

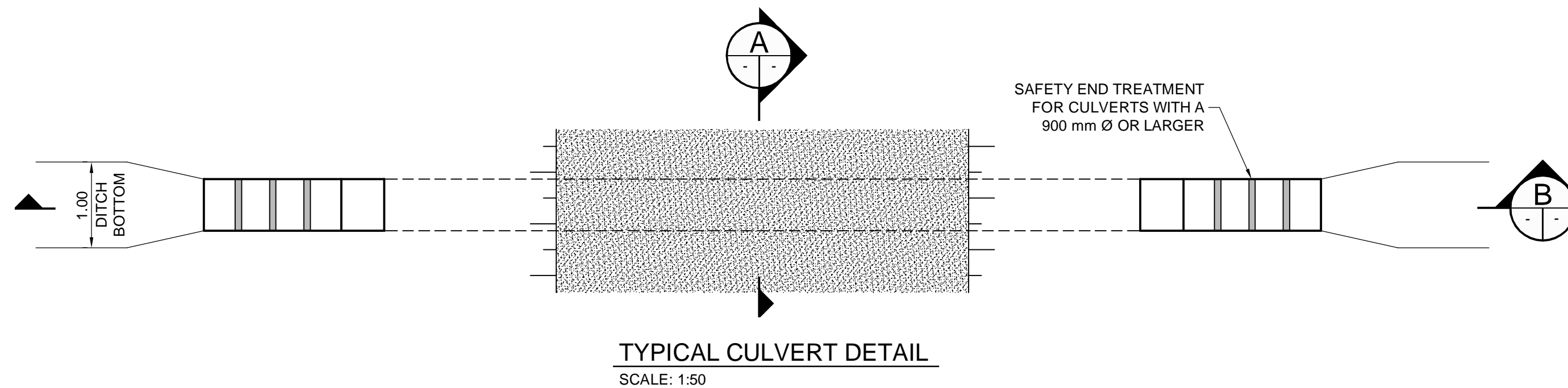
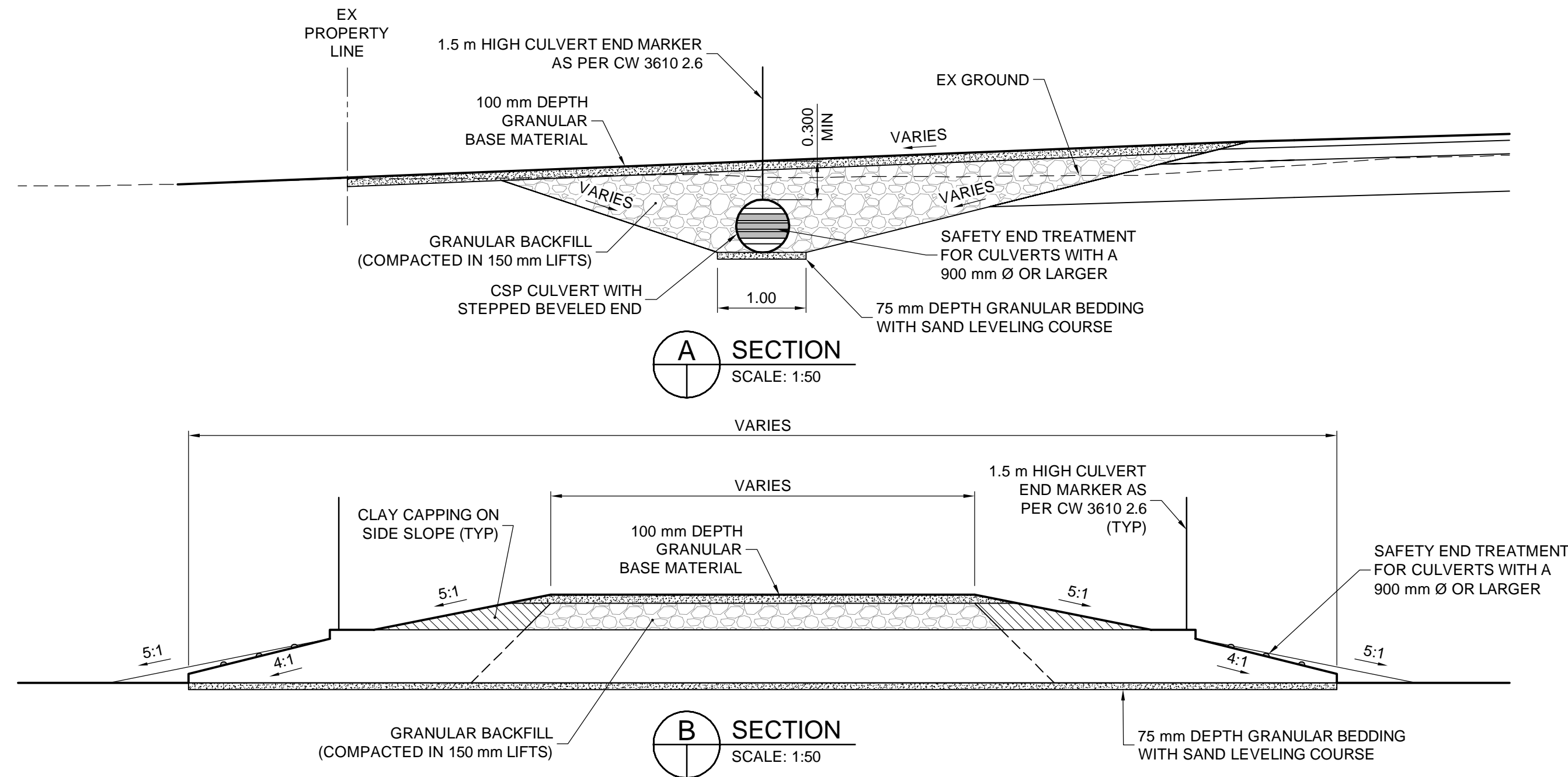
WEST DITCH CULVERTS									
NAME	SIZE	LENGTH	SLOPE	START INV. ELEV.	END INV. ELEV.	START STATION	START OFFSET	END STATION	END OFFSET
WC01	450 mm	13.2 m	0.03%	233.304	233.299	1+190.41	-11.10	1+202.35	-11.21
WC02	600 mm	13.0 m	0.10%	233.260	233.246	1+241.31	-10.40	1+254.31	-10.03
WC03	600 mm	14.7 m	0.10%	233.131	233.117	1+371.75	-10.02	1+386.45	-10.04
WC04	600 mm	12.0 m	0.10%	233.090	233.079	1+414.58	-10.09	1+426.58	-10.11
WC05	600 mm	12.6 m	0.10%	233.005	232.993	1+503.72	-10.21	1+516.32	-10.21
WC06	600 mm	16.6 m	0.10%	232.846	232.830	1+669.19	-10.47	1+685.79	-10.47
WC07	1000 mm	19.1 m	-0.05%	232.203	232.213	2+017.72	-10.43	2+036.82	-10.36
WC08	1000 mm	20.2 m	-1.53%	232.227	232.536	2+064.45	-10.15	2+084.65	-10.10
WC09	600 mm	12.8 m	-0.13%	232.571	232.588	2+111.60	-9.78	2+124.38	-10.48
WC10	600 mm	12.9 m	-0.13%	232.662	232.678	2+181.32	-10.29	2+194.22	-10.27
WC11	600 mm	13.1 m	-0.13%	232.686	232.703	2+200.48	-10.28	2+213.58	-10.24
WC12	600 mm	13.8 m	-0.13%	232.775	232.793	2+268.79	-10.13	2+282.59	-10.10
WC13	600 mm	12.0 m	-0.13%	233.168	233.184	2+571.62	-9.47	2+583.62	-9.45
WC14	600 mm	12.0 m	-0.13%	233.412	233.428	2+759.86	-9.06	2+771.86	-9.04
WC15	900 mm	13.7 m	0.13%	233.250	233.232	2+972.40	-9.47	2+986.10	-9.47
WC16	900 mm	16.0 m	0.05%	232.676	232.668	3+430.88	-10.57	3+446.88	-10.58
WC17	900 mm	14.5 m	0.07%	232.488	232.478	3+800.02	-10.40	3+814.52	-10.42
WC18	1000 mm	22.9 m	0.13%	232.230	232.200	4+155.76	-11.25	4+178.63	-11.34
WC19	450 mm	14.1 m	-0.05%	232.430	232.437	4+217.95	-10.40	4+232.05	-10.37
WC20	600 mm	15.4 m	0.12%	232.358	232.339	4+643.21	-10.05	4+658.61	-10.10
WC21	450 mm	15.1 m	0.06%	231.991	231.983	4+717.31	-11.37	4+732.41	-11.35

EAST DITCH CULVERTS									
NAME	SIZE	LENGTH	SLOPE	START INV. ELEV.	END INV. ELEV.	START STATION	START OFFSET	END STATION	END OFFSET
EC01	600 mm	13.5 m	0.13%	233.319	233.300	1+265.33	10.68	1+278.82	10.80
EC02	600 mm	16.9 m	0.13%	232.967	232.945	1+526.66	10.27	1+543.56	10.36
EC03	600 mm	14.6 m	0.13%	232.938	232.918	1+548.71	10.36	1+563.31	10.44
EC04	600 mm	17.8 m	0.13%	232.713	232.690	1+715.73	10.91	1+733.53	10.51
EC05	600 mm	14.4 m	-0.08%	232.673	232.684	2+083.52	10.03	2+097.92	9.92
EC06	600 mm	14.0 m	-0.08%	232.763	232.774	2+193.34	10.29	2+207.34	10.26
EC07	600 mm	12.2 m	-0.08%	232.892	232.903	2+351.28	10.33	2+363.48	10.33
EC08	600 mm	15.1 m	0.05%	233.285	233.278	2+853.20	10.67	2+868.30	10.62
EC09	600 mm	11.8 m	0.05%	233.225	233.219	2+973.93	11.42	2+985.73	11.42
EC10	600 mm	14.0 m	0.24%	232.736	232.702	3+444.97	10.75	3+458.97	10.73
EC11	900 mm	23.2 m	0.77%	232.348	232.170	4+170.90	10.90	4+193.92	13.79
EC12	600 mm	12.7 m	-0.05%	232.474	232.481	4+404.79	10.84	4+417.49	10.85
EC13	750 mm	14.0 m	0.05%	232.319	232.312	4+681.62	10.81	4+695.62	10.80
EC14	750 mm	13.8 m	0.05%	232.245	232.238	4+828.13	10.77	4+841.93	10.76
EC15	750 mm	14.5 m	0.43%	232.106	232.043	5+111.70	10.70	5+126.47	10.80
EC16	900 mm	17.1 m	0.43%	231.622	231.548	5+225.40	10.79	5+242.82	10.82

CROSSING CULVERTS									
NAME	SIZE	LENGTH	SLOPE	START INV. ELEV.	END INV. ELEV.	START STATION	START OFFSET	END STATION	END OFFSET
CC01	600 mm	18.7 m	-0.34%	233.180	233.244	1+321.04	-9.46	1+320.99	9.21
CC02	1200 mm	21.6 m	-0.25%	232.050	232.103	1+805.88	10.54	1+810.22	-10.62
CC03	1200 mm	26.5 m	0.08%	232.190	232.170	4+184.13	-10.86	4+197.12	12.24
CC04	1500 mm	29.0 m	0.00%	229.728	229.728	5+534.71	-14.70	5+535.61	14.28

PROPOSED WAVERLEY STREET ALIGNMENT						
SEGMENT	STATION (START)	STATION (END)	NORTHING (START)	EASTING (START)	NORTHING (END)	EASTING (END)
L1	0+000.000	0+999.923	5509120.845	632035.234	5509832.710	631333.028
L2	0+999.923	1+098.378	5509832.710	631333.028	5509903.598	631264.703
L3	1+098.378	1+146.159	5509903.598	631264.703	5509937.743	631231.280
C1	1+146.159	1+225.358	5509937.743	631231.280	5510009.045	631201.336
L4	1+225.358	1+824.766	5510009.045	631201.336	5510608.328	631189.083
L5	1+824.766	2+831.519	5510608.328	631189.083	5511614.805	631165.485
L6	2+831.519	4+148.039	5511614.805	631165.485	5512930.970	631134.966
L7	4+148.039	4+947.709	5512930.970	631134.966	5513730.411	631115.799
C2	4+947.709	5+387.477	5513730.411	631115.799	5514132.931	631265.078
L8	5+387.477	5+517.695	5514132.931	631265.078	5514229.596	631352.328
C3	5+517.695	5+946.511	5514229.596	631352.328	5514621.165	631501.767
L9	5+946.511	6+131.170	5514621.165	631501.767	5514805.822	631500.827

CURVE DATA					
#	R.	Δc	Tc	L.	L.C.
C1	105.000	43°13'01"	41.590	79.199	77.335
C2	580.000	43°26'34"	231.061	439.768	429.309
C3	580.000	42°21'40"	224.740	428.817	419.116



- NOTES:
- ALL CULVERTS GREATER THAN 900 mm Ø REQUIRE SAFETY END TREATMENTS
 - CULVERT LENGTHS SHOWN INCLUDE THE LENGTHS OF THE SAFETY END TREATMENTS



**PRELIMINARY ONLY
NOT FOR CONSTRUCTION**

UNDERGROUND STRUCTURES SUPV. U/G STRUCTURES DATE	B.M. ELEV.	DESIGNED BY RTP		ENGINEER'S SEAL 		2019 GRANULAR ROAD PROGRAM WAVERLEY STREET (GRANDMONT BOULEVARD TO CITY LIMIT)	CITY DRAWING NUMBER P-3506-2019-17
		DRAWN BY TJH					CHECKED BY TS
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE, BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.		HOR. SCALE 1:500 VERTICAL 1:20	CONSULTANT PROJECT NUMBER 18-8859	CONTROL LINE GEOMETRY AND CULVERT INFORMATION	CONSULTANT DRAWING NUMBER		