PARE ENGINEERING CORPORATION
Engineers — Planners — Landscape Architects
8 Blackstone Valley Place, Lincoln, RI 02865
401/334/4100

ITEM DETAIL AND DRAINAGE SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE STRUCTURES

STA.	STA.	POSITION	ASKEW	TYPE IN/OUT	DITCH IN	DITCH OUT	PIPE ARCH S IN	PIPE ARCH R IN	PIPE ARCH L FT	PIPE D IN	PIPE L FT	ALLOWABLE OPTIONS CSP TH	RCP CL	PCCSP TH	CAAP TH	NO PIPE ELBOW EA	ELBOWS D IN	TOP DEG	BOT DEG	ES RC EA	ES M EA	CB TYPE	DI TYPE	DEPTH DI FT	CONC CL B CY	REIN STEEL LBS	DI GRATE TYPE	CHAN ELEV	CRM CY	TR EXCAV EARTH CY	TR EXCAV ROCK CY	CH EXCAV EARTH CY	CH EXCAV ROCK CY	STRUC EXCAV CY	GRAN BKF STRUC CY	STONE FILL CY	STONE FILL TYPE	MRKR POSTS LT	MRKR POSTS RT	REMARKS
96+77		℄	78°-32' LT	HW/						30	92		III	.079	.075														1.2	48						1.85	I		1	STONE FILL TYPE I AT INLET w/ CRADLE HEADWALL
																																				3.7	II	1		STONE FILL TYPE II AT OUTLET
																														6										
107+79	108+11	LT								15	32	.064	III																									2		DRIVE CULVERT
108+00	109+00	LT																														19								CONSTRUCT MODIFIED DITCH
113+39	113+79	RT								15	40	.064	III																	11										DRIVE CULVERT
117+37		℄	73°-17' LT																															285						REMOVE EXIST 48" RCP & EXIST CONCRETE HEADWALLS
117+37		℄	73°-17' LT							SEE DETAILS			BR-4																										SEE CULVERT QUANTITIES
120+33		℄																												22										REMOVE EXIST 12" CMP
120+69		LT																																						RETAIN EXIST 8" CMP
121+67	122+50	RT		DI/						18	80	.064	III									4x4	4.0	2.5	203	A		1.8	82									2	STD D-6 OUTFALL INTO EXIST STREAM
121+88		℄	46°-40' LT							SEE DETAILS			BR-5																										SEE CULVERT QUANTITIES
121+88		℄	46°-40' LT							SEE DETAILS			BR-5																										SEE CULVERT QUANTITIES
125+05	129+80	LT																														770				1258	I			CONSTRUCT RELOCATED STREAM BED w/24" STONE FILL-TYPE II
126+46		℄																												8										REMOVE EXIST 12" STEEL PIPE
126+58	127+18	RT		ES/ES						15	60	.064	III							1	1									7								2		DRIVE CULVERT W/ END SECTIONS
126+66		℄																												11										REMOVE EXIST 18" STEEL PIPE
127+08		RT																							.10															REMOVE EXIST. CB & PLUG EXIST 18" CMP w/ CL "B" CONC.
127+96		℄		DI/HW						18	146			.064	.075	2	18	20	20			4x4	5.0	2.9	234	B		1.8	29									1	1	STD D-6, CONC. STRAIGHT HEADWALL AT OUTLET
138+59	139+05	RT																																						EXIST 12"x 54' RCP CL III & HEADWALLS TO REMAIN
139+55		℄	75° RT																											123										REMOVE EXIST. 18" RCP & EXIST HEADWALLS
139+55		℄	75° RT	HW/HW						18	122		III	.064	.060													3.6	65						1.33	II	1	1	STONE FILL TYPE II @ OUTLET. 2 NEW CONC STRAIGHT HEADWALLS
143+48		LT																							.10					5										REMOVE EXIST DI & PLUG 12" RCP & UNDERDRAINS w/ CL "B" CONC
145+31		℄		DI/HW						24	82			.064	.060	2	24	20	20			4x4	4.0	2.5	203	A		2.7	44	21					2.37	II	1	1	STD D-6, NEW CONC STRAIGHT HEADWALL @ OUTLET
146+33		RT																							.10			.07	2										REMOVE EXIST. STONE HEADWALL & PLUG EXIST 18" RCP w/ CL "B" CONC
148+40	148+90	RT																												22										REMOVE EXIST. 12" STEEL PIPE
148+84	149+41	RT								18	57	.064	III																		19							2	DRIVE CULVERT
148+81	149+11	RT																																		4.63	I			SPECIAL DITCH-12" STONE FILL TYPE I
151+33		RT & LT																							.10			.14												PLUG EXIST. 18" CMP w/ CLASS "B" CONC.
151+63		RT & LT																										.16												PLUG EXIST 20" CMP w/ CLASS "B" CONC.
151+61	151+99	RT								15	38	.064	III							2	2									5								2	DRIVE CULVERT
154+18		℄																										.07												PLUG EXIST. 18" RCP w/ CLASS "B" CONC
155+95	156+00	LT																												2										REMOVE EXIST. 12" CMP
156+25		℄		DI/						24	88		III	.064	.060							4x4	5.0	2.9	234	B			5.8						2.37	II	1	1	STD D-8 STONE FILL TYPE II @ OUTLET
156+86		LT																										.05	5											REMOVE EXIST. DROP INLET, PLUG EXIST 15" RCP w/ CL "B" CONC
164+01	167+00	RT		DI/CB						18	296		III									4x4	5.0	2.9	234	E			151											STD D-6
164+08		RT																										.07	6											REMOVE EXIST DROP INLET, PLUG EXIST. 18" RCP w/ CL "B" CONC
TOTALS										15 18 24 30	170 701 170 82					4								14.1	1108			11.7	712	40	410		285		1263 241	I II	7	13	

REMOVAL & DISPOSAL OF GUARDRAIL

STA.	STA.	LT.	RT.
58+80	63+17	437	
65+70	71+74	604	
71+15	71+93		78
81+00	87+90	690	
120+62	122+00		138
121+72	130+72	900	
139+02	148+46	944	
156+73	161+93	520	
TOTALS		4095	216

CAST-IN-PLACE CONCRETE CURB - TYPE B

STA.	STA.	LT.	RT.	STA.	STA.	LT.	RT.
158+13	161+16		303	180+10	180+75	65	
161+38	163+21		183	180+90	181+60		120
163+35	164+66		131	180+89	181+86	97	
164+80	166+00		120	181+74	182+00		126
166+00	169+06		306	182+00	182+75	75	
169+20	169+61		41	182+89	191+50	861	
169+75	171+02		127	183+17	184+31		114
169+75	170+86	137		184+63	185+56		93
171+10	171+45	60		185+70	186+49		79
171+16	172+42		126	186+63	187+04		41
171+82	172+88	106		187+18	187+93		75
172+60	173+94		134	188+07	189+52		145
173+06	174+02	96		189+66	190+56		90
174+08	174+60		52	190+70	191+50		80
174+31	174+87	56		191+50	192+66	116	
174+78	175+92		114	191+67	192+41		74
175+04	175+71	67		192+59	193+44		85
176+00	176+05	5		192+80	195+31	251	
176+06	176+70		64	193+61	195+21		160
176+50	177+10	60		195+35	196+66		131
176+84	177+05		21	195+45	196+68	123	
177+19	178+15		96	196+82	197+22	40	
177+24	178+28	104		196+83	196+98		15
178+29	179+48		119	197+12	198+94		182
178+42	179+00	58		197+36	198+33	97	
179+14	179+48	34		198+47	199+79	132	
179+48	179+96	48		199+26	0+39		110
179+67	180+25		58	199+93	201+46	153	
TOTALS		831	1995			2010	1720

PROJECT NAME _____
PROJECT NUMBER _____

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BRUNING 6508?