STATE OF VERMONT
AGENCY OF TRANSPORTATION

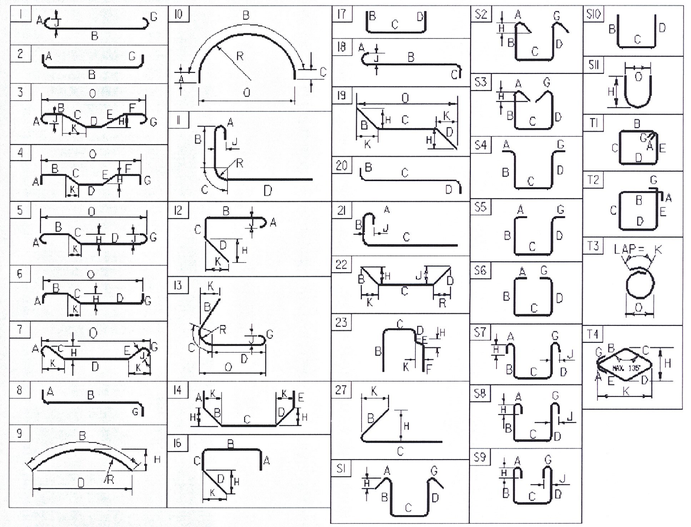
REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
OVERLAY & CURB																	
	2	5	1'- 6"	S501.2	STR						3,129#						
	2	5	2'- 6"	S502.2	STR						5,215#						
	2	5	3'- 6"	S503.2	STR						7,301#						
	2	5	4'- 6"	S504.2	STR						9,387#						
✳	3	5	5'- 6"	S505.2	STR						11,210#						
	2	5	6'- 6"	S506.2	STR						13,559#						
	2	5	7'- 6"	S507.2	STR						15,645#						
	2	5	8'- 6"	S508.2	STR						17,731#						
	2	5	9'- 6"	S509.2	STR						19,817#						
	2	5	10'- 6"	S510.2	STR						21,903#						
	2	5	11'- 6"	S511.2	STR						23,989#						
	2	5	12'- 6"	S512.2	STR						26,075#						
	2	5	13'- 6"	S513.2	STR						28,161#						
	2	5	14'- 6"	S514.2	STR						30,247#						
	2	5	15'- 6"	S515.2	STR						32,333#						
	2	5	16'- 6"	S516.2	STR						34,419#						
	2	5	17'- 6"	S517.2	STR						36,505#						
	2	5	18'- 6"	S518.2	STR						38,591#						
	2	5	19'- 6"	S519.2	STR						40,677#						
	2	5	20'- 6"	S520.2	STR						42,763#						
	2	5	21'- 6"	S521.2	STR						44,849#						
	2	5	22'- 6"	S522.2	STR						46,935#						
	2	5	23'- 6"	S523.2	STR						49,021#						
	2	5	24'- 6"	S524.2	STR						51,107#						
	20	5	25'- 6"	S525.2	STR						531,930#						
	27	5	44'- 9"	S526.2	STR						1,260,205#						
	4	5	47'- 1"	S527.2	STR						196,418#						
	2	5	44'- 1"	S528.2	STR						91,951#						
	2	5	46'- 9"	S529.2	STR						97,521#						
										Subtotal =	2,834,594#						
ABUTMENT NO. 1																	
✳	39	5	9'- 6"	1A501	STR						386,432#						
	22	5	26'- 8"	1A502	STR						611,970#						
	38	5	7'- 4"	1A503	17		6'- 6"	0'- 10"	0'- 0"		290,517#						
	38	5	12'- 10"	1A504	STR						508,524#						
	38	5	7'- 8"	1A505	STR						303,993#						
	38	5	7'- 3"	1A506	16	2'- 2"	2'- 6"	1'- 2"	1'- 5"		281,547#	1'- 0"		1'- 0"			
	38	5	40'- 9"	1A507	STR						1,615,086#						
	17	5	4'- 0"	1A508	22		2'- 0"	2'- 0"	0'- 0"		70,424#	1'- 6"	0'- 0"	1'- 6"	0'- 0"		
	17	5	6'- 4"	1A509	22		3'- 0"	3'- 4"	0'- 0"		112,237#	2'- 1"	0'- 0"	2'- 1"	0'- 0"		
	17	5	6'- 9"	1A510	22		3'- 7"	3'- 2"	0'- 0"		119,684#	2'- 9"	0'- 0"	2'- 7"	0'- 0"		
	38	5	5'- 11"	1A510	17		2'- 2"	1'- 7"	2'- 2"		234,633#						
	74	7	11'- 7"	1A701	17		7'- 0"	4'- 7"	0'- 0"		1,751,544#						
✳	39	7	8'- 10"	1A702	STR						1,103,209#						
	10	8	4'- 3"	1A801	STR						113,475#						
✳	39	8	9'- 6"	1A802	STR						989,235#						
	24	8	4'- 0"	1A803.2	14	2'- 3"	1'- 9"	0'- 0"	0'- 0"	0'- 0"	256,320#	1'- 3"		1'- 3"			
										Subtotal =	8,356,793#	fm 1-15-15 M.W.H. 1/15/15					
WINGWALL NO. 1																	
	22	5	26'- 3"	1W501	STR						602,333#						
	14	5	9'- 6"	1W502	STR						138,719#						
	14	5	5'- 5"	1W503	17		4'- 5"	1'- 0"	0'- 0"		79,143#						
▲	14	5	15'- 8"	1W504	STR						228,813#						
▲	34	5	12'- 8"	1W505	STR						449,804#						
	14	5	8'- 1"	1W506	STR						117,984#						
	14	7	11'- 7"	1W701	17		7'- 1"	4'- 6"	0'- 0"		336,373#						
	13	7	8'- 3"	1W702	17		7'- 1"	1'- 2"	0'- 0"		219,219#						
✳	15	7	8'- 10"	1W703	STR						270,128#						
	4	8	4'- 3"	1W801	STR						45,390#						
✳	15	9	9'- 6"	1W901	STR						484,500#						
	14	5	4'- 7"	1W507.2	STR						66,877#						
	2	5	9'- 4"	1W508.2	STR						19,462#						
	2	5	5'- 2"	1W509.2	STR						10,785#						
	3	5	8'- 11"	1W510.2	19		0'- 0"	1'- 10"	7'- 1"		27,911#	2'- 1"	6'- 8"			8'- 6"	
	3	5	5'- 10"	1W511.2	S10		2'- 2"	1'- 6"	2'- 2"		18,242#						
	1	5	5'- 2"	1W512.2	S10		1'- 10"	1'- 6"	1'- 10"		5,392#						
	1	5	4'- 8"	1W513.2	S10		1'- 7"	1'- 6"	1'- 7"		4,871#						
	1	5	4'- 0"	1W514.2	S10		1'- 3"	1'- 6"	1'- 3"		4,172#						
	1	5	3'- 6"	1W515.2	S10		1'- 0"	1'- 6"	1'- 0"		3,651#						
										Subtotal =	3,188,869#	fm 1-15-15 M.W.H. 1/15/15					
WINGWALL NO. 2																	
	22	5	24'- 7"	2W501	STR						564,013#						
▲	23	5	9'- 6"	2W502	STR						227,896#						
	23	5	5'- 5"	2W503	17		4'- 6"	0'- 11"	0'- 0"		130,020#						
	23	5	14'- 7"	2W504	STR						349,760#						
	32	5	21'- 8"	2W505	STR						723,258#						
	23	7	5'- 11"	2W701	STR						278,311#						
	23	7	9'- 8"	2W702	STR						454,606#						
	23	7	10'- 1"	2W703	STR						473,881#						
										Subtotal =	3,201,745#	fm 1-15-15 M.W.H. 1/20/15					

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	6	8	4'- 3"	1W801	STR						68,085#						
	23	9	7'- 8"	2W901	17		6'- 6"	1'- 2"	0'- 0"		599,794#						
	22	9	9'- 9"	2W902	17		6'- 6"	3'- 3"	0'- 0"		729,306#						
✳	24	10	9'- 6"	2W1001	STR						981,084#						
	46	5	4'- 6"	2W506.2	STR						215,901#						
✳	8	5	21'- 8"	2W507.2	STR						180,814#						
	23	5	5'- 1"	2W508.2	S10		2'- 2"	0'- 9"	2'- 2"		121,864#						
									Subtotal =		8,896,842#	fm 1-15-15 M.W.H. 1/20/15					
APPROACH SLAB NO. 1																	
	18	5	33'- 0"	1AS501.2	STR						619,542#						
✳	34	9	25'- 6"	1AS901.2	1	1'- 3"	24'- 3"				2,947,800#			0'- 11"			
									Subtotal =		3,567,342#	fm 1-15-15 M.W.H. 1/15/15					
ABUTMENT NO. 2																	
	36	5	7'- 6"	2A501	STR						281,610#						
▲	18	5	38'- 10"	2A502	STR						728,994#						
	36	5	5'- 0"	2A503	17		4'- 2"	0'- 10"	0'- 0"		187,740#						
	36	5	9'- 1"	2A504	STR						340,936#						
	36	5	7'- 8"	2A505	STR						287,993#						
	36	5	7'- 3"	2A506	16	2'- 2"	2'- 6"	1'- 2"	1'- 5"		272,223#	1'- 0"		1'- 0"			
	26	5	36'- 6"	2A507	STR						989,807#						
	11	5	4'- 0"	2A508	22		2'- 0"	2'- 0"	0'- 0"		45,892#	1'- 6"	0'- 0"	1'- 6"	0'- 0"		
	11	5	6'- 4"	2A509	22		3'- 0"	3'- 4"	0'- 0"		72,624#	2'- 1"	0'- 0"	2'- 1"	0'- 0"		
	11	5	6'- 9"	2A510	22		3'- 7"	3'- 2"	0'- 0"		77,443#	2'- 7"	0'- 0"	2'- 7"	0'- 0"		
	11	5	3'- 10"	2A511	27		1'- 11"	1'- 11"			43,942#	1'- 5"		1'- 5"			
	11	5	7'- 8"	2A512	22		1'- 10"	4'- 0"	1'- 10"		87,998#	1'- 9"	1'- 9"	0'- 9"	0'- 9"		
	36	5	5'- 11"	2A513	17		2'- 2"	1'- 7"	2'- 2"		222,284#						
✳	37	6	7'- 6"	2A601	STR						416,805#						
	9	8	3'- 9"	2A801	STR						90,113#						
✳	37	9	8'- 5"	2A901	17		6'- 0"	2'- 5"	0'- 0"		1,059,236#						
	22	8	4'- 0"	2A802.2	14	2'- 3"	1'- 9"	0'- 0"	0'- 0"	0'- 0"	234,960#	1'- 3"		1'- 3"			
										Subtotal =	5,440,600#	fm 1-15-15 M.W.H. 1/20/15					
WINGWALL NO. 3																	
✳ ▲	35	5	8'- 0"	3W501	STR						292,046#						
▲	18	5	29'- 1"	3W502	STR						545,948#						
	28	5	4'- 9"	3W503	17		3'- 10"	0'- 11"	0'- 0"		138,719#						
	22	5	9'- 6"	3W504	STR						217,987#						
	6	5	7'- 6"	3W505	STR						46,935#						
	22	5	8'- 8"	3W506	STR						198,942#						
	6	5	6'- 8"	3W507	STR						41,741#						
▲	22	5	26'- 4"	3W509	STR						604,168#						
	18	5	36'- 0"	3W512	STR						675,864#						
	37	5	7'- 6"	3W513	STR						289,433#						
	37	5	4'- 10"	3W514	17		3'- 11"	0'- 11"	0'- 0"		186,395#						
	14	5	36'- 0"	3W516	STR						525,672#						
	9	5	12'- 2"	3W519	17		3'- 6"	8'- 8"	0'- 0"		114,240#						
	9	5	5'- 6"	3W520	17		3'- 4"	2'- 2"	0'- 0"		51,639#						
	9	5	13'- 4"	3W521	19		2'- 2"	9'- 0"	2'- 0"		125,129#		0'- 11"		1'- 10"		12'- 9"
	37	6	7'- 4"	3W601	17		4'- 1"	3'- 3"	0'- 0"		407,357#						
	37	7	7'- 6"	3W701	STR						582,210#						
	16	8	3'- 9"	3W801	STR						160,200#						
	29	8	8'- 0"	3W802	STR						619,440#						
	56	9	8'- 1"	3W901	17		4'- 10"	3'- 3"	0'- 0"		1,538,432#						
	56	5	5'- 3"	3W508.2	STR						306,642#						
	9	5	25'- 0"	3W510.2	STR						234,675#						
	28	5	6'- 1"	3W511.2	S10		2'- 8"	0'- 9"	2'- 8"		177,560#						
	74	5	8'- 9"	3W515.2	STR						675,343#						
	11	5	36'- 0"	3W517.2	STR						413,028#						
	37	5	6'- 9"	3W518.2	S10		3'- 0"	0'- 9"	3'- 0"		260,489#						
									Subtotal =		9,415,218#	fm 1-15-15 M.W.H. 1/20/15					
WINGWALL NO. 4																	
	8	5	8'- 0"	4W501	STR						66,752#						
▲	18	5	9'- 10"	4W502	STR						184,548#						
	8	5	4'- 9"	4W503	17		3'- 10"	0'- 11"	0'- 0"		39,634#						
	8	5	9'- 8"	4W504	STR						80,686#						
	8	5	9'- 2"	4W505	STR						76,514#						
▲	22	5	8'- 0"	4W507	STR						183,568#						
	3	8	3'- 9"	4W801	STR						30,038#						
	8	8	8'- 0"	4W802	STR						170,880#						
	8	9	8'- 1"	4W901	17		4'- 10"	3'- 3"	0'- 0"		319,776#						
	14	5	5'- 3"	4W506.2	STR						76,661#						
✳	8	5	5'- 5"	4W508.2	STR						45,224#						
	7	5	6'- 9"	4W509.2	S10		3'- 0"	0'- 9"	3'- 0"		49,282#						
									Subtotal =		1,223,563#	fm 1-15-15 M.W.H. 1/20/15					

~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	AREA INCHES²	PERIMETER INCHES
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX. .1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORRIOSION LEVEL WILL BE RECORDED ON THE PLANSET P1 SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

VHB *Vanasse Hangen Brustlin, Inc.*

PROJECT NAME: **BRATTLEBORO**
PROJECT NUMBER: **BRO 1442 (35)**

FILE NAME: **z10j062rss.dgn**
PROJECT MANAGER: **S.E. BURBANK**
DESIGNED BY: **E.A FIALA**
REINFORCING STEEL SCHEDULE (1 OF 2)

PLOT DATE: **6/5/2013**
DRAWN BY: **E.A FIALA**
CHECKED BY: **S.E. BURBANK**
SHEET **49** OF **68**