

DRAINAGE DETAIL SHEET



STATION km + m	STATION km + m	POS.	PIPE NO.	INLET/OUTLET TYPE		DITCH		PIPE ARCH			ALLOWABLE OPTIONS						PIPE ELBOW no. deg.	ES ea	CB ea	DI ea	MH ea	DEPTH OF STRUCT. mm	CONC. CLASS B m³	REINF. STEEL kg	CHAN. ELEV. ea	STRUC. T. GRATE type	TRENCH EXCAVATION		COMM. EXC. m³	UNC. CHAN. m³	STRUCT. EXCAV. m³	GRAN. BK/FILL m³	600 COUPLING BANDS ea	PERM. EROS. MATT m²	STONE FILL		MARKER POSTS		GEO. TEXTILE UNDER STONE FILL m²	REMARKS					
				INLET	OUTLET	IN	OUT	SPAN mm	RISE mm	L m	D mm	L m	PCCSP mm	CAAP mm	RCP CL	CSP mm											CPEP SL mm	PCCSP PI mm							EARTH m³	ROCK m³	VOL. m³	type			LT ea	RT ea			
SYSTEM "6" (CONTINUED)																																													
RAMP D																																													
D 1+100.0		LT-RT	634	DI634	HDWL		X			450	16.9	1.63	1.52							2260	1.57	171		1-A	27												1		1200x1200 DI @ INLET CONST. REINFORCED CONCRETE STRAIGHT HEADWALL AND STONE FILL TYPE II @ OUTLET						
D 1+100.0	D 1+140.0	LT	633	DI633	DI635					450	39.4	1.63	1.52		X					2110				1-B	15											1		1200x1200 DI @ INLET							
D 1+100.0	D 1+215.2	RT	6b	-	-															11.7	715					9810		92	81					48	II			CONST. VEG. TREATMENT SWALE 6B W/WWEIR							
D 1+140.0		LT	632	DI632	DI633					450	1.3				X					1800				1-B														1200x1200 DI @ INLET							
D 1+140.0	D 1+180.00	LT	631	DI631	DI633					450	39.3	1.63	1.52		X					1860				1-B													1		1200x1200 DI @ INLET						
D 1+180.0		LT	630	DI630	DI631					450	2.7				X					1800				1-B															1200x1200 DI @ INLET						
D 1+215.2	D 1+215.2	RT	661T	661T	661A					1200	1.6	2.77	2.67																									CONST. RISER BASE AND ANTI-VORTEX							
D 1+215.2	D 1+226.4	RT	661A	HDWL	MH661					1050	10.6	2.77	2.67							6.27	449																2		CONST. REINFORCED CONCRETE STRAIGHT HEADWALL AT INLET; CONST. ANTI-SEEP COLLARS AND CUTOFF TRENCH						
D 1+226.4	D 1+263.2	RT-LT	661B	MH661	DITCH					1050	46.3	2.77	2.67																									1		MH @ INLET; CONST. END SECTION AT OUTLET					
SLIP RAMP D																																													
DS 1+008.0	DS 1+015.0	LT-RT	641	DI641	CB640					450	11.5			III	X					1900				1-A	19															1200x1200 DI @ INLET					
DS 1+015.0	DS 1+030.0	RT-LT	640	CB640	CB636					450	17.3	1.63	1.52	III	X					2780				1-A	69															1		CB @ INLET			
DS 1+030.0	D 1+083.0	LT-RT	636	CB636	CB638					750	16.1	1.63	1.52	III	X					3770				1-A	109																CB @ INLET				
VT ROUTE 9																																													
VT 1+451.0	DS 1+015.0	RT-LT	642	CB642	CB640					450	4.4			III	X					3150				1-B	31																CB @ INLET				
VT 1+263.0	DRN 60+030.6	LT	613	CB613	DI612					600	25.6	1.63	1.52	III	X					2300				1-E	125															1		CB @ INLET			
VT 1+263.0	VT 1+320.0	LT	615	CB615	CB613					600	56.5	1.63	1.52	III	X					3600				1-E	145																CB @ INLET				
VT 1+263.0	VT 1+274.0	LT-RT	614	CB614	CB613					450	13.3			III	X					2950				1-E	27																CB @ INLET				
VT 1+320.0		LT-RT	616	CB616	CB615					450	10.8	1.63	1.52	III	X					3500				1-E	27																CB @ INLET				
VT 1+320.0	VT 1+365.0	LT	617	CB617	CB615					450	44.2			III	X					2920				1-E	126																CB @ INLET				
VT 1+320.0	VT 1+382.0	RT	618	DI618	CB616					450	60.8	1.63	1.52	III	X					2320				1-E	113																1200x1200 DI @ INLET				
VT 1+365.0	VT 1+401.0	LT	619	DI619	CB617					450	35.4	1.63	1.52	III	X					2220				1-E	100																1200x1200 DI @ INLET				
VT 1+451.0		LT-RT	643	CB643	CB642					450	10.5			III	X					2980				1-E	35																CB @ INLET. CONST. 2.0 M STUB AND CAP AT INLET.				
VT 1+451.0	VT 1+463.0	RT	644	DI644	CB643					450	11.1			III	X					2360				1-D	16																1200x1200 DI @ INLET				
VT 1+451.0	VT 1+463.0	LT	645	DI645	CB642					450	11.1			III	X					1870				1-D	16																1200x1200 DI @ INLET				
VT 1+513.0		LT-RT	647	CB647	CB646					450	17.2			III	X					2920				1-D	55																	CB @ INLET			
VT 1+513.0	VT 1+514.0	LT	646	CB646	HDWL		X			600	10.3	1.63	1.52							3110	2.18	234		1-D	75															42		CONST. REINFORCED CONCRETE STRAIGHT HEADWALL AND STONE FILL TYPE II @ OUTLET			
VT 1+513.0	VT 1+586.0	LT	648	CB648	CB646					600	72	1.63	1.52	III	X					3100				1-D	336																	CB @ INLET			
VT 1+513.0	VT 1+556.0	RT	651	DI651	CB647					450	42.2	1.63	1.52	III	X					1800				1-D	83																	1200x1200 DI @ INLET			
VT 1+586.0	VT 1+664.0	LT	654	CB654	CB648					600	76.8	1.63	1.52	III	X					3490				1-D	456																	1		CB @ INLET	
VT 1+572.0	VT 1+586.0	RT	650	DI650	CB649					450	16.0	1.63	1.52	III	X					1870				1-D	25																		1200x1200 DI @ INLET		
VT 1+586.0		LT-RT	649	CB649	CB648					450	11.1	1.63	1.52	III	X					2610				1-D	28																		CB @ INLET		
VT 1+680.0	VT 1+664.0	LT-RT	655	CB655	CB654					600	13.5	1.63	1.52	III	X					3070				1-A	97																		1		CB @ INLET
VT 1+680.0	VT 1+681.0	RT	656	DI656	CB655					450	20.1	1.63	1.52							2100				1-A	97																		1200x1200 DI @ INLET		
VT 1+681.0	VT 1+722.0	RT	656A	DI656A	DI656					450	40.6	1.63	1.52	III	X					2100				1-A	168																		1200x1200 DI @ INLET		
VT 1+722.0	VT 1+753.0	RT	657	DI657	DI656A					450	30.5	1.63	1.52	III	X					2100				1-A	125																		1200x1200 DI @ INLET		
VT 1+753.0	VT 1+775.0	RT	658	DI658	DI657					450	20.4	1.63	1.52	III	X					2100				1-A	64																		1200x1200 DI @ INLET		
VT 1+775.0	VT 1+800.5	RT	659	DI659	DI658					450	24.7	1.63	1.52	III	X					2100				1-A	130																		1200x1200 DI @ INLET		
SEE DRAINAGE DETAIL SHEET DDS-03 FOR ALL TOTALS																																													

PIPE ALLOWABLE OPTIONS
 #1: RCP, CPEP(SL)
 #2: PCCSP, CAAP
 #3: PCCSP, CAAP, CPEP (SL)
 #4: PCCSP, CAAP, RCP, CPEP (SL)

NOTES:
 1. CPEP(SL) NOT ALLOWABLE OPTION FOR PIPES OVER 900 MM DIAMETER
 2. GRATES/COVER FOR CB/MH/DI ARE PAID INCIDENTAL TO THOSE STRUCTURES
 3. EROS MATT COLUMN REFERS TO ITEM 653.20 TEMPORARY EROSION MATTING
 4. DEPTH OF STRUCTURE IS MEASURE AS GRATE ELEV TO FINISH FLOOR
 5. DROP INLETS ARE PRECAST (SEE SHEET MD-02), CATCH BASINS AND MANHOLES ARE CAST IN PLACE (REF STANDARD D-13)

RCP = REINFORCED CONCRETE PIPE
 CPEP(SL) = CORRUGATED POLYETHYLENE PIPE- SMOOTH LINED
 PCCSP = POLYMERIC COATED CORRUGATED STEEL PIPE
 CAAP = CORRUGATED ALUMINUM ALLOY PIPE

PROJECT NAME: **BENNINGTON**
 PROJECT NUMBER: **AC NH 019-1(51)**
 FILE NAME: **zd307c1dds.xls** PLOT DATE: **2/2/2009**
 PROJECT LEADER: **GREG EDWARDS** DRAWN BY: **STANTEC**
 DESIGNED BY: **MARC FOISY** CHECKED BY: **GARY SANTY**
DRAINAGE DETAIL DDS-02 SHEET **23** OF **367**