STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET #1

Metric

STATION km + m	STATION km + m	POS.	ASKEW no. deg.	INLET/OUTLET TYPE INLET	INLET/OUTLET TYPE OUTLET	DITCH IN	DITCH OUT	PIPE ARCH SPAN mm	PIPE ARCH RISE mm	PIPE ARCH L m	PIPE D mm	PIPE L m	ALLOWABLE OPTIONS PCCSP mm	ALLOWABLE OPTIONS CAAP mm	ALLOWABLE OPTIONS RCP CL	ALLOWABLE OPTIONS CSP mm	ALLOWABLE OPTIONS CPEP SL mm	ALLOWABLE OPTIONS PCCSP PI mm	PIPE ELBOW no. deg.	ES ea	CB ea	MANHOLE ea	PRECOST	DEPTH OF STRUCT. mm	DROP INLET CONC. CLASS m³	DROP INLET REINF. STEEL kg	CONCRETE HEADWALL CONC. CLAS m³	CONCRETE HEADWALL REINF. STEEL kg	STRUCT. GRATE type	TRENCH EXCAVATION (1) EARTH m³	TRENCH EXCAVATION (1) ROCK m³	COMM EXC m³	UNC CHAN m³	STRUCT EXCAV m³	GRAN BKFILL m³	GRAN BORR m³	EROS MATT m²	STONE FILL VOL m³	STONE FILL type	MARKER POSTS LT ea	MARKER POSTS RT ea	GEOTEXTILE UNDER SONTE FILL m²	REMARKS
MAINLINE NORTHBOUND																																										
NB 8+545.0	NB 8+585.3	LT-LT	451	HDWL	MH450						600	52.5	1.63	1.52														8.18	229		80.49								70	II			135	CONST. REINFORCED CONCRETE HEADWALL CONST STONE INLET PROTECTION, TYPE II CONST PIPE CONNECTION COLLARS AT 12 M INTERVALS.
NB 8+585.3	NB 8+607.0	LT-LT	450	MH450	STONE						900	20.0	2.01	1.91								1		2400					1-CVR	83.29							4	II	2		10	CONST STONE OUTLET PROTECTION, TYPE II MARKER POSTS AT STRUCTURE AND OUTLET
MAINLINE NORTHBOUND																																										
NB 8+698.2	NB 8+775.0	LT-LT	309	DI309	CB312						450	75.8	1.63	1.52	III		X							2100	3.08	142			2-B	212.42												1200x1800 DI
NB 8+775.0		RT-RT	310	DI310	CB311						450	3.8			III		X							1350	1.71	89			1-A	13.43										1		1200x1200 DI
NB 8+775.0		LT-RT	311	CB311	CB312						450	15.0			IV		X				1			2400					1-B	43.59												
NB 8+775.0		LT-LT	312	CB312	DI313						450	3.7	1.63	1.52	IV		X				1			3000					1-B	37.56												
NB 8+775.0	NB 8+875.0	LT-LT	313	DI313	DI315						450	99.5	1.63	1.52	III		X							2100	2.52	138			1-A	247.42									1		1200x1200 DI
NB 8+875.0		LT-RT	314	DI314	DI315						450	25.4			IV		X							1650	2.03	107			1-A	66.91										1		1200x1200 DI
NB 8+875.0	NB 8+955.0	LT-LT	315	DI315	CB317						450	79.2			III		X							1950	2.36	124			1-A	214.70									1		1200x1200 DI
NB 8+955.0		LT-RT	316	DI316	CB317						450	29.1			III		X							1200	1.55	86			1-A	59.50										1		1200x1200 DI
NB 8+955.0	NB 9+045.0	LT-LT	317	CB317	CB319						600	88.8	1.63	1.52							1			1800					1-A	500.88									1		
NB 9+100.0		RT	300																											108.00							64	II			142	CONST. SLOPE DITCH WITH STONE FILL, TYPE II
NB 9+045.0		LT-RT	318	DI318	CB319						450	30.4			III		X							1200	1.55	86			1-A	57.51										1		1200x1200 DI
NB 9+045.0	NB 9+130.0	LT-LT	319	CB319	CB321						600	84.2	1.63	1.52							1			1650					1-B	283.09									1		
NB 9+130.0		LT-RT	320	DI320	CB321						450	31.0			III		X							1350	1.71	89			1-B	64.08										1		1200x1200 DI
NB 9+225.0		LT-RT	322	DI322	DI323						450	19.1			III		X							1200	1.55	86			1-B	39.84									1	1	1200x1200 DI
NB 9+225.0	XO 1+310.5	LT-RT	323	DI323	CB324						450	18.3			III		X							1500	1.87	103			1-B	44.61									1		1200x1200 DI
NB 9+290.0	NB 9+295.0	LT-RT	328	DI328	DI329						450	20.7			IV		X							2100	2.52	138			1-B	68.68										1	1200x1200 DI
NB 9+295.0	XO 1+240.0	LT-RT	329	DI329	CB330						450	20.4			IV		X							1800	2.20	120			1-B	73.24									1		1200x1200 DI
NB 9+380.0		LT-RT	332	DI332	DI333						450	21.6	1.63	1.52	III		X							1200	1.55	86			1-B	45.86										1	1200x1200 DI
NB 9+380.0	XO 1+155.8	LT-RT	333	DI333	CB334						450	21.8	1.63	1.52	IV		X							1350	1.71	89			1-B	64.57										1	1200x1200 DI
NB 9+475.0		LT-RT	335	DI335	DI336						450	22.2	1.63	1.52	III		X							1200	1.55	86			1-B	41.18										1	1200x1200 DI
NB 9+475.0	XO 1+060.2	LT-RT	336	DI336	CB337						450	22.7			IV		X							1350	1.71	89			1-B	71.51									1		1200x1200 DI
NB 9+560.0		RT-LT	339	DI339	DI340						450	24.7	1.63	1.52	III		X							1200	1.55	86			1-B	47.62										1	1200x1200 DI
NB 9+560.0	XO 0+974.3	LT-RT	340	DI340	CB341						450	28.0			III		X							1350	1.71	89			1-B	59.81									1		1200x1200 DI
NB 9+650.0		RT-LT	343	DI343	DI344						450	26.2	1.63	1.52	IV		X							1200	1.55	86			1-B	52.94										1	1200x1200 DI
NB 9+650.0	XO 0+884.0	LT-RT	344	DI344	CB345						450	29.5			III		X							1350	1.71	89			1-B	65.11									1		1200x1200 DI
NB 9+650.0	NB 9+688.9	LT	345	CB345	CB346						900	75.4	2.01	1.91							1			3600					1-B	345.66									1		
NB 9+712.9	NB 9+737.2	LT	346	CB346	346A						1200	17.7	2.77	2.67							1			2400					1-B	85.03											
L																																										
L 1+382.9	L 1+319.9	LT	346A	346	CV309																																	203	II			650	CONST. SWALE WITH STONE FILL TYPE II
L 1+319.9	L 1+299.6	LT	CV309	346A	309A						1500	21.3		3.43																					75						
L 1+299.6	L 1+288.7	LT	309A	CV309	STONE																																	20	II			84	CONST. SWALE WITH STONE FILL TYPE II
L 1+288.7	L 1+260.4	LT	398A	309A	398B																																	120	II			400	CONST. FOREBAY STONE FILL TYPE IL
L 1+260.4	L 1+159.7	LT	398B	398B	MH398																																	61	I			200	CONST WETPOND. CONST. STONE FILL TYPE I AT INLET SEE EARTHWORKS SHEET.
SEE DRAINAGE DETAIL SHEET 3 FOR ALL TOTALS																																										

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

NOTE: 1. CPEP(SL) NOT ALLOWABLE OPTION FOR PIPES OVER 900 MM DIAMETER
2. GRATES/COVER FOR CB/MH ARE PAID UNDER THOSE STRUCTURES
3. GRATES FOR DI WILL BE PAID SEPARATELY

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

PROJECT NAME: BENNINGTON
PROJECT NUMBER: AC NH 019-1(53)

FILE NAME: zd307c3dds.xls
PROJECT LEADER: GREG EDWARDS
DESIGNED BY: JJS/MARC FOISY
DRAINAGE DETAIL SHEET #1

PLOT DATE: 5/17/2007
DRAWN BY: STANTEC
CHECKED BY: GARY SANTY
SHEET 20 OF 577