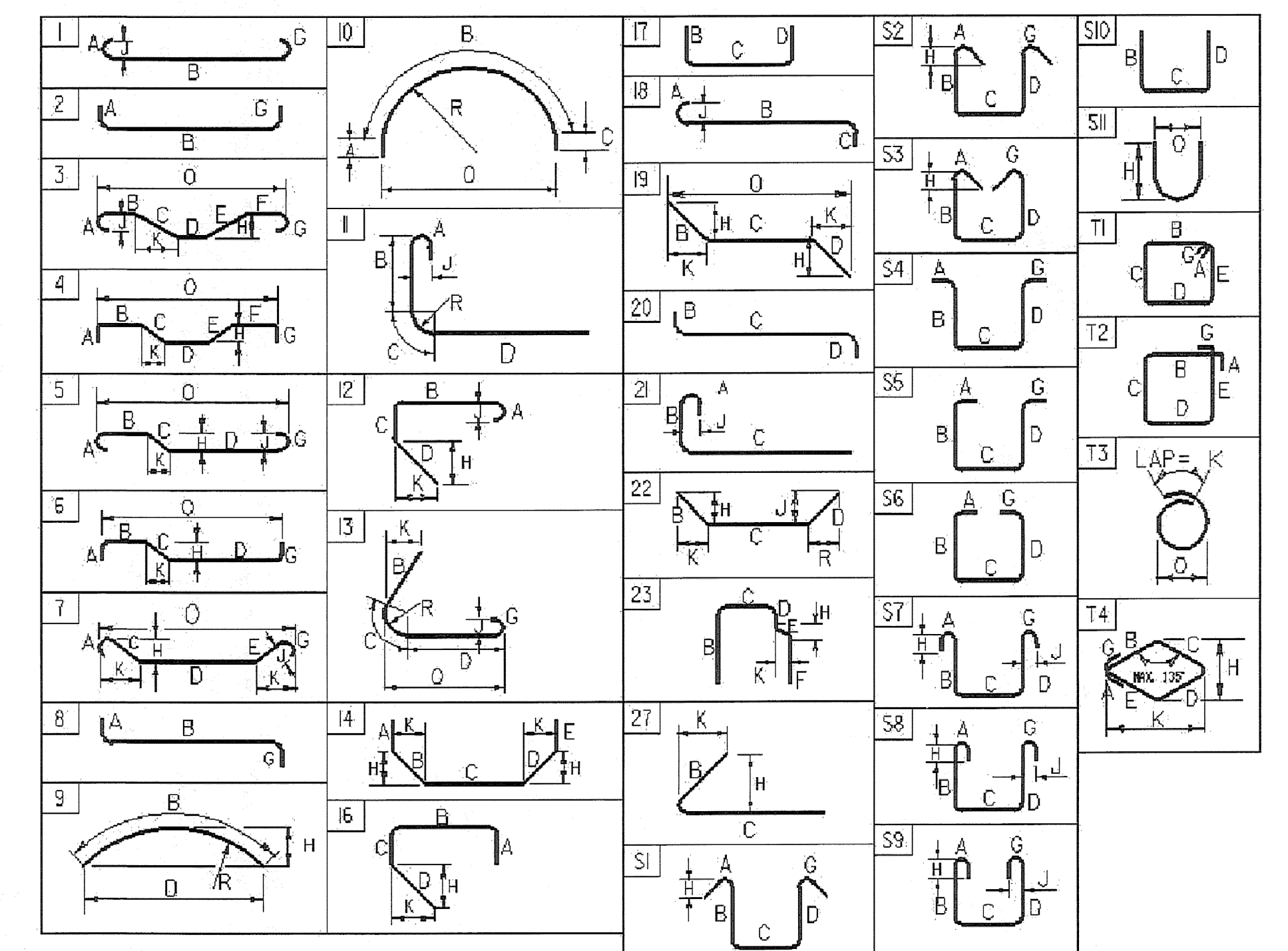


# REINFORCING STEEL SCHEDULE

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									
<b>DECK</b>																																												
																			2	16	3610	2W1609	19		410	3200	---								130		390							
*	38	16	7110	ES1601	STR														12	16	1690	2W1606	S10		660	370	660																	
▲	18	16	8840	ES1602	STR														48	16	2000	2W1608	19		1000	1000	---																	
	62	16	2070	ES1603	S5	250	665	240	665			250							23	22	3340	2W2201	17		1270	2070	---																	
*	63	19	2540	ES1901	S6	300	360	1220	360			300							12	22	2610	2W2202	STR																					
*	47	29	9115	ES2901	1	275	8840					---							26	25	3040	2W2501	STR																					
<b>APPROACH SLAB NO. 1</b>																																												
*	17	16	6440	1EAS1601	STR														5	16	10200	2A1601	STR																					
*	45	19	4540	1EAS1901	1	200	4340					---							10	16	10200	2A1602	STR																					
<b>APPROACH SLAB NO. 2</b>																																												
* ▲	17	16	9320	2EAS1601	STR														32	16	1180	2A1603	STR																					
*	45	19	4540	2EAS1901	1	200	4340					---							25	16	4060	2A1604	STR																					
	7	19	4750	2EAS1902	STR														25	16	2670	2A1605	STR																					
▲	3	19	4470	2EAS1903	STR														62	16	4960	2A1607	STR																					
<b>ABUTMENT NO. 1</b>																																												
	5	16	9800	1A1601	STR														8	16	4630	2A1608	STR																					
	10	16	9800	1A1602	STR														30	16	2060	1A1606	16	660	640	340	420								300		300							
	31	16	1180	1A1603	STR														*	32	22	2050	1A2201	STR																				
	24	16	4110	1A1604	STR														*	13	25	1000	1EA2501	STR																				
	24	16	2720	1A1605	STR														12	25	1450	1EA2502	19		450	1000	---																	
▲	62	16	4760	1A1607	STR														*	36	29	2740	1A2901	STR																				
	8	16	4680	1A1608	STR														31	29	2940	1A2902	17		1170	1770	---																	
* ▲	9	16	850	1A1609	STR														<b>WINGWALL NO. 3</b>																									
	6	16	3290	1A1610	STR														5	16	4780	3W1601	STR																					
	30	16	2060	1A1606	16	660	640	340	420				300						11	16	4780	3W1602	STR																					
*	30	22	2050	1A2201	STR														16	16	1180	3W1603	STR																					
*	13	25	1000	1EA2501	STR														▲	16	16	4670	3W1604	STR																				
	12	25	1450	1EA2502	19		450	1000	---										16	16	2720	3W1605	STR																					
*	35	29	2740	1A2901	STR														▲	32	16	4550	3W1607	STR																				
	29	29	2940	1A2902	17		1170	1770	---										2	16	4580	3W1609	19		420	4160	---									60		420						
<b>WINGWALL NO. 1</b>																																												
	5	16	4180	1W1601	STR														16	16	1690	3W1606	S10		660	370	660																	
	11	16	4180	1W1602	STR														30	22	3340	3W2201	17		1270	2070	---																	
	14	16	1180	1W1603	STR														16	22	2610	3W2202	STR																					
▲	14	16	5720	1W1604	STR														*	34	25	3040	3W2501	STR																				
	14	16	2770	1W1605	STR														<b>WINGWALL NO. 4</b>																									
▲	32	16	3950	1W1607	STR														5	16	4180	4W1601	STR																					
	2	16	4140	1W1609	19		410	3730	---					130					11	16	4180	4W1602	STR																					
	14	16	1690	1W1606	S10		660	370	660										14	16	1180	4W1603	STR																					
▲	48	16	2000	1W1608	19		1000	1000	---										▲	14	16	4670	4W1604	STR																				
	26	22	3340	1W2201	17		1270	2070	---										14	16	2720	4W1605	STR																					
	14	22	2610	1W2202	STR														▲	32	16	3950	4W1607	STR																				
*	30	25	3040	1W2501	STR														2	16	4040	4W1609	STR		420	3620	---							90		410								
<b>WINGWALL NO. 2</b>																																												
	5	16	3680	2W1601	STR														14	16	1690	4W1606	S10		660	370	660																	
	11	16	3680	2W1602	STR														▲	48	16	2000	4W1608	19		1000	1000	---																
	13	16	1180	2W1603	STR														26	22	3340	4W2201	17		1270	2070	---																	
▲	13	16	5720	2W1604	STR														14	22	2610	4W2202	STR																					
	12	16	2770	2W1605	STR														29	25	3040	4W2501	STR																					
▲	32	16	3450	2W1607	STR																																							

~ NOTES ~

- UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING 55M SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M31M (ASTM A 615M-SI). ALL BARS SHALL BE GRADE 420, 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	NOMINAL MASS (kg/m)	NOMINAL DIMENSIONS ROUND SECTION		
		DIAMETER (mm)	CROSS SECTIONAL AREA (mm²)	PERIMETER (mm)
#10	0.560	9.5	71	29.84
#13	0.994	12.7	129	39.90
#16	1.552	15.9	199	49.95
#19	2.235	19.1	284	60.00
#22	3.042	22.2	387	69.74
#25	3.973	25.4	510	79.80
#29	5.060	28.7	645	90.16
#32	6.404	32.3	819	101.47
#36	7.907	35.8	1006	112.47
#43	11.380	43.0	1452	135.09
#57	20.240	57.3	2581	180.01

PROJECT NAME: **Guilford**  
 PROJECT NUMBER: **BRO 1442 (24)**  
 FILE NAME: sj076rf.xls & sj076rss.dgn  
 PROJECT MANAGER: R.R. WHITCOMB  
 DESIGNED BY: J. PERRIGO  
 REINFORCING STEEL SCHEDULE

PLOT DATE: 3/3/2008  
 DRAWN BY: J. PERRIGO  
 CHECKED BY: T. LACKEY  
 SHEET 43 OF 59