ITEM DETAIL AND DRAINAGE SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE STRUCTURES

STA.	STA.	POS.	ASKEW	TYPE IN	TYPE OUT	DITCH IN	DITCH OUT	REM/RST S	REM/RST L	PIPE OPTIONS D IN	PIPE OPTIONS L FT	PIPE OPTIONS OPT	PIPE OPTIONS CSP TH	PIPE OPTIONS RCP CL	PIPE OPTIONS PCCSP TH	PIPE OPTIONS CAAP TH	PIPE OPTIONS CGMPP TH	NO. PIPE ELBOW EA	ELBOWS D IN	ELBOWS TOP DEG	ELBOWS BOT DEG	ELBOWS 24" CPLG EA	ELBOWS ELB OPT	END SECTION EA	END SECTION OPT	DEPTH DI FT	CONC CL B CY	REIN STEEL LBS	DI GRATE TYPE	CHAN ELEV	C R M CY	TR EXCAV EARTH CY	TR EXCAV ROCK CY	UN-CLASS CHAN CY	COM EXCAV CY	STRUC EXCAV CY	GRAN BKF STRUC CY	STONE FILL TYPE	STONE FILL CY	MRKR POSTS LT	MRKR POSTS RT	REMARKS
MAINLINE																																										
487+50	~~487+50~~	LT RT	74°	HDWL	HDWL					42	252	G			0.109	0.105																35									
~~487+50~~	488+33	RT																												1.5		5						II	196	1		HEADWALL OUTLET TO ENERGY DISIPATION PAD (SEE DETAIL)
487+50		LT																												1.5		12										HEADWALL
495+00		LT																								4.0	2.0	184	A				8								1	
495+00	495+00	LT RT		DI	PAD					18	150	C			0.064	0.060																43	56						I	2	1		OUTLET PAD (14'X14'X1')
500+00	500+00	LT RT		PAD	PAD					24	192	D			0.064	0.060																10							II	84			STONE FILL INLET; OUTLET PAD (8'X8'X2')
488+00	491+35	LT																																					II	227			SPECIAL DITCH W/TYPE II STONE FILL
491+00	496+00	LT																																1843									TYPICAL CUT-OFF SWALE
496+00	499+00	LT																																819									TYPICAL CUT-OFF SWALE
492+00	498+75	LT																																									SPECIAL DITCH W/EROSION MATTING AND SEEDING
498+75	499+60	LT																																				II	95				SPECIAL DITCH W/TYPE II STONE FILL
504+85	504+85	LT RT		HDWL	HDWL					186	286						0.218																										CORRUGATED GALVANIZED PLATE PIPE, SEE SHEET BR701
495+25	500+00	RT																																									SPECIAL DITCH W/EROSION MATTING AND SEEDING
502+00	520+00	LT																																									SPECIAL DITCH W/EROSION MATTING AND SEEDING
506+50		LT																								3.5	1.8	161	A												1		
506+50	506+50	LT LT		DI	PAD					12	114	A			0.064	0.060		2	12	21	21	4	J									1						I	1			
512+00		LT																								3.5	1.8	161	A												1		
512+00	512+00	LT LT		DI	PAD					12	52	A			0.064	0.060																1						I	1	1		OUTLET PAD (4'X2'X1')
517+00		LT																								3.5	1.8	161	A														
517+00	517+00	LT		DI	PAD					12	58	A			0.064	0.060																1						I	1	1		OUTLET PAD (4'X2'X1')
515+63		LT RT	37	HDWL	HDWL					108	325					0.200	0.168																									C	ORRUGATED PIPE STRUCTURE OPTION, SEE SHEET BR801
520+00	522+00	RT																														180						II	180			4' WIDE SPECIAL DITCH
520+00	523+00	LT																																								4' WIDE SPECIAL DITCH
520+00	520+00	LT RT		HDWL	RCES					30	158			III																7.0		156										INCLUDES "L" SHAPED HEADWALL
520+00	524+00	LT																														180						II	180			4' WIDE SPECIAL DITCH
520+10	521+00	RT		MES	DI					30	94	E			0.079	0.075								1	M	5.5	2.5	223	B			172									
521+00	524+00	RT		DI	DI					30	300	E			0.079	0.075										4.5	2.1	192	B			357									
527+00	A-14+60	LT RT		DI	DI					18	100			III												5.0	2.3	215	B			95									
529+50	A-17+13	RT		DI	DI					24	56			III												5.5	2.5	223	B			95									
529+50	529+50	LT RT		DI	DI					18	100			III												4.0	2.0	199	B			72									
529+50	531+50	RT		DI	DI					24	200	D			0.064	0.060										6.0	2.6	246	B			230									
531+50	531+50	LT		DI	DI					18	56			III												4.5	2.1	192	B			50									
531+50	531+50	LT RT		DI	DI					18	56			III												5.0	2.3	232	B			62									
CVRR																																										
36+05	40+30	LT LT		HDWL	HDWL					78	425	STR	0.138			0.135	0.109																										CORRUGATED PIPE STRUCTURE OPTION, SEE SHEET BR10&1101
41+50		RT LT		HDWL	HDWL					60	59																																GALVANIZED STRUCTURAL STEEL LINER PLATE PIPE SEE SHEET BR10&1103
39+95	44+50	RT																																2380				II	1255				SPECIAL DITCH ALONG CVRR W/TYPE II STONE FILL
44+50	53+50	RT																																1164				I	737				SPECIAL DITCH ALONG CVRR W/TYPE I STONE FILL
44+50	53+50	LT																																1913				I	532				SPECIAL DITCH ALONG CVRR W/TYPE I STONE FILL
41+05																																											EXISTING BOX CULVERT TO BE CLEANED
43+17	44+47	LT		HDWL	HDWL					24	130	D			0.064	0.060																										
ROUTE 2A	RAMP A																																									
11+50	13+00	RT																																				I	22			ENHANCED EMBANKMENT DITCH W/TYPE I STONE FILL
15+00	17+50	RT																																				I	429			SPECIAL DITCH W/TYPE I STONE FILL
17+25	20+60	LT																																				I	159			SPECIAL DITCH W/TYPE I STONE FILL
17+50	22+50	RT																																								ENHANCED EMBANKMENT DITCH W/EROSION MATTING AND SEEDING
ROUTE 2A	RAMP B																																									
12+00	20+00	RT																																				I	110			ENHANCED EMBANKMENT DITCH W/TYPE I STONE FILL
18+50	22+20	LT																																								SPECIAL DITCH W/EROSION MATTING
ROUTE 2A	RAMP D																																									
12+00	13+00	RT																																								ENHANCED EMBANKMENT DITCH
13+00	19+00	RT																																				I	89			ENHANCED EMBANKMENT DITCH W/TYPE I STONE FILL
14+50	20+10	LT																																				I	249			SPECIAL DITCH W/TYPE I STONE FILL
19+00		RT																								4.0	2.0	184	A												1		
19+00	19+00	RT RT		DI	PAD					12	76	A			0.064	0.060		2	12	21	21	4	J															I	1		1	OUTLET PAD (8'X4'X1')
19+20		LT																								PRCC																
19+20	19+20	LT LT		DI	DITCH					12	28	A			0.064	0.060		2	12	21	21	4	J																		1	
21+60		LT																								PRCC																
21+60	21+60	LT LT		DI	DITCH					12	14	A			0.064	0.060																									1	
21+45	113+30 2A	LT RT																																				I	178			SPECIAL DITCH W/TYPE I STONE FILL
21+20	117+80 2A	RT RT																																				I	152			SPECIAL DITCH W/TYPE I STONE FILL
										OPTIONS				RCP	DIA																											
TOTALS										342		A		312	18			6	OPT. J			12		1	M	27.6	2573	5-A		15.4	1860	64	8119	0	0	0	I	2663	8	3	
										150		C		56	24													8-B										II	2217			
										522		D		158	30																							IV	0			
										394		E																														
										252		G																														

STA.	STA.	TYP.	POS.	D	L	TRENCH E	TRENCH R	CAR	FB	MKR PST
TOTALS										

UNDERDRAIN

STA.	STA.	TYP.	POS.	D	L	TRENCH E	TRENCH R	CAR	FB	MKR PST
CARRIED	FORWARD				7279	675	3548	285	0	4
MAINLINE										
520+00	521+00	RT	6		86	71		20		
520+00	525+75	LT	6		560	388		20		
521+00	524+00	LT	6		300	200				
527+00	530+50	LT	6		350	233				
528+50	529+50	RT	6		100	66				
529+50	530+50	RT	6		100	66				
ROUTE 15	RAMPS									
A-11+60	A-14+60	RT	6		300	200				
A-14+60	A-17+14	RT	6		250	167				
A-17+13	A-19+13	RT	6		200	133				
D-2+50	D-5+00	RT	6		230	167		20		1
D-5+20	D-11+20	RT	6		575	402		25	1	1
ROUTE 15										
10+50	14+50	LT	6		410	276				
11+60	15+00	RT	6		336	226				
23+50	24+45	LT	6		95	61				
24+51	29+45	LT	6		494	332				
22+40	23+10	LT	6			36		65	1	
TOTALS					11665	3699	3548	435	2	6

~~FINAL QUANTITIES ARE LOCATED ON THE COMPARISON SHEETS.~~

PROJECT NAME WILLISTON - COLCHESTER
PROJECT NUMBER PB 033-1(2)