

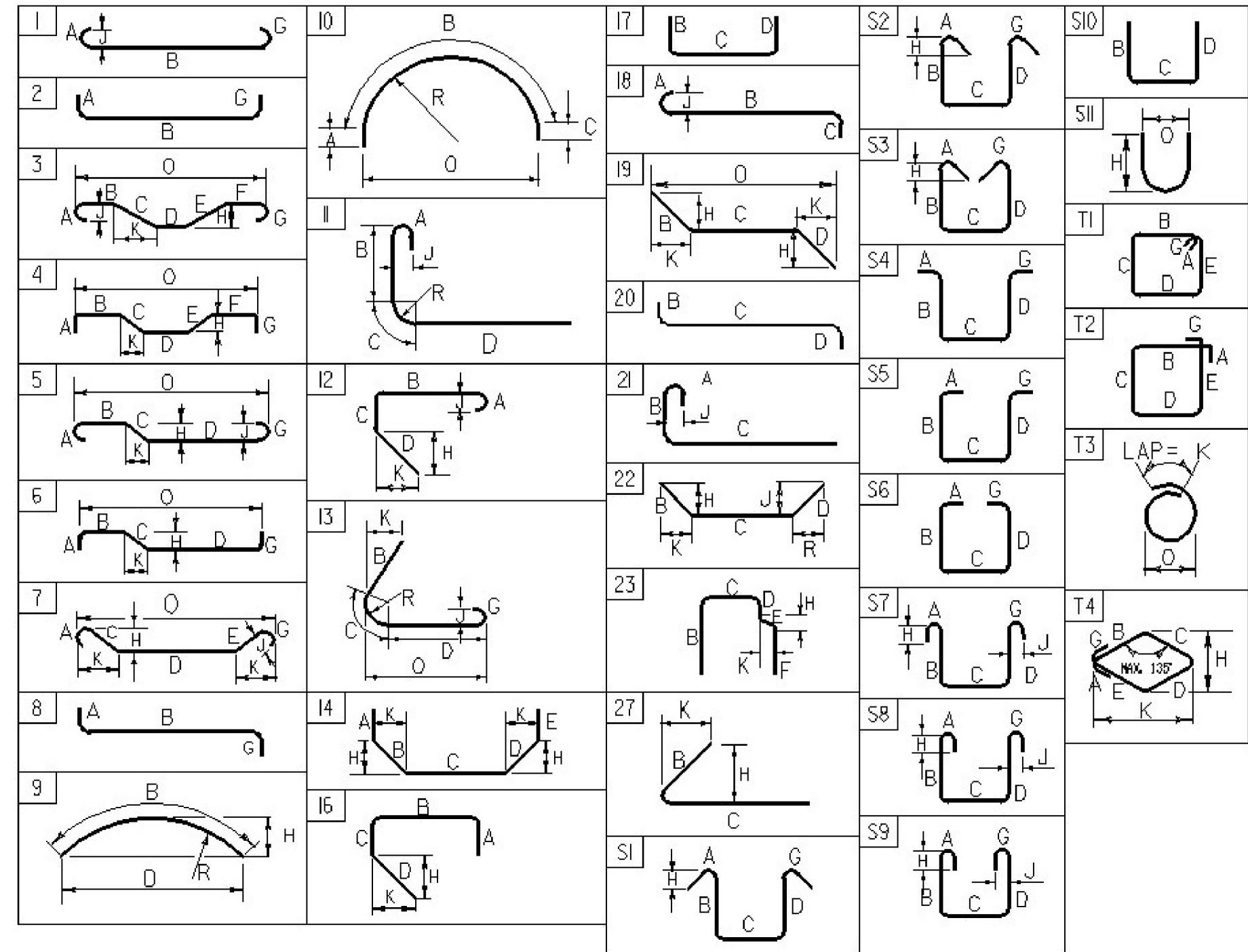
STATE OF VERMONT
AGENCY OF TRANSPORTATION

REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O	ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
SOUTH COLLAR																																			
	2	4	28'- 2"	ESC401	9		28'- 2"						3'- 2"			31'- 2"	27'- 3"																		
	4	4	19'- 1"	ESC402	9		19'- 1"						2'- 3"			20'- 0"	18'- 4"																		
	4	4	12'- 7"	ESC403	9		12'- 7"						0'- 7"			33'- 5"	12'- 6"																		
*	3	4	24'- 10"	ESC404	9		24'- 10"						2'- 5"			31'- 10"	24'- 2"																		
	4	4	23'- 7"	ESC405	9		23'- 7"						3'- 3"			20'- 8"	22'- 4"																		
	4	4	10'- 10"	ESC406	9		10'- 10"						0'- 5"			34'- 1"	10'- 9"																		
* ▲	175	4	1'- 9"	ESC407	17		0'- 8"	1'- 1"	0'- 0"																										
NORTH COLLAR																																			
▲	23	4	9'- 8"	ENC401	17		3'- 10"	2'- 0"	3'- 10"																										
*	8	4	21'- 3"	ENC402	STR	21'- 3"																													
	2	4	3'- 2"	ENC403	STR	3'- 2"																													
	2	4	2'- 1"	ENC404	STR	2'- 1"																													
	2	4	21'- 8"	ENC405	9		21'- 8"						1'- 10"			31'- 2"	21'- 3"																		
	2	4	19'- 6"	ENC406	9		19'- 6"						2'- 4"			20'- 0"	18'- 9"																		
	2	4	20'- 6"	ENC407	9		20'- 6"						2'- 7"			20'- 0"	19'- 7"																		
	4	4	12'- 7"	ENC408	9		12'- 7"						0'- 7"			33'- 5"	12'- 6"																		
	2	4	22'- 4"	ENC409	9		22'- 4"						2'- 11"			20'- 8"	21'- 3"																		
	2	4	23'- 4"	ENC410	9		23'- 4"						3'- 3"			20'- 8"	22'- 1"																		
	4	4	10'- 10"	ENC411	9		10'- 10"						0'- 5"			34'- 1"	10'- 9"																		
* ▲	135	4	1'- 8"	ENC412	17		0'- 8"	1'- 0"	0'- 0"																										

~ NOTES ~

- 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.
- 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".
- BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
- ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
- "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
- "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
- WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.
- ▲ DENOTES BARS TO BE CUT IN FIELD.
- * DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
- △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
- E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS				
BAR SIZE DESIGNA- TION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION		PERMETER INCHES
		DIAMETER INCHES	AREA INCHES ²	
#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

SHOP DRAWING REVIEW	
☒ REVIEWED AS REQUIRED BY THE CONSTRUCTION CONTRACT DOCUMENTS AND APPROVED, BUT ONLY FOR CONFORMANCE TO THE DESIGN CONCEPT OF THE WORK, AND SUBJECT TO FURTHER LIMITATIONS AND REQUIREMENTS CONTAINED IN THE CONSTRUCTION CONTRACT DOCUMENTS.	
☐ REJECTED	☐ REVISE AND RESUBMIT
☐ APPROVED AS NOTED	
CORRECTIONS OR COMMENTS MADE ON THE SHOP DRAWINGS DURING THIS REVIEW DID NOT RELIEVE CONTRACTOR FROM COMPLIANCE WITH REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. THIS CHECK IS ONLY FOR REVIEW OF GENERAL CONFORMANCE WITH THE DESIGN CONCEPT OF THE PROJECT AND GENERAL COMPLIANCE WITH THE INFORMATION GIVEN IN THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR: CONFIRMING AND CORRELATING ALL QUANTITIES AND DIMENSIONS; SELECTING FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION; COORDINATING THEIR WORK WITH THAT OF ALL OTHER TRADES; AND PERFORMING THEIR WORK IN A SAFE AND SATISFACTORY MANNER.	
 CLD Consulting Engineers 540 Commercial Street Manchester, NH 03101 603-688-9225	Job Number: 14-0116 Reviewed by: A GIRALDI Date: 3/15/17

PROJECT NAME: ST. JOHNSBURY
PROJECT NUMBER: BF 7000(20)
FILE NAME: 86e048/cos/z86e048schedule.dg
PROJECT LEADER: J. BYATT
DESIGNED BY: A. GIRALDI
REINFORCING STEEL SCHEDULE
DRAWN BY: M. SMITH
CHECKED BY: S. BEAUMONT
SHEET 52 OF 70

Vermont Agency of Transportation
RECEIVED
CK'D BY CLD OK'D BY WBP
March 10, 2017
RESUBMIT NO Approved
BY WPELLETIER DATE 03/15/2017