

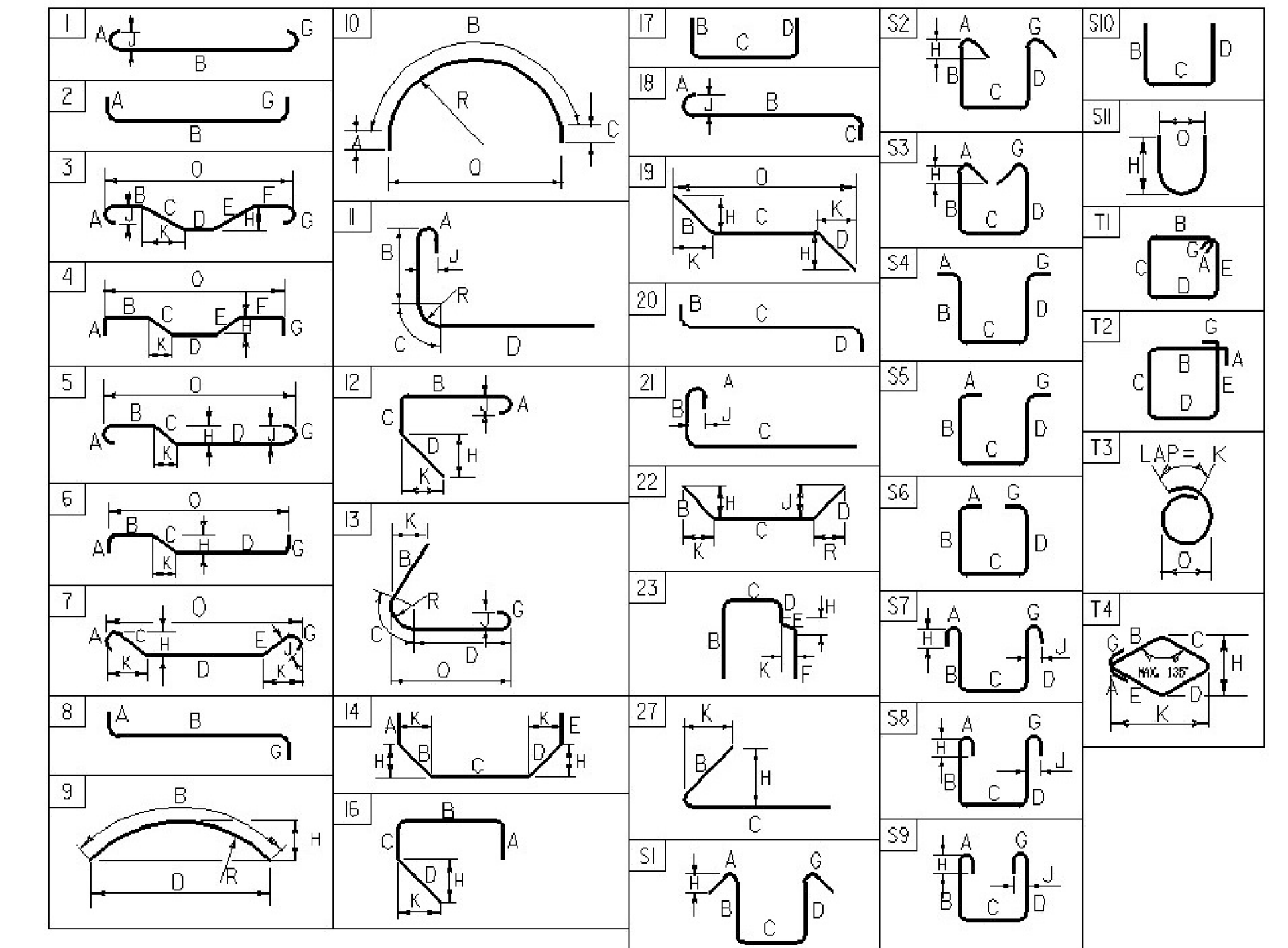
REINFORCING STEEL SCHEDULE

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
DECK																																			
	184	5	29'-6"	S501.2	STR																														
	264	5	36'-1"	S502.2	STR																														
	276	5	23'-6"	S503.2	STR																														
*	551	6	4'-11"	S601.2	STR																														
APPROACH SLAB #1																																			
	22	5	29'-3"	1AS501	STR																														
*	37	9	20'-9"	1AS901	1	1'-3"	19'-6"																												
	30	5	5'-2"	1AS502.2	1	0'-7"	4'-0"																												
APPROACH SLAB #2																																			
	22	5	29'-3"	2AS501	STR																														
	36	9	20'-9"	2AS901	1	1'-3"	19'-6"																												
	30	5	5'-2"	2AS502.2	1	0'-7"	4'-0"																												
ABUTMENT #1																																			
	16	5	21'-2"	1A501.2	STR																														
	32	5	7'-7"	1A502.2	5	0'-7"	4'-10"	2'-2"	---																										
	81	5	10'-10"	1A503.2	S10		4'-2"	2'-6"	4'-2"																										
	41	5	7'-8"	1A504.2	S10		2'-11"	1'-10"	2'-11"																										
	8	6	9'-8"	1A601.2	19		8'-8"	1'-0"	---																										
	8	6	9'-8"	1A602.2	27		1'-0"	8'-8"	---																										
*+	42	8	14'-4"	1A801.2	17		2'-2"	12'-2"	---																										
+▲	81	8	14'-4"	1A802.2	17		2'-2"	12'-2"	---																										
	36	5	21'-2"	1A501	STR																														
	16	6	9'-8"	1A601	19		8'-8"	1'-0"	---																										
*	15	6	9'-8"	1A602	27		1'-0"	8'-8"	---																										
WINGWALL #1																																			
+▲	21	5	13'-5"	1W501.2	STR																														
	12	5	11'-1"	1W502.2	STR																														
	9	5	2'-9"	1W503.2	S10		0'-10"	1'-1"	0'-10"																										
	6	5	5'-11"	1W504.2	19		2'-2"	3'-9"	---																										
*▲	17	5	11'-1"	1W502	STR																														
	8	5	5'-11"	1W504	19		2'-2"	3'-9"	---																										
WINGWALL #2																																			
+▲	21	5	11'-8"	2W501.2	STR																														
*▲	13	5	11'-1"	2W502.2	STR																														
	9	5	2'-9"	2W503.2	S10		0'-10"	1'-1"	0'-10"																										
	6	5	5'-11"	2W504.2	27		2'-2"	3'-9"	---																										
▲	14	5	11'-1"	2W502	STR																														
	7	5	5'-11"	2W504	27		2'-2"	3'-9"	---																										
ABUTMENT #2																																			
	16	5	21'-2"	2A501.2	STR																														
	32	5	7'-7"	2A502.2	5	0'-7"	4'-10"	2'-2"	---																										
	81	5	10'-10"	2A503.2	S10		4'-2"	2'-6"	4'-2"																										
	41	5	7'-8"	2A504.2	S10		2'-11"	1'-10"	2'-11"																										
	9	6	9'-8"	2A601.2	19		8'-8"	1'-0"	---																										
	9	6	9'-8"	2A602.2	27		1'-0"	8'-8"	---																										
	41	8	15'-0"	2A801.2	17		2'-2"	12'-10"	---																										
+▲	81	8	15'-0"	2A802.2	17		2'-2"	12'-10"	---																										
	40	5	21'-2"	2A501	STR																														
	14	6	9'-8"	2A601	19		8'-8"	1'-0"	---																										
	17	6	9'-8"	2A602	27		1'-0"	8'-8"	---																										
WINGWALL #3																																			
+▲	21	5	14'-1"	3W501.2	STR																														
	12	5	11'-1"	3W502.2	STR																														
	9	5	2'-9"	3W503.2	S10		0'-10"	1'-1"	0'-10"																										
	6	5	5'-11"	3W504.2	27		2'-2"	3'-9"	---																										
	18	5	11'-1"	3W502	STR																														
	9	5	5'-11"	3W504	27		2'-2"	3'-9"	---																										
WINGWALL #4																																			
+▲	21	5	12'-4"	4W501.2	STR																														
	12	5	11'-1"	4W502.2	STR																														
	9	5	2'-9"	4W503.2	S10		0'-10"	1'-1"	0'-10"																										
	6	5	5'-11"	4W504.2	19		2'-2"	3'-9"	---																										
▲	14	5	12'-4"	4W502	STR																														
	7	5	5'-11"	4W504	19		2'-2"	3'-9"	---																										

~ 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-S1). 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.

12. + DENOTES BARS CHANGED FROM LEVEL II TO LEVEL I.



ASTM STANDARD REINFORCING BARS

BAR SIZE	YIELD STRENGTH (ksi)	TENSILE STRENGTH (ksi)	ELONGATION (%)	WELDED EPOXY COATED (ksi)
#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	2.04	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.14
#9	3.400	1.13	1.00	3.54
#10	4.3	1.270	1.27	3.990
#11	5.31	1.410	1.56	4.430
#14	7.65	1.69	2.25	5.32
#18	13.60	2.26	4.00	7.09

~ REINFORCING STEEL CORROSION RESISTANCE LEVEL ~

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 CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET PI SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

PROJECT NAME:	ROYALTON	PLOT DATE:	10/4/2013
PROJECT NUMBER:	BRS 0147 (13)	DRAWN BY:	C. MOONEY
FILE NAME:	BR 271s86e056rs_s_27	DESIGNED BY:	D. PETERSON
PROJECT MANAGER:	C. CARLSON	CHECKED BY:	D. PETERSON
BRIDGE 27 REINFORCING STEEL SCHEDULE		SHEET 46 OF 186	