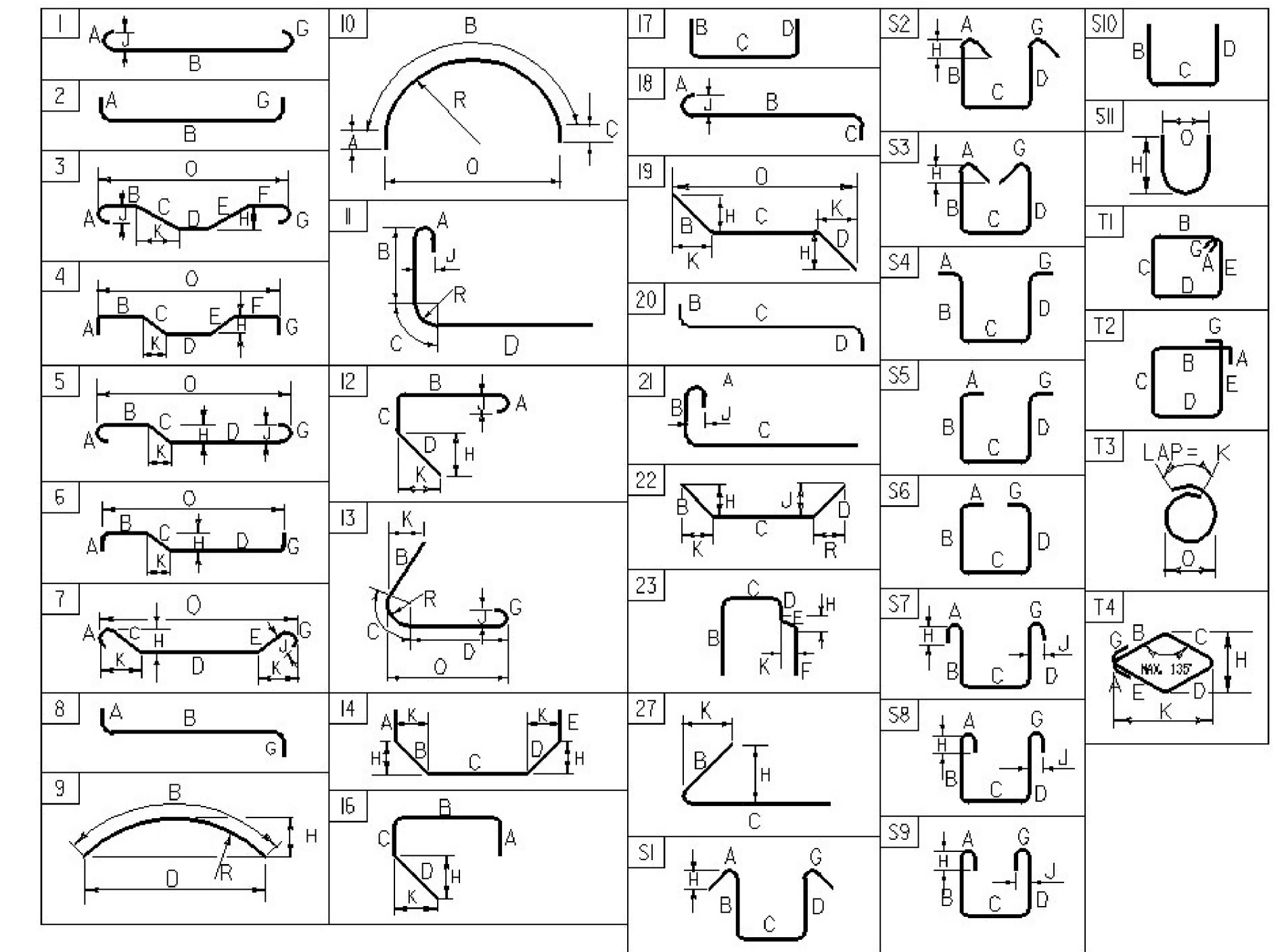


REINFORCING STEEL SCHEDULE

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.



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

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
 603-688-6225

Job Number: 14-0116
 Reviewed by: A GIRALDI
 Date: 3/15/17

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

PROJECT NAME: ST. JOHNSBURY
 PROJECT NUMBER: BF 7000(20)
 FILE NAME: 86e048/cos/z86e048schedule.dgPLOT DATE: 10/26/2016
 PROJECT LEADER: J. BYATT DRAWN BY: M. SMITH
 DESIGNED BY: A. GIRALDI CHECKED BY: S. BEAUMONT
 REINFORCING STEEL SCHEDULE SHEET 52 OF 70