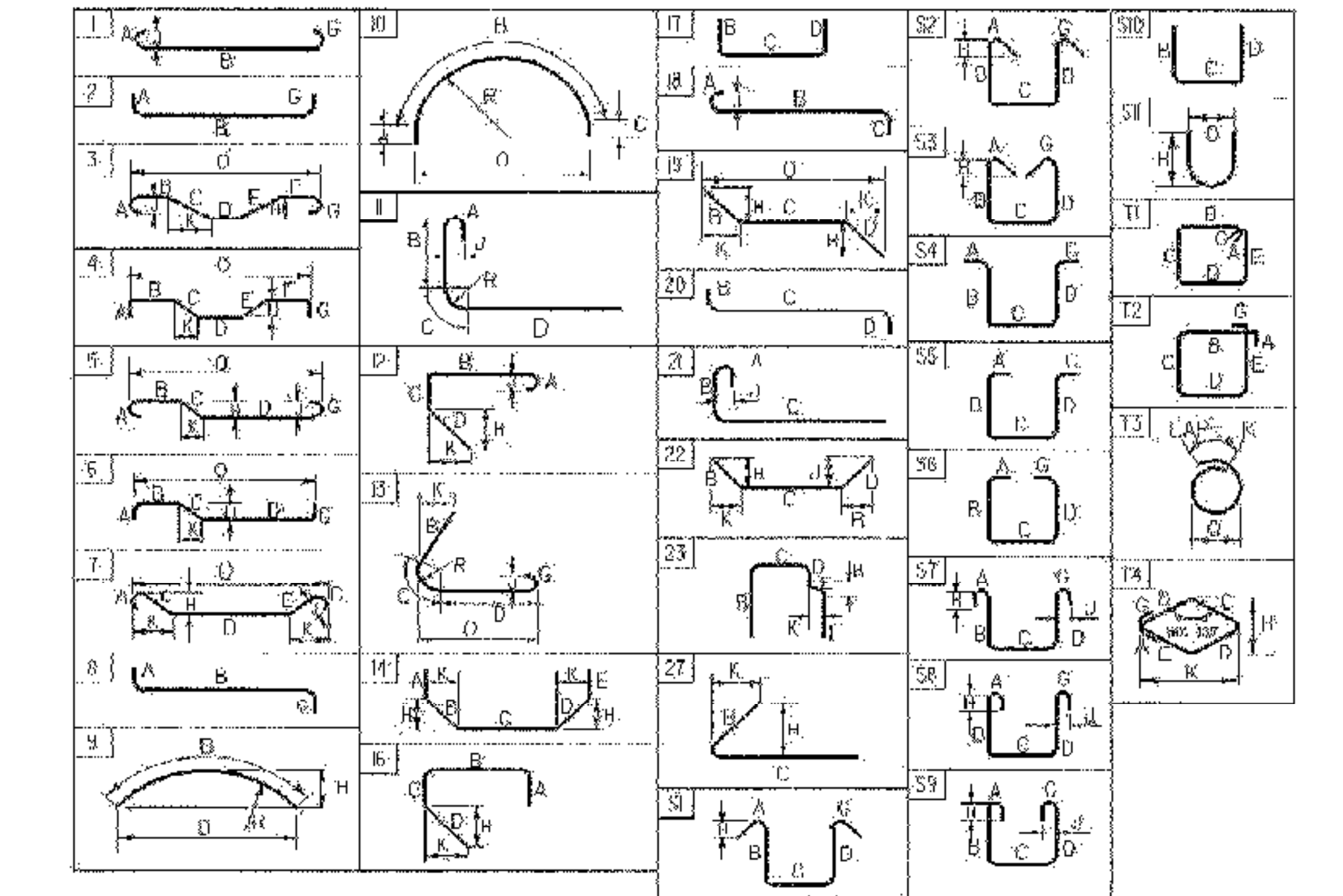


REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPR	A	B	C	D	E	F	G	H	J	K	R	O	ITEM	EACH	SIZE	LENGTH	MARK	TYPL	A	B	C	D	E	F	G	H	J	K	R	O				
ABUTMENT #2																		PIER #1																					
38	5	20	4'	2A501	STR													37	5	11'	0"	1P501	STR																
41	5	4'	11"	2A502	STR													38	5	20'	6"	1P502	STR																
62	33	5	19'	1"	2A503	STR												*	25	5	33'	1"	1P501	STR															
	46	5	20'	0"	2A504	STR												▲	12	5	33'	1"	1P502	STR															
	38	5	11'	11"	2A505	STR												△	10	7	33'	1"	1P701	STR															
	4	5	21'	9"	2A506	STR												*	▲	34	5	8'	6"	1P801	STR														
*	17	8	3'	8"	2A801	STR												†	19	8	8'	9"	1EP802	STR															
	72	8	11'	0"	2A802	STR												58	9	25'	0"	1P901	STR																
*	19	8	4'	3"	2EA803	STR												190	5	10'	40"	1P503	T1	0'-6"	2'-1"	2'-10"	2'-3"	2'-10"	0'-6"										
*	38	7	7'	6"	2A701	STR												76	5	8'	6"	1P504	S11																
▲	49	5	4'	8"	2A507	22		2'-4"	2'-4"									98	5	12'	0"	1P505	S10	4'-2"	3'-8"	4'-2"													
	40	5	19'	0"	2A508	22		2'-2"	1'-6"	2'-2"								*	15	5	18'	2"	1P503	22	3	8'-8"	11'-8"												
	4	5	5'	10"	2A509	22	2'-2"	1'-6"	2'-2"									▲	59	9	15'-5"	1P902	17			6'-11"	8'-8"												
	34	5	8'	9"	2A510	16	2'-2"	2'-7"	1'-2"									9-7/2																					
	18	8	8'	3"	2EA804	22		2'-8"	3'-8"																														
	43	8	9'	5"	2A901	17		1'-8"	7'-11"																														
	38	9	15'	4"	2A902	17		4'-7"	10'-8"																														
WINGWALL #3																		PIER #2																					
*	21	5	15'	3"	3W501	STR												△	37	5	11'	0"	2P501	STR															
	14	5	4'	11"	3W502	STR													18	5	20'	6"	2P502	STR															
▲	14	5	21'	9"	3W503	STR													70	5	4'	6"	2P503	STR															
▲	14	5	12'	2"	3W504	STR													12	5	32'	11"	2P504	STR															
▲	44	5	13'	6"	3W505	STR													*	▲	13	5	33'	1"	2P601	STR													
*	15	7	7'	6"	3W701	STR													△	9	7	32'	11"	2P701	STR														
	7	8	3'	8"	3W801	STR													△	36	5	3'	6"	2P801	STR														
	26	9	11'	3"	3W901	STR													58	5	13'	10"	2P802	STR															
	14	5	8'	11"	3W506	S10		2'-2"	1'-7"	2'-2"									18	8	4'	6"	2EP803	19		1'-8"	3'-0"												
	2	5	28'	8"	3W507	19		2'-8"	24'-0"										80	5	14'	10"	2P505	T1	0'-6"	2'-1"	3'-10"	2'-1"	2'-10"	0'-6"									
*	14	9	9'	3"	3W902	17		1'-8"	7'-8"										36	5	8'	6"	2P506	S11	9'-7/2														
	14	9	14'	7"	3W903	17		4'-1"	10'-6"										88	5	12'	0"	2P507	17		4'-2"	3'-8"	4'-2"											
WINGWALL #4																																							
▲	14	5	30'	0"	4W501	STR													*	16	5	18'	2"	2P603	22		8'-8"	11'-8"											
*	27	5	3'	11"	4W502	STR													△	▲	80	9	15'	5"	2P901	17		6'-11"	8'-8"										
▲	26	5	21'	9"	4W503	STR																																	
▲	20	5	12'	2"	4W504	STR																																	
▲	36	5	25'	5"	4W505	STR																																	
*	13	8	3'	8"	4W801	STR																																	
9	50	8	11'	0"	4W901	STR																																	
	28	5	8'	11"	4W506	S10		2'-2"	1'-7"	2'-2"																													
	2	5	28'	1"	4W507	22		2'-0"	24'-1"																														
	9	5	10'	0"	4W508	19		2'-2"	5'-8"	2'-2"																													
	9	5	8'	4"	4W509	20		2'-2"	4'-0"	2'-2"																													
	8	9	9'	3"	4W802	17		1'-8"	7'-9"																														
*	27	9	14'	7"	4W903	17		4'-1"	10'-8"																														
	24	7	7'	6"	4W701	STR																																	

~ 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-S). 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 DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS				
BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS - ROUND SECTION		
		DIA. 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: **HARTFORD**
 PROJECT NUMBER: **BRO-BTN 2004 (1)**
 FILE NAME: s89j045rein7.xls PLOT DATE: 10/02/2003
 PROJECT MANAGER: C.P. WILLIAMS DRAWN BY: M. LONGSTREET
 DESIGNED BY: K.M. HIGGINS CHECKED BY: K.M. HIGGINS
 REINFORCING STEEL SCHEDULE SHEET #2 SHEET 61 OF 97