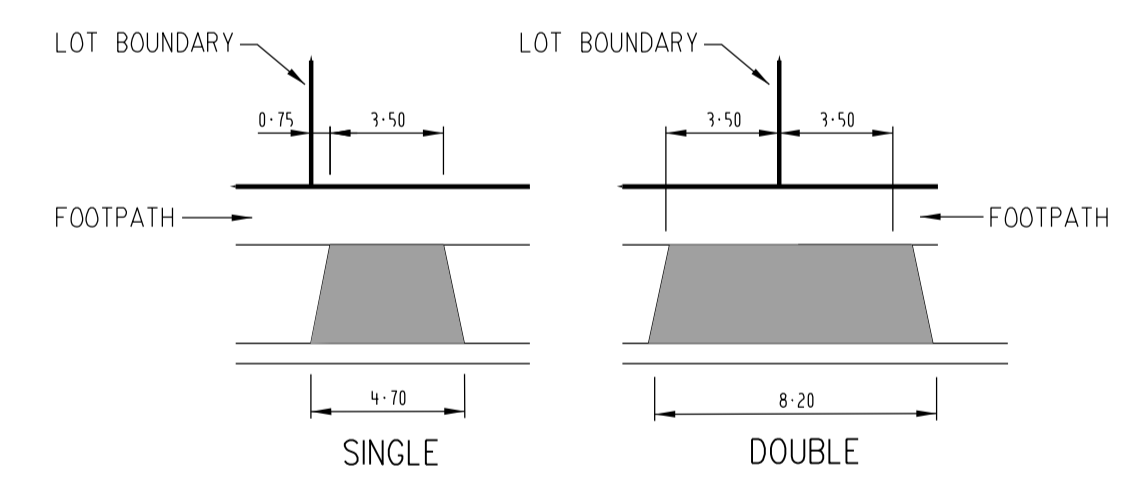


LOCALITY PLAN
NTS

SHEET INDEX

SHT No.	VER	DESCRIPTION
1	D	DETAIL PLAN, SHEET INDEX, SERVICES SCHEDULE & LOCALITY PLAN
2	C	TYPICAL CROSS SECTIONS, PAVEMENT DETAIL & INTERSECTION PLAN
3	B	LONGITUDINAL SECTION - HAGLEY ROAD & GUARDIAN STREET
4	C	LONGITUDINAL SECTION - REALM VISTA
5	B	CROSS SECTIONS - HAGLEY ROAD
6	A	CROSS SECTIONS - GUARDIAN STREET
7	C	CROSS SECTIONS - REALM VISTA
8	A	DRAINAGE LONGITUDINAL SECTIONS-1
9	A	DRAINAGE LONGITUDINAL SECTIONS-2
10	A	DRAINAGE LONGITUDINAL SECTIONS-3
11	A	DRAINAGE LONGITUDINAL SECTIONS-4 & PIT SCHEDULE
12	A	PARKING AND SIGNAGE & LINEMARKING PLAN



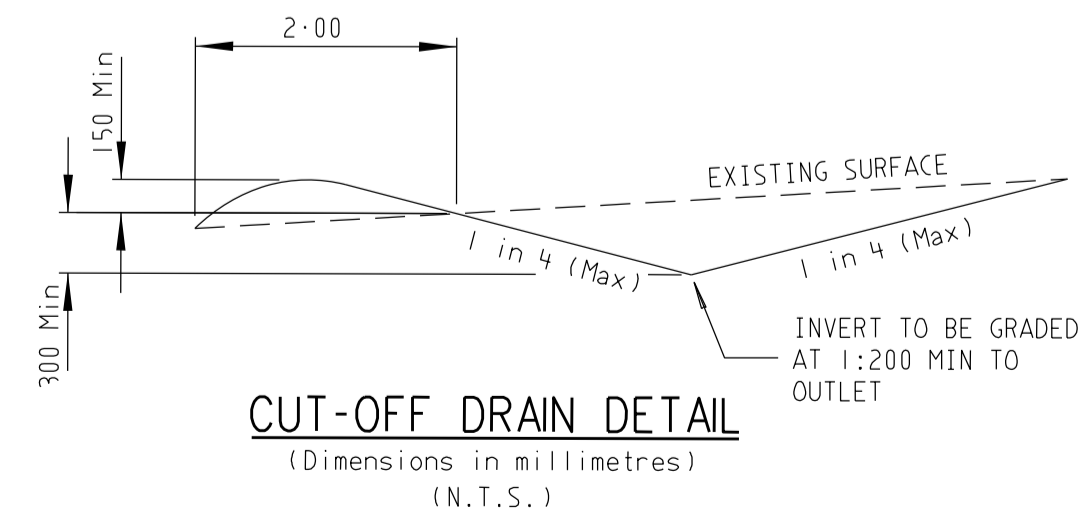
DRIVEWAY PLAN
NOT TO SCALE

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

PLAN
SCALE 1:500

SERVICES OFFSETS AND LOCATIONS

STREET/LOT NAME	Rd. RESERVE	WATER		GAS	ELECTRICITY			NBN			Bk. of KERB	JOINT TRENCHING
		DW	NDW		CABLES	POLES	NBN CABLES	NBN PITS	NBN W	NBN S		
REALM VISTA	16-00	3-20 W	2-70 W	2-25 W	2-50 E	1-00 BOK	1-85 E	1-85 W	4-35 W	4-05 E		G DW NDW & E NBN
HAGLEY ROAD	16-00	3-20 S	2-70 S	2-25 S	2-50 N	1-00 BOK	1-85 N	1-85 S	4-35 S	4-05 N		G DW NDW & E NBN
GUARDIAN STREET	16-00	3-20 S	2-70 S	2-25 S	2-50 N	1-00 BOK	1-85 N	1-85 S	4-35 S	4-05 N		G DW NDW & E NBN



CUT-OFF DRAIN DETAIL
(Dimensions in millimetres)
(N.T.S.)

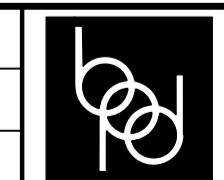
NOTE: ALL SEWERS UNDER FOOTPATH ARE TO BE BACKFILLED WITH 20mm CLASS 4 CRUSHED ROCK

ATTENTION TO CONTRACTOR

- IT IS THE CONTRACTORS RESPONSIBILITY TO ENSURE THAT THE DIGITAL PLAN, PROVIDED FOR SETOUT PURPOSES, MATCHES THE TBM COORDINATES SHOWN.
- Where concrete works about a sewer access chamber surround or similar structure, an expansion joint of approved material shall be provided between the two faces.

SYMBOL LEGEND

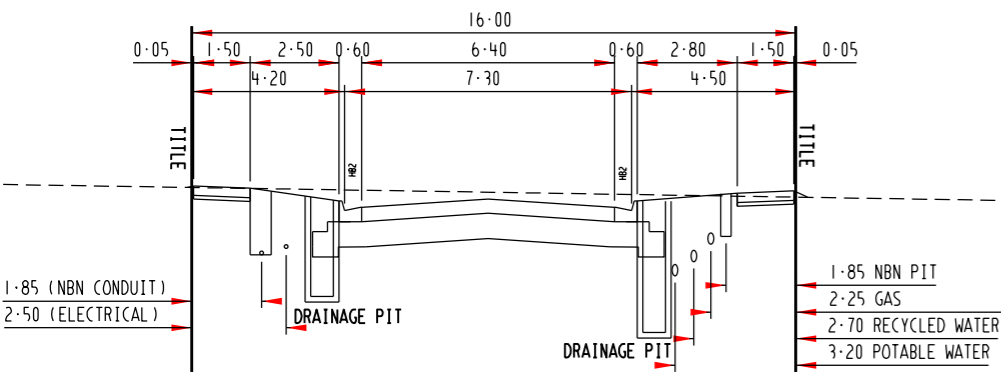
Drains	—●—●—●—	Ex/Natural/FS Level	—●—●—●—
Sewer <300	—●—●—●—	FS @ Building Line	—●—●—●—
Sewer >300	—●—●—●—	Top/Toe of Batter	—●—●—●—
Water	—●—●—●—	Top Ret. Wall Level	—●—●—●—
House Drain	—●—●—●—	100yr Flood Level	—●—●—●—
Property Inlet	—●—●—●—	Fill Prop/Ex	—●—●—●—
Street Sign	—●—●—●—	Cut Prop/Ex	—●—●—●—
PSM	—●—●—●—		
Retaining Wall	—●—●—●—		
Conduits 50mm	—●—●—●—		
Conduits 100mm	—●—●—●—		
Ex Gas/Elect/Tel	—●—●—●—		



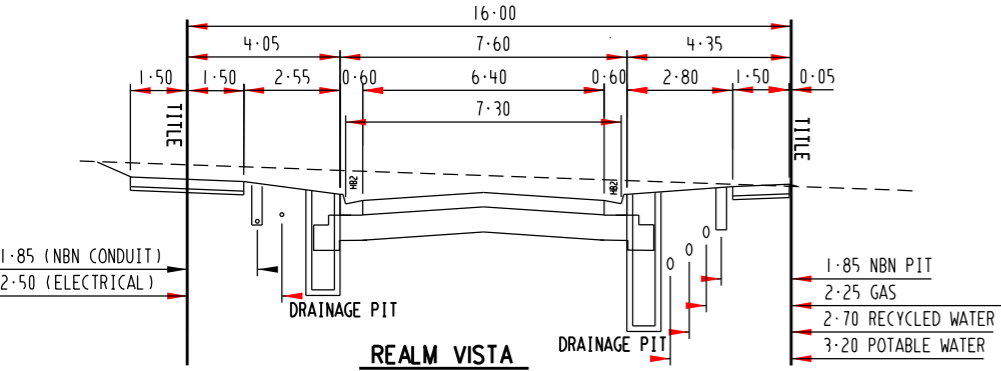
breese pitt dixon pty. ltd.
land surveyors civil engineers
1/19 coto street hawthorn east, 3123
telephone 8823 2300
fax no. 8823 2310

**WARATAH ESTATE
STAGE 7**

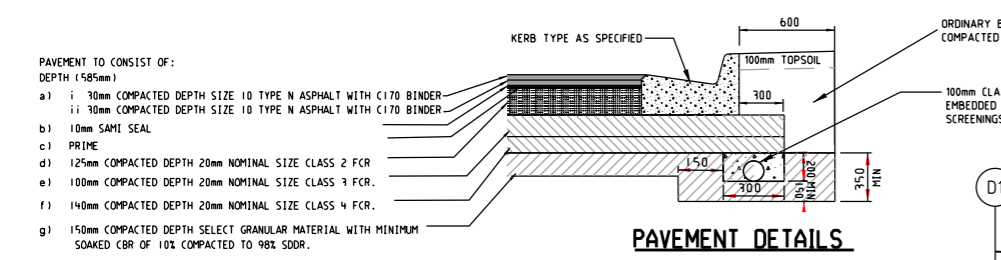
AMENDMENTS	DATE	REMARKS	CHECKED
D	18/10/17	DRIVEWAY FOR LOT 728 UPDATED	MELWAY REF. 766-E-6
C	21/08/17	LOT LEVELS UPDATED	SURVEY BJ
B	02/08/17	LOT LEVELS UPDATED	DESIGN SBS
A	11/07/17	ISSUED FOR CONSTRUCTION	DRAWN SBS



HAGLEY ROAD & GUARDIAN STREET NTS



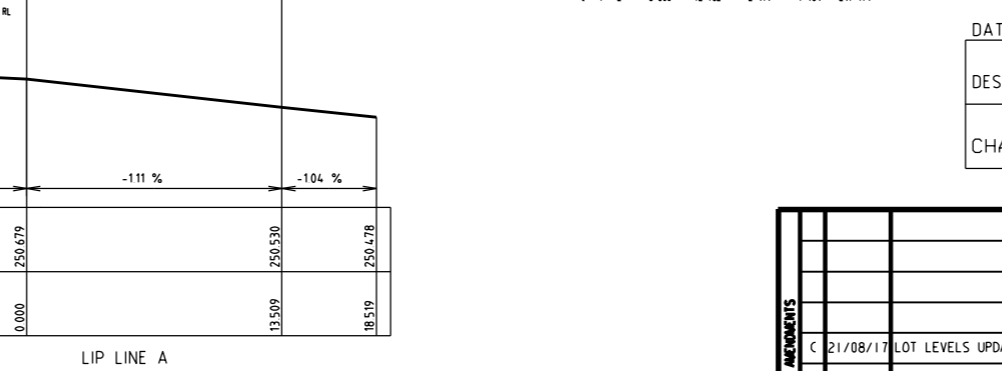
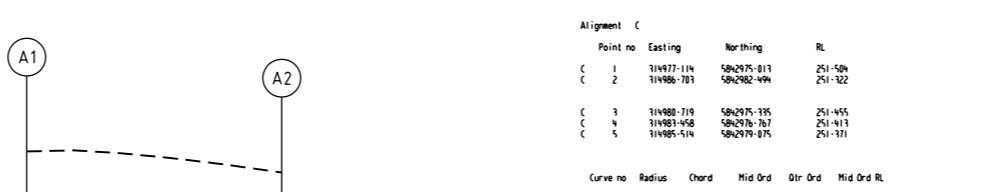
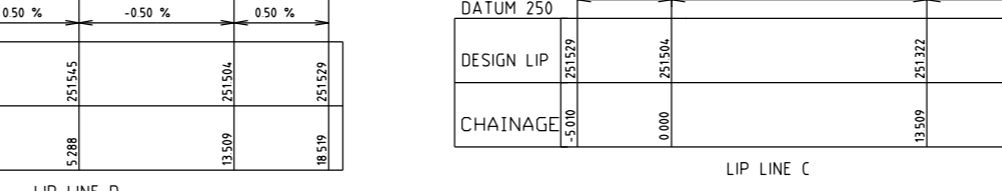
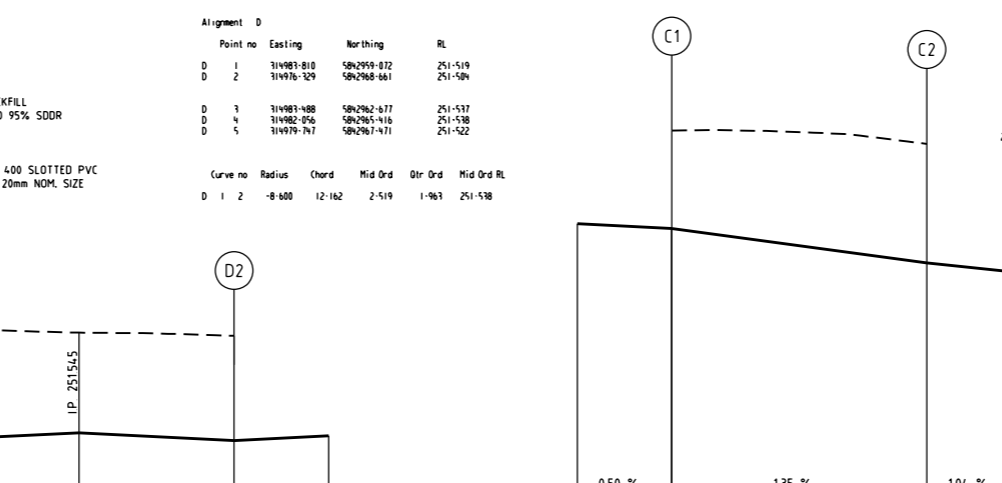
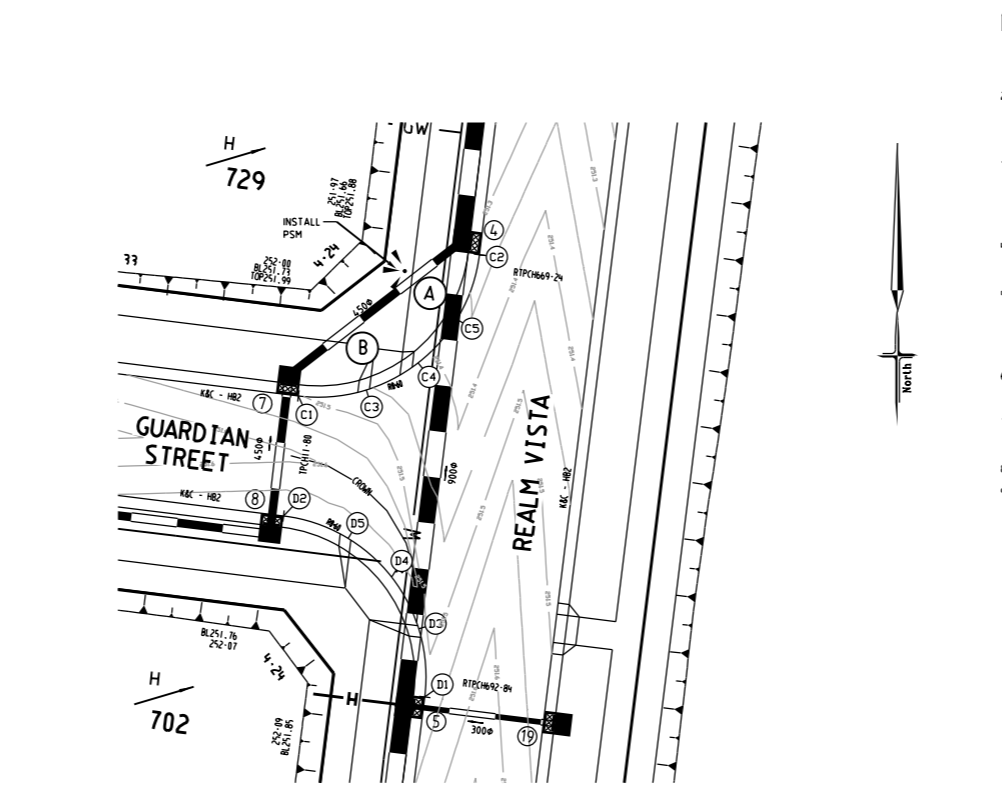
REALM VISTA NTS



PAVEMENT DETAILS REALM VISTA, HAGLEY ROAD GUARDIAN STREET

SUBGRADE
SILTY CLAY COMPACTED TO AT LEAST 100% STD DRY DENSITY RATIO (SOAKED C.B.R. > 2.5%) WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT.

NOTE: THE MATERIAL TO BE USED AS "SELECTED GRANULAR MATERIAL" IS TO BE SUBMITTED TO THE CONSULTANT AND COUNCIL FOR APPROVAL PRIOR TO TENDER SUBMISSION. ADDITIONAL COSTS WILL NOT BE CONSIDERED POST TENDER.



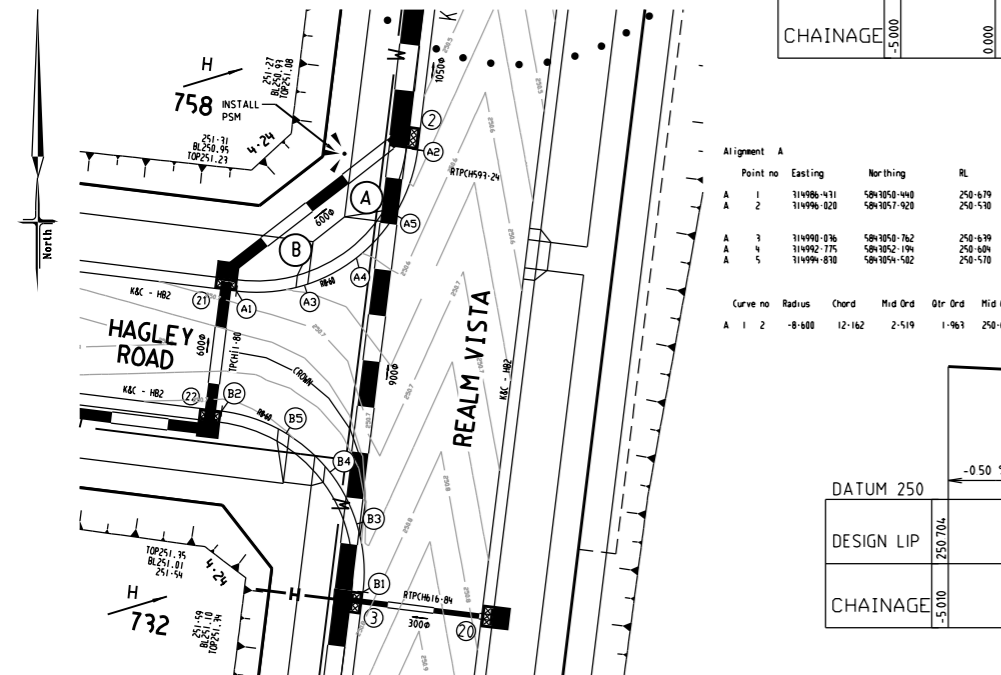
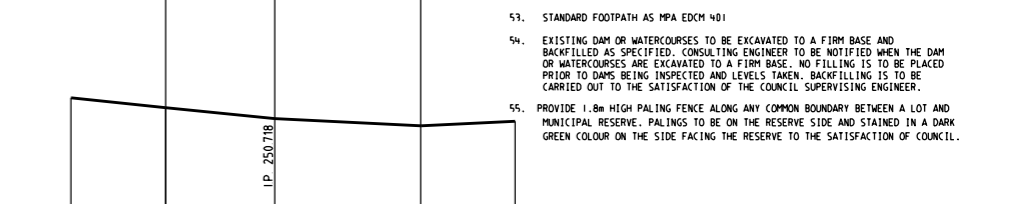
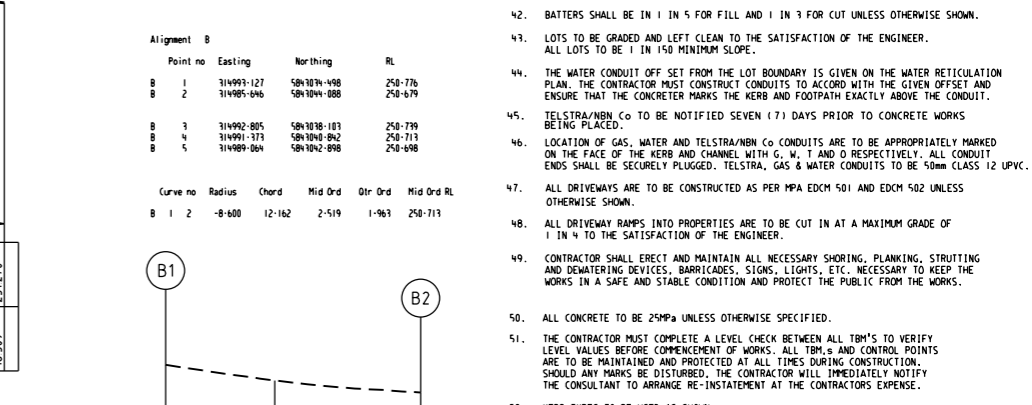
INTERSECTION DETAILS SCALE 1:200

LIP OF KERB PROFILES SCALE: HORIZONTAL 1:200 VERTICAL 1:20

NOTES

- ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH MPA & HUPE CITY COUNCIL STANDARD DRAWINGS, SPECIFICATIONS, APPROVED PLANS AND TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- COUNCIL TO BE NOTIFIED SEVEN (7) CLEAR WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORKS WITH A PRE-CONSTRUCTION MEETING BEING HELD BETWEEN HUPE CITY COUNCIL, THE CONSULTANT AND THE CONTRACTOR BEFORE WORKS COMMENCE. A SITE MANAGEMENT PLAN IS TO BE SUBMITTED PRIOR TO COMMENCEMENT OF WORKS AND PRIOR TO AN ON-SITE PRE-CONSTRUCTION MEETING.
- PRIOR TO COMMENCEMENT OF THE WORKS, THE CONTRACTOR SHALL PROVIDE THE FOLLOWING INFORMATION:
 - SOURCE OF QUARRY MATERIAL
 - N.A.T.A. APPROVED TEST RESULTS FOR THE F.C.R. THAT IS TO BE USED
 - IF THE SOURCE OF THE QUARRY MATERIAL IS CHANGED DURING THE COURSE OF THE WORKS, THEN NEW TEST RESULTS SHALL BE PROVIDED.
- PRIOR TO COMMENCEMENT OF WORKS ON-SITE, THE CONTRACTOR MUST ENSURE THAT ALL MATTERS RELATING TO THE OCCUPATIONAL HEALTH AND SAFETY ACT 2004 AND OHS REGULATIONS 2007 HAVE BEEN AND WILL BE COMPLIED WITH.
- PRIOR TO COMMENCEMENT OF WORKS, THE CONTRACTOR MUST SUBMIT A SMP TO THE CONSULTANT FOR APPROVAL. THE CONTRACTOR MUST COMPLY WITH THE RECOMMENDATIONS OF THE ENVIRONMENT PROTECTION AUTHORITY PUBLICATION NO.275 "CONSTRUCTION TECHNIQUES FOR SEDIMENT POLLUTION CONTROL". APPROPRIATE SILTATION CONTROL IS TO BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND MAINTENANCE PERIOD OF THE WORKS.
- THE DISPOSAL SITE FOR SOIL REMOVAL FROM SITE AND TRUCK ROUTE IS TO BE SUBMITTED TO AND APPROVED BY THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE IN WRITING PRIOR TO THE COMMENCEMENT OF ANY WORKS.
- WHERE WORKS ARE IN THE VICINITY OF EXISTING SERVICES, THESE SERVICES ARE TO BE LOCATED AND EXPOSED/PRIOR TO COMMENCEMENT OF WORKS, AND THE RELEVANT AUTHORITIES NOTIFIED SEVEN (7) CLEAR DAYS PRIOR TO THE COMMENCEMENT OF THE WORKS.
- ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.
- ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM AND .
- ALL CO-ORDINATES ARE TO MAP GRID OF AUSTRALIA (MGA).
- THE CONTRACTOR MUST ARRANGE THE REQUISITE INSPECTIONS OF THE WORKS WITH THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE AS PER THE HOLD POINTS IN THE MPA MANUAL AND HUPE CITY COUNCIL SPECIFICATIONS.
- FILL AREAS TO BE STRIPPED OF TOPSOIL, FILLED AND TOPSOIL REPLACED TO OBTAIN FINAL FILL LEVELS AS SHOWN ON PLAN. FILLING IS TO BE CLEAN CLAY COMPACTED TO A DENSITY NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY VALUE DETERMINED BY THE STANDARD COMPACTION TEST IN ACCORDANCE WITH A.S.1289.5.1.1-2003.
- FILLING TO COMPLY WITH A.S.3798-2007, LEVEL 1 UNLESS SPECIFIED OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL IMPORTED FILL MATERIAL, INCLUDING TOPSOIL, SATISFIES THE DESCRIPTION FOR CLEAN FILL MATERIAL IN EPA BULLETIN PUBLICATION NO 44B SEPT '95 AND SUBSEQUENT REVISIONS. THE CONTRACTOR SHALL IF REQUIRED PROVIDE VERIFICATION INCLUDING TEST CERTIFICATES TO THE CHIEF EXECUTIVE OFFICER AND/OR THEIR REPRESENTATIVE.
- WHERE, AS A CONDITION OF THE PLANNING PERMIT OR AS A RESULT OF THE PRE-CONSTRUCTION MEETING, FENCING OF AREAS CONTAINING TREES, NATIVE GRASSES AND SHRUBS IS REQUIRED, A THREE STRAND STAR PICKET AND WIRE FENCE SHALL BE CONSTRUCTED.
- NO TREE OR NATIVE VEGETATION IS TO BE DISTURBED OR REMOVED WITHOUT PRIOR APPROVAL FROM COUNCIL'S SUSTAINABLE ENVIRONMENT DEPARTMENT. ANY TREES REMOVED, VEGETATION OR OTHER MATERIALS ARE NOT TO BE BURNED ON-SITE.
- BEFORE COMMENCING WORK ON TRENCHES IN EXCESS OF 1.5M DEEP, NOTICE OF SUCH PROPOSAL IS TO BE FORWARDED BY THE CONTRACTOR TO WORKSAFE VICTORIA.
- THE CONTRACTOR IS TO OBTAIN A BUILDING PERMIT FOR ANY STRUCTURES/FENCES AND FOR ANY RETAINING WALLS OVER 1.0M IN HEIGHT.
- ANY INFRASTRUCTURE DAMAGE DURING THE DEFECTS LIABILITY PERIOD IS THE RESPONSIBILITY OF THE DEVELOPER OR HIS REPRESENTATIVE AND IS TO BE REINSTATED TO THE SATISFACTION OF THE CHIEF EXECUTIVE OFFICER OR HIS REPRESENTATIVE.
- ALL DISTURBED AREAS, ie. NATURE STRIPS, BATTERS, ALLOTMENTS & RESERVES, ARE TO BE REINSTATED TO A CLEAN, TIDY CONDITION. TOP DRESSED 1100mm LOAMY TOP SOIL FREE OF CLUMPS, SOOTS AND CLAY LUMPS AND SOAK WITH GRASS SEED. SEED IS TO BE A DROUGHT TOLERANT COUCH/FESCUE MIX UNLESS OTHERWISE DETAILED. BLEND IS GENERALLY AS FOLLOWS:
90% DROUGHT TOLERANT PERENNIAL RYE
10% KIARRU

NOTE: GRASS IS TO BE ESTABLISHED PRIOR TO THE END OF THE MAINTENANCE PERIOD OR UNLESS OTHERWISE AGREED.



breese pitt dixon pty. ltd.
land surveyors civil engineers

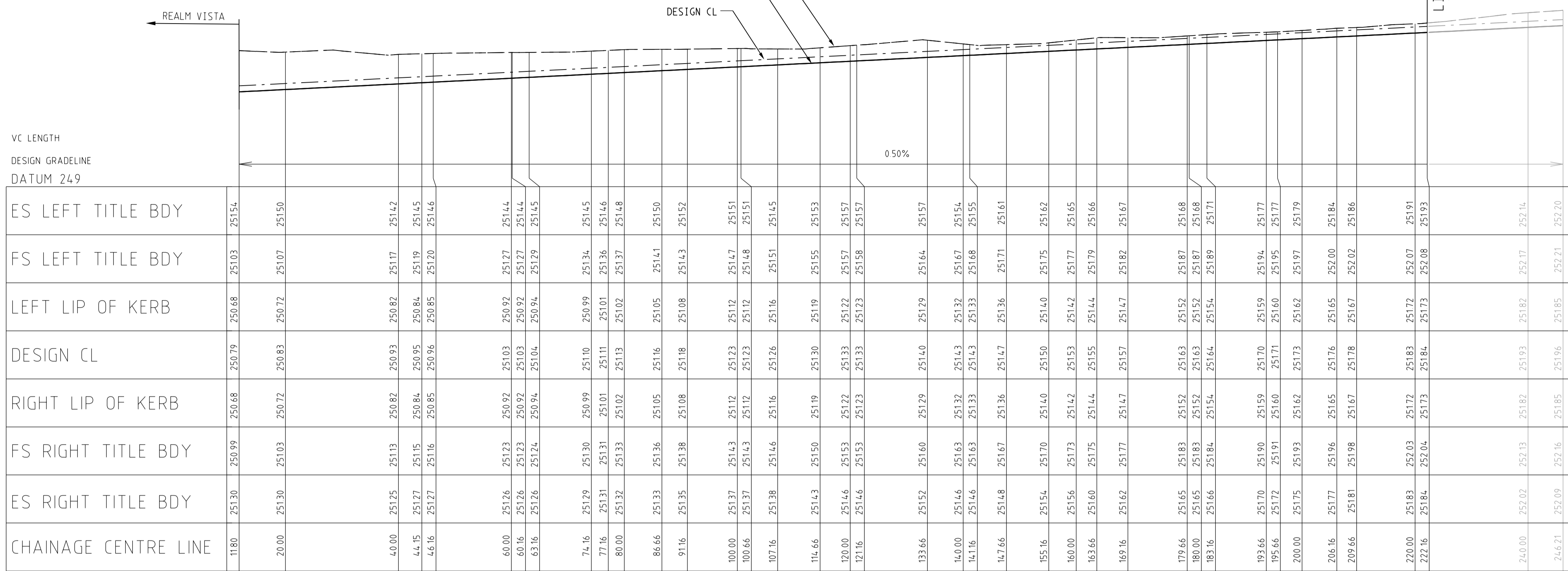
MELWAY REF. 766-E-6	SURVEY BJ
02/08/17 LOT LEVELS UPDATED	DESIGN SBS
11/07/17 ISSUED FOR CONSTRUCTION	DRAWN SBS

**WARATAH ESTATE
STAGE 7**

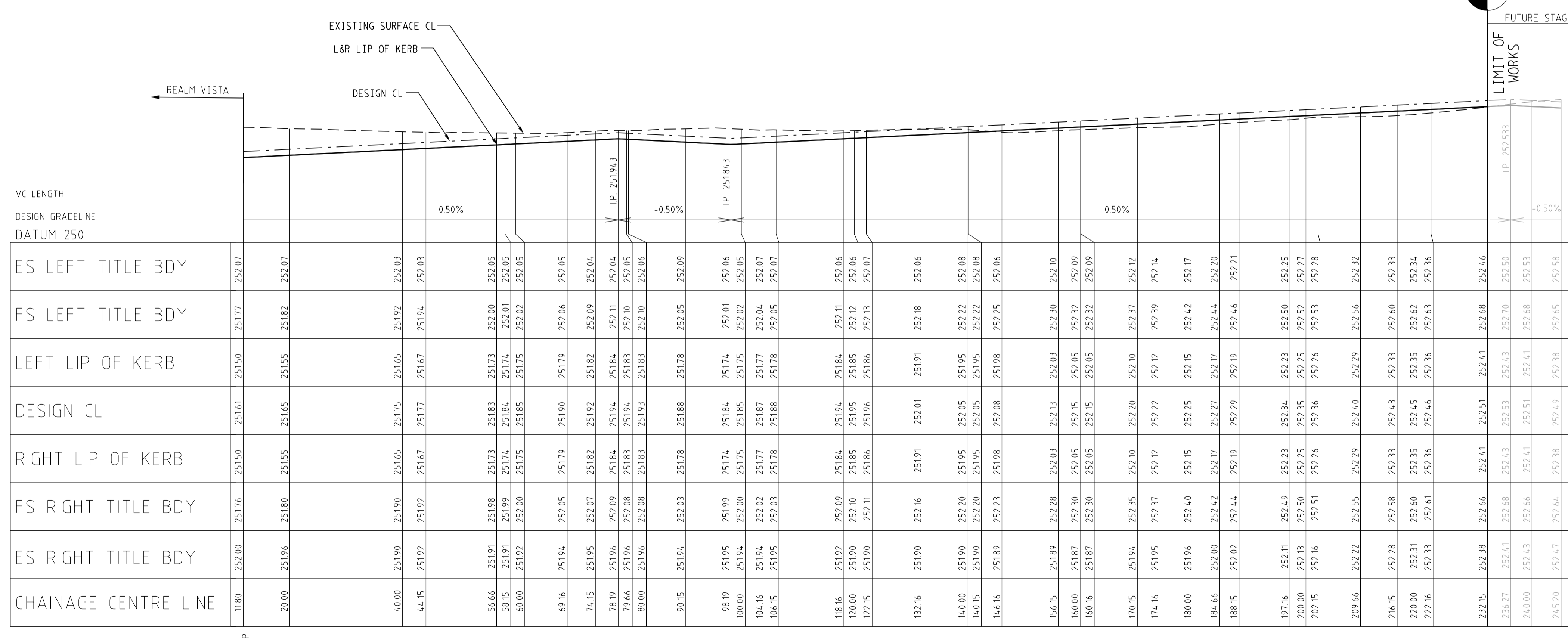
MUNICIPALITY HUME	8711 E/7
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1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310

DATE DEC 16	SCALE AS SHOWN	DATUM AHD	DATE DEC 16	SHEET 2 OF 12
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HAGLEY ROAD



GUARDIAN STREET

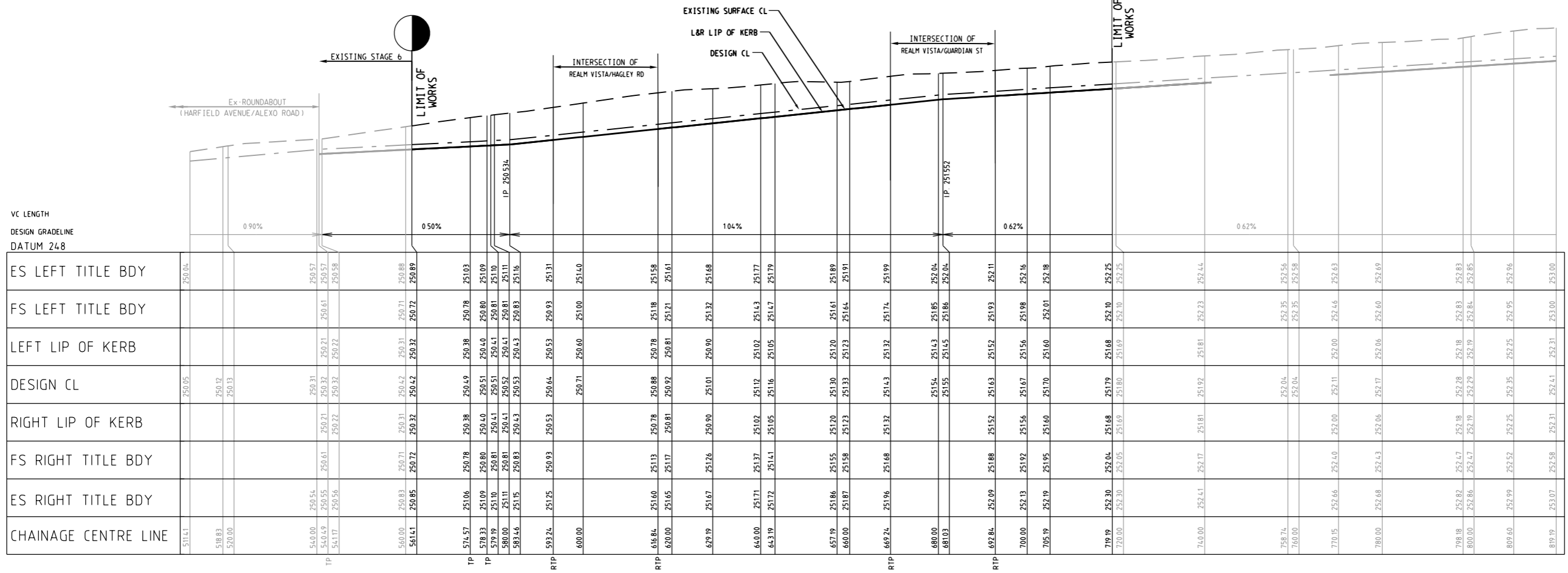
LONGITUDINAL SECTION
SCALE HORIZONTAL 1:500
VERTICAL 1:50

VER	DATE	REMARKS
B	02/08/17	LONG SECTIONS UPDATED
A	11/07/17	ISSUED FOR CONSTRUCTION

	MELWAY REF. 366-E-6	WARATAH ESTATE STAGE 7	MUNICIPALITY HUME
	SURVEY B.J.		REFERENCE 8711 E/7
	DESIGN S.B.S.		SHEET 3 OF 12
	DRAWN S.B.S.		B
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE DEC '16

breese pitt dixon pty. ltd.
land surveyors
civil engineers

1/19 colto street
howthorn east, 3123
telephone 8823 2300
fax no. 8823 2310



	511.41	518.83	520.00	540.00	540.49	541.17	550.00	550.83	561.41	574.57	578.33	579.19	580.00	583.46	593.24	600.00	616.84	620.00	629.19	640.00	643.19	657.19	660.00	669.24	680.00	681.03	692.84	700.00	705.19	719.19	720.00	740.00	758.74	760.00	770.15	780.00	798.18	800.00	809.60	819.19	
ES LEFT TITLE BDY	250.04			250.57	250.21	250.32	250.57	250.88	250.89	250.49	250.78	250.40	250.41	250.41	250.43	250.64	250.71	250.88	250.92	251.01	251.02	251.12	251.17	251.68	251.99	252.04	252.04	252.11	252.16	252.18	252.25	252.25	252.44	252.56	252.56	252.63	252.69	252.83	252.85	252.96	253.00
FS LEFT TITLE BDY				250.61	250.21	250.22	250.51	250.71	250.72	250.38	250.40	250.41	250.41	250.43	250.63	250.70	250.78	250.81	250.90	251.00	251.02	251.12	251.17	251.68	251.99	252.04	252.04	252.11	252.16	252.18	252.25	252.25	252.44	252.56	252.56	252.63	252.69	252.83	252.85	252.96	253.00
LEFT LIP OF KERB				250.21	250.22	250.22	250.41	250.31	250.32	250.38	250.40	250.41	250.41	250.43	250.63	250.70	250.78	250.81	250.90	251.00	251.02	251.12	251.17	251.68	251.99	252.04	252.04	252.11	252.16	252.18	252.25	252.25	252.44	252.56	252.56	252.63	252.69	252.83	252.85	252.96	253.00
DESIGN CL	250.05	250.12	250.13	250.31	250.32	250.32	250.42	250.42	250.42	250.49	250.51	250.51	250.52	250.53	250.64	250.71	250.88	250.92	251.01	251.02	251.12	251.16	251.32	251.68	251.99	252.04	252.04	252.11	252.16	252.18	252.25	252.25	252.44	252.56	252.56	252.63	252.69	252.83	252.85	252.96	253.00
RIGHT LIP OF KERB				250.31	250.32	250.32	250.42	250.42	250.42	250.49	250.51	250.51	250.52	250.53	250.64	250.71	250.88	250.92	251.01	251.02	251.12	251.16	251.32	251.68	251.99	252.04	252.04	252.11	252.16	252.18	252.25	252.25	252.44	252.56	252.56	252.63	252.69	252.83	252.85	252.96	253.00
FS RIGHT TITLE BDY				250.54	250.55	250.56	250.65	250.71	250.72	250.78	250.80	250.81	250.81	250.83	250.93	251.00	251.13	251.17	251.26	251.37	251.41	251.55	251.58	251.68	251.99	252.04	252.04	252.11	252.16	252.18	252.25	252.25	252.44	252.56	252.56	252.63	252.69	252.83	252.85	252.96	253.00
ES RIGHT TITLE BDY				250.54	250.55	250.56	250.65	250.71	250.72	250.78	250.80	250.81	250.81	250.83	250.93	251.00	251.13	251.17	251.26	251.37	251.41	251.55	251.58	251.68	251.99	252.04	252.04	252.11	252.16	252.18	252.25	252.25	252.44	252.56	252.56	252.63	252.69	252.83	252.85	252.96	253.00
CHAINAGE CENTRE LINE	511.41	518.83	520.00	540.00	540.49	541.17	550.00	550.83	561.41	574.57	578.33	579.19	580.00	583.46	593.24	600.00	616.84	620.00	629.19	640.00	643.19	657.19	660.00	669.24	680.00	681.03	692.84	700.00	705.19	719.19	720.00	740.00	758.74	760.00	770.15	780.00	798.18	800.00	809.60	819.19	

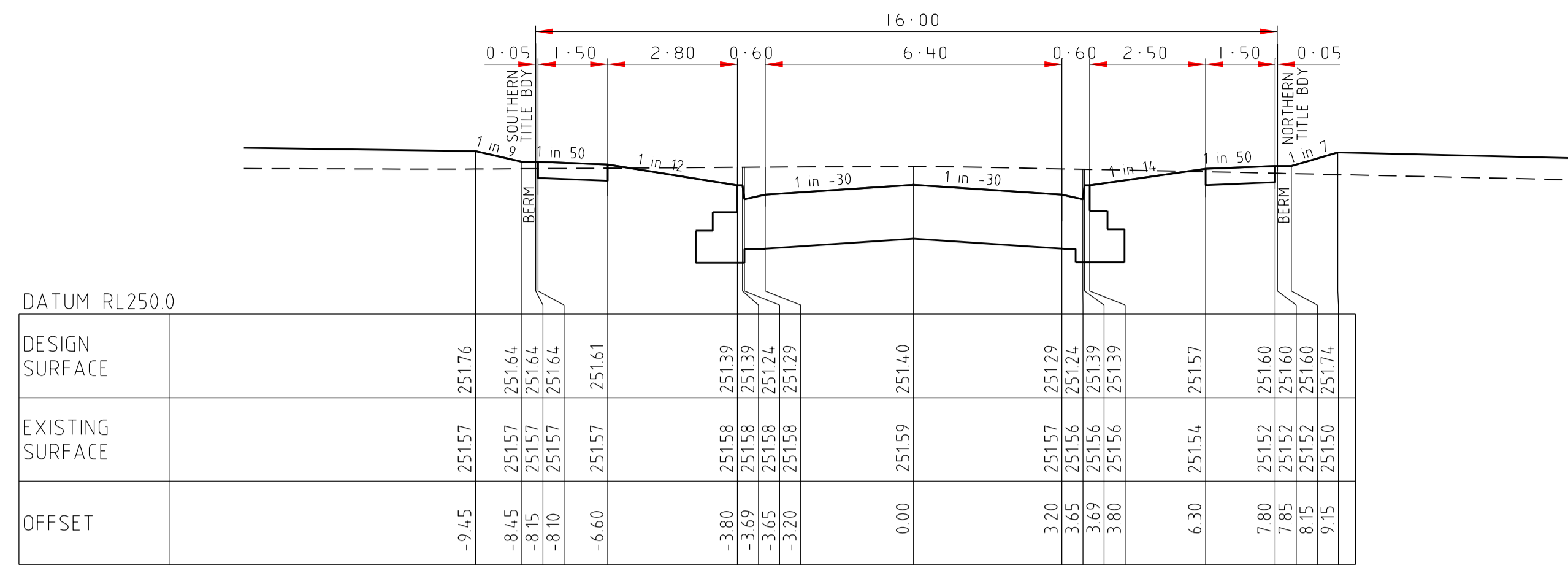
REALM VISTA

LONGITUDINAL SECTION
SCALE HORIZONTAL 1:500
VERTICAL 1:50

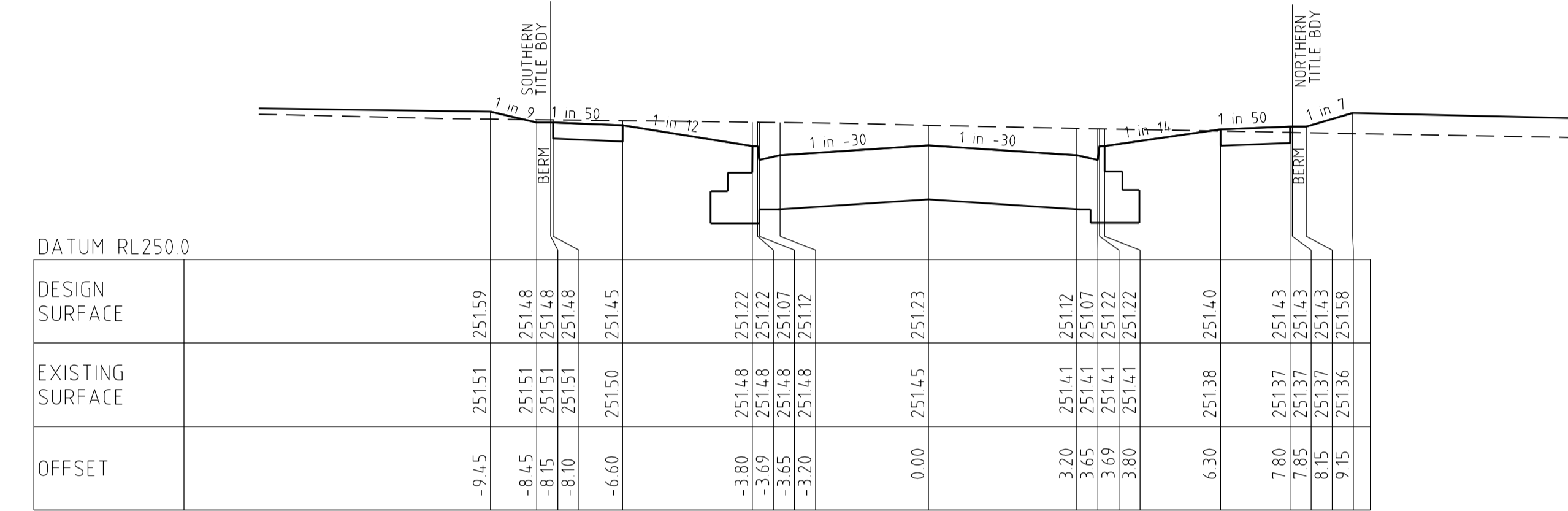
REV	DATE	REMARKS
A	11/07/17	ISSUED FOR CONSTRUCTION
B	02/08/17	LONG SECTIONS UPDATED
C	21/08/17	LONG SECTIONS UPDATED

 breese pitt dixon Pty. Ltd. land surveyors civil engineers		MELWAY REF. 366-E-6	
		SURVEY BJ	
WARATAH ESTATE STAGE 7		MUNICIPALITY HUME	
		REFERENCE 8711 E/7	
CHECKED	SCALE AS SHOWN	DATUM AHD	DATE DEC'16

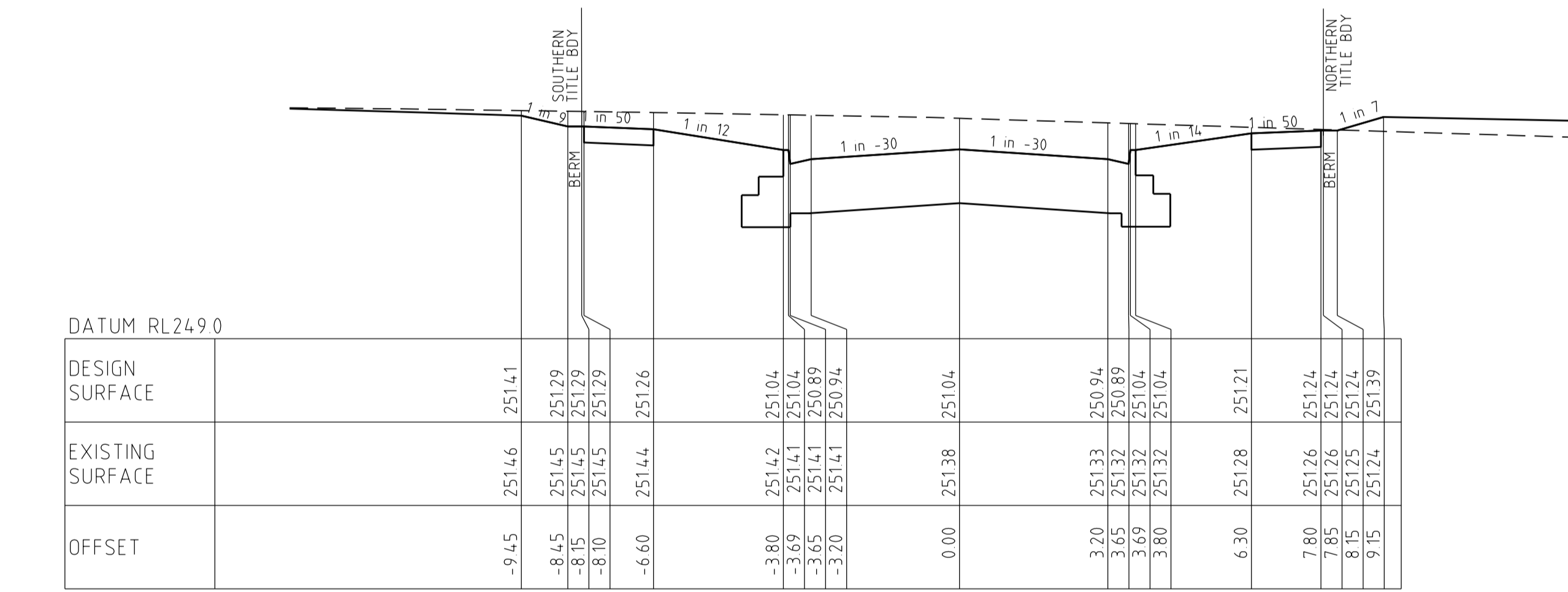
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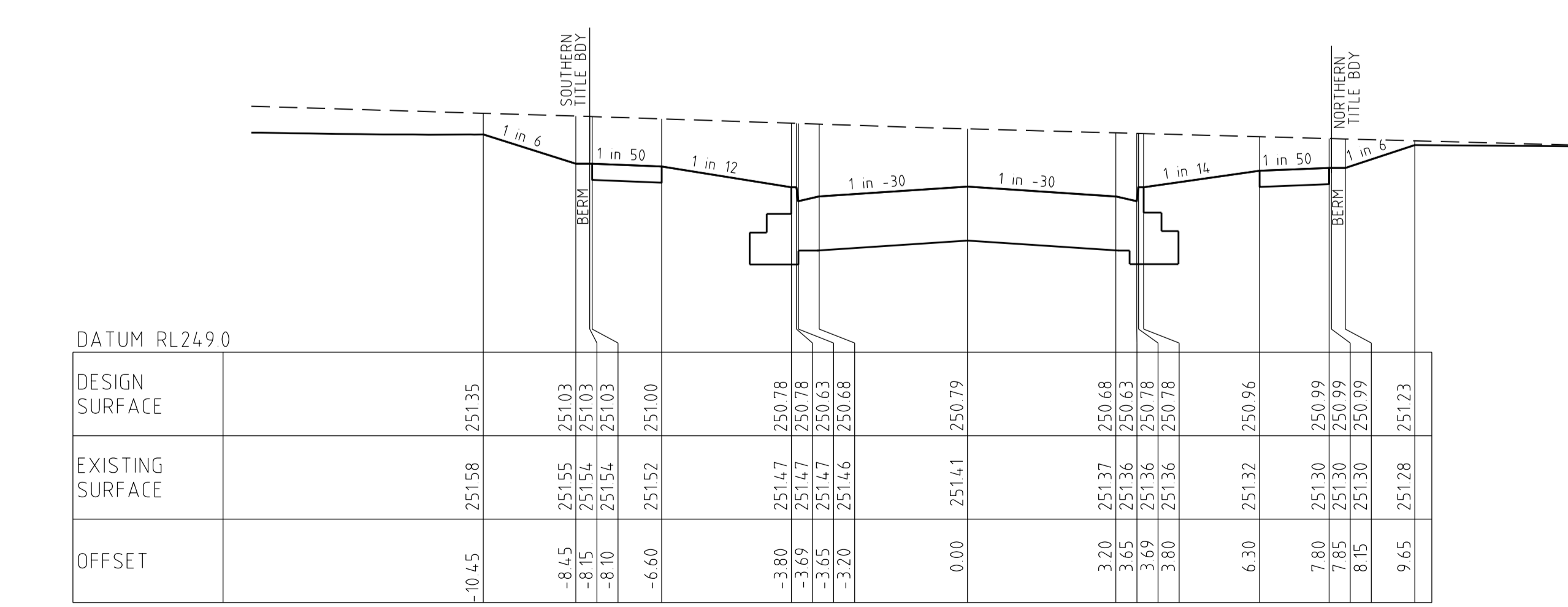
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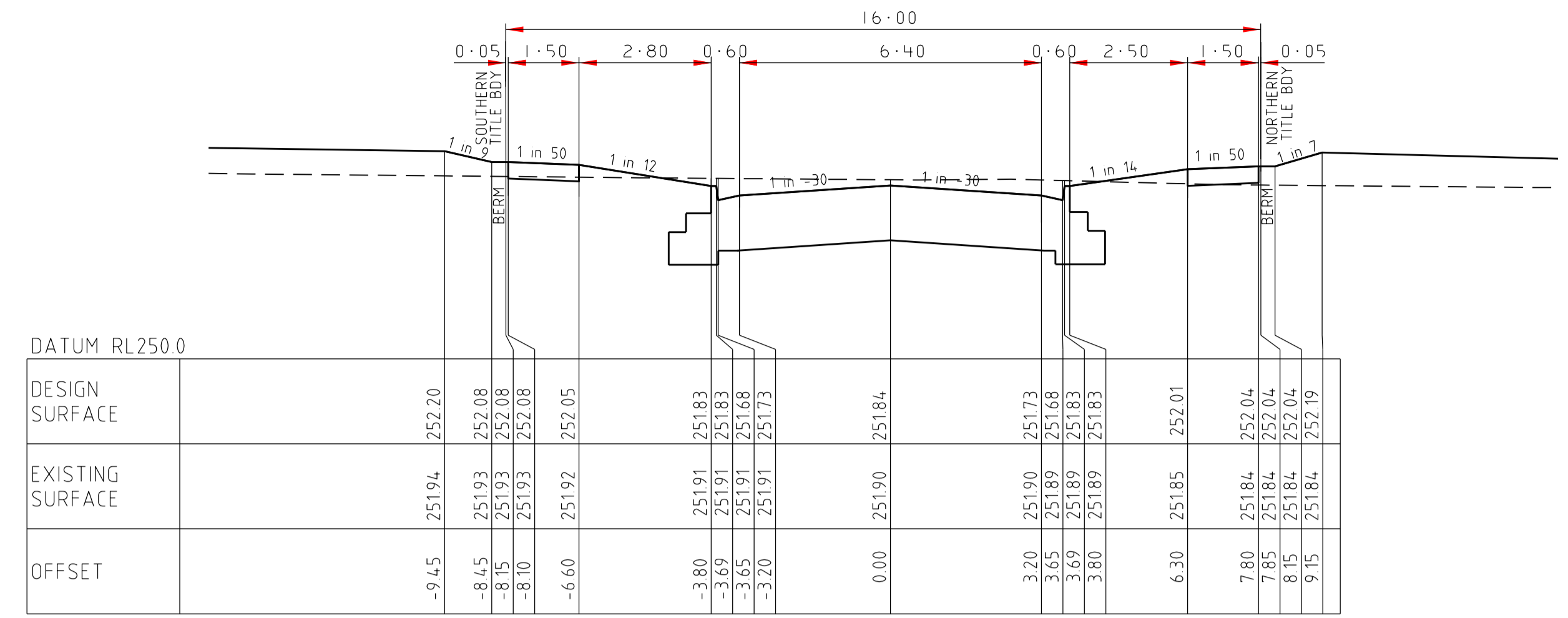


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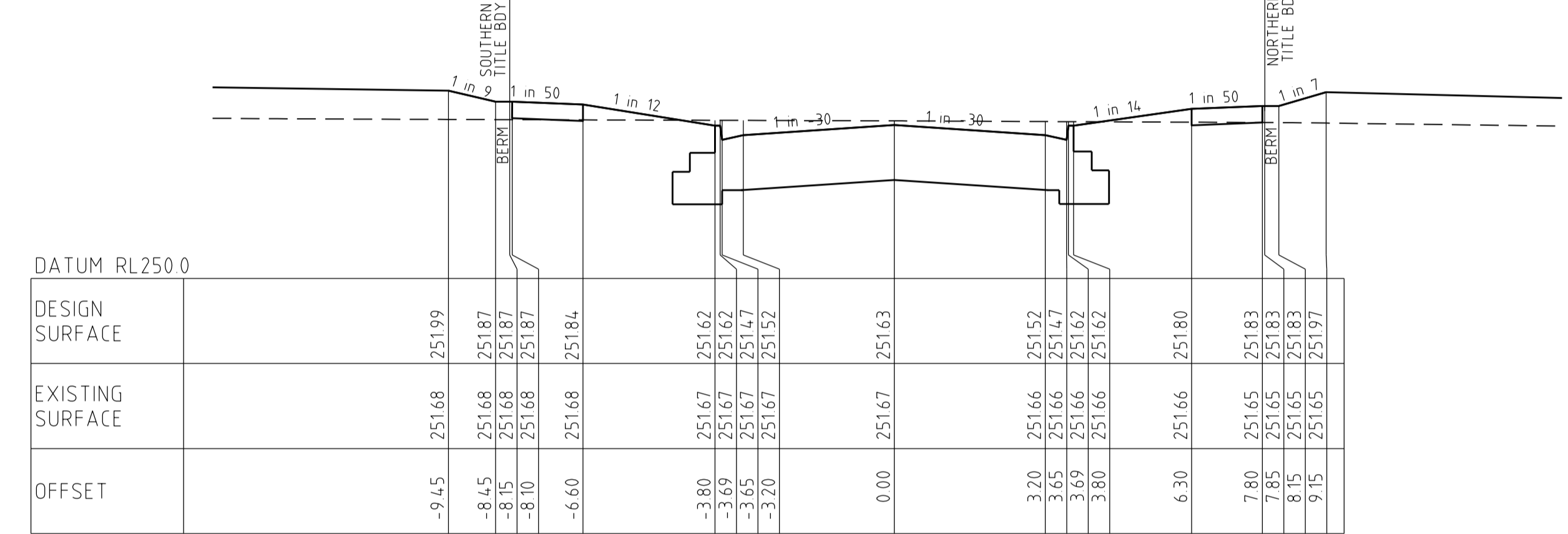


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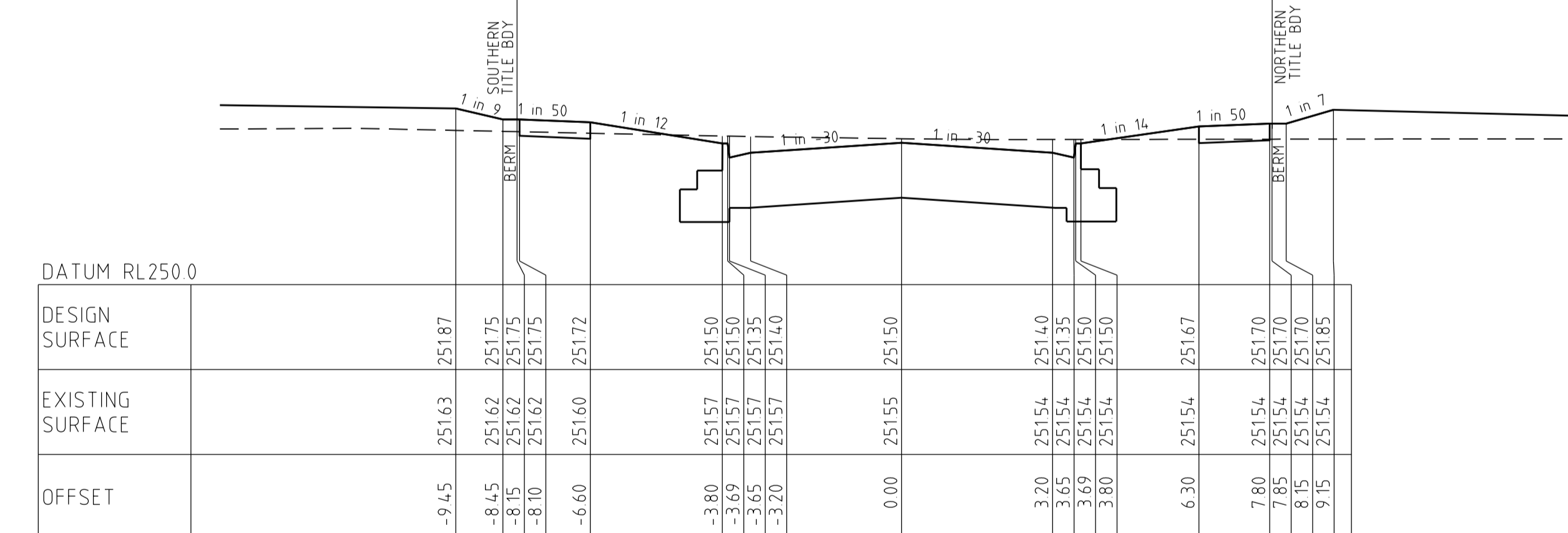
CROSS SECTIONS
SCALE HORIZONTAL 1:100
VERTICAL 1:50



222.16



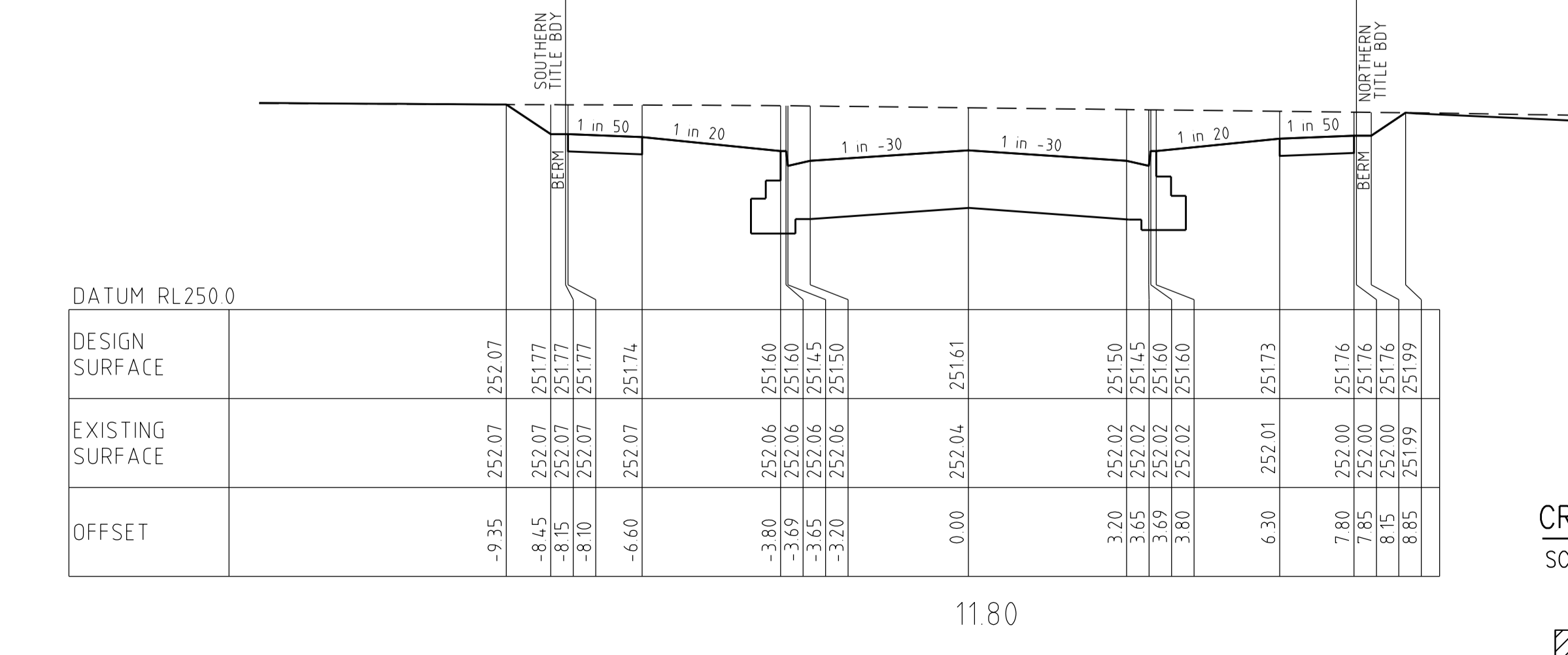
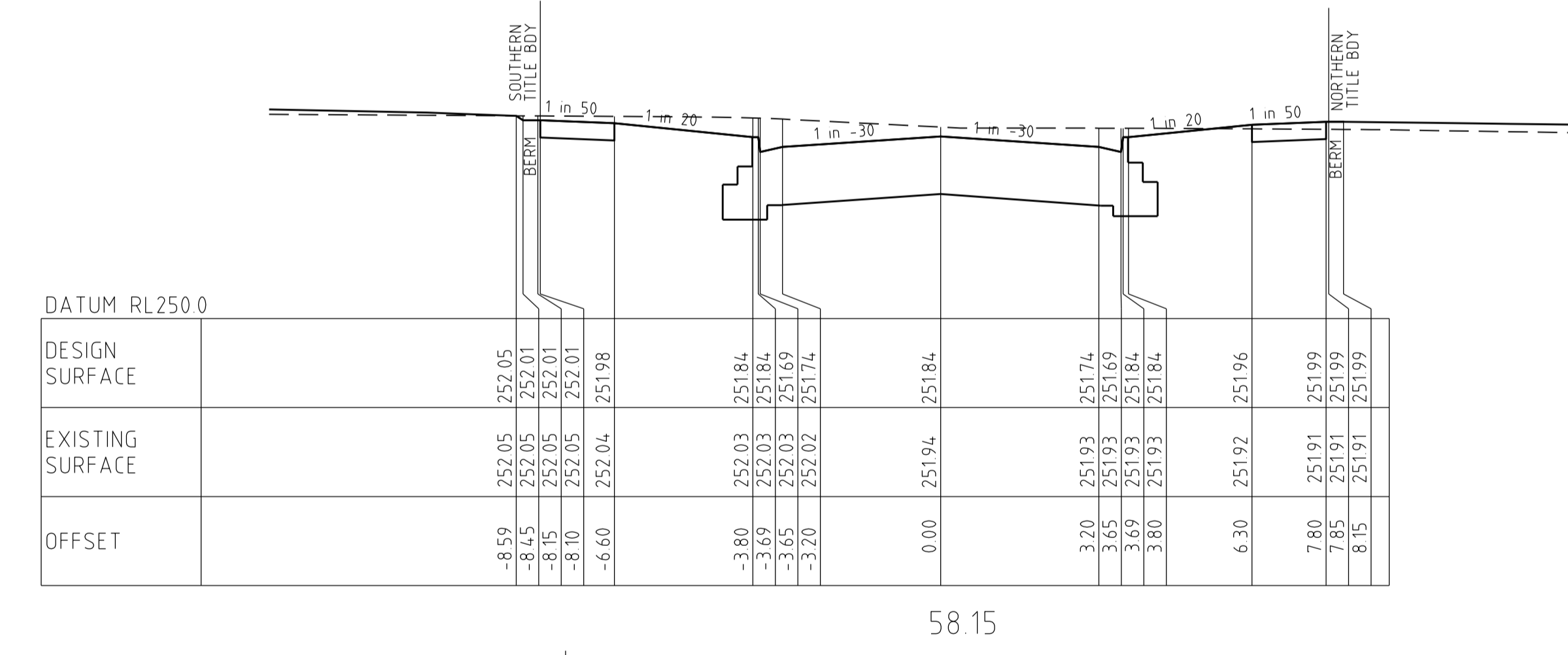
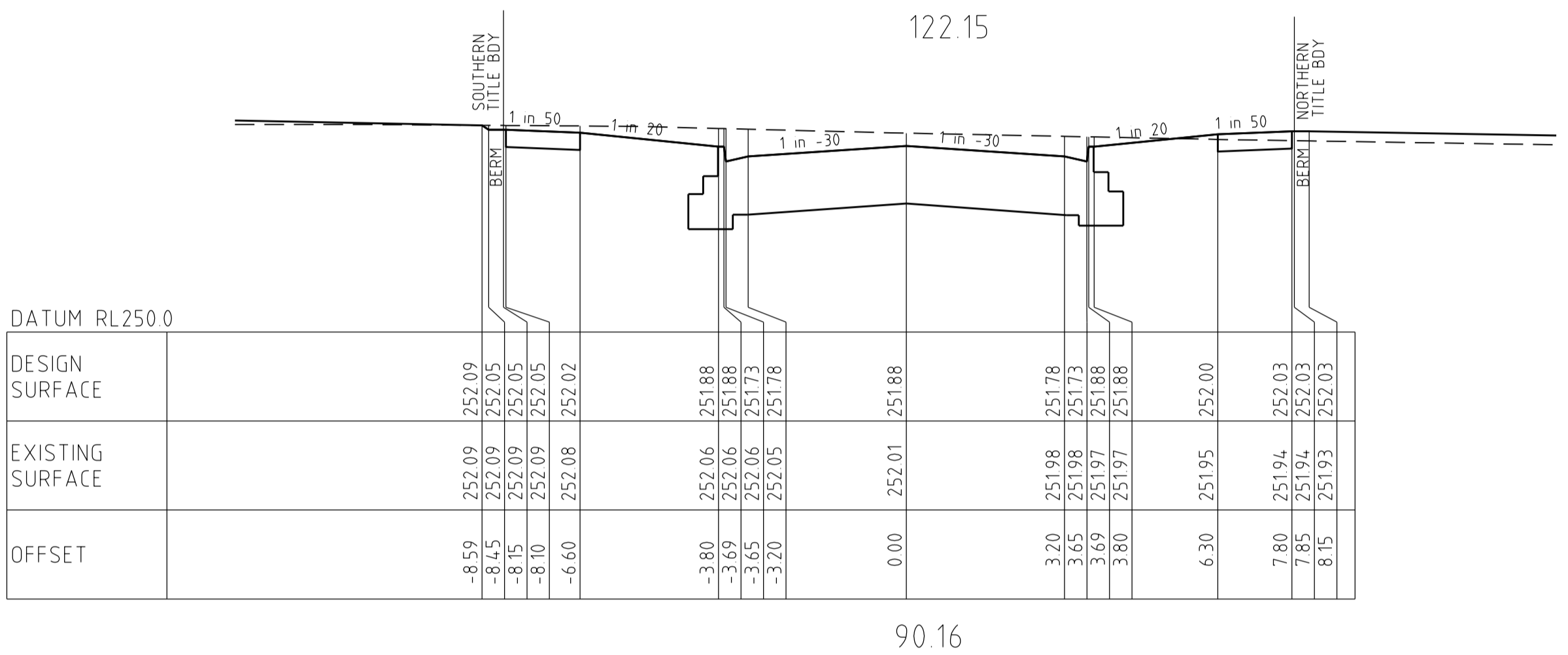
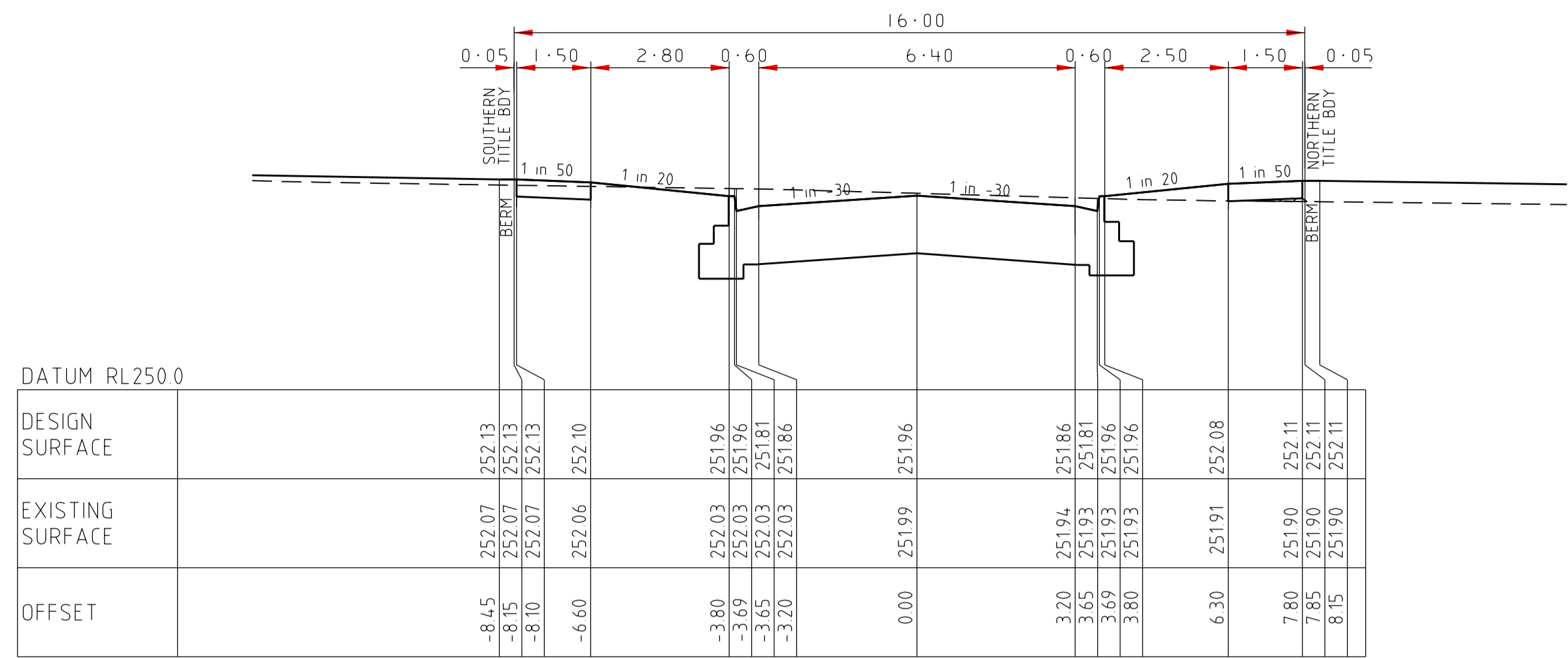
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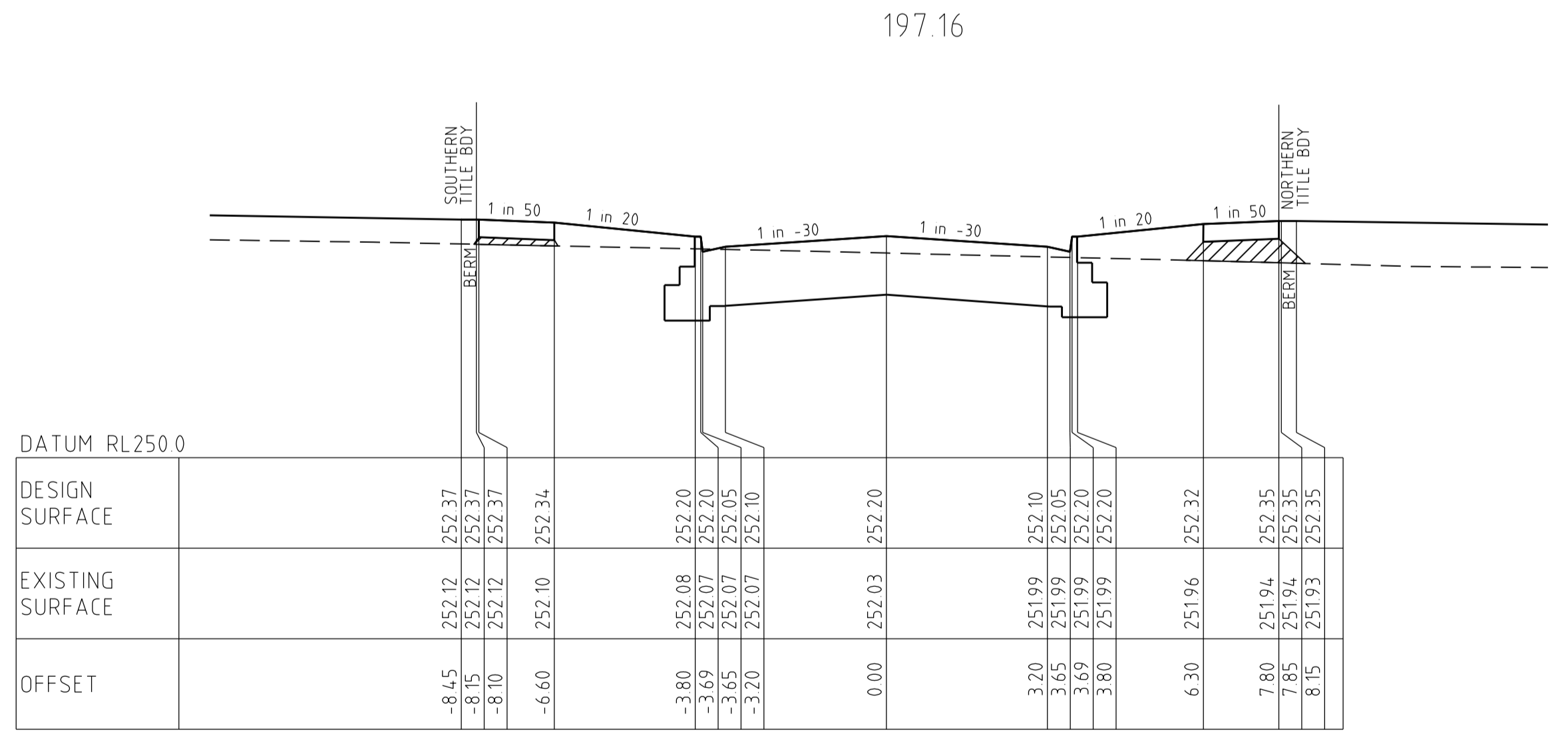
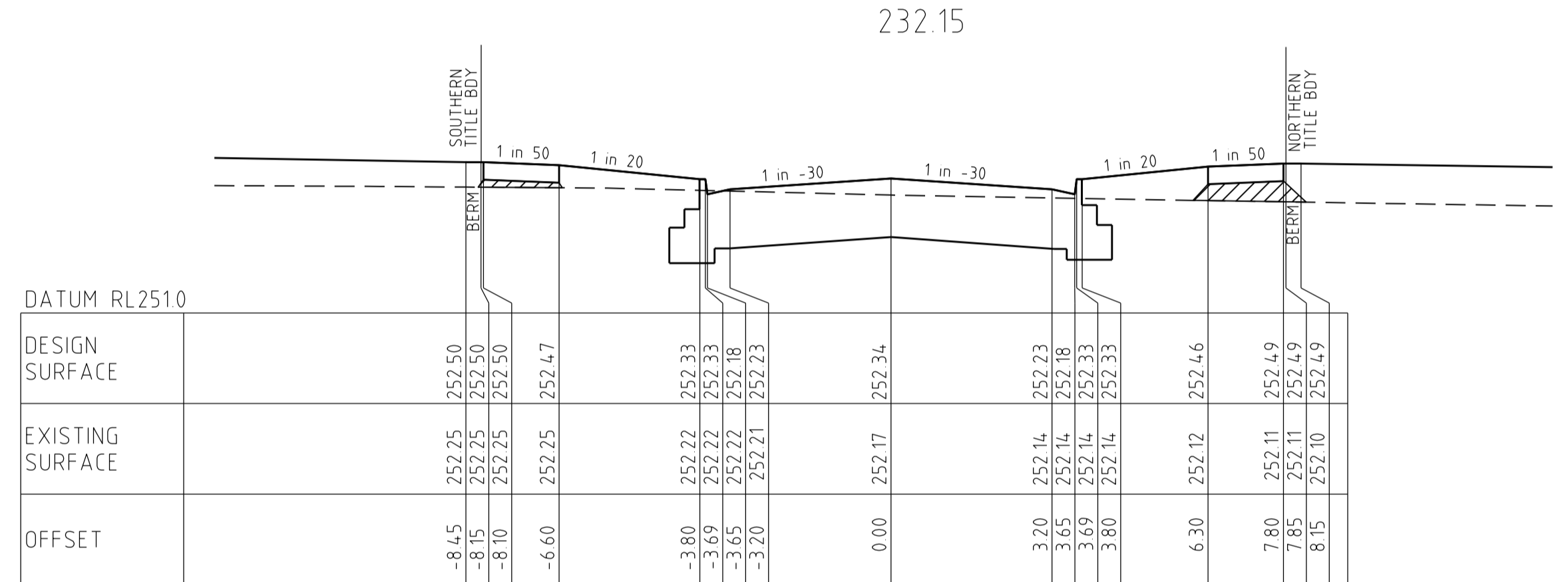
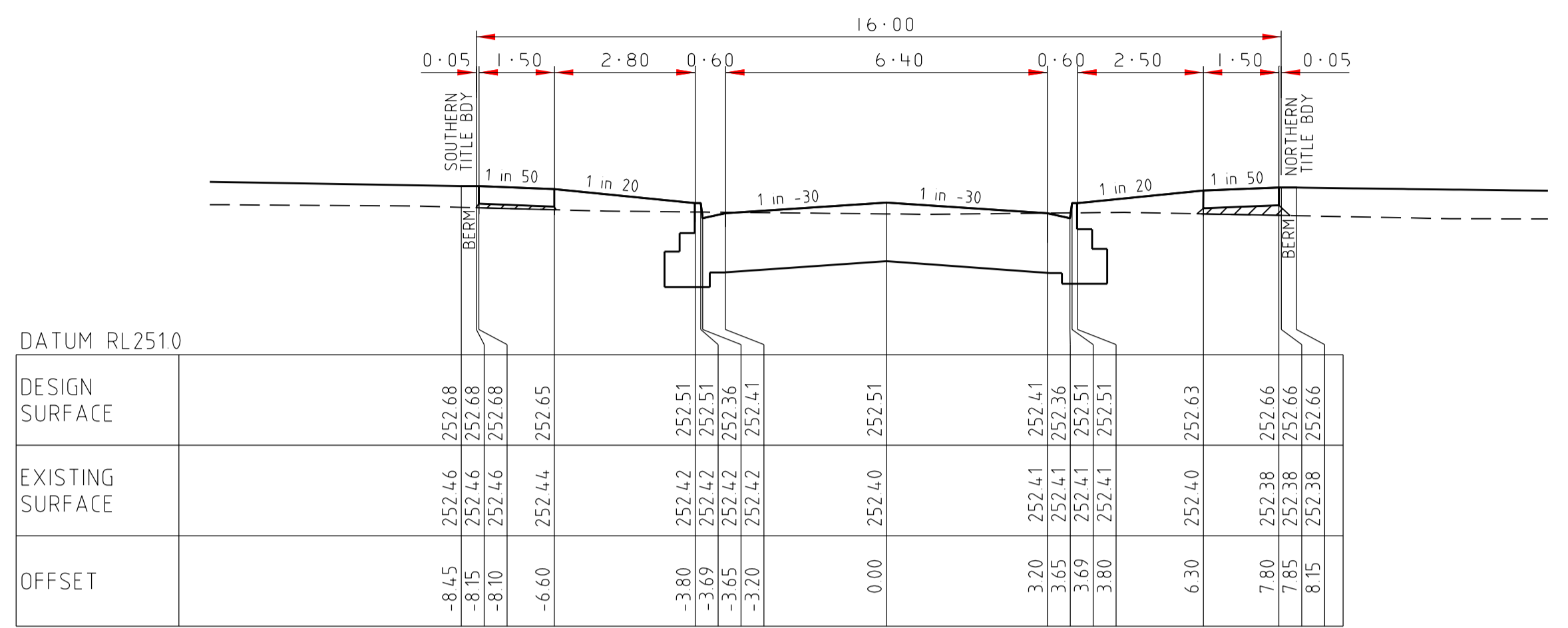
155.16

HAGLEY ROAD

		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
WARATAH ESTATE STAGE 7		MUNICIPALITY HUME		REFERENCE 8711 E/7	
AMENDMENTS B 02/08/17 CROSS SECTIONS UPDATED A 11/07/17 ISSUED FOR CONSTRUCTION		MELWAY REF. 366-E-6 SURVEY BJ DESIGN SBS DRAWN SBS		SCALE AS SHOWN DATUM AHD DATE DEC'16	
VER DATE REMARKS		CHECKED		SHEET 5 OF 12	

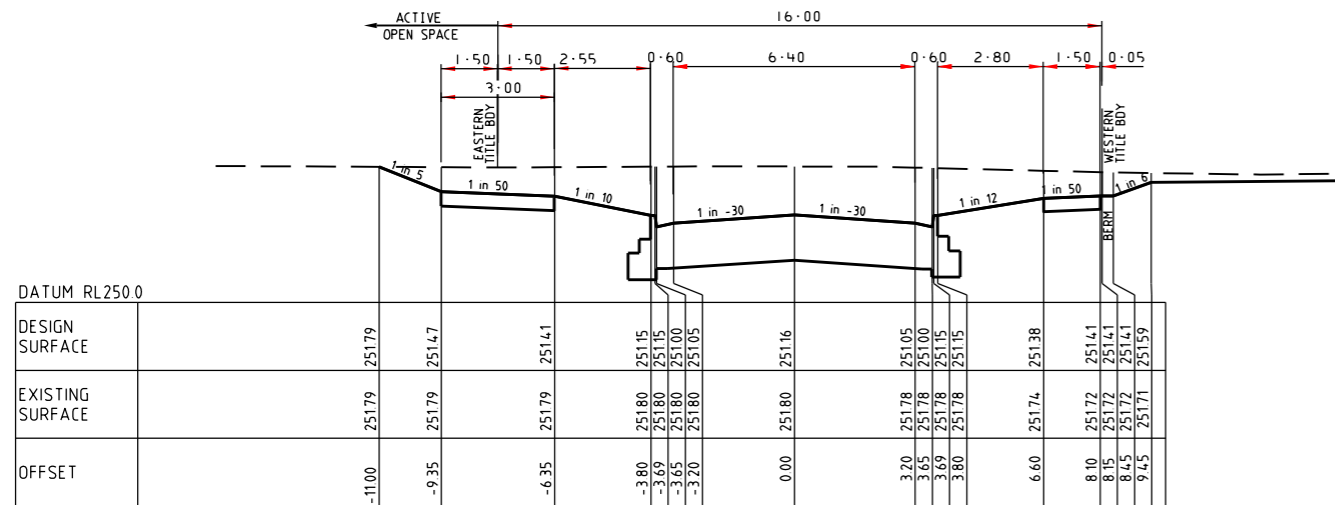


CROSS SECTIONS
 SCALE HORIZONTAL 1:100
 VERTICAL 1:50
 INDICATES MINIMUM CLASS 3 CRUSHED ROCK BACKFILL

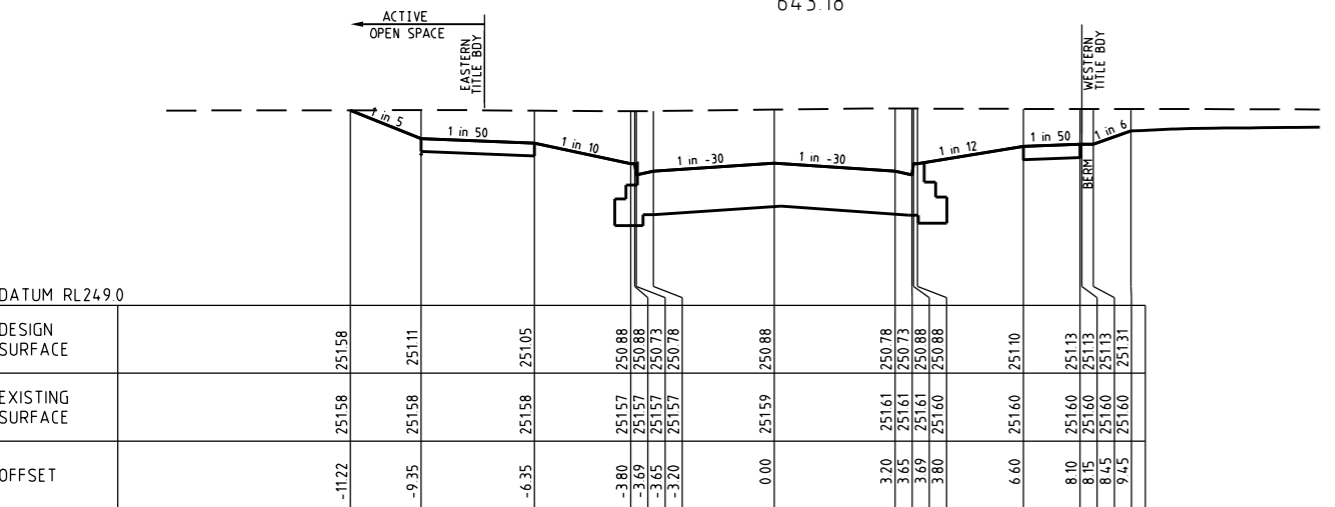


GUARDIAN STREET

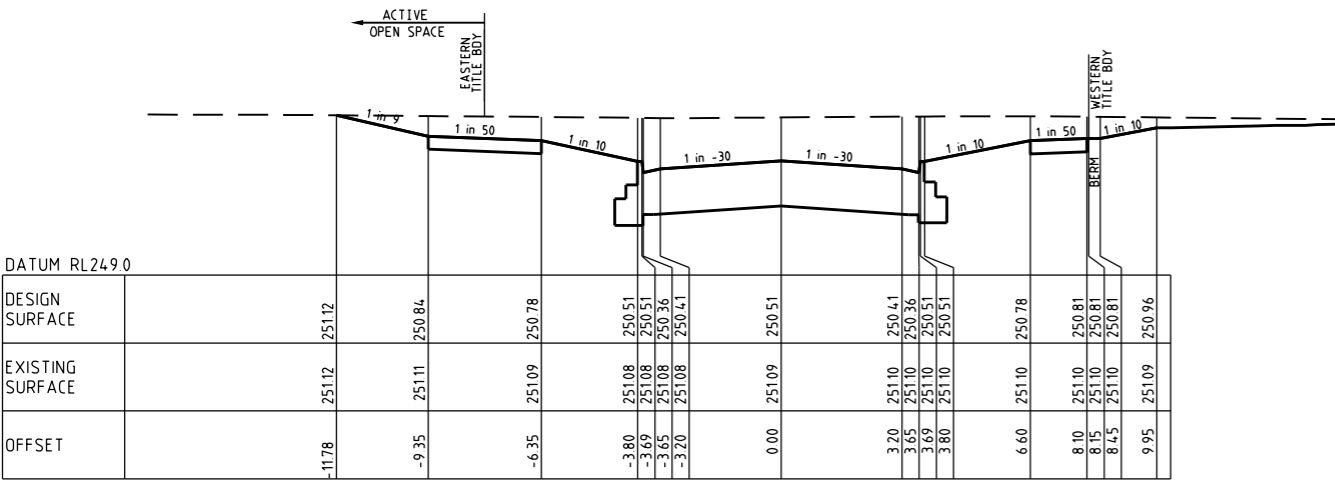
		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF. 366-E-6 SURVEY BJ DESIGN SBS DRAWN SBS		WARATAH ESTATE STAGE 7		MUNICIPALITY HUME REFERENCE 8711 E/7	
AMENDMENTS A 11/07/17 ISSUED FOR CONSTRUCTION	VER DATE 11/07/17	REMARKS ISSUED FOR CONSTRUCTION	CHECKED SBS	SCALE AS SHOWN DATUM AHD DATE DEC'16	SHEET 6 OF 12 A



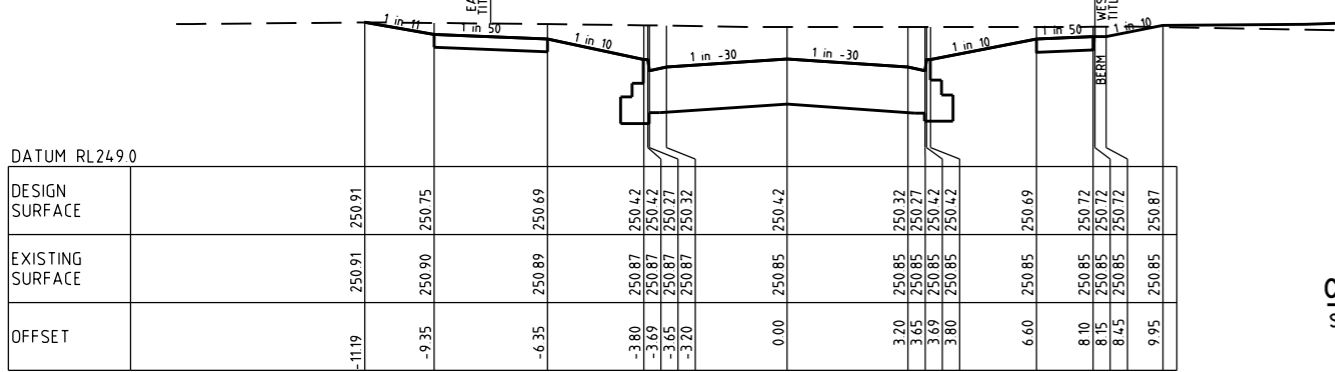
643.18



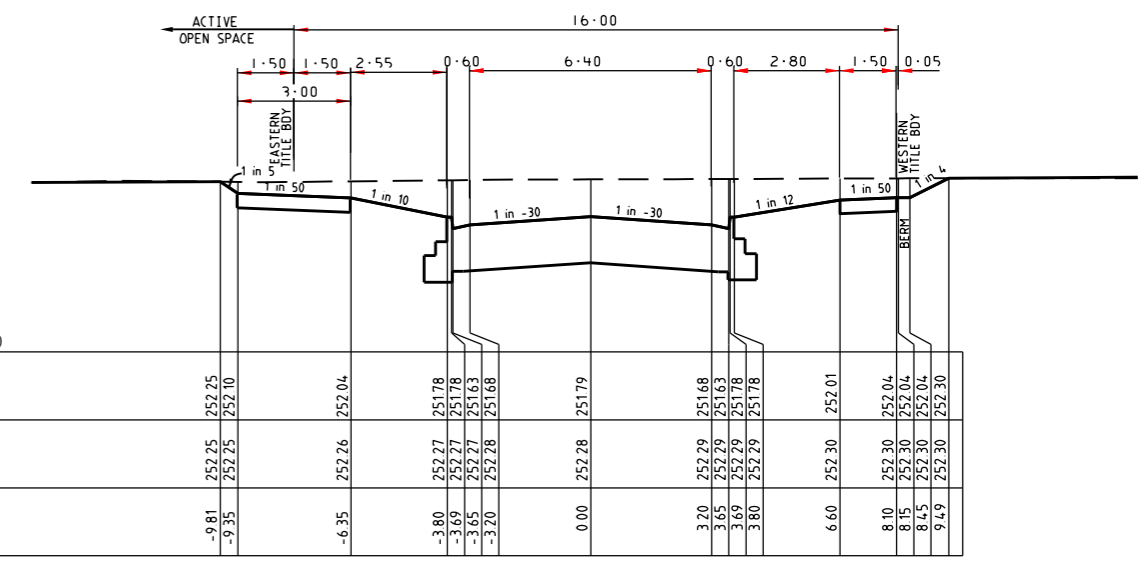
616.84



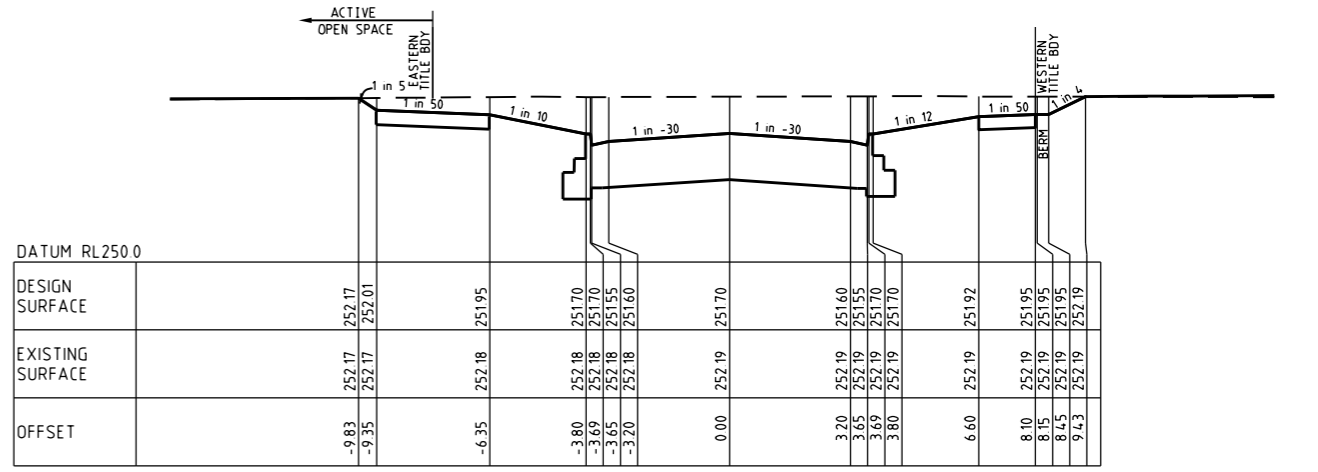
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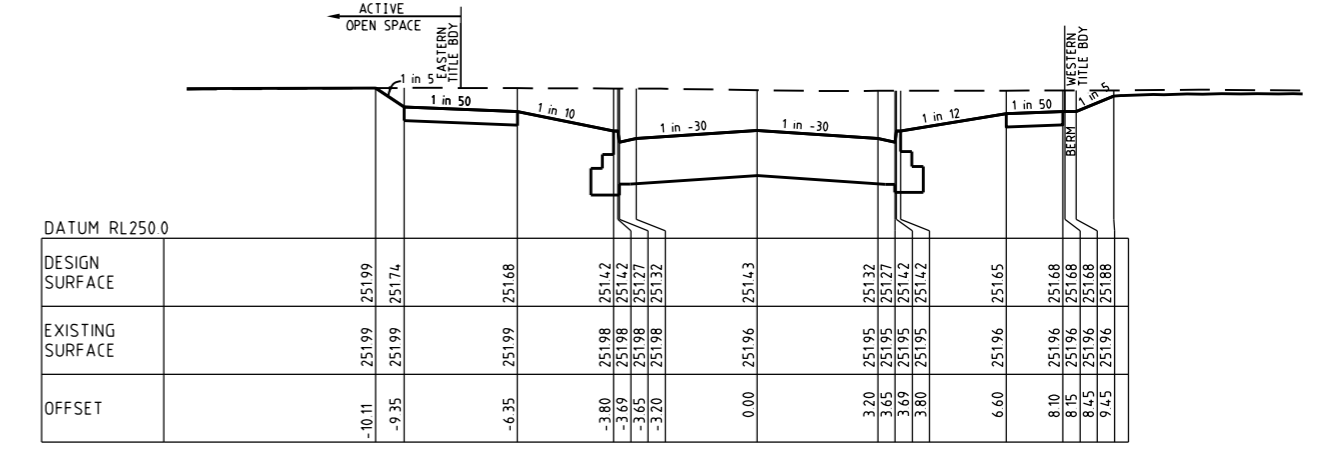
561.41



719.18



705.18

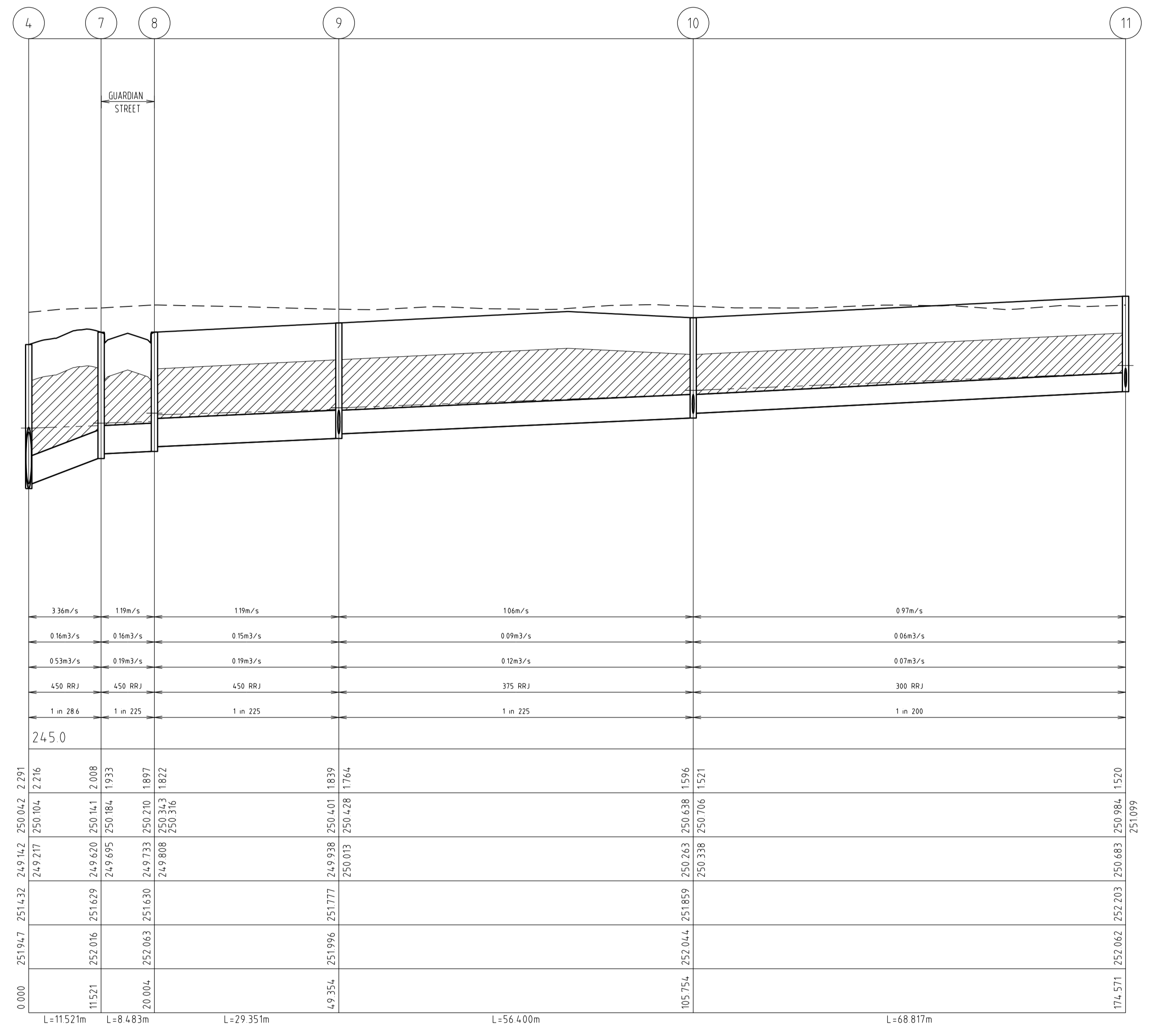
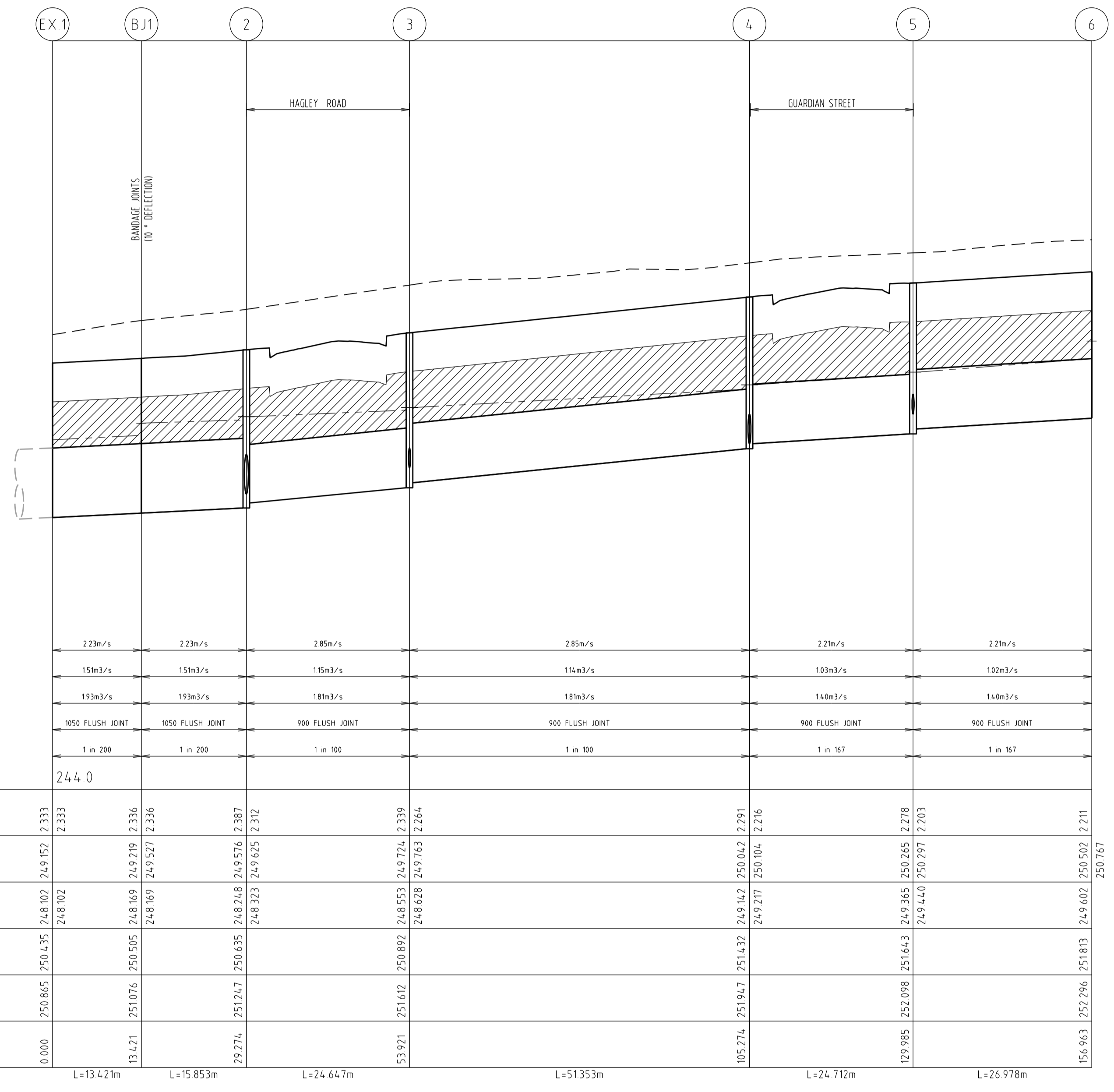


669.24

REALM VISTA

CROSS SECTIONS
SCALE HORIZONTAL 1:100
VERTICAL 1:50

		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street howthorn east, 3123 telephone 8823 2300 fax no. 8823 2310
MELWAY REF. 366-E-6		WARATAH ESTATE STAGE 7		MUNICIPALITY HUME
SURVEY BJ		DESIGN SBS		REFERENCE 8711 E/7
DRAWN SBS		CHECKED		SCALE AS SHOWN DATUM AHD DATE DEC '16 SHEET 7 OF 12
21/08/17 CROSS SECTIONS UPDATED	02/08/17 CROSS SECTIONS UPDATED	11/07/17 ISSUED FOR CONSTRUCTION	11/07/17 ISSUED FOR CONSTRUCTION	11/07/17 ISSUED FOR CONSTRUCTION



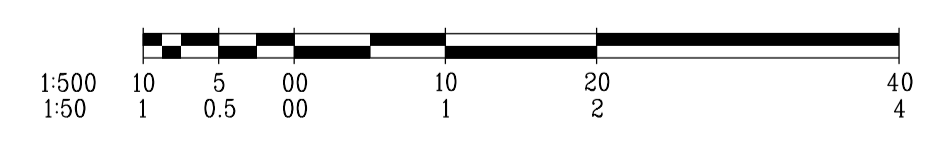
VELOCITY (m/sec)	2.23m/s	2.23m/s	2.85m/s	2.85m/s	2.21m/s	2.21m/s
DESIGN (m3/s)	15m3/s	15m3/s	15m3/s	14m3/s	10m3/s	10m3/s
CAPACITY (m3/s)	19m3/s	19m3/s	18m3/s	18m3/s	14m3/s	14m3/s
DIAMETER AND TYPE (CLASS 2)	1050 FLUSH JOINT	1050 FLUSH JOINT	900 FLUSH JOINT	900 FLUSH JOINT	900 FLUSH JOINT	900 FLUSH JOINT
GRADE	1 in 200	1 in 200	1 in 100	1 in 100	1 in 167	1 in 167
DATUM RL	244.0					
DEPTH FS TO INVERT	2.333	2.336	2.387	2.291	2.211	2.211
HGL LEVEL	248.102	249.219	249.576	250.042	250.502	250.767
INVERT	248.102	248.169	248.323	249.217	249.440	250.297
FINISHED SURFACE	250.435	250.505	250.635	251.632	251.643	251.813
NATURAL SURFACE	250.865	251.076	251.247	251.612	251.947	252.296
CHAINAGE	0.000	13.421	29.274	53.921	105.274	156.963
	L=13.421m	L=15.853m	L=24.647m	L=51.353m	L=24.712m	L=26.978m

VELOCITY (m/sec)	3.36m/s	1.19m/s	1.19m/s	1.06m/s	0.97m/s
DESIGN (m3/s)	0.16m3/s	0.16m3/s	0.15m3/s	0.09m3/s	0.06m3/s
CAPACITY (m3/s)	0.53m3/s	0.19m3/s	0.19m3/s	0.12m3/s	0.07m3/s
DIAMETER AND TYPE (CLASS 2)	450 RRJ	450 RRJ	450 RRJ	375 RRJ	300 RRJ
GRADE	1 in 286	1 in 225	1 in 225	1 in 225	1 in 200
DATUM RL	245.0				
DEPTH FS TO INVERT	2.291	2.008	1.933	1.839	1.521
HGL LEVEL	249.217	249.620	249.695	250.263	250.683
INVERT	249.217	249.620	249.733	250.263	250.706
FINISHED SURFACE	251.432	251.629	251.630	251.777	252.203
NATURAL SURFACE	251.947	252.016	252.063	251.996	252.062
CHAINAGE	0.000	11.521	20.004	49.354	105.754
	L=11.521m	L=8.483m	L=29.351m	L=56.400m	L=68.817m

INDICATES CRUSHED ROCK BACKFILL

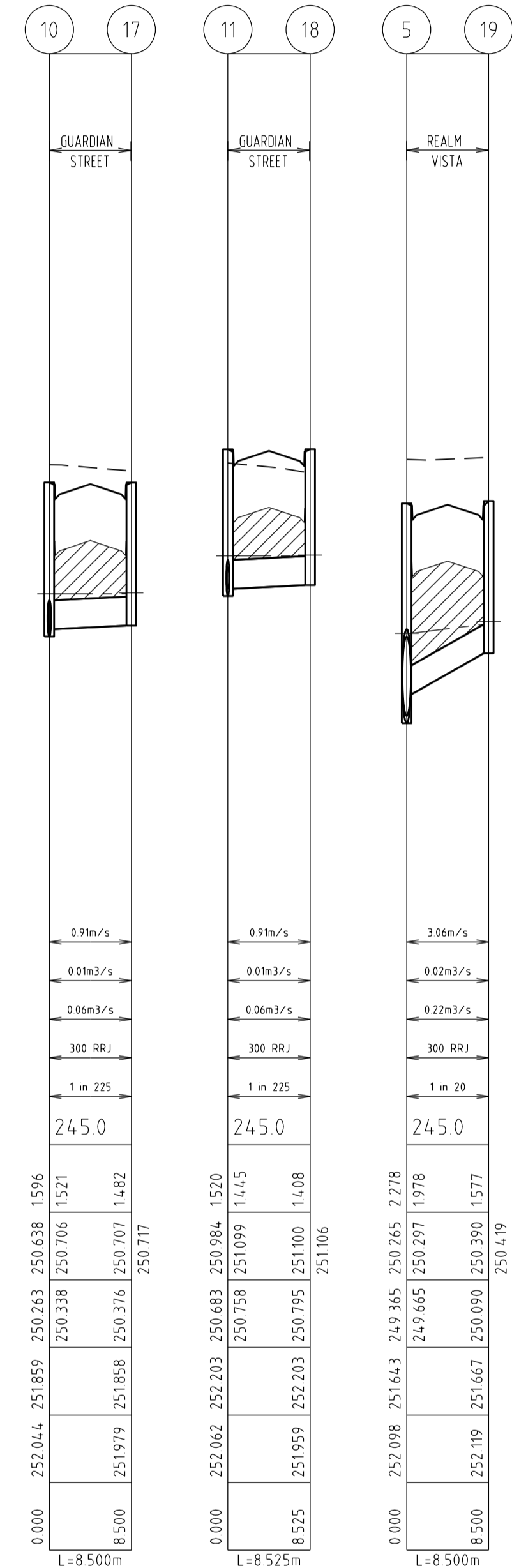
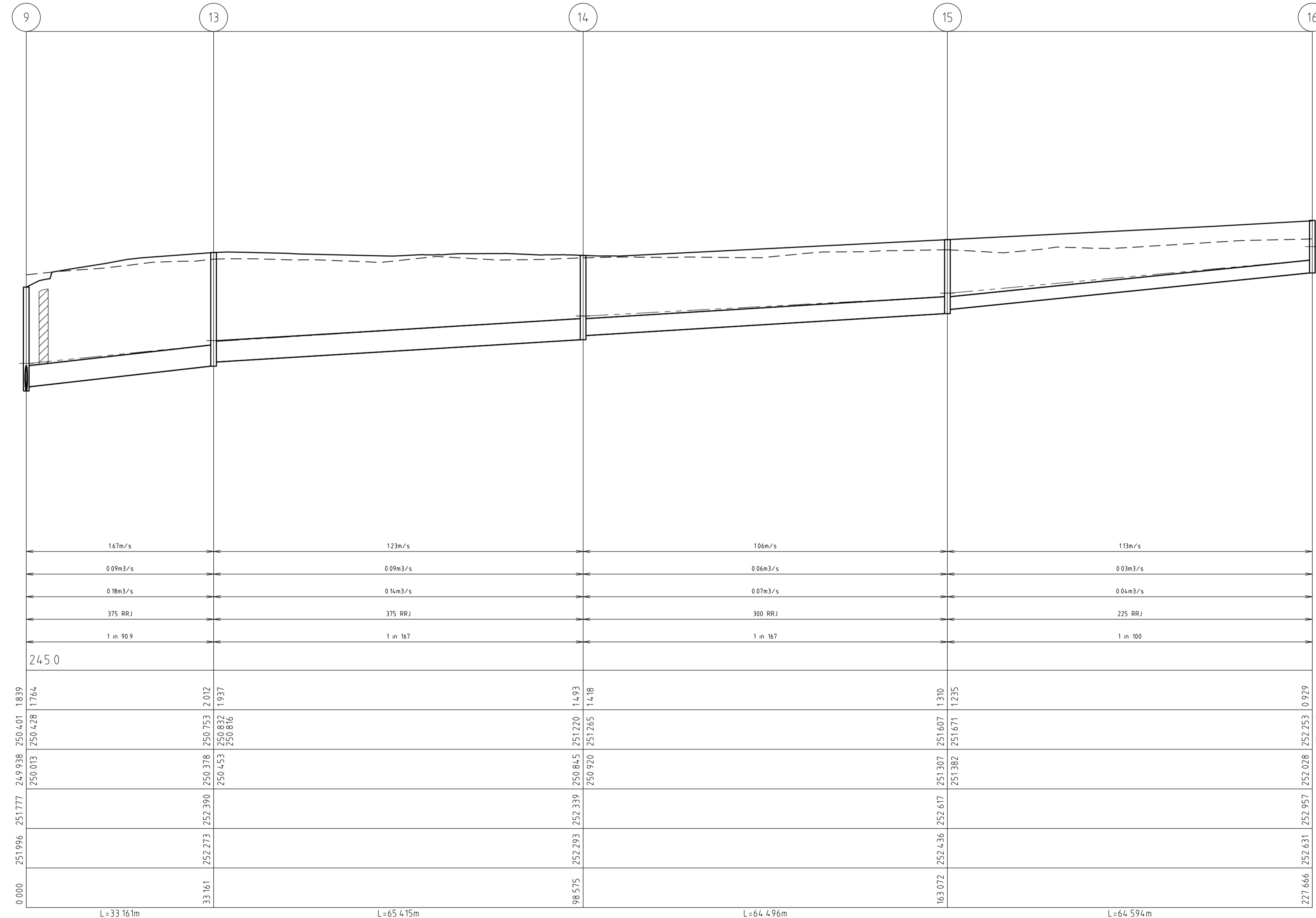
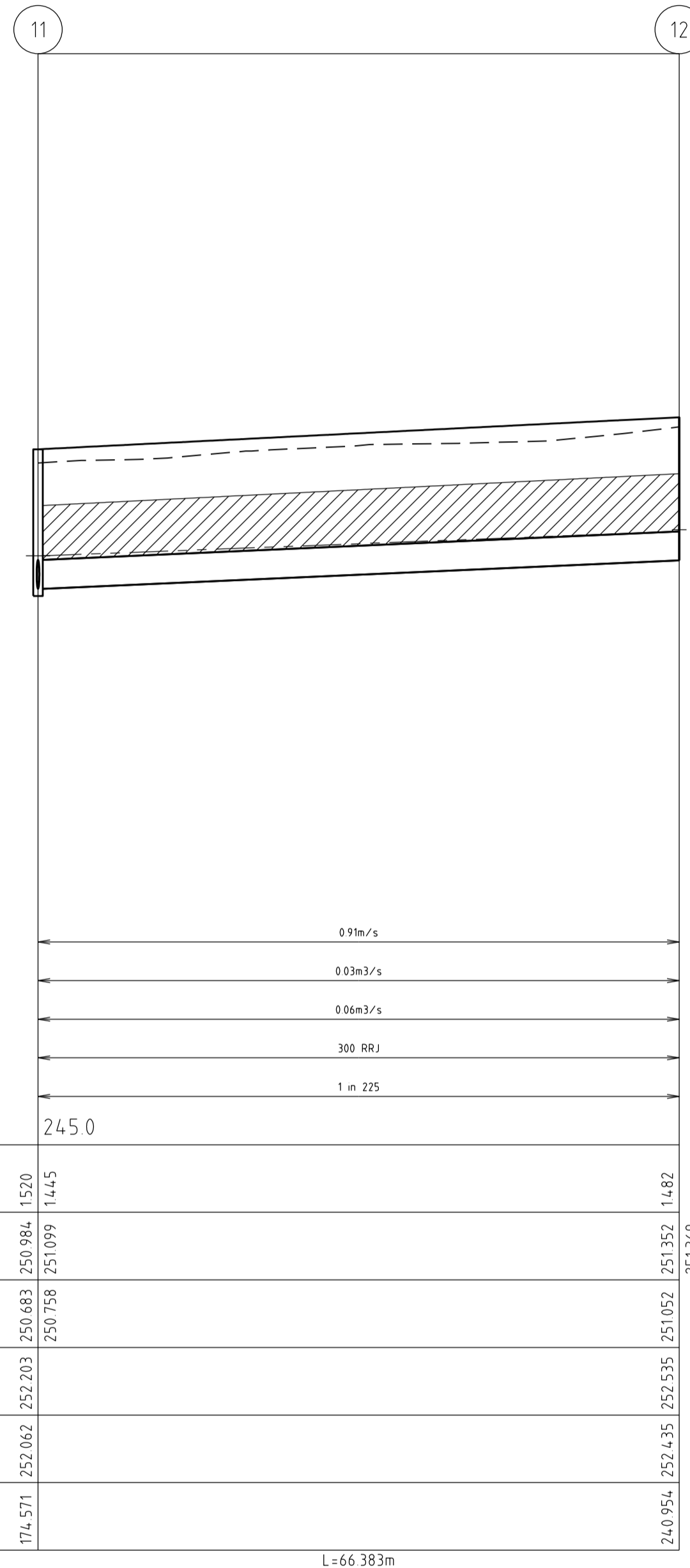
INDICATES 5YR HGL

NOTE:
ALL DRAINS LAID UNDER BACK OF KERB AND FOOTPATH TO
TO BE CLASS 3 AND UNDER ROAD PAVEMENT TO BE MINIMUM
CLASS 2 F.C.R.



DRAINAGE LONGITUDINAL SECTIONS
SCALE HORIZONTAL 1:500
VERTICAL 1:50

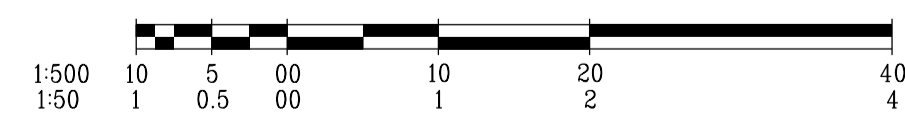
		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF. 366-E-6 SURVEY BJ DESIGN SBS DRAWN SBS		WARATAH ESTATE STAGE 7		MUNICIPALITY HUME REFERENCE 8711 E/7	
AMENDMENTS A 11/07/17 ISSUED FOR CONSTRUCTION				SCALE AS SHOWN DATUM AHD DATE DEC'16 SHEET 8 OF 12	
VER	DATE	REMARKS	CHECKED	DATE	FILED



INDICATES CRUSHED ROCK BACKFILL

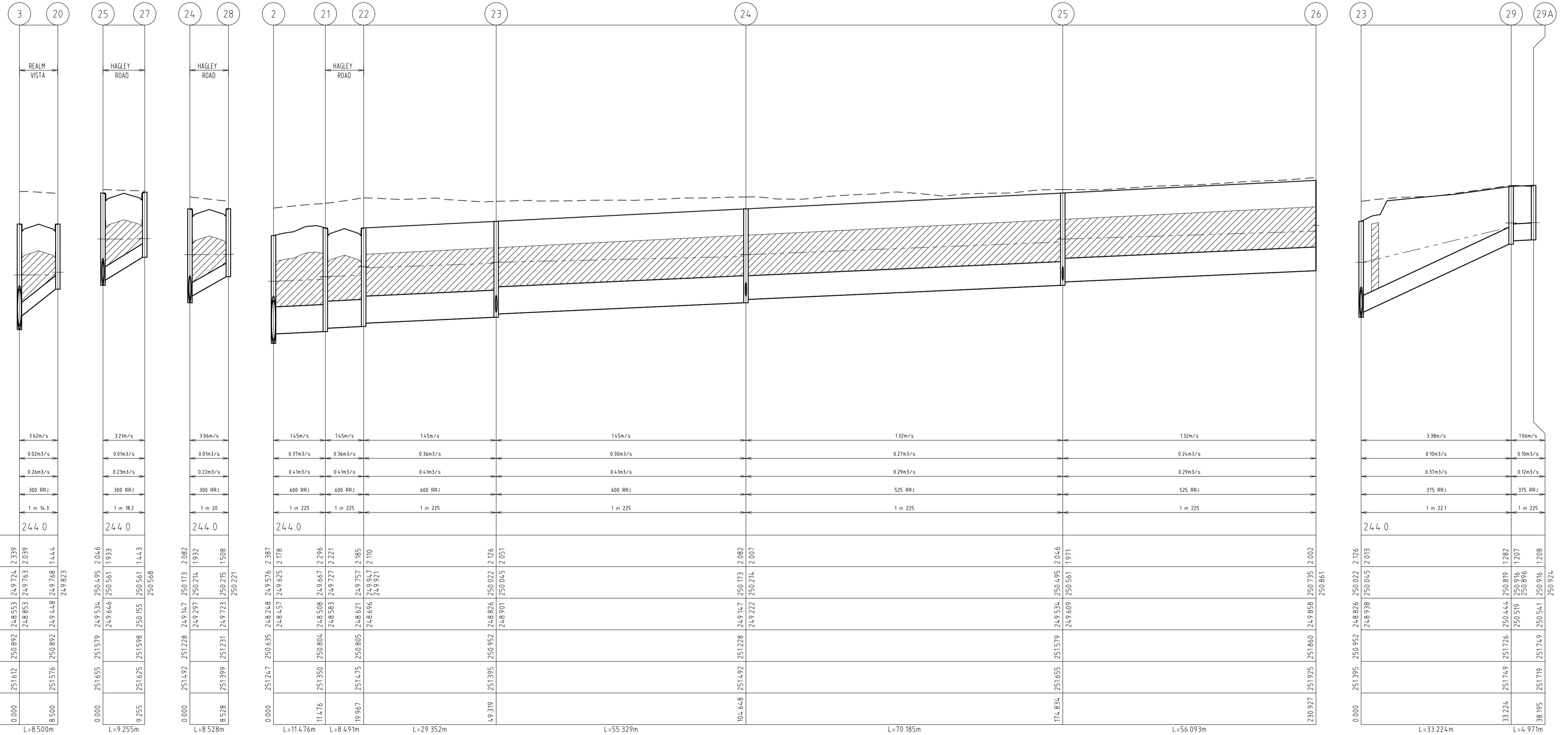
INDICATES 5YR HGL

NOTE:
ALL DRAINS LAID UNDER BACK OF KERB AND FOOTPATH TO
TO BE CLASS 3 AND UNDER ROAD PAVEMENT TO BE MINIMUM
CLASS 2 F.C.R.



DRAINAGE LONGITUDINAL SECTIONS
SCALE HORIZONTAL 1:500
VERTICAL 1:50

AMENDMENTS		MELWAY REF. 366-E-6		breese pitt dixon pty. ltd. land surveyors		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
A 11/07/17 ISSUED FOR CONSTRUCTION		SURVEY BJ		WARATAH ESTATE STAGE 7		MUNICIPALITY HUME	
VER DATE REMARKS		DESIGN SBS		REFERENCE 8711 E/7		SHEET 9 OF 12	
CHECKED		DRAWN SBS		SCALE AS SHOWN DATUM AHD		DATE DEC'16	

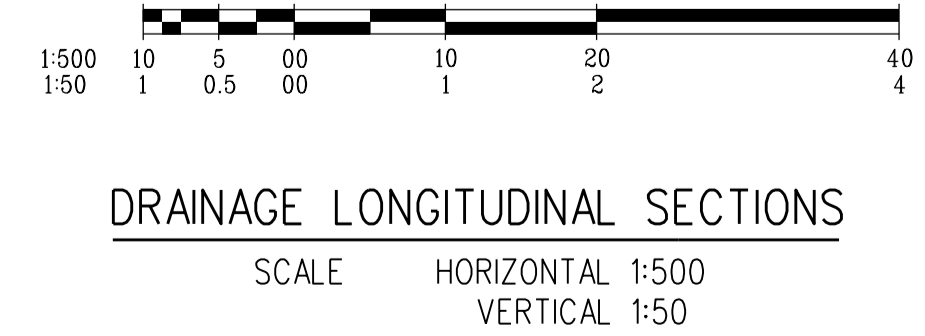


DEPTH FS TO INVERT	HGL LEVEL	INVERT	FINISHED SURFACE	NATURAL SURFACE	CHAINAGE
2.339	249.724	246.553	250.892	251.612	0.000
2.039	249.763	248.853	250.892	251.576	8.500
1.444	249.768	249.448	250.892	251.576	8.500
2.046	250.495	249.534	251.579	251.655	0.000
1.933	250.561	249.646	251.598	251.625	0.255
1.443	250.561	250.155	251.598	251.625	0.255
2.082	250.173	249.147	251.228	251.492	0.000
1.932	250.214	249.297	251.231	251.399	8.528
1.508	250.215	249.723	251.231	251.399	8.528
250.221					
2.387	249.825	248.157	250.635	251.217	0.000
2.296	249.867	248.508	250.804	251.350	11.476
2.221	249.727	248.583	250.804	251.350	11.476
2.185	249.757	248.621	250.805	251.475	19.967
2.110	249.921	248.696	250.805	251.475	19.967
2.126	250.022	248.826	250.952	251.395	49.319
2.051	250.045	248.901	250.952	251.395	49.319
2.082	250.173	249.147	251.228	251.492	300.648
2.007	250.214	249.222	251.228	251.492	300.648
2.046	250.495	249.534	251.579	251.655	374.834
1.971	250.561	249.609	251.598	251.655	374.834
2.002	250.735	249.858	251.860	251.925	230.927
2.002	250.861	249.858	251.860	251.925	230.927
2.126	250.022	248.826	250.952	251.395	0.000
2.013	250.045	248.938	250.952	251.395	0.000
1.282	250.819	250.444	251.726	251.749	33.224
1.207	250.916	250.519	251.726	251.749	33.224
1.208	250.916	250.896	251.749	251.749	38.95
1.208	250.916	250.541	251.749	251.749	38.95

INDICATES CRUSHED ROCK BACKFILL

INDICATES 5YR HGL

NOTE:
ALL DRAINS LAID UNDER BACK OF KERB AND FOOTPATH TO BE CLASS 3 AND UNDER ROAD PAVEMENT TO BE MINIMUM CLASS 2 F.C.R.

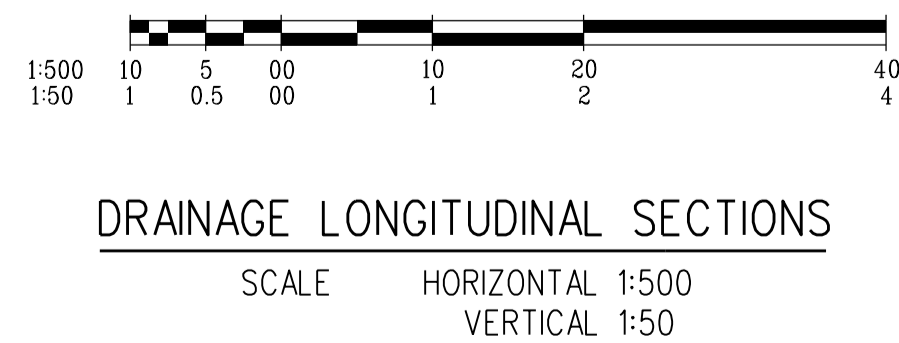
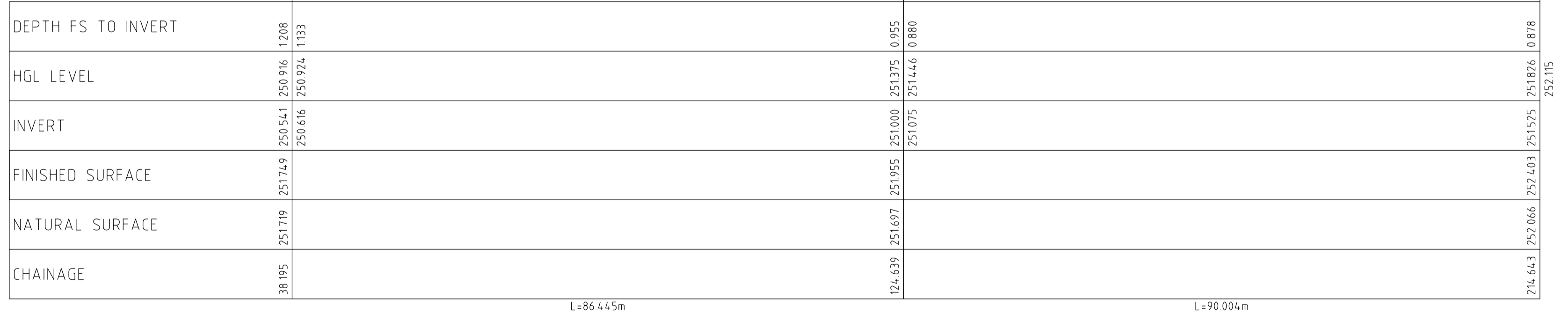


breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF. 366-E-6 SURVEY BJ DESIGN SBS DRAWN SBS		WARATAH ESTATE STAGE 7	
MUNICIPALITY HUME REFERENCE 8711 E/7		SHEET 10 OF 12	
AMENDMENTS A 11/07/17 ISSUED FOR CONSTRUCTION	VER DATE REMARKS	CHECKED	SCALE AS SHOWN DATUM AHD DATE DEC'16

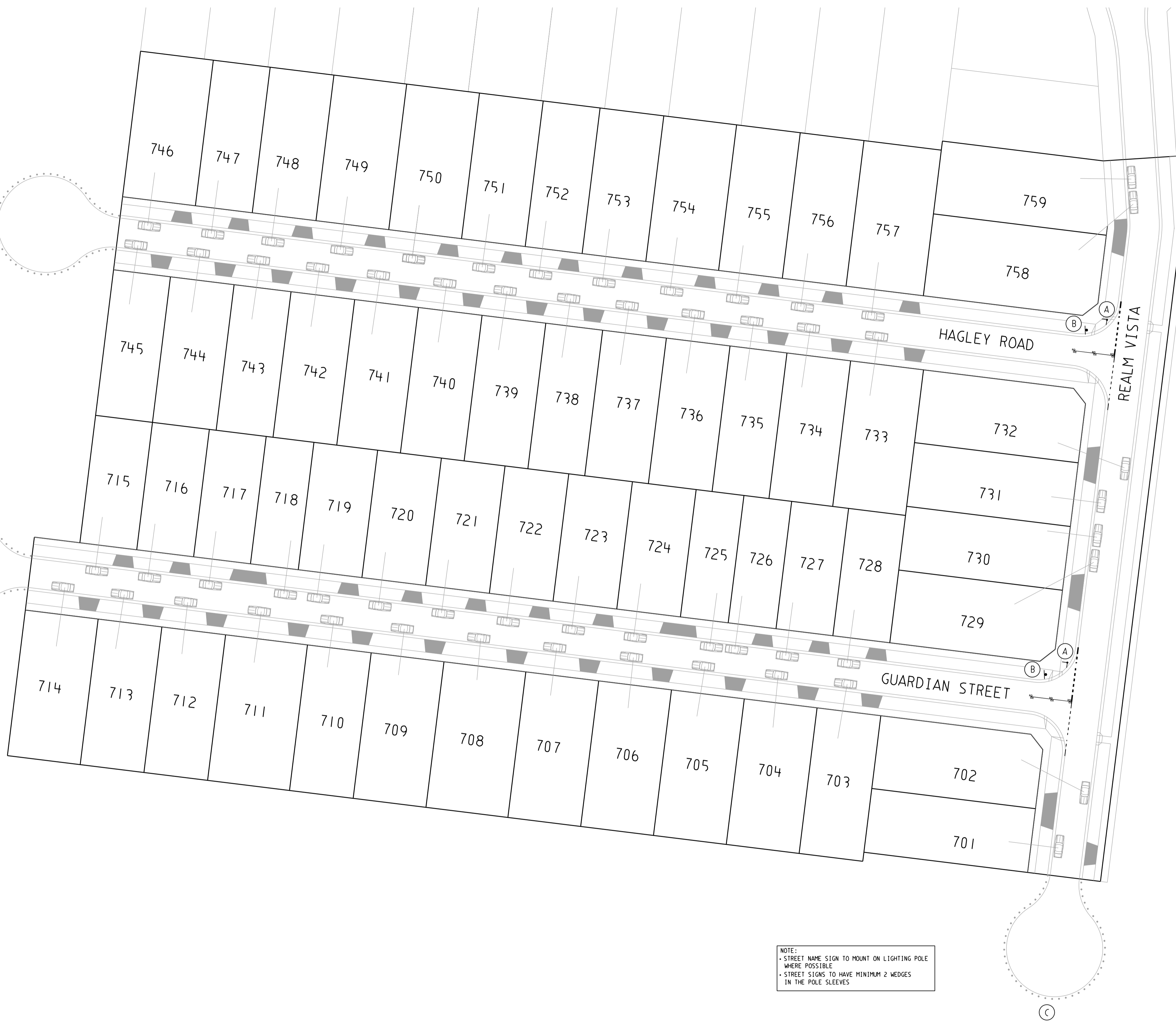
Pit No.	TYPE	INTERNAL		INLET		OUTLET		PIT		SD DRAWINGS	REMARKS
		WD	LEN	DIA	INV LEV	DIA	INV LEV	SETOUT RL	DEPTH		
Ex.1	ENDPIPE			1050	248.102			250.435	2.333		CONNECT TO EXISTING ENDDPIPE
2	GRADED ENTRY PIT(HB2)	1350	900	900	248.323	1050	248.248	250.635	2.387	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
3	GRADED ENTRY PIT(HB2)	1200	900	900	248.628	900	248.553	250.892	2.339	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
4	GRADED ENTRY PIT(HB2)	1200	900	900	249.217	900	249.142	251.432	2.291	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
5	GRADED ENTRY PIT(HB2)	1200	900	900	249.440	900	249.365	251.643	2.278	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
6	ENDPIPE					900	249.602	251.813	2.211		TEMPORARY SANDBAG ENDDWALL
7	GRADED ENTRY PIT(HB2)	600	900	450	249.695	450	249.620	251.629	2.008	MPA EDCM STD DWG 601	
8	GRADED ENTRY PIT(HB2)	600	900	450	249.808	450	249.733	251.630	1.897	MPA EDCM STD DWG 601	
9	JUNCTION PIT	600	900	375	250.013	450	249.938	251.777	1.839	MPA EDCM STD DWG 605	
10	GRADED ENTRY PIT(HB2)	600	900	300	250.338	375	250.263	251.859	1.596	MPA EDCM STD DWG 601	
11	GRADED ENTRY PIT(HB2)	600	900	300	250.758	300	250.683	252.203	1.520	MPA EDCM STD DWG 601	
12	ENDPIPE	600	900			300	251.052	252.535	1.482		TEMPORARY SANDBAG ENDDWALL
13	JUNCTION PIT	900	900	375	250.453	375	250.378	252.390	2.012	MPA EDCM STD DWG 607	HAUNCHED PIT COVER TO 600X900.
14	JUNCTION PIT	600	900	300	250.920	375	250.845	252.339	1.493	MPA EDCM STD DWG 605	
15	JUNCTION PIT	600	900	225	251.382	300	251.307	252.617	1.310	MPA EDCM STD DWG 605	
16	JUNCTION PIT	600	900			225	252.028	252.957	0.929	MPA EDCM STD DWG 605	
17	GRADED ENTRY PIT(HB2)	600	900			300	250.376	251.858	1.482	MPA EDCM STD DWG 601	
18	GRADED ENTRY PIT(HB2)	600	900			300	250.795	252.203	1.408	MPA EDCM STD DWG 601	
19	GRADED ENTRY PIT(HB2)	600	900			300	250.090	251.667	1.577	MPA EDCM STD DWG 601	
20	GRADED ENTRY PIT(HB2)	600	900			300	249.448	250.892	1.444	MPA EDCM STD DWG 601	
21	GRADED ENTRY PIT(HB2)	900	900	600	248.583	600	248.508	250.804	2.296	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
22	GRADED ENTRY PIT(HB2)	900	900	600	248.696	600	248.621	250.805	2.185	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
23	JUNCTION PIT	900	900	600	248.901	600	248.826	250.952	2.126	MPA EDCM STD DWG 607	HAUNCHED PIT COVER TO 600X900.
24	GRADED ENTRY PIT(HB2)	900	900	300	249.297			251.228	2.082	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
25	GRADED ENTRY PIT(HB2)	900	900	300	249.646			251.579	2.046	MPA EDCM STD DWG 601	HAUNCHED PIT COVER TO 600X900.
26	ENDPIPE					525	249.534				TEMPORARY SANDBAG ENDDWALL
27	GRADED ENTRY PIT(HB2)	600	900			300	250.155	251.598	1.443	MPA EDCM STD DWG 601	
28	GRADED ENTRY PIT(HB2)	600	900			300	249.723	251.231	1.508	MPA EDCM STD DWG 601	
29	JUNCTION PIT	600	900	375	250.519	375	250.444	251.726	1.282	MPA EDCM STD DWG 605	
29A	JUNCTION PIT	600	900	375	250.616	375	250.541	251.749	1.208	MPA EDCM STD DWG 605	
30	JUNCTION PIT	600	900	375	251.075	375	251.000	251.955	0.955	MPA EDCM STD DWG 605	
31	JUNCTION PIT	600	900			300	251.525	252.403	0.878	MPA EDCM STD DWG 605	PROVIDE 225mm BLOCKOUT IN NORTH & SOUTHWALL @ IL251.600

PIT SCHEDULE

VELOCITY (m/sec)
DESIGN (m³/s)
CAPACITY (m³/s)
DIAMETER AND TYPE (CLASS 2)
GRADE
DATUM RL



		breese pitt dixon pty. ltd. land surveyors civil engineers		1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	
MELWAY REF. 366-E-6 SURVEY BJ DESIGN SBS DRAWN SBS		WARATAH ESTATE STAGE 7		MUNICIPALITY HUME REFERENCE 8711 E/7	
AMENDMENTS A 11/07/17 ISSUED FOR CONSTRUCTION	VER DATE REMARKS	CHECKED	SCALE AS SHOWN	DATUM AHD	DATE DEC '16
SHEET 11 OF 12			A		

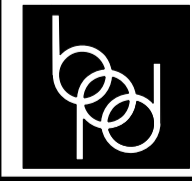


NOTE:
 - STREET NAME SIGN TO MOUNT ON LIGHTING POLE WHERE POSSIBLE
 - STREET SIGNS TO HAVE MINIMUM 2 WEDGES IN THE POLE SLEEVES

PARKING AND SIGNAGE & LINEMARKING PLAN
 SCALE 1:500

SIGN SCHEDULE

- (A) "STREET NAME" SIGN
- (B)  R1-2
- (C) "NO ROAD" SIGN (HCC SD4-07)

AMENDMENTS		 breese pitt dixon pty. ltd. land surveyors civil engineers 1/19 cato street hawthorn east, 3123 telephone 8823 2300 fax no. 8823 2310	WARATAH ESTATE STAGE 7	MUNICIPALITY HUME REFERENCE 8711 E/7			
VER	DATE				SCALE AS SHOWN	DATUM AHD	DATE DEC'16
		MELWAY REF. 366-E-6					
		SURVEY BJ					
		DESIGN SBS					
		DRAWN SBS					
A	11/07/17	ISSUED FOR CONSTRUCTION					