STATE OF VERMONT
AGENCY OF TRANSPORTATION

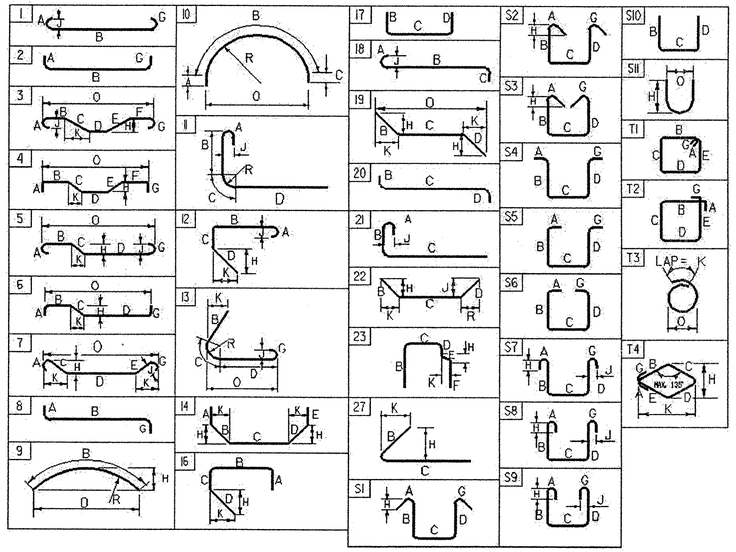
REINFORCING STEEL SCHEDULE

	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
SUPERSTRUCTURE																	
SPAN ONE																	
▲	153	5	12'- 9"	ES503	STR												
▲	153	5	19'- 3"	ES504	STR												
▲	153	5	25'- 9"	ES505	STR												
▲	153	5	10'- 9"	ES506	STR												
	10	5	19'- 3"	ES517	STR												
	112	5	54'- 0"	ES521	STR												
	109	5	5'- 3"	ES507	1	0'- 7"	4'- 8"										
	109	5	5'- 10"	ES508	1	0'- 7"	5'- 3"										
	4	5	3'- 2"	ES510	19		1'- 0"	2'- 2"					0'- 6"				
✳	34	5	10'- 10"	ES511	16	1'- 3"	2'- 6"	6'- 1"	1'- 0"								
	5	5	5'- 0"	ES512	19		2'- 2"	2'- 10"					1'- 6"				
	32	5	2'- 8"	ES513	16	---	---	1'- 2"	1'- 6"								
	5	5	5'- 7"	ES514	19		2'- 2"	3'- 5"					1'- 8"				
	24	5	10'- 5"	ES515	S5	1'- 6"	3'- 3"	0'- 8"	3'- 6"			1'- 6"					
	3	5	11'- 5"	ES516	S5	1'- 6"	3'- 3"	1'- 8"	3'- 6"			1'- 6"					
	31	5	5'- 3"	ES519	S5	1'- 6"	0'- 10"	1'- 2"	0'- 3"			1'- 6"					
	3	5	9'- 1"	ES520	S5	1'- 6"	2'- 7"	0'- 8"	2'- 10"			1'- 6"					
	210	5	6'- 1"	ES523	S5	1'- 0"	1'- 4"	1'- 5"	1'- 4"			1'- 0"					
SPAN TWO																	
▲	159	5	12'- 9"	ES503	STR												
▲	159	5	19'- 3"	ES504	STR												
▲	159	5	25'- 9"	ES505	STR												
▲	159	5	10'- 9"	ES506	STR												
	10	5	19'- 3"	ES517	STR												
	222	5	47'- 7"	ES525	STR												
✳	35	5	12'- 0"	ES527	STR												
	115	5	5'- 3"	ES507	1	0'- 7"	4'- 8"										
	203	5	5'- 10"	ES508	1	0'- 7"	5'- 3"										
	31	5	5'- 3"	ES519	S5	1'- 6"	0'- 10"	1'- 2"	0'- 3"			1'- 6"					
	318	5	6'- 1"	ES523	S5	1'- 0"	1'- 4"	1'- 5"	1'- 4"			1'- 0"					
SPAN THREE																	
▲	109	5	12'- 9"	ES503	STR												
▲	109	5	19'- 3"	ES504	STR												
▲	109	5	25'- 9"	ES505	STR												
▲	109	5	10'- 9"	ES506	STR												
	112	5	47'- 7"	ES525	STR												
	34	5	13'- 0"	ES529	STR												
	4	5	13'- 0"	ES529	STR												
	109	5	5'- 3"	ES507	1	0'- 7"	4'- 8"										
✳	110	5	5'- 10"	ES508	1	0'- 7"	5'- 3"										
	210	5	6'- 1"	ES523	S5	1'- 0"	1'- 4"	1'- 5"	1'- 4"			1'- 0"					
SPAN FOUR																	
✳ ▲	189	5	12'- 9"	ES503	STR												
▲	188	5	19'- 3"	ES504	STR												
▲	188	5	25'- 9"	ES505	STR												
▲	188	5	10'- 9"	ES506	STR												
	10	5	19'- 3"	ES517	STR												
	222	5	47'- 7"	ES525	STR												
	188	5	5'- 3"	ES507	1	0'- 7"	4'- 8"										
✳	145	5	5'- 10"	ES508	1	0'- 7"	5'- 3"										
	31	5	5'- 3"	ES519	S5	1'- 6"	0'- 10"	1'- 2"	0'- 3"			1'- 6"					
	384	5	6'- 1"	ES523	S5	1'- 0"	1'- 4"	1'- 5"	1'- 4"			1'- 0"					
SPAN FIVE																	
▲	234	5	12'- 9"	ES503	STR												
▲	232	5	19'- 3"	ES504	STR												
▲	234	5	25'- 9"	ES505	STR												
▲	232	5	10'- 9"	ES506	STR												
▲	28	5	19'- 3"	ES509	STR												
	10	5	19'- 3"	ES517	STR												
	321	5	33'- 6"	ES531	STR												
	190	5	5'- 3"	ES507	1	0'- 7"	4'- 8"										
✳	189	5	5'- 10"	ES508	1	0'- 7"	5'- 3"										
	24	5	11'- 0"	ES518	S5	1'- 6"	3'- 5"	0'- 11"	3'- 8"			1'- 6"					
	31	5	5'- 3"	ES519	S5	1'- 6"	0'- 10"	1'- 2"	0'- 3"			1'- 6"					
	2	5	13'- 1"	ES522	S5	1'- 6"	3'- 5"	2'- 3"	3'- 8"			1'- 6"					
	354	5	6'- 1"	ES523	S5	1'- 0"	1'- 4"	1'- 5"	1'- 4"			1'- 0"					
✳	33	5	11'- 1"	ES524	16	1'- 3"	2'- 9"	6'- 1"	1'- 0"								
	32	5	2'- 11"	ES526	16	---	---	1'- 5"	1'- 6"								
	4	5	3'- 2"	ES532	19		1'- 0"	2'- 2"					0'- 6"				
	5	5	3'- 10"	ES533	19		1'- 8"	2'- 2"					1'- 4"				
	5	5	4'- 7"	ES534	19		2'- 2"	2'- 5"					1'- 10"				

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
APPROACH SLAB NUMBER ONE																	
	26	5	48'- 0"	1EAS503	STR												
	16	8	2'- 7"	1EAS801	22			1'- 9"	0'- 10"	---							
✳	44	9	25'- 9"	1EAS901	1	1'- 3"	24'- 6"							0'- 11"			
APPROACH SLAB NUMBER TWO																	
✳	26	5	48'- 0"	2EAS503	STR												
	16	8	2'- 7"	2EAS801	22			1'- 9"	0'- 10"	---							
	44	9	25'- 9"	2EAS901	1	1'- 3"	24'- 6"							0'- 11"			
ABUTMENT ONE																	
SOUTH WINGWALL																	
⑦	7	5	7'- 1"	1W501	STR												
	7	5	4'- 6"	1W505	S10		3'- 0"	1'- 6"	---								
	7	5	4'- 6"	1W506	S10		3'- 0"	1'- 6"	---								
NORTH WINGWALL																	
	5	5	11'- 1"	1W503	STR												
	12	5	4'- 6"	1W505	S10		3'- 0"	1'- 6"	---								
	12	5	4'- 6"	1W506	S10		3'- 0"	1'- 6"	---								
ABUTMENT TWO																	
SOUTH WINGWALL																	
	5	5	34'- 6"	2W502	STR												
	35	5	4'- 6"	1W505	S10		3'- 0"	1'- 6"	---								
	35	5	4'- 6"	1W506	S10		3'- 0"	1'- 6"	---								
NORTH WINGWALL																	
⑦	7	5	19'- 0"	2W504	STR												
	19	5	4'- 6"	1W505	S10		3'- 0"	1'- 6"	---								
	19	5	4'- 6"	1W506	S10		3'- 0"	1'- 6"	---								
PIER ONE																	
▲	30	5	5'- 4"	1P501	17		1'- 10"	1'- 8"	1'- 10"								
PIER THREE																	
▲	60	5	5'- 4"	3P501	17		1'- 10"	1'- 8"	1'- 10"								
PIER FOUR																	
▲	42	5	5'- 4"	4P501	17		1'- 10"	1'- 8"	1'- 10"								

~ 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. ⑦ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. "E" IN PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER INCHES	AREA INCHES^2	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

PROJECT NAME: **HARTLAND**
PROJECT NUMBER: **IM 091-1 (36)**

FILE NAME: **za272rs.xls**
PROJECT LEADER: **E JOHNSTON**
DESIGNED BY: **S YONGHO**
REINFORCING STEEL SCHEDULE SHEET #1

PLOT DATE: **12/10/2002**
DRAWN BY: **N HERRERA**
CHECKED BY: **E JOHNSTON**
SHEET **40** OF **85**