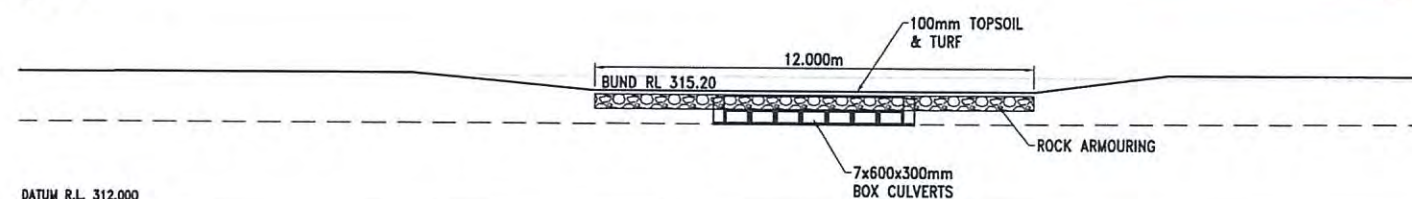
POINT	EASTING	NORTHING
01	675782.785	7059961.437
02	675800.465	7059958.042
03	675798.431	7059940.415
04	675795.029	7059937.774
05	675778.181	7059940.108

**PARK BASIN
SETOUT POINTS**

POINT	EASTING	NORTHING
06	676067.421	7060065.974
07	676079.096	7060071.284
08	676087.838	7060076.168
09	676092.504	7060080.313
10	676112.620	7060078.868
11	676108.726	7060046.833
12	676106.677	7060039.462
13	676105.043	7060029.399
14	676062.750	7060036.246



SECTION A-A
SCALE 1:100



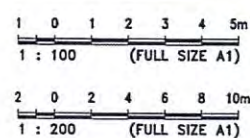
SECTION B-B
SCALE 1:100

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

REV	DESCRIPTION	BY	APP	DATE
A	ORIGINAL ISSUE	AR	JH	01/08/14
B	PROPOSED STORMWATER DRAINAGE HIGHLIGHTED	AR	JH	15/09/14



FYFE

RPEQ 5023

Approved by, for and on behalf of Bradlees

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REG. NO. 233

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Bradlees
Part of the Meinhardt Group

**ECONOMIC DEVELOPMENT
QUEENSLAND**

DETENTION BASIN SETOUT & DETAILS

**CLEARVIEW RISE
STAGE 5, 6 & 7 - BULK EARTHWORKS**
MARANOVA REGIONAL COUNCIL

ISSUE FOR APPROVAL

DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET
AR	AR	JH	01/08/14	1:100	1 OF 1
PROJECT NO	DRAWING NO	REV			
14-732	21				B

SEWERAGE NOTES:

1. THE GENERAL ALIGNMENT OF SEWER PIPES SHALL BE 1.80m OUTSIDE THE PROPERTY BOUNDARIES UNLESS OTHERWISE SHOWN:
2.0m FROM REAR BOUNDARIES WHEN ADJACENT TO ROOFWATER DRAINAGE.
2. ALL SEWER PIPES SHALL BE uPVC S8 UNLESS SHOWN OTHERWISE.
3. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES (CMDG) SEWERAGE SPECIFICATIONS AND STANDARDS.
4. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARDS.
5. ALL WORK ASSOCIATED WITH LIVE SEWERS OR MAINTENANCE HOLES SHALL BE CARRIED OUT BY COUNCIL AT THE CONTRACTORS EXPENSE (UNLESS OTHERWISE APPROVED).
6. WHERE SEWERS HAVE A GRADE OF 1 IN 6 OR STEEPER, CONCRETE ANCHOR BLOCKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CMDG STANDARD DRAWING CMDG-W-041.
7. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF EXISTING SERVICES WITH RELEVANT AUTHORITIES BEFORE COMMENCING WORK.
8. PIPE EMBEDMENT AND TRENCHFILL TO BE IN ACCORDANCE WITH CMDG-S-090 STANDARD DRAWING, TYPE 1 UNLESS NOTED OTHERWISE.
9. THE INVERT LEVELS SHOWN ON THE LONGITUDINAL SECTIONS ARE THE LEVELS CALCULATED AT THE CENTRES OF MANHOLES.
10. HOUSE CONNECTION JUNCTION CHAINAGES SHOWN ON THE LONGITUDINAL SECTIONS ARE MEASURED FROM THE DOWNSTREAM MANHOLE.
11. EACH ALLOTMENT SHALL BE SERVICED BY A DN100mm DIAMETER PROPERTY CONNECTION. FOR ALLOTMENTS OTHER THAN SINGLE RESIDENTIAL, A DN150mm PROPERTY CONNECTION SHALL BE PROVIDED. (1 IN 40 MIN GRADE). A STAR PICKET WITH PVC SAFETY CAP SHALL BE LOCATED VERTICALLY ABOVE THE PROPERTY CONNECTION END CAP, WITH THE TOP OF THE PEG TO BE VISIBLE AND WHITE PLASTIC MARKER TAPE 50mm WIDE SHALL BE ATTACHED TO THE PROPERTY CONNECTION END CAP. RISER BROUGHT VERTICALLY, MAXIMUM 1.0m ABOVE SURFACE AND STAPLED TO THE MARKER PEG.
12. THE LEVELS ON MANHOLE COVERS SHOWN ON THE LONGITUDINAL SECTIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FINISH MANHOLE COVERS AND SURROUNDS TO SUIT THE SLOPE AND LEVEL OF THE FINISHED SURFACE AT THAT LOCATION UNLESS OTHERWISE DIRECTED BY THE SUPERINTENDENT.
13. TOP OF MANHOLE COVERS TO BE FLUSH WITH THE SURFACE IN ROADWAYS AND 75mm PROUD OF FINISHED SURFACE LEVEL ELSEWHERE.
14. ALL WORKS ASSOCIATED WITH LIVE SEWERAGE LINES TO BE CARRIED OUT BY COUNCIL AT THE CONTRACTORS EXPENSE, UNLESS OTHERWISE APPROVED.
15. SEWER RISING MAIN MARKER PLATES (125mm x 75mm) WITH 30mm HIGH "SRM" AND 20mm HIGH "2.0" OR "4.0" BLUE TEXT, TO MANUFACTURED OUT OF CLASS 1 REFLECTIVE SHEETING AND LEGEND ATTACHED TO WHITE ALUMINUM PLATE THEN COVERED WITH 4.5mm POLYCARBONATE SHEETING.
16. BRASS KERB MARKER TO BE INSERTED INTO KERB AND CHANNEL BOTH SIDES OF ROAD TO INDICATE SERVICE CROSSING. DISKS TO BE FIRMLY BONDED TO CONCRETE KERB SURFACE AT CONSTRUCTION AND CORRECTLY ORIENTATED FOR EASE OF IDENTIFICATION.
17. MARKER TAPE FOR SEWER MAINS TO BE INSTALLED IN ACCORDANCE WITH WSA 02-2002-2.3 STANDARD DRAWING SEW-1201.

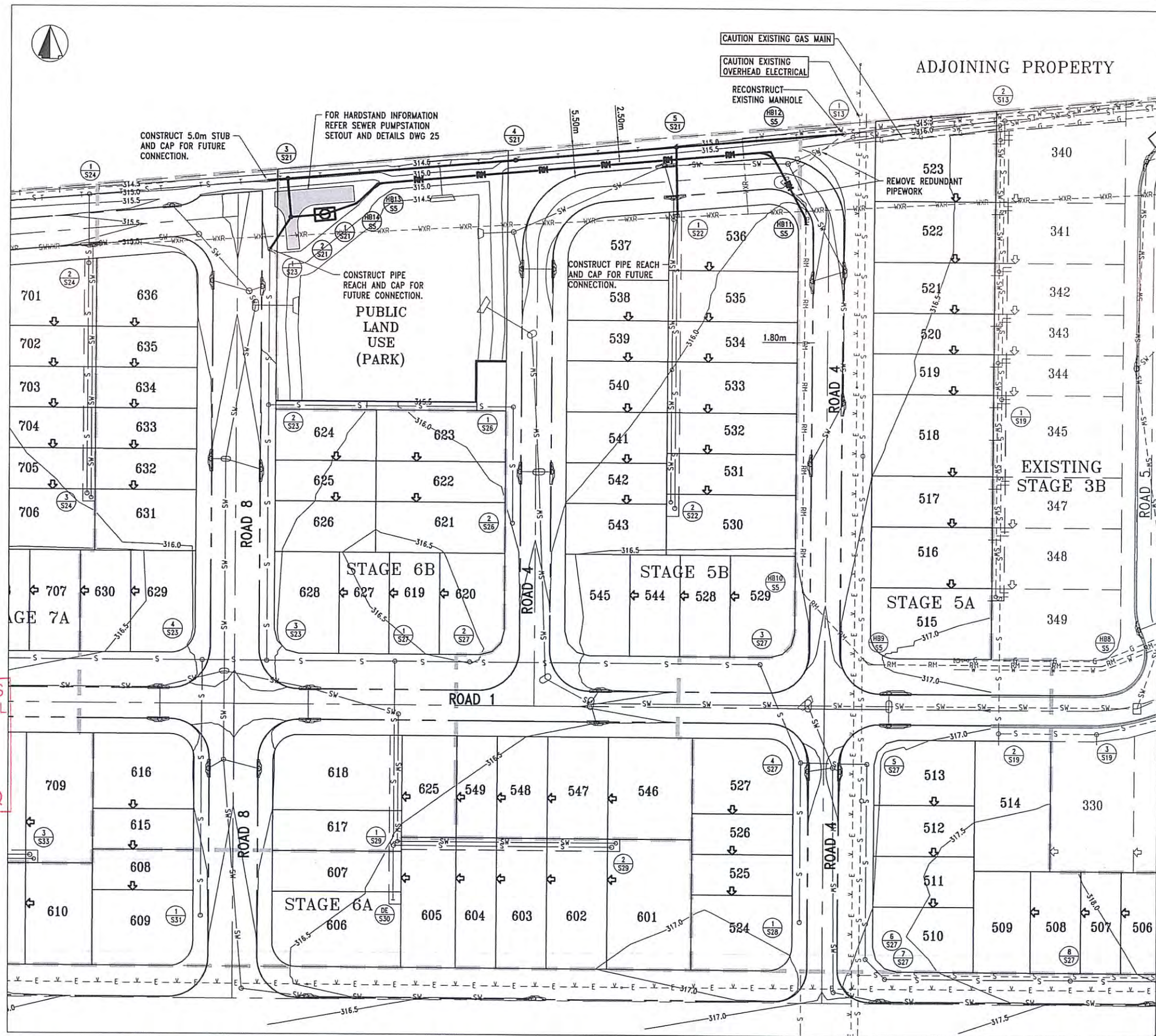
PLANS AND DOCUMENTS referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

LEGEND

- 12.0 FINISHED SURFACE CONTOURS
- NOMINAL KERB LINE
- SEWERAGE MANHOLE 1 ON LINE 2
- PROPOSED SEWER RISING MAIN
- PROPOSED STORMWATER
- FUTURE STORMWATER
- FUTURE SEWER MAIN
- EXISTING SEWER
- EXISTING STORMWATER
- EXISTING WATER
- EXISTING SEWER RISING MAIN
- STAGE BOUNDARY
- ZERO LOT BOUNDARY



REV	DESCRIPTION	BY	APP	DATE
1	ORIGINAL ISSUE	JW	AR	01/08/14
2	PROPOSED SEWER HIGHLIGHTED AND ADDITIONAL CONSTRUCTION LABELS	JW	AR	10/09/14

5 0 5 10 15 20 25m
1 : 500 (FULL SIZE A1)

FYFE
FUTURE YOUNG FUTURE ENGINEERING

RPEQ 5023

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Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994

Bradlees
Part of the Murrumbidgee Group

CLIENT
ECONOMIC DEVELOPMENT QUEENSLAND
TITLE
SEWER RETICULATION PLAN

PROJECT
**CLEARVIEW RISE
STAGE 5, 6 & 7 - BULK EARTHWORKS
MARANOVA REGIONAL COUNCIL**

ISSUE FOR APPROVAL

DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET
AR	JW	JH	01/08/14	1:500	1 OF 1
PROJECT NO	14-732	22	REV	B	

[illegible]

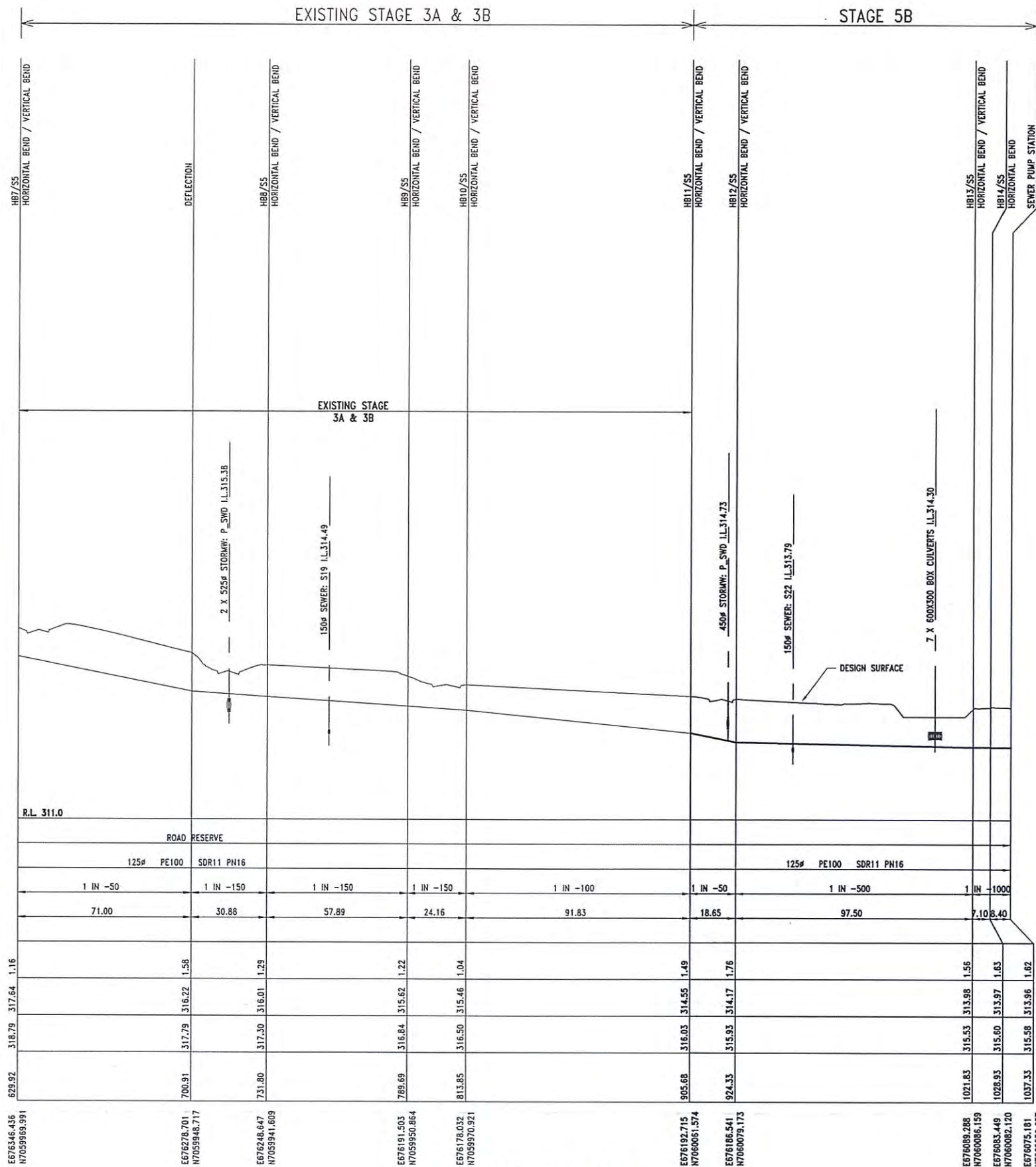
FITTING TYPE

DATUM
PROPERTY DESC.
DIAMETER & CLASS
GRADE
LENGTH

DEPTH TO INVERT

INVERT LEVEL

SURFACE LEVEL

DISTANCE
IN METRESSTRUCTURE
LOCATION

LINE LINE S5 - RISING MAIN

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

REV	DESCRIPTION	BY	APP	DATE
A	ORIGINAL ISSUE	DH	JH	01/08/14
B	MAJOR DRAFTING AMENDMENTS	AR	JH	18/02/14

1 0 1 2 3 4 5m

1 : 100 VERT.

10 0 10 20 30 40 50m

1 : 1000 HORIZ.

(FULL SIZE A1)

FYFE

ENVIRONMENTAL
ENGINEERING
RESOURCES

RPEQ 5023

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Bradlees

Environmental Engineering Resources

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Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217
Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994

CLIENT
ECONOMIC DEVELOPMENT
QUEENSLAND

TITLE
SEWER RISING MAIN
LONGITUDINAL SECTION

PROJECT
CLEARVIEW RISE
STAGE 5, 6 & 7 - BULK EARTHWORKS
MARANOVA REGIONAL COUNCIL

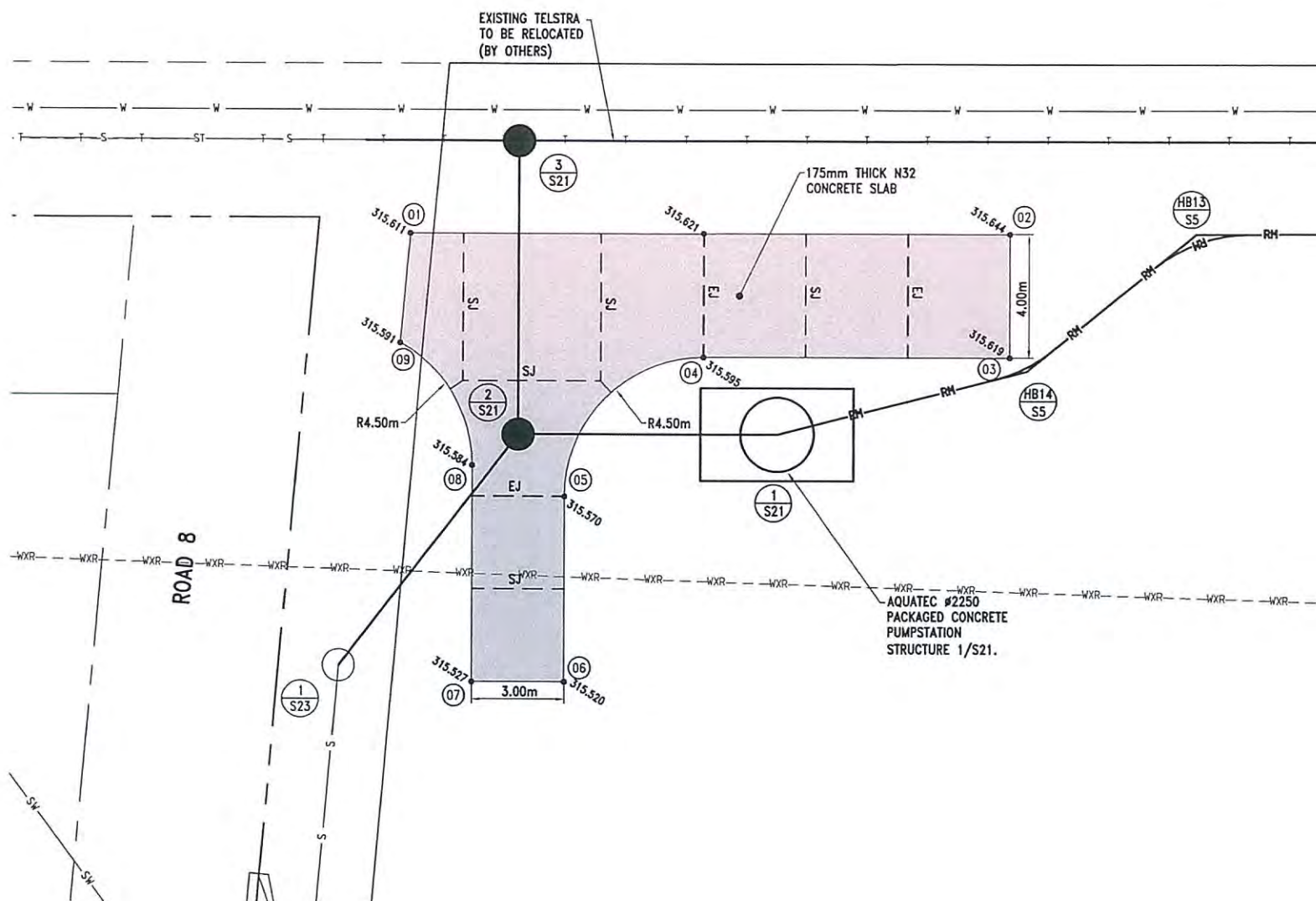
STATUS
ISSUE FOR APPROVAL

DESIGNED	DRAWN	APPROVED	DATE	SCALE	SHEET
AR	DH	JH	01/08/14	A1	1 OF 1

PROJECT No 14-732

DRAWING No 24

REV B



LEGEND

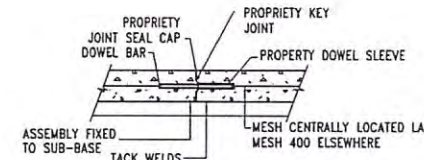
— 1 —	NOMINAL KERB LINE
— S2 —	SEWERAGE MANHOLE 1 ON LINE 2
— RM —	PROPOSED SEWER RISING MAIN
— SW —	STORMWATER
— SW —	FUTURE STORMWATER
— S —	FUTURE SEWER MAIN
— S — S —	EXISTING SEWER
— SW — SW —	EXISTING STORMWATER
— W — W —	EXISTING WATER
— WXR — WXR —	EXISTING WATER MAIN TO BE REMOVED
— E — E —	EXISTING OVERHEAD ELECTRICAL
— T — T —	EXISTING TELSTRA

LEGEND

— EJ —	EXPANSION JOINT
— SJ —	SAWN JOINT
— 08 —	SETOUT POINT
● 315.548	FINISHED LEVEL

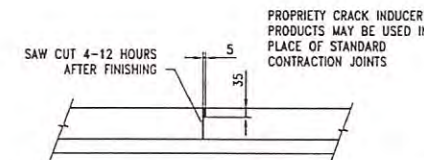
SETOUT POINTS

POINT	EASTING	NORTHING
01	676063.730	7060087.996
02	676083.216	7060086.596
03	676082.929	7060082.607
04	676072.955	7060083.323
05	676068.144	7060079.157
06	676067.714	7060073.172
07	676064.722	7060073.387
08	676065.223	7060080.369
09	676063.161	7060084.482



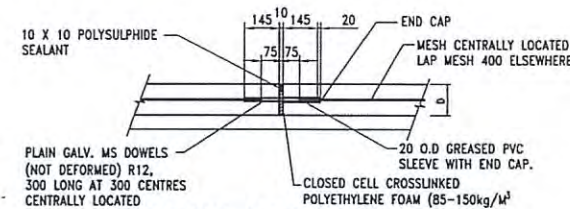
KEY JOINT DETAIL

N.T.S.



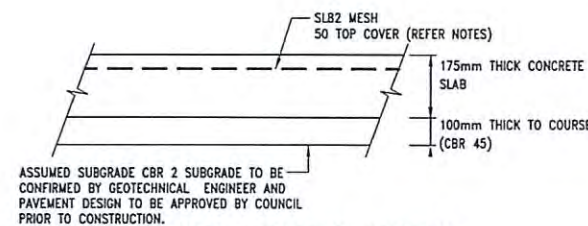
TRANSVERSE SAWN JOINT DETAIL - S.J.

N.T.S.



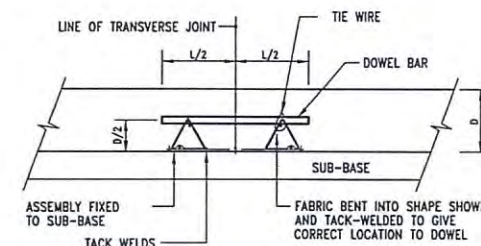
EXPANSION JOINT DETAIL - E.J.

N.T.S.



TYPICAL CONCRETE PAVEMENT SECTION

N.T.S.



DOWEL BAR INSTALLATION DETAIL

N.T.S.

CONCRETE NOTES

GENERAL

Works to be constructed in accordance with current Australian and Local Authority standard drawings and specifications unless noted otherwise. Concrete construction shall comply with the following standards and codes:

General - AS 3600 Concrete Code.

Strength and testing - AS 1012.

Current periods and methods - AS 3600 and AS 3799 respectively.

Slip resistance - AS/NZS 3661.1 Slip Resistance of Pedestrian Surfaces.

All surface finishes to be confirmed with superintendent.

Where a broom finish is specified, the sweep direction shall be applied transversely to the direction of travel.

Pavements should not be trafficked for a minimum 7 days after of placement.

COLOURING

Unless noted otherwise, integral (mixed through) colouring shall be used for pavements. Traffic islands, medians, parking and pedestrian areas may have colour worked into surface by the 'dry shake' method.

Pattern and colour to be determined by Client in consultation with Council.

REINFORCING

Reinforcing shall comply to AS/NZS 4671 and shall be free from material which may affect bond with the concrete.

Reinforcing shall be generally supported on bar chairs in a regular grid secured to subbase in such a way as to resist displacement during concrete pouring.

Fabric: Shall be in the form of a single sheet and supported on bar chairs in a regular grid not exceeding 1m. Lap so that the two outermost wires on one sheet overlaps the outmost wire on the sheet being lapped.

Cover:

Top Cover	40mm for concrete bases < 150mm
	50mm for concrete bases > 150mm
Joints	75mm from transverse contraction and isolation joints
	40 to 80mm from longitudinal joints

Dowels:

All Dowels shall be grade 250R steel bars, 450mm long and placed at 300mm centres. The insertion of dowels during the placing of concrete not acceptable.

To permit joint movement, dowels shall be;

- sawn, not cropped
- straight, smooth and free of burrs
- effectively de-banded over at least half of their length
- placed orthogonal to the joint direction and parallel to the pavement surface

Concrete Slab Thickness

Concrete Slab Thickness	Diameter
125 - 140	20mm
141 - 160	24mm
161 - 190	28mm
191 - 220	33mm
221 - 250	36mm

DRIVEWAYS

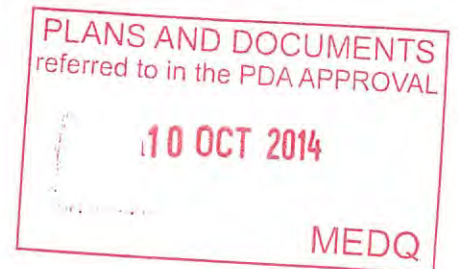
Concrete driveways shall be in accordance with councils Std Drg No. CMDG-R-042 and Part 6 of Queensland Development Code.

CONSTRUCTION JOINTS AND INTERFACES

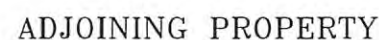
Joints shall be airblasted clean prior to application of sealant.

Abelflex or approved equivalent is required at all locations where concrete pavements meets kerbing and manholes.

Where a construction joint is required, dowel joints shall be substituted for sawn joints. Apply small trowel finish (5mm) to edge of concrete pavements at all A.C. interface locations.



REV	DESCRIPTION	BY	APP	DATE	SURVEYOR	RPEQ 5023	BRADLEES	CLIENT	PROJECT	STATUS	DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET
A	ORIGINAL ISSUE	AR	JH	01/08/14		Approved by, for and on behalf of Bradlees	Bradford Lees Pty Ltd ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradleesmeinhart.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5031 Sunshine Coast Ph 07 5451 1994	ECONOMIC DEVELOPMENT QUEENSLAND	CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL	ISSUE FOR APPROVAL	AR	AR	JH	01/08/14	1:100	1 OF 1
						This drawing has been produced for the exclusive use of the client (nominated on this document). No third party is to rely on this document without written permission from Bradlees. This drawing is not to be constructed from unless "Issued for construction" is displayed and only where signed by an RPEQ. © Copyright	SCI QUAL INTERNATIONAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REG. NO. 233				14-732	25				A



CONNECT INTO EXISTING WATER
MAIN. FINAL CONNECTION TO BE
CARRIED OUT BY COUNCIL AT
CONTRACTORS EXPENSE

**CAUTION: EXISTING
OVERHEAD ELECTRICAL**

REDUNDANT BORE MAIN
PIPEWORK, FITTING THRUST
BLOCKS ETC. TO BE
REMOVED AND DISPOSED OF
OFFSITE.

PROPOSED 200mm DIA BORE MAIN

EXISTING WATER
TO BE REMOVED

PUBLIC
LAND
USE
(PARK)

STAGE 6B	
----------	--

STAGE 5B

WATER RETICULATION NOTES:

1. ALL WORK & MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT CAPRICORN MUNICIPAL DEVELOPMENT GUIDELINES (CMDG) WATER SPECIFICATIONS & STANDARDS.
2. UNLESS SPECIFIED OTHERWISE ALL MATERIALS AND WORK SHALL COMPLY WITH THE RELEVANT AUSTRALIAN STANDARD (CURRENT EDITION AND AMENDMENT).
3. THE GENERAL ALIGNMENT OF WATER MAINS SHALL BE 1.5m OUTSIDE THE PROPERTY BOUNDARY UNLESS SHOWN OTHERWISE.
4. WATER RETICULATION MAINS SHALL BE CONSTRUCTED WITH PVC-O PN16 PIPE D.I.C.L. COMPATIBLE.
5. ADOPT TOP OF LIP AS PERMANENT LEVEL.
6. COVER ON MAINS FROM PERMANENT LEVEL TO BE:
 - AREAS NOT SUBJECT TO VEHICULAR LOADING - 600mm
 - AREAS SUBJECT TO VEHICULAR LOADING:
 - NOT IN ROADWAY - 600mm
 - SEALED ROADWAY - 900mm
7. CONDUITS TO BE INSTALLED IN ACCORDANCE WITH CURRENT CMDG WATER STANDARDS.
8. TESTING, FLUSHING AND CHLORINATION TO BE CARRIED IN ACCORDANCE WITH CURRENT CMDG WATER SPECIFICATIONS & STANDARDS.
9. MARKERS ARE REQUIRED FOR ALL HYDRANTS & VALVES IN ACCORDANCE WITH CURRENT CMDG WATER SPECIFICATIONS & STANDARDS.
10. DEAD ENDS OF WATER MAINS TO BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CMDG WATER SPECIFICATIONS & DRAWINGS.
11. THE CONTRACTOR SHALL DETERMINE ALLOWABLE BEARING CAPACITIES OF THE UNDISTURBED SIDE OF THE TRENCH. DIMENSIONS OF THE THRUST BLOCK ARE TO BE IN ACCORDANCE WITH CMDG WATER STANDARD DRAWING CMDG-W-041.
12. ALL CONNECTIONS TO EXISTING/ LIVE WATER MAINS TO BE MADE BY COUNCIL AT DEVELOPER'S EXPENSE. CONNECTION TO INCLUDE STOP VALVE AS DIRECTED BY SUPERINTENDENT. UNLESS OTHERWISE APPROVED.
13. WATER MAINS SHALL BE TESTED UNDER HYDRAULIC PRESSURE TO A PRESSURE TEST OF 1.25MPa.
14. ALL FASTENERS USED IN THE WORKS SHALL BE STAINLESS STEEL GRADE 316 OR 304 TO EITHER AS1449 OR AS 316 OR 304 (AMERICAN IRON & STEEL INSTITUTE) OR UNS S31600 OR S30400.
15. VALVES & HYDRANTS IF NOT TO BE LOCATED UNDER FOOTPATHS. PLEASE NOTIFY THE SUPERINTENDENT IF CONFLICTS EXIST.

LEGEND

- | | |
|----------------------|-----------------------------------|
| _____ | NOMINAL KERB LINE |
| W200 | PROPOSED #200mm WATERMAIN |
| -WXR-----WXR- | EXISTING WATER MAIN TO BE REMOVED |
| -----SW | PROPOSED STORMWATER |
| -----E | PROPOSED ELECTRICAL |
| -----G | PROPOSED GAS |
| -----S | PROPOSED SEWER |
| -----T | PROPOSED TELSTRA |
| -W-----W- | EXISTING WATER |
| -----W200 | EXISTING #200 WATER |
| -E-----E-----E-----E | EXISTING OVERHEAD ELECTRICAL |
| -G-----G-----G-----G | EXISTING GAS |
| -T-----T-----T-----T | EXISTING TELSTRA |

SCHEDULE OF FITTINGS

NO.	DESCRIPTION
①	ø200 SLUICE VALVE
②	ø200 90° BEND

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

REV		DESCRIPTION		BY	APP	DATE	SURVEYOR										CLIENT										PROJECT										TITLE										STATUS										DESIGNED										DRAWN										APPROVED										DATE										SCALE @ A1										SHEET																													
A		ORIGINAL ISSUE		AR	JH	01/08/14	FYFE										RPEQ 5023										Bradford Lees Pty Ltd ABN 29 054 159 191										ECONOMIC DEVELOPMENT QUEENSLAND										CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL										WATER BORE MAIN RELOCATION										ISSUE FOR APPROVAL										AR										AR										JH										01.08.14										1:500										1 OF									
B		PROPOSED BORE MAIN HIGHLIGHTED		AR	JH	18/09/14	50250																																																																																																																																	

ADJOINING PROPERTY

LEGEND

- 12 EXISTING SURFACE CONTOURS
- NOMINAL KERB LINE
- SEDIMENT FENCE
- DUST FENCE
- SHAKEDOWN AREA
- LIMIT OF EARTHWORKS

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

NOTES:

- MEASURES SHOWN ON THIS PLAN ARE TO BE IMPLEMENTED PRIOR TO PRE-START MEETING WITH COUNCIL.
- ALL TEMPORARY SEDIMENT CONTROLS SHALL BE MAINTAINED AS DIRECTED BY THE SUPERINTENDENT

THE CONTRACTOR MUST INFORM THEMSELVES OF AND COMPLY WITH THE STATE PLANNING POLICY FOR HEALTHY WATERS.

REV A	DESCRIPTION ORIGINAL ISSUE	BY JW	APP JH	DATE 01.08.14	 1 : 1000 (FULL SIZE A1)	 FYFC Flood Yarragundi Yarragundi Council	RPEQ 5023 Approved by, for and on behalf of Bradlees This drawing has been produced for the exclusive use of the client (nominated on this document). No third party is to rely on this document without written permission from Bradlees. This drawing is not to be construed from unless "Issued for construction" is displayed and only where signed by an RPEQ. © Copyright	 SCI QUAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REG. NO. 233	Bradford Lees Pty Ltd ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradleesmeinhart.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994	 Bradlees Part of the Macquarie Group	CLIENT ECONOMIC DEVELOPMENT QUEENSLAND	PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL	TITLE EROSION & SEDIMENT CONTROL PLAN PHASE 1 SHEET 1 OF 2	STATUS ISSUE FOR APPROVAL	DESIGNED AR	DRAWN JW	APPROVED JH	DATE 01.08.14	SCALE @ A1 1:500	SHEET 1 OF 2
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ADJOINING PROPERTY

CONSTRUCT TEMPORARY
SEDIMENT BASIN

PUBLIC
LAND
USE
(PARK)

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

LEGEND

- 12 EXISTING SURFACE CONTOURS
- NOMINAL KERB LINE
- SEDIMENT FENCE
- DUST FENCE
- SHAKEDOWN AREA
- LIMIT OF EARTHWORKS

NOTES:

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A	ORIGINAL ISSUE	JW	JH	01.08.14	FYFE	Approved by, for and on behalf of Bradlees	This drawing has been produced for the exclusive use of the client (nominated on this document). No third party is to rely on this document without written permission from Bradlees. This drawing is not to be constructed from unless "Issued for construction" is displayed and only where signed by an RPEQ. © Copyright	SC1 QUAL INTERNATIONAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REGD. NO. 233	PROJECT No 14-732	DRAWING No 28	REV A				



ADJOINING PROPERTY

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

LEGEND

- 30 --- EXISTING SURFACE CONTOURS
- 15 --- FINISHED SURFACE CONTOURS
- --- NOMINAL KERB LINE
- SEDIMENT FENCE
- DUST FENCE
- GRASS SWALE
- LEVEL SPREADER
- SHAKEDOWN AREA
- SW --- STORMWATER
- SW --- EXISTING STORMWATER
- LIMIT OF EARTHWORKS

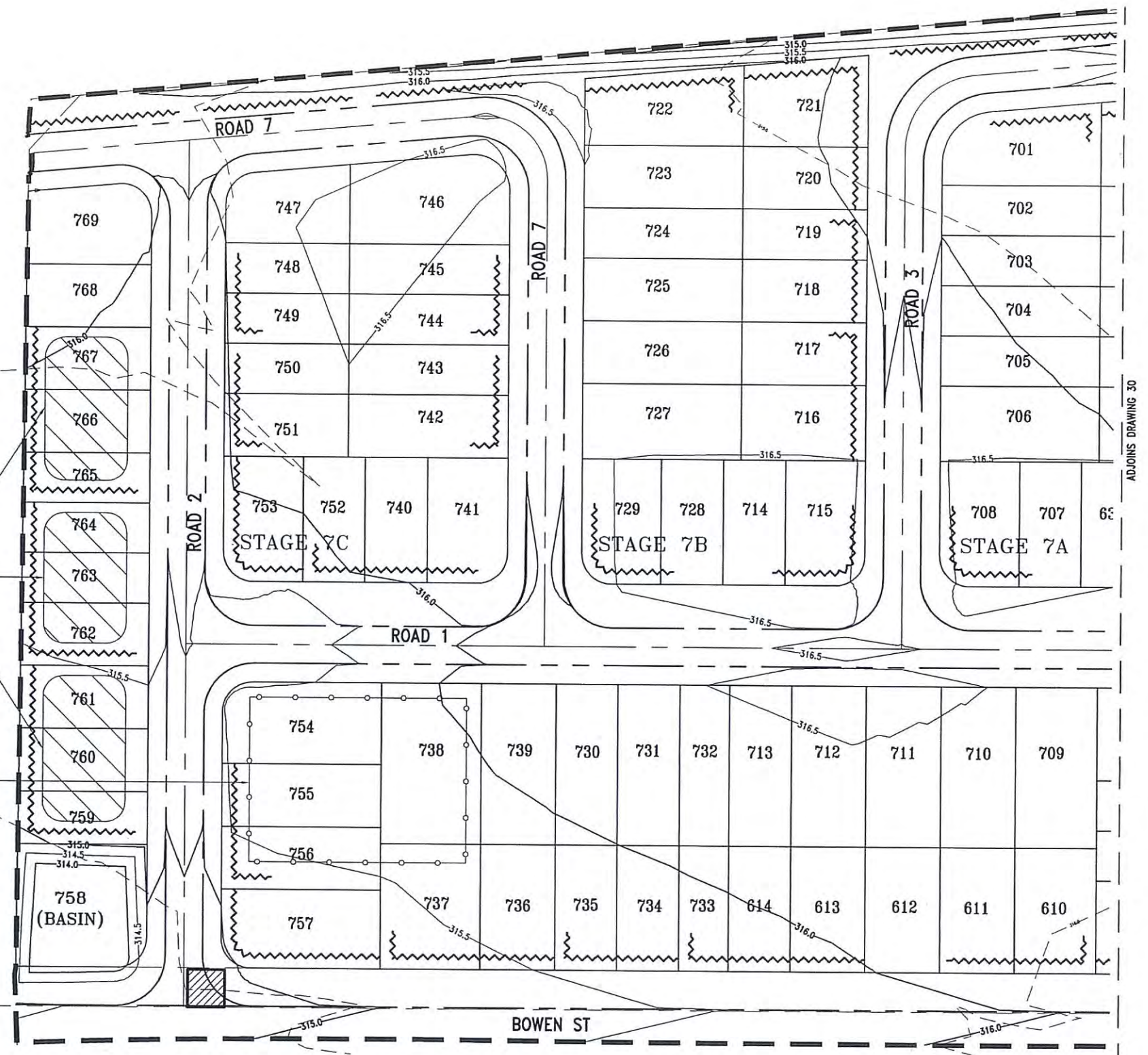
THE CONTRACTOR MUST INFORM THEMSELVES OF AND
COMPLY WITH THE "STATE PLANNING POLICY FOR
HEALTHY WATERS".

NOTES:

THE MEASURES SHOWN ON THIS PLAN ARE INDICATIVE
ONLY. THE CONTRACTOR SHALL CARRY OUT ALL
WORKS IN ACCORDANCE WITH THE CONTRACTORS
SEDIMENT AND EROSION CONTROL PLAN. ALL
RESPONSIBILITY FOR SEDIMENT AND EROSION CONTROL
IS DELEGATED TO THE CONTRACTOR BY THE
APPLICANT AND THE LAND OWNERS UNTIL THE ON
MAINTENANCE INSPECTION.
CONTRACTOR AT A MINIMUM IS TO COMPLY WITH
HEALTHY WATERWAYS "CONTROLLING STORMWATER
POLLUTION ON YOUR BUILDING SITE" AND ALL
ASSOCIATED DOCUMENTATION AND CHECKLISTS.

NOMINATED STOCKPILE
LOCATIONS 2.0m MAX.
HEIGHT

(INDICATIVE) SITE
OFFICE, CARPARK,
TOILETS & REFUGE ETC.



REV A	DESCRIPTION ORIGINAL ISSUE	BY JW	APP JH	DATE 01.08.14	SURVEYOR 	RPEQ 5023 Approved by, for and on behalf of Bradlees 	SCI QUAL INTERNATIONAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REG. NO. 233	Bradlees Pty Ltd ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradleesmeinhart.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5031 Sunshine Coast Ph 07 5451 1994	CLIENT ECONOMIC DEVELOPMENT QUEENSLAND	PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL	TITLE EROSION & SEDIMENT CONTROL PLAN PHASE 2 SHEET 1 OF 2	STATUS ISSUE FOR APPROVAL	DESIGNED AR	DRAWN JW	APPROVED JH	DATE 01.08.14	SCALE @ A1 1:500	SHEET 1 OF 2
										PROJECT No 14-732	DRAWING No 29	REV A						



PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

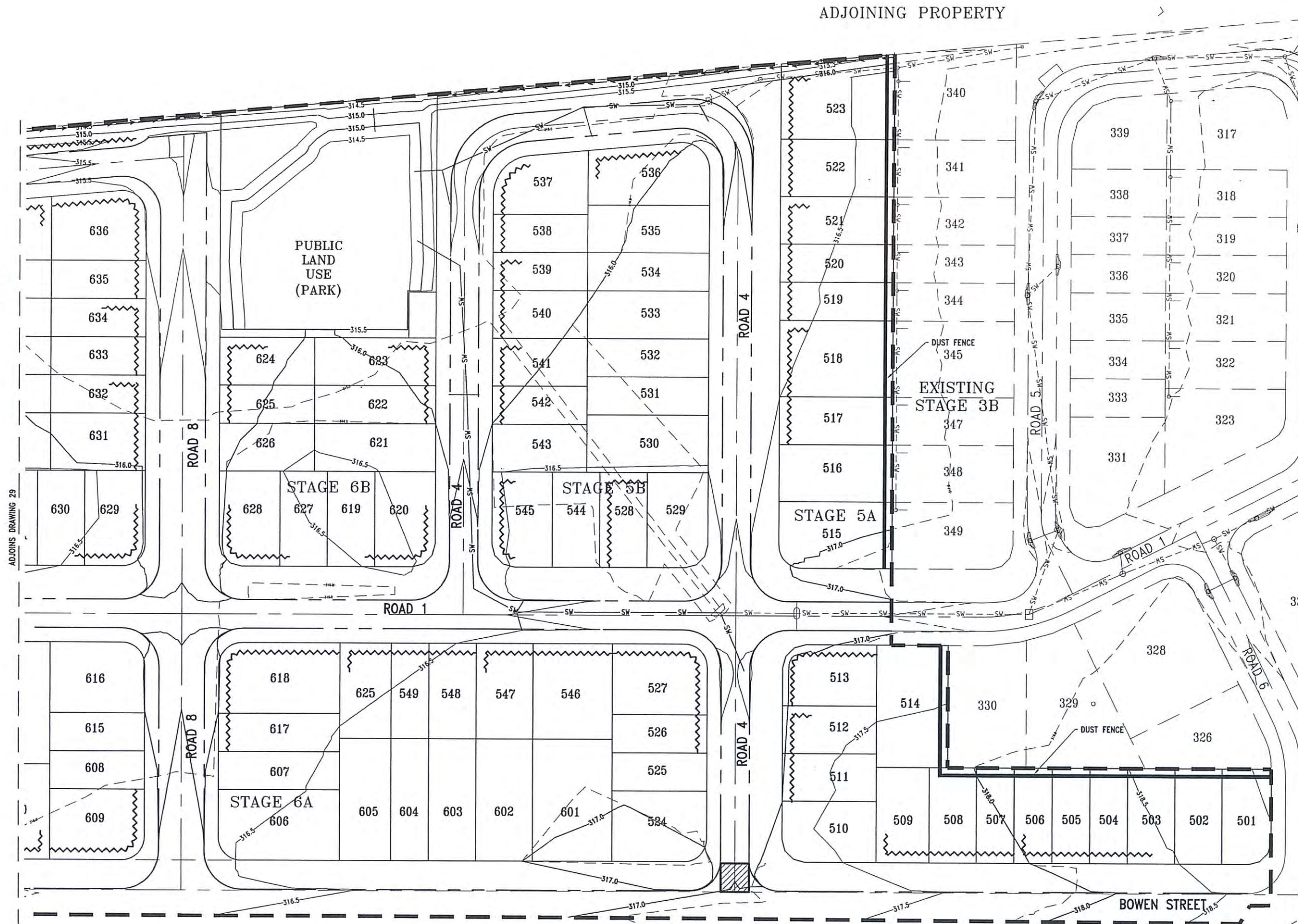
LEGEND

- 30 — EXISTING SURFACE CONTOURS
- 15 — FINISHED SURFACE CONTOURS
- — NOMINAL KERB LINE
- — SEDIMENT FENCE
- — DUST FENCE
- — GRASS SWALE
- — LEVEL SPREADER
- — SHAKEDOWN AREA
- SW — STORMWATER
- SW — EXISTING STORMWATER
- — LIMIT OF EARTHWORKS

THE CONTRACTOR MUST INFORM THEMSELVES OF AND
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POLLUTION ON YOUR BUILDING SITE" AND ALL
ASSOCIATED DOCUMENTATION AND CHECKLISTS.



<table><tr><th>REV</th><th>DESCRIPTION</th><th>BY</th><th>APP</th><th>DATE</th></tr><tr><td>A</td><td>ORIGINAL ISSUE</td><td>JW</td><td>JH</td><td>01/08/14</td></tr></table>		REV	DESCRIPTION	BY	APP	DATE	A	ORIGINAL ISSUE	JW	JH	01/08/14	50510152025m 1 : 500 (FULL SIZE A1) FYFE FYFE Earth Partner of the Mott MacDonald Group	SURVEYOR RPEQ 5023 Approved by, for and on behalf of Bradlees This drawing has been produced for the exclusive use of the client (nominated on this document). No third party is to rely on this document without written permission from Bradlees. This drawing is not to be constructed from unless "Issued for construction" is displayed and only where signed by an RPEQ. © Copyright SCI QUAL INTERNATIONAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REG. NO. 233 Bradford Lees Pty Ltd ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradleesreinhardt.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994 Bradlees Part of the Mott MacDonald Group <table><tr><td>CLIENT</td><td colspan="2">ECONOMIC DEVELOPMENT QUEENSLAND</td></tr><tr><td>TITLE</td><td colspan="2">EROSION & SEDIMENT CONTROL PLAN PHASE 2 SHEET 2 OF 2</td></tr></table> <table><tr><td>PROJECT</td><td colspan="2">CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL</td></tr><tr><td>STATUS</td><td colspan="2">ISSUE FOR APPROVAL</td></tr><tr><td>DESIGNED</td><td>DRAWN</td><td>APPROVED</td><td>DATE</td><td>SCALE @ A1</td><td>SHEET</td></tr><tr><td>AR</td><td>JW</td><td>JH</td><td>01/08/14</td><td>1:500</td><td>2 OF 2</td></tr><tr><td>PROJECT No 14-732</td><td>DRAWING No 30</td><td>REV A</td><td colspan="3"></td></tr></table>	CLIENT	ECONOMIC DEVELOPMENT QUEENSLAND		TITLE	EROSION & SEDIMENT CONTROL PLAN PHASE 2 SHEET 2 OF 2		PROJECT	CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL		STATUS	ISSUE FOR APPROVAL		DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET	AR	JW	JH	01/08/14	1:500	2 OF 2	PROJECT No 14-732	DRAWING No 30	REV A			
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ADJOINING PROPERTY

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

10 OCT 2014

MEDQ

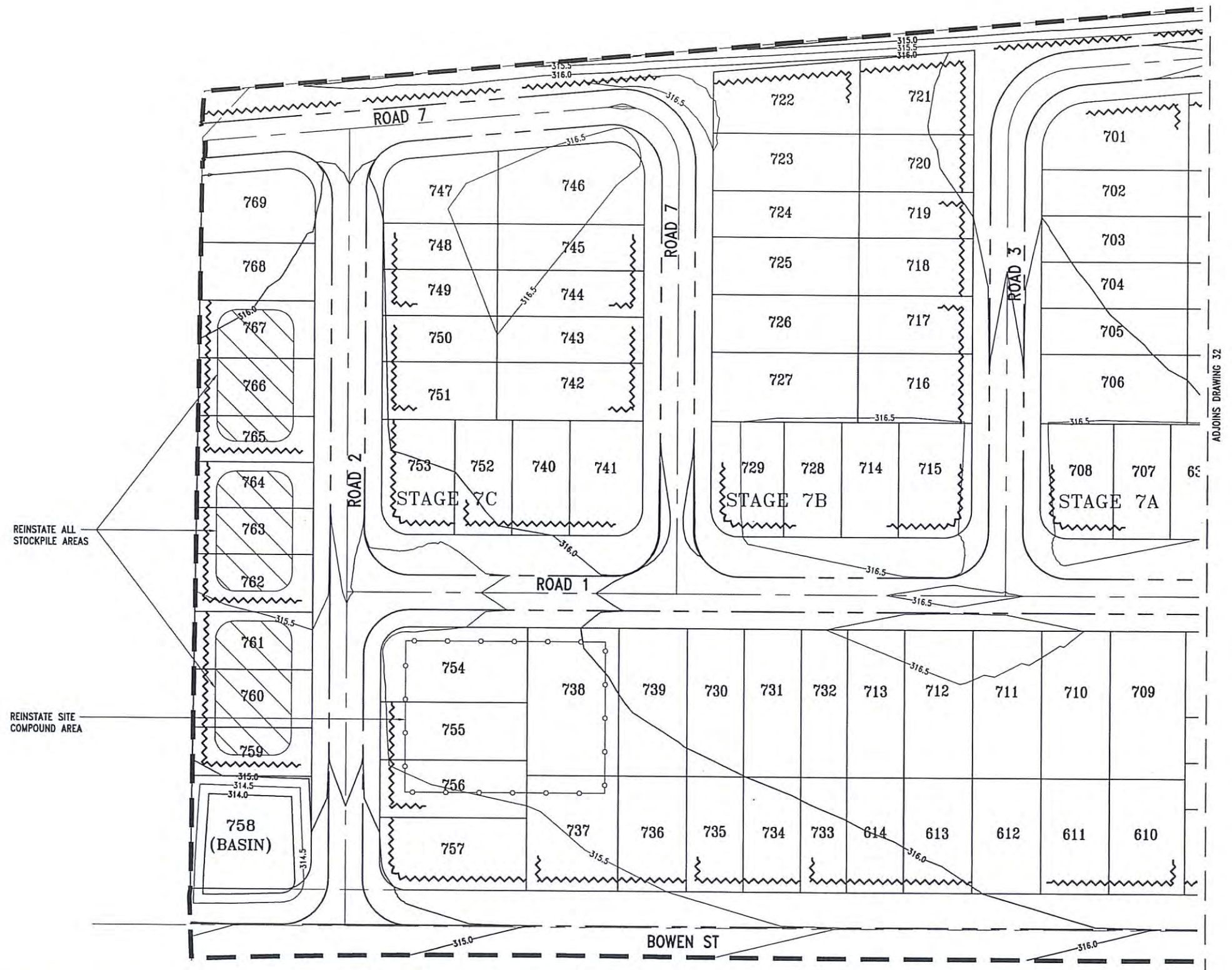
LEGEND

- 12 FINISHED SURFACE CONTOURS
- NOMINAL KERB LINE
- SEDIMENT FENCE
- DUST FENCE
- GRASS SWALE
- LEVEL SPREADER
- SHAKEDOWN AREA
- SW STORMWATER
- LIMIT OF EARTHWORKS

NOTES:

THE MEASURES SHOWN ON THIS PLAN ARE INDICATIVE ONLY. THE CONTRACTOR SHALL CARRY OUT ALL WORKS IN ACCORDANCE WITH THE CONTRACTORS SEDIMENT AND EROSION CONTROL PLAN. ALL RESPONSIBILITY FOR SEDIMENT AND EROSION CONTROL IS DELEGATED TO THE CONTRACTOR BY THE APPLICANT AND THE LAND OWNERS UNTIL THE ON MAINTENANCE INSPECTION. CONTRACTOR AT A MINIMUM IS TO COMPLY WITH HEALTHY WATERWAYS "CONTROLLING STORMWATER POLLUTION ON YOUR BUILDING SITE" AND ALL ASSOCIATED DOCUMENTATION AND CHECKLISTS. SEDIMENT CONTROLS ARE NOT TO BE REMOVED PRIOR TO SATISFACTORY ESTABLISHMENT OF GROUND COVER / WRITTEN DIRECTION FROM SUPERINTENDENT.

THE CONTRACTOR MUST INFORM THEMSELVES OF AND COMPLY WITH THE "STATE PLANNING POLICY FOR HEALTHY WATERS".



REV A	DESCRIPTION ORIGINAL ISSUE	BY JW	APP JH	DATE 01/08/14	SURVEYOR 	RPEQ 5023 Approved by, for and on behalf of Bradlees 	 SCI QUAL INTERNATIONAL QUALITY ASSURED COMPANY AS/NZS ISO 9001:2008 REG. NO. 233	Bradford Lees Pty Ltd ABN 29 064 159 191 Ph 07 5528 6411 Fax 07 5528 6422 Web www.bradlees.com.au Email mail.au@bradleesreinhardt.com Postal PO Box 2293, Southport QLD 4215 Gold Coast Office Level 1, 34 Thomas Drive, Chevron Island QLD 4217 Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994	 Part of the Macquarie Group	CLIENT ECONOMIC DEVELOPMENT QUEENSLAND TITLE EROSION & SEDIMENT CONTROL PLAN PHASE 3 SHEET 1 OF 2	PROJECT CLEARVIEW RISE STAGE 5, 6 & 7 - BULK EARTHWORKS MARANOVA REGIONAL COUNCIL STATUS ISSUE FOR APPROVAL	DESIGNED AR DRAWN JW APPROVED JH DATE 01/08/14 SCALE @ A1 1:500 SHEET 1 OF 2
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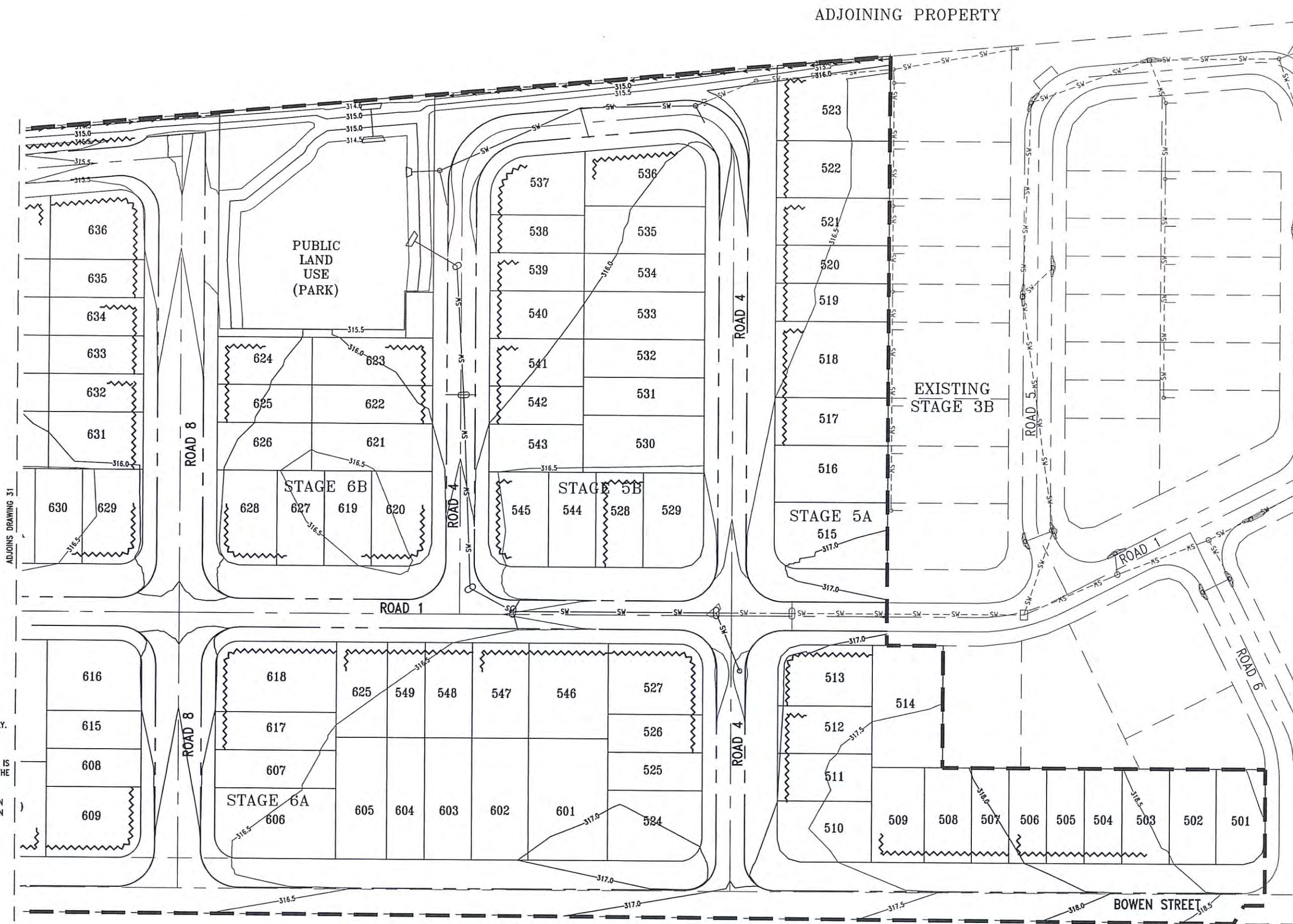
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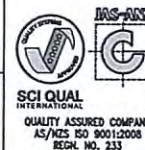
SURVEYOR

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RPEQ 5023

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Brisbane Ph 07 3018 5034 Sunshine Coast Ph 07 5451 1994

Bradlees
Part of the Macquarie Group

CLIENT

ECONOMIC DEVELOPMENT
QUEENSLAND

EROSION & SEDIMENT CONTROL PLAN
PHASE 3
SHEET 2 OF 2

PROJECT

CLEARVIEW RISE
STAGE 5, 6 & 7 - BULK EARTHWORKS
MARANOVA REGIONAL COUNCIL

ISSUE FOR APPROVAL

PROJECT NO: 14-732

DRAWING NO: 32

REV: A

DESIGNED	DRAWN	APPROVED	DATE	SCALE @ A1	SHEET
AR	JW	JH	01/08/14	1:500	2 OF 2

GENERAL NOTES:

1. ALL FENCING AND SILT FENCING TO BE INSTALLED PRIOR TO PRE-START MEETING.
2. THE CONTRACTOR SHALL PROVIDE AN EROSION AND SEDIMENT CONTROL PLAN FOR APPROVAL BY SUPERINTENDENT PRIOR TO POSSESSION OF SITE BEING GRANTED.
3. ALL COARSE SEDIMENTS ARE TO BE CONTROLLED AND SHALL NOT ENTER THE DOWNSTREAM INFRASTRUCTURE. THE TARGET FOR THIS IS 50mg/L OF SUSPENDED SOLIDS 90% OF THE TIME.
4. ALL WORKS ARE TO BE IN ACCORDANCE WITH C.M.D.G "EROSION CONTROL AND STORMWATER MANAGEMENT".

PHASING NOTES:

PHASE 1 - PRIOR TO PRE-START
THE CONTRACTOR WILL BE PAID FOR SCHEDULED QUANTITIES FOR THIS PHASE

PHASE 2 - DURING CONSTRUCTION

THIS PHASE IS TO BE IN ACCORDANCE WITH THE CONTRACTOR'S SEDIMENT AND EROSION CONTROL PLAN. THE MONTHLY ALLOWANCE IN THE SCHEDULE WILL NOT BE CLAIMABLE IF TESTS SHOW A RELEASE OF 50mg/L AND THE RAIN EVENTS DO NOT EXCEED 75TH PERCENTILE OF A 5 DAY EVENT (ON THIS SITE 40mm OVER 5 DAYS). ALL OTHER COSTINGS NOT SCHEDULED ARE DEEMED INCLUDED.

PHASE 3 - PRACTICAL COMPLETION INSPECTION

THE CONTRACTOR WILL BE PAID FOR SCHEDULED QUANTITIES FOR THIS PHASE

STOCKPILE NOTES:

1. ALL STOCKPILES MUST BE SURROUNDED BY A SILT FENCE.
2. STOCKPILES MUST BE COVERED, IF NECESSARY, TO PREVENT DUST OR CONTAMINATION OF WATERS.

STABILISATION NOTES:

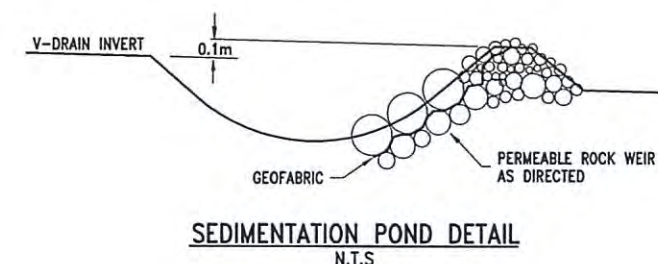
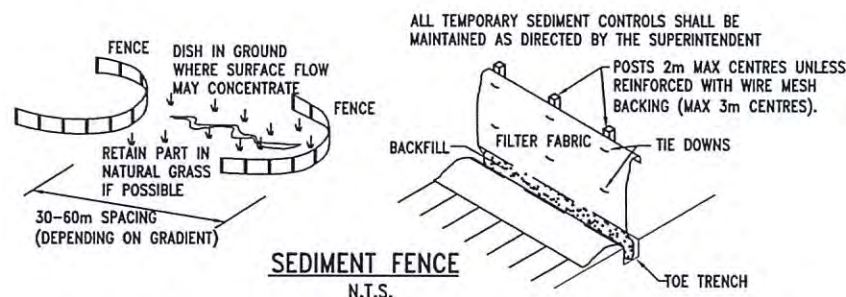
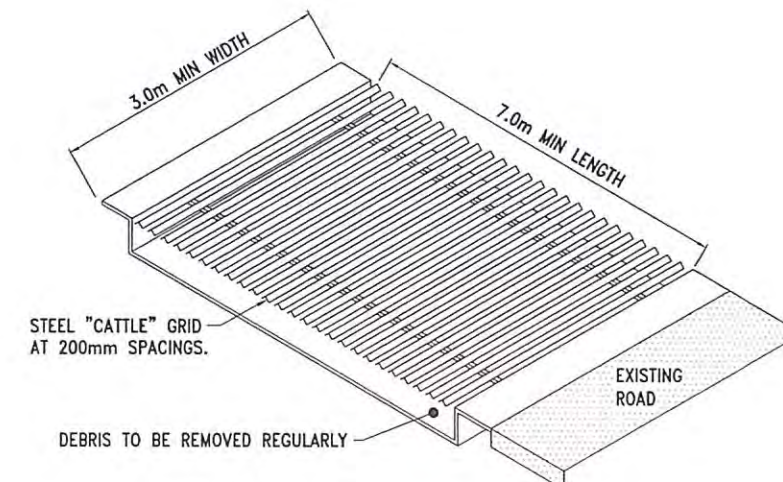
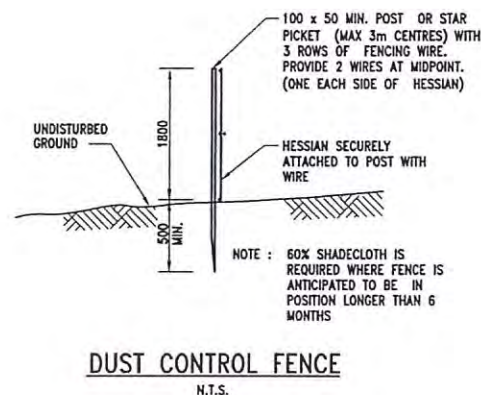
1. TOP SOIL AND SEED MUST BE PLACED ON COMPLETED AREAS WITHIN 7 DAYS OF THAT AREA BEING COMPLETED.
2. HYDROMULCHING MAY BE ORDERED BY THE SUPERINTENDENT.
3. ALL BATTERS GREATER THAN 1 IN 4 TO BE MULCHED WITH ONSITE MULCH.
4. 90% STRIKE MUST OCCUR WITHIN 4 WEEKS. AFTER THIS PERIOD RE-SEEDING MAY BE ORDERED AT THE CONTRACTOR'S COST.

THE CONTRACTOR MUST INFORM THEMSELVES OF AND COMPLY WITH THE "STATE PLANNING POLICY FOR HEALTHY WATERS".

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EROSION & SEDIMENT CONTROL PLAN DETAILS & NOTES										PROJECT No	DRAWING No	REV			
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