* ALL COMPUTATIONS ARE IN THREE RING BINDERS

INVERT ELEVATIONS ARE FOR PIPE RUNS

ITEM DETAIL AND DRAINAGE SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE STRUCTURES

** SEE #600 SERIES, THREE RING BINDERS FOR QUANTITIES

LAYOUT CODE	STATION	STATION	POSITION	TYPE	DITCH		PIPE					Modified Structures w/composite grade ring							ES			MH			DI		CB					DEPTH	DI/CB	CHAN	CRM	TR EXCAV (2)		INLET	OUTLET	STRUC	Dense Graded Stone	GRAN	SOLID	STONE FILL **		Date Initials	REMARKS
				IN/OUT	IN	OUT	4"	6"	12"	18"	24"	MH (EA)			CB (EA)				12"	18"	24"	48"	60"	72"	30"x30"	(MOD.)	48"	60"	72"	96"	DI/CB	GRATE(1)	ELEV		EARTH	ROCK	ELEV.	ELEV.	EXCAV		BORR	ROCK				
							IN	IN	IN	IN	IN	48"	60"	72"	48"	60"	72"	96"				EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	FT	TYPE	EA	CY	CY	CY			CY	CY	CY	SY	CY	TYPE		
U-1	372+24		33' RT																																									EXISTING STRUCTURE TO REMAIN
U-2	372+75		35' RT																																									EXISTING STRUCTURE TO REMAIN
U-3	374+55		35' LT																													~~1~~												ADJUST EXISTING DI TO GRADE AND REMOVE 18" CMP NORTH
~~U-4~~	~~374+55~~		~~32' RT~~	~~OUT~~							~~10~~									1														~~6~~										~~EXTEND EXISTING 24" PIPE TO THE WEST WITH END SECTION~~ WORK NOT NEEDED AS PERMANENT DRAINAGE FROM CONTRAT #2 WAS BUILT
U-5	375+00		38' RT																																									REMOVE EXISTING PIPE
V-1	376+43	378+57	34' RT	CB/CB						~~212~~ 210																	1				7.0	E		~~66~~ 5.96		181.09	174.60		2.97					07/20/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 7-14-04 TO 7-20-04 10 LENGTHS + 13'
V-2	379+96	380+27	44' RT	DI/CB					~~34~~ 31																1						5.0	A		~~41~~ 3.45		172.73	169.74		——					07/20/04 GLW	12" OPTION PIPE, 30" X 30" DI WITH CI GRATE – TYPE A. CONNECT DI TO EXISTING 4" PVC 20" + 11'
~~V-3~~	~~375+06~~	~~375+42~~	~~52' LT~~	~~IN/OUT~~							~~36~~									1														~~11~~										~~24" OPTION PIPE WITH END SECTIONS~~
V-4	376+70		36' RT																																									REMOVE EXISTING STRUCTURE AND 18" CMP NORTH
V-5	377+50	380+82	48.5' LT	CB/CB						~~330~~ ✓																	1				7.5	E		~~109~~	~~15.6~~	176.86	169.0		3.28					06/09/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 6-3-04 TO 6-9-04 16 LENGTHS + 15'
V-6	378+57	380+27	34.5' RT	CB/CB						~~168~~ 167																	1				7.0	E		~~58~~ 10.03		174.60	169.74		4.04					07/13/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 6-3-04 TO 6-9-04 7 LENGTHS + 17'+12.5' / 12" PVC INLET
V-7	379+30		38' RT																																									REMOVE EXISTING 24" CMP AND HEADWALLS
V-8	380+50		37' RT																																									REMOVE EXISTING PIPE AND HEADWALL
V-9	377+50	377+50	10' LT	DI/CB						~~37~~ 36																	1				7.0	A		~~19~~ 2.81		177.78	177.32		1.11					06/11/04 GLW	18" OPTION PIPE, 30" X 30" DI WITH CI GRATE – TYPE A 6-11-04 1 LENGTH + 16'
V-10	380+82	382+50	44' LT	CB/CB						~~166~~ 164																	1				7.0	E		~~56~~ 6.31		169.0	166.10		3.15					06/02/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 6-1-04 TO 6-2-04 8 LENGTHS + 6'
V-11	380+45		41' LT								✓																																REMOVE EXISTING DI. PLUG AT ROW
V-12	380+27	382+50	30' RT	CB/CB			9			~~221~~ 220																	1				8.0	E		~~87~~ 8.69		169.42	165.80		5.06					07/08/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 7-6-04 TO 7-8-04 11 LENGTHS + 3' / 4" DRAIN INTO V-12
V-13	378+55		46' RT						11																																			EXTEND EXISTING 12" PVC 11' TO STRUCTURE V-6 (INCIDENTAL TO PIPE ITEMS) SEE ITEM #628.35 (0850)
V-14	380+04		59' RT							~~4~~																																			MATCH EXISTING 4" PVC INTO V-2 (INCIDENTAL TO PIPE ITEMS) SEE ITEM #628.35 (0855)
V-15	380+32		39' RT																																									EXTEND EXISTING 3" PVC 12' TO STRUCTURE V-12 (INCIDENTAL TO PIPE ITEMS) SEE ITEM #628.35 (0855)
V-16	379+93		54' RT																																									CUT EXISTING 12" PVC TO CUT LINE @ 379+97 (INCIDENTAL TO PIPE ITEMS) SEE ITEM #628.35 (0850)
V-17	380+93		34' RT																																									REMOVE EXISTING STRUCTURE AND PIPE TO THE NORTH
V-18	~~375+06~~ 375+04	375+54	53' LT	IN/OUT							~~48~~ 50									~~2~~ 1											2.5			~~15~~		183.75	183.10		——					25/25/04 STW	~~24" OPTION PIPE WITH END SECTIONS~~ PARAGON INSTALLED PIPE W/ END SECTION. CONTRACT #2 INSTALLED PERM. DRAINAGE WHICH ELIMINATED THE TEMP. SYSTEM
W-1	382+50	382+42	48' LT	CB/OUT							~~163~~ 160																~~1~~	1			8.5	E		~~121~~ 12.46		164.57	154.10		4.96					25/27/04 GLW	24" OPTION PIPE, ~~48"~~ DIA. CB WITH CI GRATE – TYPE E 60"
W-2	383+33		38' LT																																									REMOVE EXISTING STRUCTURE. PLUG EXISTING 24" RCP TO THE WEST CPH PLUGGED PIPE (90% CERTAINTY)
W-3	385+55	~~387+30~~ 387+32	30' RT	CB/CB						✓ 173																	1				8.5	E		~~74~~ 12.78	~~3.1~~	159.60	157.88		6.1 3.1					08/30/04 STW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E
W-4	383+32		33' RT																																									REMOVE EXISTING STRUCTURE AND EXISTING 3' x 2 1/2' CONC. BOX CULVERT TO THE WEST
W-5	383+31	382+50	52' RT	CB/CB			22			~~85~~ 82																	1				5.5	E		~~22~~ 8.27		166.29	165.74		3.89					07/27/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 4 LENGTHS + 3' / 4" PVC CONNECTED INTO W-5
W-6	383+43	383+31	46' RT	CB/CB						10																	1				5.0	E		~~7~~ 4.94		166.44	166.25		2.47					07/27/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E
W-7	*341+57	383+31	14' RT	CB/CB						~~107~~ 105	4																1				4.0	E		~~22~~ 5.06		166.28	172.38		2.53					07/30/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 7-29-04 TO 7-30-04 5 LENGTHS + 7' / 4" OF 24" CPEP(SL) TO TIE INTO PIPE FROM THE EAST
W-8	382+42		211' LT	OUT						24										1																					~~59~~	~~11~~		NEW MES. AND TYPE II STONE FILL AT OUTLET
W-10	*341+54		20' LT																																									REMOVE EXISTING STRUCTURE AND PIPE TO SOUTH
W-11	*341+55	*341+57	25' LT	CB/CB			55		36	~~36~~																	1				3.0	E		4.07		172.86	172.63		2.03					07/30/04 GLW	~~18"~~ OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E. CONNECT TO EXISTING PIPE TO EAST 12" 4" DRAIN INLET 1 LENGTH + 17.5'
W-12	*341+83		21' LT																																									REMOVE EXISTING DI & PIPE TO WEST
~~W-13~~	*341+58		~~53' LT~~	NOT DONE																													1												ADJUST EXISTING STRUCTURE TO GRADE
W-14	384+63	387+63	44' LT	CB/CB						~~298~~ 295																	1				7.0	E		~~88~~ 6.65		162.36	157.36		3.17 3.70					05/25/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 5-18-04 TO 5-25-04 15 LENGTHS
W-15	383+93	385+55	45' RT	CB/CB						~~160~~ 161																	1				8.0	E		~~70~~ 8.29		162.67	159.68		3.89					09/01/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 8-30-04 TO 9-01-04 7 LENGTHS +13'&10.5'
W-16	382+50	382+50	LT-RT	CB/CB							~~83~~ 82																~~1~~	1			7.5	E		~~43~~ 8.67		166.28	165.74		3.86					07/01/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 7-26-04 TO 7-27-04 4 LENGTHS +3'
W-17	385+55	385+55	56' RT	DI/CB						~~26~~ 25																	1				6.0	A		~~28~~ 5.33		164.26	160.10		2.07					08/30/04 GLW	18" OPTION PIPE, 30" X 30" DI WITH CI GRATE – TYPE A 8-30-04 4 LENGTHS +3'
W-18	*342+20	*341+55	30' LT	DI/CB					62																		1				5.5	A		~~3~~ 7.09		174.01	172.86		——					08/04/04 GLW	~~18"~~ OPTION PIPE, 30" X 30" DI WITH CI GRATE – TYPE A 12" USED TO TIE IN 8-03-04 TO 8-04-04 3 LENGTHS +3'
X-1	387+63	390+57	44' LT	CB/CB						~~292~~ 291																	1				7.0	E		~~119~~ 7.07		157.36	150.82		3.37					05/17/04 GLW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E 5-12-04 TO 5-17-04 14 LENGTHS +15'
X-2	~~387+30~~ 387+32	389+93	30' RT	CB/CB						~~261~~ 260																	1				7.0	E		~~79~~ 4.4	~~8.5~~	157.88	154.35		5.3					08/24/04 STW	18" OPTION PIPE, 48" DIA. CB WITH CI GRATE – TYPE E
X-3	NA																																										DID NOT USE
X-4	390+57	~~390+95~~ 391+00	44' LT	CB/OUT							~~56~~ 60									1									1		9.0	E		~~53~~ 20.3		150.85	149.09		5.3			~~4~~ 9.6	+	08/27/03 STW	24" OPTION PIPE, 72" DIA. CB WITH CI GRATE – TYPE E, AND END SECTION OUTLET MOVED SLIGHTLY TO NORTH TO FACILITATE PREVIOUSLY CONSTRUCTED OUTLET SWALE
COLUMN #1: SUB-TOTAL									129	2529	~~3097~~ 356									~~7~~ 3			~~4~~			~~16~~	1					~~2~~ 1	~~1206~~ 152.63					75.35			~~63~~			

NOTES: * = SIDE STREET OR JUGHANDLE OR DRIVE

(1) = GRATES ARE INCIDENTAL TO CATCH BASINS / DROP INLETS.

(2) = TRENCH ITEMS ARE INCIDENTAL TO CULVERTS, STORM DRAINS, UNDERDRAIN AND STONE OUTLETS. QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY.

(3) = FINAL QUANTITIES SHOWN IN RED

PROJECT NAME: U.S. ROUTE 7: SHELBURNE ROAD (F.A.P.)

PROJECT NUMBER: NH-EGC-019-4 (28)

DRAINAGE AS-BUILTS
ITEM DETAIL DRAWING NO. 1

SHEET 43AB OF 283 SHEETS

C:\6330008 (US Rte 7 Shelburne Rd)\AS-BUILTS\DRAINAGE\DRAINAGE-1_4rev.DWG, 6/28/2006 1:50:44 PM