DRAINAGE AND ITEM QUANTITY SHEET

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

PROJECT HARTFORD NO. HES-SOS-2194(4)

APPROXIMATE SUMMARY OF QUANTITIES

LANDSCAPING	EROSION CONTROL	BRIDGE	ROADWAY	GRAND TOTAL	UNIT	ITEM (● = NOT A BID ITEM)	ITEM NO.	RND.
			1	1	LS	CLEARING & GRUBBING plus INDIV. TREES	201.10	
			40	40	LF	REMOVAL & DISPOSAL OF EXIST. GUARDRAIL	202.40	1
			9200	9200	CY	COMMON EXCAVATION	203.15	24
			100	100	CY	SOLID ROCK EXCAVATION (EST.)	203.16	
			1	1	CY	EARTH BORROW (EST.)	203.30 ●	
			1800	1800	CY	SAND BORROW	203.31	8
			1325	1325	CY	GRANULAR BORROW	203.32	13
			1150	1150	CY	ROCK BORROW (EST.)	203.33	9
	27		1043	1070	CY	TRENCH EXCAVATION OF EARTH	204.20	
			1	1	CY	TRENCH EXCAVATION OF ROCK (EST.)	204.21 ●	
			1	1	CY	GRANULAR BACKFILL for STRUCTURES (EST.)	204.30 ●	
			1	1	SY	DRILLING & BLASTING OF SOLID ROCK SUBGRADE (EST.)	206.10 ●	
			750	750	SY	SCARIFYING EXISTING PAVEMENT	212.20	
	131		4189	4320	CY	SUBBASE OF GRAVEL	301.15	
			730	730	TON	PLANT MIXED BASE COURSE	303.25	
	26		874	900	CY	STRIPPING OF PITS	307.10	
			520	520	TON	BITUMINOUS CONCRETE PAVEMENT	406.25	
			7	7	CY	CONCRETE, CLASS B	501.25	06
			550	550	LB	REINFORCING STEEL	507.15	3
			430	430	LF	18" ACCGMP (.064)	601.1552	
			40	40	LF	24" ACCGMP (.064)	601.1572	
			124	124	LF	30" ACCGMP (.079)	601.1583	
						BEGIN OPTION PIPES		
			42	42	LF	12" ACCGMP (.064)	601.1532	
			42	42	LF	12" CAACP (.060)	601.2032	
			52	52	LF	15" CGMP (.064)	601.1792	
			52	52	LF	15" CAACP (.060)	601.2042	
			52	52	LF	15" RCP Class III	601.2613	
			1	1	EA	12" ACCGMP ELBOW (.064)	601.5532	
			1	1	EA	12" CAAP ELBOW (.060)	601.6032	
						END OPTION PIPES		
			3	3	EA	METAL END SECTION FOR 18" ACCGMP (.064)	601.6222	
			1	1	EA	METAL END SECTION FOR 30" ACCGMP (.079)	601.6243	
			1	1	EA	PRECAST REINFORCED CONC. CURB D.I.	604.30	
			1	1	EA	CAST IRON GRATE W/FRAME, TYPE A	604.45	
			2	2	EA	CAST IRON GRATE W/FRAME, TYPE B	604.46	
			970	970	LF	6" UNDERDRAIN (EST)	605.101	
			120	120	LF	6" UNDERDRAIN CARRIER PIPE (EST.)	605.151	4
			2	2	EA	UNDERDRAIN FLUSHING BASINS (EST.)	605.95	
			60	60	HR	ROADWAY PATROL MAINTENANCE (EST.)	607.10	
	3		5	8	HR	BULLDOZER RENTAL, TYPE I (EST.)	608.10	
	3		5	6	HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I (EST.)	608.25	
	3			3	HR	TRUCK RENTAL (EST.)	608.37	
			100	100	M GAL	DUST CONTROL W/WATER (EST.)	609.10	
			1	1	TON	DUST & ICE CONTROL W/CALCIUM CHLORIDE (EST.)	609.15	
	445			445	CY	STONE FILL, TYPE I	613.10	
	10			10	CY	STONE FILL, TYPE II	613.11	
			340	340	LF	TREATED TIMBER CURB	616.35	
			8	8	EA	BOUNDARY MARKERS (EST.)	619.10	
			15	15	EA	WOOD MARKER POSTS	619.15	
			4	4	EA	REMOVING & RESETTING PROPERTY MARKERS (EST.)	619.20	
			600	600	LF	GUARD RAIL, STANDARD STEEL BEAM W/WOOD POST, TYPE II	621.28	
			4	4	EA	ANCHOR FOR STEEL BEAM GUARD RAIL W/WOOD POSTS	621.70	
			110	110	HR	UNIFORMED TRAFFIC OFFICERS	630.10	
			350	350	HR	FLAGPERSONS	630.15	
			1	1	LS	MOBILIZATION	635.10	
			850	850	LF	4" REFLECTORIZED WHITE LINES	646.10	
			2944	2944	LF	4" REFLECTORIZED YELLOW LINES	646.11	
			19	19	LF	24" STOP BARS	646.20	
	200			200	LB	SEED (INCLUDES 16 lbs. WINTER RYE)	651.10	6
	1110			1110	LB	FERTILIZER	651.15	
	5			5	TON	AGRICULTURAL LIMESTONE	651.20	
	6			6	TON	HAY MULCH	651.25	
	100			100	SY	EROSION MATTING	654.20	4
7				7	EA	SUGAR MAPLE (1¾"-2" Cal.) (B & B)	656.336	
			35	35	SF	TRAFFIC SIGNS, TYPE "A"	675.20	0.1
			208	208	LB	TRAFFIC SIGN POSTS, TYPE "A"	675.35	
			8	8	SF	REMOVING SIGNS	675.51	

DETAILED SUMMARY OF QUANTITIES

QUANTITY	UNIT	ITEM	RND.
		COMMON EXCAVATION	
4767	CY	MAINLINE (TH #49)	
337	CY	BEGIN APPROACH (TH #49)	
2126	CY	DECEL. LANE & TAPER (U.S. 4)	
146	CY	DRIVES & APPROACHES	
1800	CY	SAND BORROW (IN CUTS)	
24	CY	ROUND	
9200	CY	TOTAL	
		TRENCH EXCAVATION OF EARTH	
407	CY	PIPES	
83	CY	SPECIAL DITCHES	
529	CY	UNDERDRAIN (EST.)	
18	CY	TEST TRENCH	
6	CY	ROUND	
1043	CY	TOTAL	
		SUBBASE OF GRAVEL	
3116	CY	MAINLINE (H304)	
205	CY	BEGIN APPROACH	
201	CY	TH #49 & US 4 INTERSECTION	
363	CY	DECEL. LANE & TAPER	
290	CY	DRIVES & APPROACHES	
14	CY	ROUND	
4189	CY	TOTAL	
		PLANT MIXED BASE COURSE	
554	TON	MAINLINE (H304)	
43	TON	BEGIN APPROACH	
61	TON	TH #49 & US 4 INTERSECTION	
66	TON	DECEL. LANE & TAPER	
6	TON	ROUND	
730	TON	TOTAL	
		BITUMINOUS CONCRETE PAV'T.	
264	TON	MAINLINE PAV'T. (H304)	
158	TON	MAINLINE SHOULDERS (H304)	
44	TON	DECEL. LANE & TAPER	
21	TON	TH #49 & US 4 INTERSECTION	
29	TON	BEGIN APPROACH	
4	TON	ROUND	
520	TON	TOTAL	
		TEMPORARY EROSION CONTROL	
27	CY	TRENCH EXCAVATION OF EARTH	
131	CY	SUBBASE OF GRAVEL	
26	CY	STRIPPING OF PITS	
3	HR	BULLDOZER RENTAL, TYPE I	
3	HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	
13	CY	STONE FILL, TYPE I	
16	LB	SEED, WINTER RYE	
1	TON	HAY MULCH	
52	SY	EROSION MATTING	
3	HR	TRUCK RENTAL	

DRAINAGE STRUCTURES

STA.	STA.	POS.	ASKEW	TYPE IN / OUT	DITCH IN	DITCH OUT	24" ELBOW CPL. BAND	24" ELBOW D IN	24" ELBOW ∡	ACCGMP D IN	ACCGMP L FT.	ACCGMP TH.	MES	PRC CDI	EROS. MATTING SY	OPTION D IN	OPTION L FT.	RCP CL.	C.G. M.P. TH.	CAA C.P. TH.	DEPTH D.I.	CONC. CL. B CY.	REIN. STEEL LBS.	D.I. GRATE TYPE	TR. EXCAV. EARTH C.Y.	TR. EXCAV. ROCK C.Y.	STONE FILL C.Y.	FILL TYPE	WOOD MRK. POSTS LT.	WOOD MRK. POSTS RT.	REMARKS
TH #49																															
35+10	35+72	Lt.		RCDI /						18"	64	.064									3.5	19	158	A	41				1	1	Remove Existing Dr. Culv.
35+32		℄	38°20' R.	MES /						30"	124	.079	1-30"												104		10	II	1	1	Remove Existing 18" ACC.
35+50		Lt.																							7						Remove Existing Dr. Culvert
35+72	39+80	Lt.																									121	I			CONSTRUCT SPECIAL DITCH W/SEI ITEM 203.15
37+50	39+90	Rt.																									74	I			CONSTRUCT SPECIAL DITCH W/SEI ITEM 203.15
39+00	39+42	Rt.		PRCCDI /			✓	1-12"	80°					1		12"	42		.064	.060					7					1	
40+03	40+41	Rt. ~ Lt.		MES /	✓	✓				18"	72	.064	1-18"												71		16	I	1	1	INLET & OUTLET DITCHES W/SEI TYPE I
40+75	43+60	Lt.																									84	I			CONSTRUCT SPECIAL DITCH W/S.E.I. ITEM 203.15
43+08		Rt.								24"	40	.064													5				1	1	Remove Existing Dr. Culv.
43+27	43+63	Rt. ~ Lt.		MES /			✓			18"	66	.064	1-18"												7				1	1	
43+64	46+20																										80	I			CONSTR. SPECIAL DITCH W/SEI ITEM 203.15
46+17		℄	60° Lt.	MES /		✓				18"	80	.064	1-18"												21		1	I	1	1	EXISTING 18" PIPE REMOVE CONSTR. OUTLET DITCH W/SEI
46+30	48+25	Lt.																							83		54	I			CONST. SPECIAL DITCH W/SEI ITEM 203.20
49+50	49+62	Rt. ~ Lt.		RCDI /		✓				18"	90	.064									3.5	1.9	158	B	27		1	I	1	1	CONST. OUTLET DITCH W/SEI
49+59		℄	73° Lt.																						26						EXISTING 18" RCP REMOVE
	U.S. Route 4																														
268+75	269+12	Lt. ~ Rt.		RCDI /		✓				18"	60	.064									5.0	2.6	231	B	43		1	I			CONST. OUTLET DITCH W/SEI
269+05		℄	67° Rt.																						53						EXISTING 15" RCP REMOVE
270+75	271+36	Lt.													27																Erosion Matting
271+65		Lt.														15"	52	III	.064	.060											Drive pipe (in ditch)
271+87	272+25	Lt.													17																Erosion Matting
TOTALS							1-12"	80°	18"	430	.064	3-18"																	7-8		
									24"	40	.064			1	44	12"	42		.064	.060		6.4	547	1-A	490		432	I		15	
									30"	124	.079	1-30"				15"	52	III	.064	.060				2-B			10	II			

UNDERDRAIN

STA.	STA.	TYP	POS.	D	L	TE	TR	FB	MP
35+70	39+90	U	LT.	6"	420	257		1	
42+50	42+70	C	LT.	6"	66	29			
42+70	46+20	U	LT.	6"	350	143	52		
ESTIMATED		U			200	80	30	1	
		C			50	20	8		
TOTALS					1086	529	90	2	

Guard Rail, Standard Steel Beam W/Wood Posts, Type II

STA.	STA.	POS.	LENGTH	621.70 ANCHORS
39+30	42+99	Rt.	375'	2
43+17	45+36	Rt.	225'	2
TOTAL			600	4

Treated Timber Curb

STA.	STA.	POS.	LENGTH
39+40	42+80	Rt.	340'

Removal & Disposal of Existing Guard Rail

STA.	STA.	POS	LENGTH
268+70	269+07	Lt.	39'

LENGTH OF PROJECT

STA.	STA.	FEET	MILES	REMARKS
36+00	49+85	1385.0	0.262	EXCLUDES DECELERATION LANE ON U.S. ROUTE 4.

HARTFORD

PROJECT HES-SOS 2194(4)

SHEET 3 OF 60

D-8