US Army Corps
of Engineers
Savannah District

RICHARD B. RUSSELL POWERPLANT
SAVANNAH RIVER, GEORGIA AND SOUTH CAROLINA

15kV SF6 GENERATOR CIRCUIT BREAKER AND STATIC STARTING SYSTEM INSTALLATION

VOLUME 2: REFERENCE DRAWINGS

101RRP_V1COVERSHEET.DGN

INDEX OF CONTRACT DRAWINGS (VOL. 1)

FILE NO.	SHEET NO.	PLATE NO.	TITLE
			GENERAL
RBR-107	001	G-1	INDEX OF CONTRACT DRAWINGS
RBR-107	002	G-2	INDEX OF REFERENCE DRAWINGS
RBR-107	003	G-3	SYMBOL LEGEND AND ABBREVIATIONS
RBR-107	004	G-4	CONTROL DEVICE SCHEDULE SHEET 1 OF 3
RBR-107	005	G-5	CONTROL DEVICE SCHEDULE SHEET 2 OF 3
RBR-107	006	G-6	CONTROL DEVICE SCHEDULE SHEET 3 OF 3
RBR-107	007	C-1	PROJECT AREA, LOCATION AND VICINITY MAP
RBR-107	008	C-2	PROJECT SITE PLAN
RBR-107	009	A-1	ARRANGEMENT PLAN EL. 322.0, 332.5
RBR-107	010	A-2	ARRANGEMENT PLAN EL. 350.0
			STRUCTURAL
RBR-107	011	S-1	STRUCTURAL MODIFICATIONS SHEET 1 OF 2
RBR-107	012	S-2	STRUCTURAL MODIFICATIONS SHEET 2 OF 2
			ELECTRICAL SCHEMATIC DIAGRAMS
RBR-107	013	E-1	MAIN UNITS ONE-LINE DIAGRAM EXISTING CONFIGURATION
RBR-107	014	E-2	MAIN UNITS ONE-LINE DIAGRAM REVISED CONFIGURATION
RBR-107	015	E-3	UNIT 2 THREE-LINE DIAGRAM EXISTING CONFIGURATION
RBR-107	016	E-4	UNIT 2 THREE-LINE DIAGRAM REVISED CONFIGURATION
RBR-107	017	E-5	UNIT 5 THREE-LINE DIAGRAM EXISTING CONFIGURATION
RBR-107	018	E-6	UNIT 5 THREE-LINE DIAGRAM REVISED CONFIGURATION
RBR-107	019	E-7	UNIT 2 GEN. & TURBINE CONTROLS SH. 1 OF 8
RBR-107	020	E-8	UNIT 2 GEN. & TURBINE CONTROLS SH. 2 OF 8
RBR-107	021	E-9	UNIT 2 GEN. & TURBINE CONTROLS SH. 3 OF 8
RBR-107	022	E-10	UNIT 2 GEN. & TURBINE CONTROLS SH. 4 OF 8
RBR-107	023	E-11	UNIT 2 GEN. & TURBINE CONTROLS SH. 5 OF 8
RBR-107	024	E-12	UNIT 2 GEN. & TURBINE CONTROLS SH. 6 OF 8
RBR-107	025	E-13	UNIT 2 GEN. & TURBINE CONTROLS SH. 7 OF 8
RBR-107	026	E-14	UNIT 2 GEN. & TURBINE CONTROLS SH. 8 OF 8
RBR-107	027	E-15	UNIT 2 EXCITATION EQUIPMENT
RBR-107	028	E-16	UNIT 2 OCB 720 CONTROLS EXISTING CONFIGURATION
RBR-107	029	E-17	UNIT 2 GCB 720 CONTROLS REVISED CONFIGURATION
RBR-107	030	E-18	UNIT 2 ANNUNCIATOR
RBR-107	031	E-19	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 1 OF 8
RBR-107	032	E-20	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 2 OF 8
RBR-107	033	E-21	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 3 OF 8
RBR-107	034	E-22	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 4 OF 8
RBR-107	035	E-23	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 5 OF 8
RBR-107	036	E-24	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 6 OF 8
RBR-107	037	E-25	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 7 OF 8
RBR-107	038	E-26	UNIT 5 GEN./MOTOR & TURBINE CTRL SH. 8 OF 8
RBR-107	039	E-27	UNIT 5 GEN. & EXCITER PROT. RELAYS
RBR-107	040	E-28	UNIT 5 EXCITATION EQUIPMENT
RBR-107	041	E-29	UNIT 5 PHASE REVERSAL SWITCH
RBR-107	042	E-30	UNIT 5 STARTING BUS SWITCH
RBR-107	043	E-31	UNIT 5 ABCB 750 CONTROLS EXISTING CONFIGURATION
RBR-107	044	E-32	UNIT 5 GCB 750 CONTROLS REVISED CONFIGURATION
RBR-107	045	E-33	UNIT 5 ANNUNCIATOR
RBR-107	046	E-34	COMMON UNIT CONTROLS SHEET 1 OF 3
RBR-107	047	E-35	COMMON UNIT CONTROLS SHEET 2 OF 3
RBR-107	048	E-36	COMMON UNIT CONTROLS SHEET 3 OF 3
RBR-107	049	E-37	PROTECTIVE RELAYS
RBR-107	050	E-38	SWITCHYARD CONTROLS
RBR-107	051	E-39	STARTING BUS BKR. 722 CONTROLS
RBR-107	052	E-40	STARTING BUS BKR. 901 CONTROLS
RBR-107	053	E-41	SFC INPUT BKR. 767 CONTROLS
RBR-107	054	E-42	SFC DIGITAL INPUTS
RBR-107	055	E-43	SFC DIGITAL OUTPUTS
RBR-107	056	E-44	XFMRS 3 & 4 ANNUNCIATOR
RBR-107	057	E-45	SWITCH DEVELOPMENT
RBR-107	058	E-46	RESERVED
RBR-107	059	E-47	RESERVED
RBR-107	060	E-48	RESERVED
RBR-107	061	E-49	RESERVED
RBR-107	062	E-50	RESERVED
			ELECTRICAL WIRING DIAGRAMS
RBR-107	063	E-51	UNIT 2 BKR. CONNECTION DIAGRAM EXISTING CONFIGURATION
RBR-107	064	E-52	UNIT 2 BKR. CONNECTION DIAGRAM REVISED CONFIGURATION
RBR-107	065	E-53	MAIN CONTROL SWITCHBOARD UNITS 1-4 WIRING DETAILS
RBR-107	066	E-54	MAIN CONTROL SWITCHBOARD PANEL 8F TB SH. 1 OF 2
RBR-107	067	E-55	MAIN CONTROL SWITCHBOARD PANEL 8F TB SH. 2 OF 2
RBR-107	068	E-56	MAIN CONTROL SWITCHBOARD PANEL 8F INTERIOR
RBR-107	069	E-57	MAIN CONTROL SWITCHBOARD PANEL 8R TB
RBR-107	070	E-58	MAIN CONTROL SWITCHBOARD PANEL 8R INTERIOR SH. 1 OF 3
RBR-107	071	E-59	MAIN CONTROL SWITCHBOARD PANEL 8R INTERIOR SH. 2 OF 3
RBR-107	072	E-60	MAIN CONTROL SWITCHBOARD PANEL 8R INTERIOR SH. 3 OF 3
RBR-107	073	E-61	AUXILIARY CONTROL SWITCHBOARD PANEL 8AUXF
RBR-107	074	E-62	RESERVED
RBR-107	075	E-63	RESERVED
RBR-107	076	E-64	RESERVED
RBR-107	077	E-65	RESERVED
RBR-107	078	E-66	UNIT 5 BKR. CONNECTION DIAGRAM EXISTING CONFIGURATION
RBR-107	079	E-67	UNIT 5 BKR. CONNECTION DIAGRAM REVISED CONFIGURATION
RBR-107	080	E-68	UNIT 5 STARTING BUS SWITCH CONNECTION DIAGRAM
RBR-107	081	E-69	MAIN CONTROL SWITCHBOARD UNITS 5-8 WIRING DETAILS
RBR-107	082	E-70	MAIN CONTROL SWITCHBOARD PANEL 12F TB
RBR-107	083	E-71	MAIN CONTROL SWITCHBOARD PANEL 12R TB
RBR-107	084	E-72	MAIN CONTROL SWITCHBOARD PANEL 12 TB
RBR-107	085	E-73	MAIN CONTROL SWITCHBOARD PANEL 12F INTERIOR
RBR-107	086	E-74	MAIN CONTROL SWITCHBOARD PANEL 12R INTERIOR SH. 1 OF 4
RBR-107	087	E-75	MAIN CONTROL SWITCHBOARD PANEL 12R INTERIOR SH. 2 OF 4
RBR-107	088	E-76	MAIN CONTROL SWITCHBOARD PANEL 12R INTERIOR SH. 3 OF 4
RBR-107	089	E-77	MAIN CONTROL SWITCHBOARD PANEL 12R INTERIOR SH. 4 OF 4
RBR-107	090	E-78	AUXILIARY CONTROL SWITCHBOARD PANEL 12AUXF

FILE NO.	SHEET NO.	PLATE NO.	TITLE
RBR-107	091	E-79	RESERVED
RBR-107	092	E-80	RESERVED
RBR-107	093	E-81	MAIN CONTROL SWITCHBOARD PANEL 14 TB MODIFICATIONS
RBR-107	094	E-82	MISCELLANEOUS TB MODIFICATIONS
RBR-107	095	E-83	STARTING BUS BKRS. 722 & 732 CONNECTION DIAGRAM
RBR-107	096	E-84	BREAKERS 767, 777, & 901 CONNECTION DIAGRAM
RBR-107	097	E-85	STATIC FREQUENCY CONTROLLER CONNECTION DIAGRAM
RBR-107	098	E-86	RESERVED
RBR-107	099	E-87	RESERVED
RBR-107	100	E-88	RESERVED
RBR-107	101	E-89	RESERVED
RBR-107	102	E-90	RESERVED
RBR-107	103	E-91	RESERVED
RBR-107	104	E-92	RESERVED
RBR-107	105	E-93	RESERVED
RBR-107	106	E-94	RESERVED
RBR-107	107	E-95	RESERVED
RBR-107	108	E-96	RESERVED
			EQUIPMENT LAYOUT
RBR-107	109	E-97	MAIN CONTROL SWITCHBOARD SHEET 1 OF 3
RBR-107	110	E-98	MAIN CONTROL SWITCHBOARD SHEET 2 OF 3
RBR-107	111	E-99	MAIN CONTROL SWITCHBOARD SHEET 3 OF 3
RBR-107	112	E-100	EL. 322.0 UNITS 1-4 EXISTING CONFIGURATION
RBR-107	113	E-101	EL. 322.0 UNITS 5-8 EXISTING CONFIGURATION
RBR-107	114	E-102	EL. 350.0 UNITS 1-4 EXISTING CONFIGURATION
RBR-107	115	E-103	EL. 350.0 UNITS 5-8 EXISTING CONFIGURATION
RBR-107	116	E-104	SECTION UNITS 1-4 EXISTING CONFIGURATION
RBR-107	117	E-105	SECTION UNITS 5-8 EXISTING CONFIGURATION
RBR-107	118	E-106	EL. 322.0 UNITS 1-4 REVISED CONFIGURATION
RBR-107	119	E-107	EL. 322.0 UNITS 5-8 REVISED CONFIGURATION
RBR-107	120	E-108	EL. 350.0 UNITS 1-4 REVISED CONFIGURATION
RBR-107	121	E-109	EL. 350.0 UNITS 5-8 REVISED CONFIGURATION
RBR-107	122	E-110	SECTION UNITS 1-4 REVISED CONFIGURATION
RBR-107	123	E-111	BREAKER SECTION UNITS 5-8 REVISED CONFIGURATION
RBR-107	124	E-112	STATIC START SECTION UNITS 5-8 REVISED CONFIGURATION
			EQUIPMENT, CONDUIT & CABLE TRAY DETAILS
RBR-107	125	E-113	UNIT 1 CABLE TRAY AND TERMINAL CABINET DETAILS
RBR-107	126	E-114	UNITS 1-4 CABLE TRAY DETAILS
RBR-107	127	E-115	UNITS 5-8 CABLE TRAY MODIFICATIONS, PLAN VIEWS
RBR-107	128	E-116	UNITS 5-8 TRAYS & TRANS./CONN. COMPARTMENT DETAILS
RBR-107	129	E-117	TRANSITION/CONNECTION COMPARTMENT INTERIOR DETAILS
RBR-107	130	E-118	INPUT CIRCUIT BREAKERS CONDUIT & CABLE TRAY DETAILS
RBR-107	131	E-119	STATIC FREQUENCY CONTROLLER CONDUIT & CABLE TRAY DETAILS
RBR-107	132	E-120	OUTPUT CIRCUIT BREAKERS CONDUIT & CABLE TRAY DETAILS
RBR-107	133	E-121	RESERVED
RBR-107	134	E-122	RESERVED
			CABLE ROUTING SCHEMATICS
RBR-107	135	E-123	CABLE ROUTING SCHEMATIC, REMOVAL SHEET 1 OF 6
RBR-107	136	E-124	CABLE ROUTING SCHEMATIC, REMOVAL SHEET 2 OF 6
RBR-107	137	E-125	CABLE ROUTING SCHEMATIC, REMOVAL SHEET 3 OF 6
RBR-107	138	E-126	CABLE ROUTING SCHEMATIC, REMOVAL SHEET 4 OF 6
RBR-107	139	E-127	CABLE ROUTING SCHEMATIC, REMOVAL SHEET 5 OF 6
RBR-107	140	E-128	CABLE ROUTING SCHEMATIC, REMOVAL SHEET 6 OF 6
RBR-107	141	E-129	CABLE ROUTING SCHEMATIC, INSTALLATION SHEET 1 OF 6
RBR-107	142	E-130	CABLE ROUTING SCHEMATIC, INSTALLATION SHEET 2 OF 6
RBR-107	143	E-131	CABLE ROUTING SCHEMATIC, INSTALLATION SHEET 3 OF 6
RBR-107	144	E-132	CABLE ROUTING SCHEMATIC, INSTALLATION SHEET 4 OF 6
RBR-107	145	E-133	CABLE ROUTING SCHEMATIC, INSTALLATION SHEET 5 OF 6
RBR-107	146	E-134	CABLE ROUTING SCHEMATIC, INSTALLATION SHEET 6 OF 6
RBR-107	147	E-135	RESERVED
RBR-107	148	E-136	RESERVED
			CABLE AND CONDUIT SCHEDULES
RBR-107	149	E-137	CABLE AND CONDUIT SCHEDULES CABLES 1G, SHEET 1 OF 2
RBR-107	150	E-138	CABLE AND CONDUIT SCHEDULES CABLES 1G, SHEET 2 OF 2
RBR-107	151	E-139	CABLE AND CONDUIT SCHEDULES CABLES 2G
RBR-107	152	E-140	CABLE AND CONDUIT SCHEDULES CABLES 3G
RBR-107	153	E-141	CABLE AND CONDUIT SCHEDULES CABLES 4G
RBR-107	154	E-142	CABLE AND CONDUIT SCHEDULES CABLES 5G, SHEET 1 OF 2
RBR-107	155	E-143	CABLE AND CONDUIT SCHEDULES CABLES 5G, SHEET 2 OF 2
RBR-107	156	E-144	CABLE AND CONDUIT SCHEDULES CABLES 6G, SHEET 1 OF 2
RBR-107	157	E-145	CABLE AND CONDUIT SCHEDULES CABLES 6G, SHEET 2 OF 2
RBR-107	158	E-146	CABLE AND CONDUIT SCHEDULES CABLES 7G, SHEET 1 OF 2
RBR-107	159	E-147	CABLE AND CONDUIT SCHEDULES CABLES 7G, SHEET 2 OF 2
RBR-107	160	E-148	CABLE AND CONDUIT SCHEDULES CABLES 8G, SHEET 1 OF 2
RBR-107	161	E-149	CABLE AND CONDUIT SCHEDULES CABLES 8G, SHEET 2 OF 2
RBR-107	162	E-150	CABLE AND CONDUIT SCHEDULES CABLES A, B, V, & MISC., SH. 1 OF 2
RBR-107	163	E-151	CABLE AND CONDUIT SCHEDULES CABLES A, B, V, & MISC., SH. 2 OF 2
RBR-107	164	E-152	CABLE AND CONDUIT SCHEDULES STATIC FREQUENCY CONTROLLER

SYMBOL	ZONE	DESCRIPTION	DATE	BY

REVISIONS

101RRP_G01_INDEX1.DGN
101RRP_TBLK.DGN

DESIGN	CHECK
(CENWP-HDC-A)	R. VANATTA

PREPARED BY: BRENT MAHAN
DIRECTOR, HDC
REVIEWED: WILLIAM C. LYNCH
PROJECT MANAGER
RECOMMENDED: DANIEL L. PARROTT
CHIEF, CIV. PROG. & PROJ. MGMT. BRANCH
DATE:

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
INDEX OF CONTRACT DRAWINGS
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	G-1

SCALE: SHEET 001

i:\ebs_dgn\RBR0107\03B11W\Contract Drawings\101rrp_g01_index1.dgn
11/03/2003
k6enxndt

INDEX OF REFERENCE DRAWINGS (VOL. 2)

FILE NO.	PLATE NO.	DRAWING NO.	TITLE
			GENERAL
RBR-107	G-1		INDEX OF CONTRACT DRAWINGS
RBR-107	G-2		INDEX OF REFERENCE DRAWINGS
			EXISTING MAIN ONE-LINE DIAGRAMS
RBR-107	R-1	RR5E-1001	MAIN ONE-LINE DIAGRAM - SH. 1
RBR-107	R-2	RR5E-1002	MAIN ONE-LINE DIAGRAM - SH. 2
			EXISTING GENERATOR CIRCUIT BREAKER SHOP DRAWINGS
RBR-107	R-3	2D24296	WESTINGHOUSE - OIL CIRCUIT BREAKER SCHEMATIC AND CONNECTION DIAGRAM (710)
RBR-107	R-4	2D24297	WESTINGHOUSE - OIL CIRCUIT BREAKER SCHEMATIC AND CONNECTION DIAGRAM (720)
RBR-107	R-5	2D24298	WESTINGHOUSE - OIL CIRCUIT BREAKER SCHEMATIC AND CONNECTION DIAGRAM (730)
RBR-107	R-6	2D24299	WESTINGHOUSE - OIL CIRCUIT BREAKER SCHEMATIC AND CONNECTION DIAGRAM (740)
RBR-107	R-7	4043B82	WESTINGHOUSE - BUSHING TYPE CURRENT TRANSFORMER CONNECTIONS ON OCB (710)
RBR-107	R-8	4043B83	WESTINGHOUSE - BUSHING TYPE CURRENT TRANSFORMER CONNECTIONS ON OCB (720)
RBR-107	R-9	4043B84	WESTINGHOUSE - BUSHING TYPE CURRENT TRANSFORMER CONNECTIONS ON OCB (730)
RBR-107	R-10	4043B85	WESTINGHOUSE - BUSHING TYPE CURRENT TRANSFORMER CONNECTIONS ON OCB (740)
RBR-107	R-11	5495C40	WESTINGHOUSE - (OIL CIRCUIT BREAKER OUTLINE)
RBR-107	R-12	BB80-5-0103, 1 OF 3	BBC - GENERAL OUTLINE, 3 POLE AIR BLAST CIRCUIT BREAKER
RBR-107	R-13	BB80-5-0103, 2 OF 3	BBC - GENERAL OUTLINE, 3 POLE AIR BLAST CIRCUIT BREAKER
RBR-107	R-14	BB80-5-0103, 3 OF 3	BBC - GENERAL OUTLINE, 3 POLE AIR BLAST CIRCUIT BREAKER
RBR-107	R-15	BB80-5-0104, 1 OF 2	BBC - AIR BLAST CIRCUIT BREAKER ELEMENTARY DIAGRAM
RBR-107	R-16	BB80-5-0105, 1 OF 6	BBC - AIR BLAST CIRCUIT BREAKER CONNECTION DIAGRAM - CONTROL CABINET
RBR-107	R-17	BB80-5-0105, 2 OF 6	BBC - AIR BLAST CIRCUIT BREAKER CONNECTION DIAGRAM - ABCB, CT's, DISC
RBR-107	R-18	BB80-5-0105, 3 OF 6	BBC - AIR BLAST CIRCUIT BREAKER 750 CONNECTION DIAGRAM - TERMINATION CABINET
RBR-107	R-19	BB80-5-0105, 4 OF 6	BBC - AIR BLAST CIRCUIT BREAKER 760 CONNECTION DIAGRAM - TERMINATION CABINET
RBR-107	R-20	BB80-5-0105, 5 OF 6	BBC - AIR BLAST CIRCUIT BREAKER 770 CONNECTION DIAGRAM - TERMINATION CABINET
RBR-107	R-21	BB80-5-0105, 6 OF 6	BBC - AIR BLAST CIRCUIT BREAKER 780 CONNECTION DIAGRAM - TERMINATION CABINET
RBR-107	R-22	BB80-5-0109, 1 OF 1	BBC - COMPRESSED AIR SYSTEM SCHEMATIC, AIR BLAST CIRCUIT BREAKER
RBR-107	R-23	BB80-5-0112, 1 OF 1	ABB - AIR BLAST CIRCUIT BREAKER KEY INTERLOCK SCHEME
RBR-107	R-24	D 86-1024	EAGLE AIR SYSTEMS - COMPRESSED AIR PLANT
			EXISTING ISOPHASE BUS, PT CUBICLE, AND PHASE REVERSAL SWITCH SHOP DRAWINGS
RBR-107	R-25	CN8C2130, SHT 1	WESTINGHOUSE - UNIT 1, P.T. & SURGE WIRING DIAGRAM
RBR-107	R-26	CN8C2130, SHT 2	WESTINGHOUSE - UNIT 2, P.T. & SURGE WIRING DIAGRAM
RBR-107	R-27	CN8C2130, SHT 3	WESTINGHOUSE - UNIT 3, P.T. & SURGE WIRING DIAGRAM
RBR-107	R-28	CN8C2130, SHT 4	WESTINGHOUSE - UNIT 4, P.T. & SURGE WIRING DIAGRAM
RBR-107	R-29	CN8D2492, SHT 1	WESTINGHOUSE - UNIT 1, INDOOR PLAN - IPB
RBR-107	R-30	CN8D2492, SHT 4	WESTINGHOUSE - UNIT 1, IPB INDOOR ELEVATION
RBR-107	R-31	CN8D2492, SHT 5	WESTINGHOUSE - UNIT 1, OUTDOOR ELEVATION IPB
RBR-107	R-32	CN8D2492, SHT 6	WESTINGHOUSE - UNIT 1, IPB OUTDOOR SECTION
RBR-107	R-33	CN8D2492, SHT 12	WESTINGHOUSE - UNIT 1, OUTDOOR PLAN IPB
RBR-107	R-34	CN8D2493, SHT 1	WESTINGHOUSE - UNIT 2, INDOOR PLAN - IPB
RBR-107	R-35	CN8D2493, SHT 2	WESTINGHOUSE - UNIT 2, P.T. CUBICLE
RBR-107	R-36	CN8D2493, SHT 4	WESTINGHOUSE - UNIT 2, IPB INDOOR ELEVATION
RBR-107	R-37	CN8D2493, SHT 5	WESTINGHOUSE - UNIT 2, OUTDOOR ELEVATION IPB
RBR-107	R-38	CN8D2493, SHT 6	WESTINGHOUSE - UNIT 2, OUTDOOR ELEVATION IPB
RBR-107	R-39	CN8D2493, SHT 7	WESTINGHOUSE - UNIT 2, IPB OUTDOOR SECTION
RBR-107	R-40	CN8D2493, SHT 12	WESTINGHOUSE - UNIT 2, OUTDOOR PLAN IPB
RBR-107	R-41	D-870428	BBC - ISOLATED PHASE BUS PLAN AT 24C, UNITS 5 & 7
RBR-107	R-42	D-870429	BBC - ISOLATED PHASE BUS SIDE EL. AT 24C, UNITS 5 & 7
RBR-107	R-43	D-870430	BBC - ISOLATED PHASE BUS PLAN AT EL. 322, UNIT 5 & 7
RBR-107	R-44	D-870431	BBC - ISOLATED PHASE BUS PLAN AT 29C, UNIT 6 & 8
RBR-107	R-45	D-870432	BBC - ISOLATED PHASE BUS SIDE EL. AT 29C, UNIT 6 & 8
RBR-107	R-46	D-870433	BBC - ISOLATED PHASE BUS PLAN AT EL. 322, UNIT 6 & 8
RBR-107	R-47	D-870434	BBC - ISOLATED PHASE BUS SIDE EL. AT EL. 322, UNIT 5 TO 8
RBR-107	R-48	D-870436	BBC - ISOLATED PHASE BUS DETAILS, UNIT 5 TO 8
RBR-107	R-49	D-870437	BBC - POT. TRANSF. & SURGE PROTECTION CUBICLE, UNIT 5 TO 8
RBR-107	R-50	D-870442	BBC - ISOLATED PHASE BUS GROUNDING SCHEME, UNITS 5, 6, 7 & 8
RBR-107	R-51	C876013	BBC - SCHEMATIC DIAGRAM FOR PHASE REVERSAL DISCONNECTING SWITCH MOTOR MECHANISM
RBR-107	R-52	C876014	BBC - WIRING DIAGRAM FOR PHASE REVERSAL DISCONNECTING SWITCH MOTOR MECHANISM
			EXISTING STARTING BUS CIRCUIT BREAKER 722 & 732 SHOP DRAWINGS
RBR-107	R-53	60211-D0426	BBC - INDOOR METALCLAD SWITCHGEAR - GENERAL ARRANGEMENT
RBR-107	R-54	60211-D0476	BBC - INDOOR METALCLAD SWITCHGEAR - ELEMENTARY DIAGRAM
RBR-107	R-55	60211-D0477 SHT 1	BBC - INDOOR METALCLAD SWITCHGEAR - SCHEMATIC DIAGRAM (722)
RBR-107	R-56	60211-D0477 SHT 2	BBC - INDOOR METALCLAD SWITCHGEAR - SCHEMATIC DIAGRAM (732)
RBR-107	R-57	60211-D0481 SHT 1	BBC - INDOOR METALCLAD SWITCHGEAR - CONNECTION DIAGRAM CUB. 1 (732)
RBR-107	R-58	60211-D0481 SHT 2	BBC - INDOOR METALCLAD SWITCHGEAR - CONNECTION DIAGRAM CUB. 1 (732)
RBR-107	R-59	60211-D0482 SHT 1	BBC - INDOOR METALCLAD SWITCHGEAR - CONNECTION DIAGRAM CUB. 2 (733)
RBR-107	R-60	60211-D0482 SHT 2	BBC - INDOOR METALCLAD SWITCHGEAR - CONNECTION DIAGRAM CUB. 2 (733)
			EXISTING STARTING BUS AND M.O.D. SHOP DRAWINGS
RBR-107	R-61	B- 260-30	CALVERT - BAR BUS, COVER & JOINT ASSEMBLY
RBR-107	R-62	B- 260-109	CALVERT - COVER & JOINER ASSEMBLY
RBR-107	R-63	B- 260-136	CALVERT - NON-VENTILATED BUS DUCT HOUSING SPLICE DETAIL
RBR-107	R-64	B- 5045-15	CALVERT - CIRCUIT BREAKER TERMINATION DETAIL
RBR-107	R-65	B- 5045-16	CALVERT - M.O.D. TERMINAL BLOCK WIRING SCHEMATIC
RBR-107	R-66	B- 5045-17	CALVERT - TRANSITION BOX DETAIL
RBR-107	R-67	B- 5045-18	CALVERT - M.O.D. TERMINATION TO DUCT
RBR-107	R-68	C- 5045-11	CALVERT - TRANSITION DETAILS @ BAY 2 & 3
RBR-107	R-69	C- 5045-13	CALVERT - M.O.D. BOX PARTS DETAIL
RBR-107	R-70	C- 5045-14	CALVERT - M.O.D. BOX DETAIL
RBR-107	R-71	C- 5045-32	CALVERT - CONTROL SCHEMATIC FOR MOTOR OPERATED DISCONNECT 767
RBR-107	R-72	C- 5045-33	CALVERT - CONTROL SCHEMATIC FOR MOTOR OPERATED DISCONNECT 777
RBR-107	R-73	C- 5045-34	CALVERT - CONTROL SCHEMATIC FOR MOTOR OPERATED DISCONNECT 787
RBR-107	R-74	D- 5045-2	CALVERT - INSTALLATION LAYOUT SERVICE BAY 3, 4 & 5
RBR-107	R-75	D- 5045-3	CALVERT - INSTALLATION LAYOUT SERVICE BAY 5, 6, 7 & 8
RBR-107	R-76	D- 5045-12	CALVERT - (MOTOR OPERATED DISCONNECT - DETAILS)
RBR-107	R-77	D- 5045-28	CALVERT - WIRING DIAGRAM FOR MOTOR OPERATED DISCONNECT SWITCH 767
RBR-107	R-78	D- 5045-29	CALVERT - WIRING DIAGRAM FOR MOTOR OPERATED DISCONNECT SWITCH 777
RBR-107	R-79	D- 5045-30	CALVERT - WIRING DIAGRAM FOR MOTOR OPERATED DISCONNECT SWITCH 787
RBR-107	R-80	C100D8	CLEAVELAND/PRICE - LCG-C OPERATOR & SWITCH OUTLINE ASSEMBLY
RBR-107			

FILE NO.	PLATE NO.	DRAWING NO.	TITLE
			EXISTING CABLE ROUTING AND CABLE TRAY DETAIL DRAWINGS
RBR-107	R-81	RR5E-308	CABLE ROUTING - SHEET 1
RBR-107	R-82	RR5E-309	CABLE ROUTING - SHEET 2
RBR-107	R-83	RR5E-310	CABLE ROUTING - SHEET 3
RBR-107	R-84	RR5E-311	CABLE ROUTING - SHEET 4
RBR-107	R-85	RR5E-312	CABLE ROUTING - SHEET 5
RBR-107	R-86	RR5E-313	CABLE TRAYS - ARRANGEMENT - SHEET 1
RBR-107	R-87	RR5E-321	CABLE TRAYS - SECTIONS AND DETAILS - SHEET 3
RBR-107	R-88	RR5E-1302	CABLE ROUTING - SH. 1
RBR-107	R-89	RR5E-1303	CABLE ROUTING - SH. 2
RBR-107	R-90	RR5E-1304	CABLE ROUTING - SH. 3
RBR-107	R-91	RR5E-1305	CABLE ROUTING - SH. 4
			EXISTING CONTROL BOARD SHOP DRAWINGS
RBR-107	R-92	E-10060 SHT 1 OF 4	CENTRAL SWBD - UNIT 5 ANNUNCIATOR & TRANSF. NO. 3 ANNUNCIATOR SCHEMATIC DIAGRAM
RBR-107	R-93	E-10062 SHT 1 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 12F, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-94	E-10062 SHT 2 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 12R, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-95	E-10062 SHT 9 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 13F, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-96	E-10062 SHT 10 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 13R, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-97	E-10062 SHT 20 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 15F, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-98	E-10062 SHT 21 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 15R, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-99	E-10062 SHT 28 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 16F, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-100	E-10062 SHT 29 OF 35	CENTRAL SWBD - MAIN SWITCHBOARD PANEL 16R, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-101	E-10063 SHT 1 OF 19	CENTRAL SWBD - AUX. SWITCHBOARD PANEL 12AUXF, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-102	E-10063 SHT 5 OF 19	CENTRAL SWBD - AUX. SWITCHBOARD PANEL 13AUXF, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-103	E-10063 SHT 9 OF 19	CENTRAL SWBD - AUX. SWITCHBOARD PANEL 14AUXF, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-104	E-10063 SHT 12 OF 19	CENTRAL SWBD - AUX. SWITCHBOARD PANEL 15AUXF, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-105	E-10063 SHT 16 OF 19	CENTRAL SWBD - AUX. SWITCHBOARD PANEL 16AUXF, TERMINAL BLOCK LAYOUT AND EXTERNAL CONNECTIONS
RBR-107	R-106	R-43085 SHT 1 OF 8	CONTROL POWER - GENERATOR NO. 1 ANNUNCIATOR
RBR-107	R-107	R-43546	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 7F
RBR-107	R-108	R-43548	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 7R
RBR-107	R-109	R-43550	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 8F
RBR-107	R-110	R-43552	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 8R
RBR-107	R-111	R-43558	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 10F
RBR-107	R-112	R-43560	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 10R
RBR-107	R-113	R-43562	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 11F
RBR-107	R-114	R-43564	CONTROL POWER - MAIN BOARD EXTERNAL CABLING, PANEL 11R
RBR-107	R-115	R-43587	CONTROL POWER - AUXILIARY BOARD EXTERNAL CABLING, PANEL 7AUXF
RBR-107	R-116	R-43591	CONTROL POWER - AUXILIARY BOARD EXTERNAL CABLING, PANEL 8AUXF
RBR-107	R-117	R-43595	CONTROL POWER - AUXILIARY BOARD EXTERNAL CABLING, PANEL 9AUXF
RBR-107	R-118	R-43599	CONTROL POWER - AUXILIARY BOARD EXTERNAL CABLING, PANEL 10AUXF
RBR-107	R-119	R-43603	CONTROL POWER - AUXILIARY BOARD EXTERNAL CABLING, PANEL 11AUXF
RBR-107	R-120	170-583-01-1 2/2	MARINE IND - STATIC EXCITATION WTA-300 CUST. CKT. IDENT. AND TERM. LIST
RBR-107	R-121	9973-208 SH 4 OF 9	WOODWARD - DIAGRAM-WIRING FOR U.S. ARMY CORPS OF ENGINEERS RICHARD B. RUSSELL UNITS 1&4
RBR-107	R-122	9973-210 SH 4 OF 9	WOODWARD - DIAGRAM-WIRING FOR U.S. ARMY CORPS OF ENGINEERS RICHARD B. RUSSELL UNITS 2&3
RBR-107	R-123	9973-688 SH 8 OF 13	WOODWARD - DIAGRAM-WIRING FOR U.S. ARMY CORPS OF ENGINEERS RICHARD B. RUSSELL UNITS 5&7
RBR-107	R-124	9973-728 SH 8 OF 13	WOODWARD - DIAGRAM-WIRING FOR U.S. ARMY CORPS OF ENGINEERS RICHARD B. RUSSELL UNITS 6&8
			GFE ISOPHASE BUS AND CIRCUIT BREAKER SHOP DRAWINGS
RBR-107	R-125	1HDP80 0803 SH 1	ABB - GENERATOR CIRCUIT BREAKER AND ISOLATED PHASE BUS SUPPLY - UNIT 1-4
RBR-107	R-126	1HDP80 0803 SH 2	ABB - GENERATOR CIRCUIT BREAKER AND ISOLATED PHASE BUS SUPPLY - UNIT 1-4
RBR-107	R-127	1HDP80 0804 SH 1	ABB - GENERATOR CIRCUIT BREAKER AND ISOLATED PHASE BUS SUPPLY - UNIT 5/7
RBR-107	R-128	1HDP80 0804 SH 2	ABB - GENERATOR CIRCUIT BREAKER AND ISOLATED PHASE BUS SUPPLY - UNIT 6/8
RBR-107	R-129	1HDP80 0804 SH 3	ABB - GENERATOR CIRCUIT BREAKER AND ISOLATED PHASE BUS SUPPLY - UNIT 6/8
RBR-107	R-130	995D676	ABB - TERMINATION CABINET WITH STAND - OUTLINE
RBR-107	R-131	995D685 SH 1	ABB - TERMINATION CABINET AND CABLE TROUGH - LAYOUT DRAWING
RBR-107	R-132	995D685 SH 2	ABB - TERMINATION CABINET AND CABLE TROUGH - LAYOUT DRAWING
RBR-107	R-133	1HC0012968	ABB - GENERATOR CIRCUIT BREAKER HG OUTLINE DRAWING TYPE HGC 3 - UNITS 1-4
RBR-107	R-134	1HC0012969	ABB - GENERATOR CIRCUIT BREAKER HG OUTLINE DRAWING TYPE HGC 3 - UNITS 5&7
RBR-107	R-135	1HC0012970	ABB - GENERATOR CIRCUIT BREAKER HG OUTLINE DRAWING TYPE HGC 3 - UNITS 6&8

SYMBOL	ZONE	DESCRIPTION	DATE	BY

REVISIONS

101RRP_G02_INDEX2.DGN
101RRP_TBLK.DGN

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
INDEX OF REFERENCE DRAWINGS
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	G-2

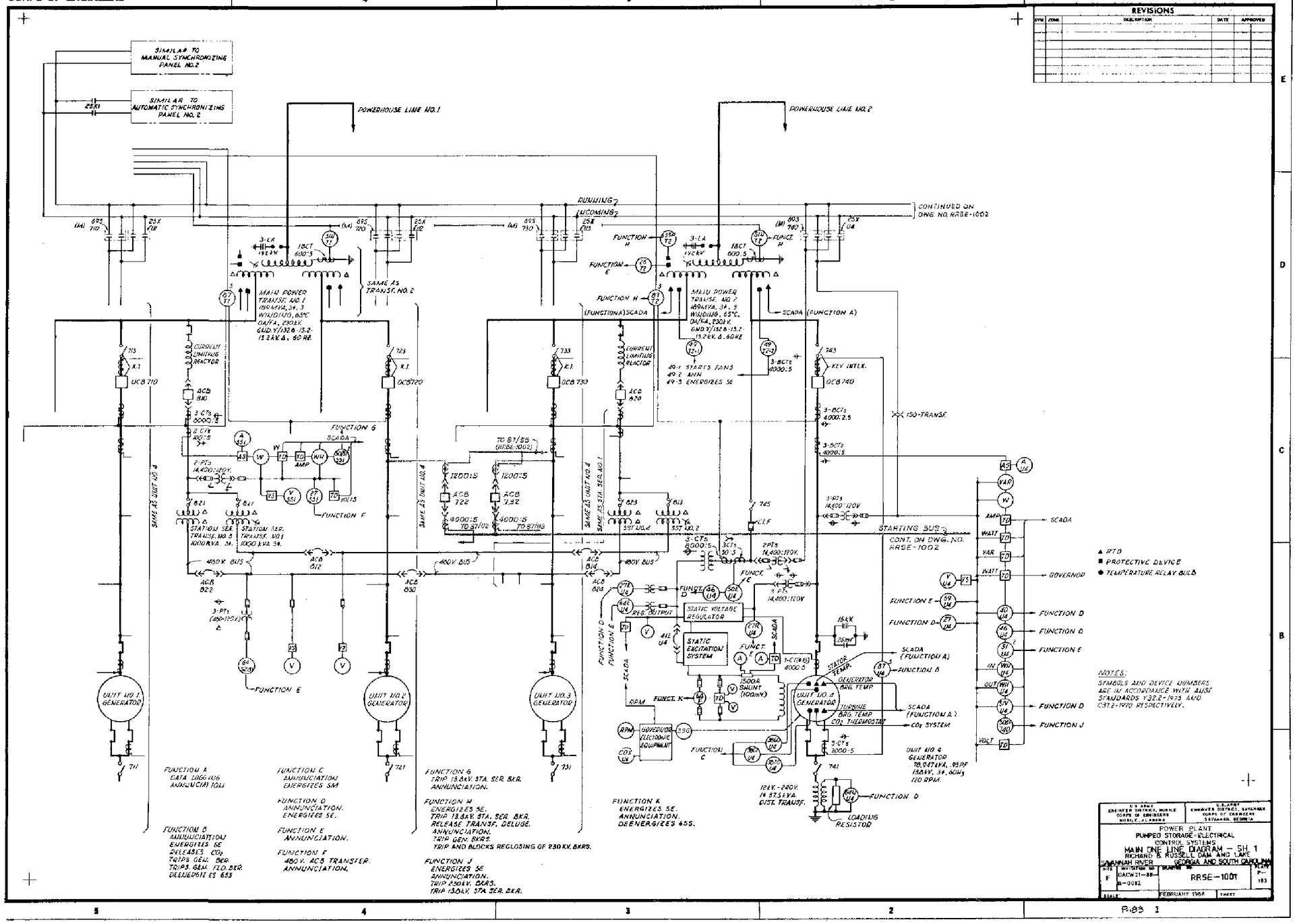
SCALE: SHEET 002

i:\ebs_dgn\RBR0107\03B11W\Contract Drawings\101rrp_g02_index2.dgn
11/03/2003
k6enxndt

CORPS OF ENGINEERS — U. S. ARMY

REVISIONS

SYM	ZONE	DESCRIPTION	DATE	APPROVED



U.S. ARMY ENGINEER DISTRICT, MOBILE CORPS OF ENGINEERS MOBILE, ALABAMA

U.S. ARMY ENGINEER DISTRICT, SAVANNAH CORPS OF ENGINEERS SAVANNAH, GEORGIA

POWER PLANT
PUMPED STORAGE-ELECTRICAL
CONTROL SYSTEMS
MAIN ONE LINE DIAGRAM — SH. 1
RICHARD B. RUSSELL DAM AND LAKE
SAVANNAH RIVER GEORGIA AND SOUTH CAROLINA

SIZE	SOLICITATION NO.	DRAWING NO.	SHEET NO.
F	DACW21-88-B-0082	RR5E-1001	P-183

SCALE: FEBRUARY 1988 SHEET

P-183 1

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-1

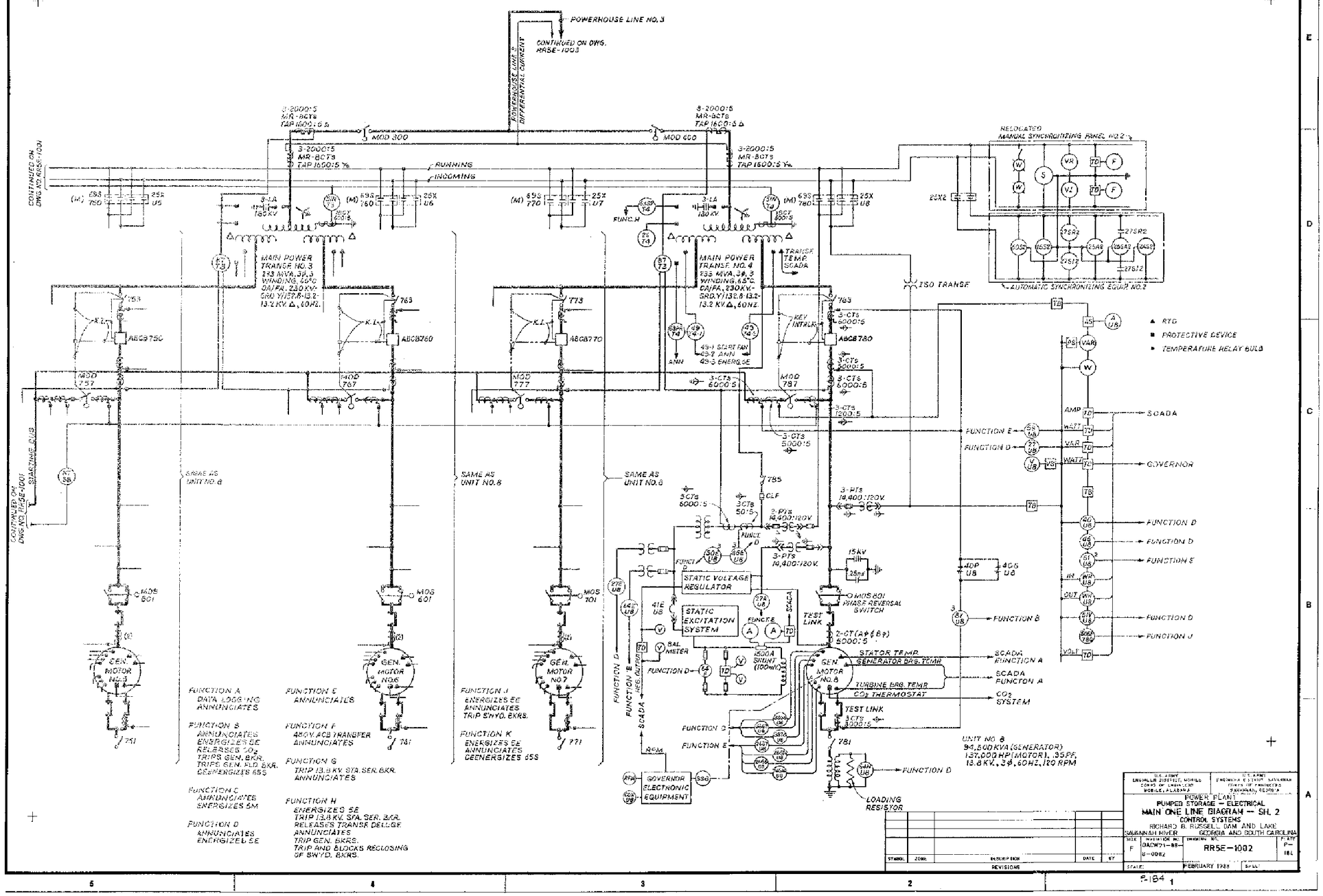
SCALE: NONE SHEET

101RRP_R001_CESAS_RR5E1001.DGN
101RRP_TBLK.DGN
CESAS_RR5E1001.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r001_cesas_rr5e1001.dgn
11/03/2003
k6enxndt

...\101rrp_r001_cesas_rr5e1001.dgn 11/03/2003 02:23:54 PM

CORPS OF ENGINEERS | U. S. ARMY



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

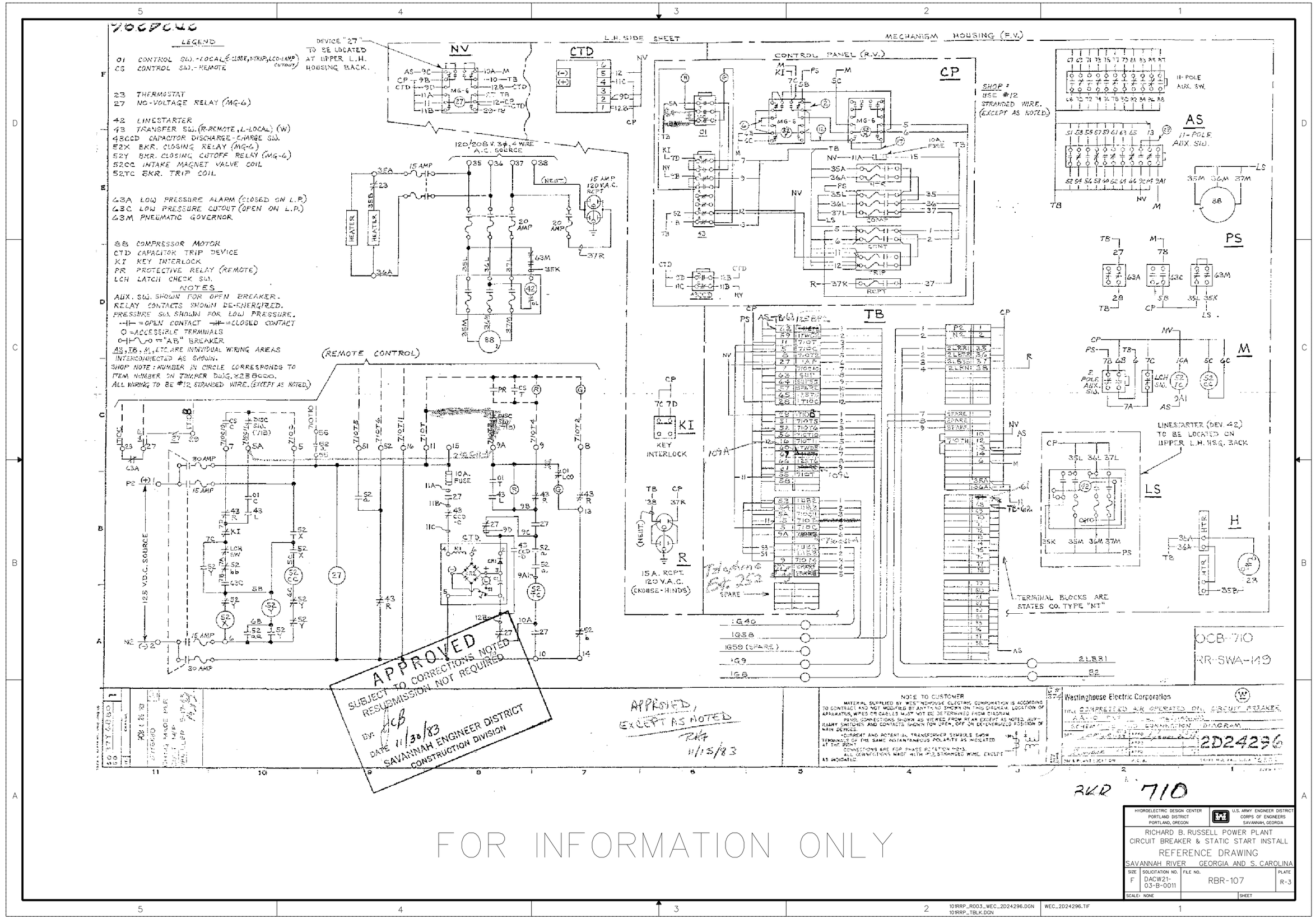
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-2

SCALE: NONE | SHEET

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r002_cesas_rr5e1002.dgn
11/03/2003
k6enxndt

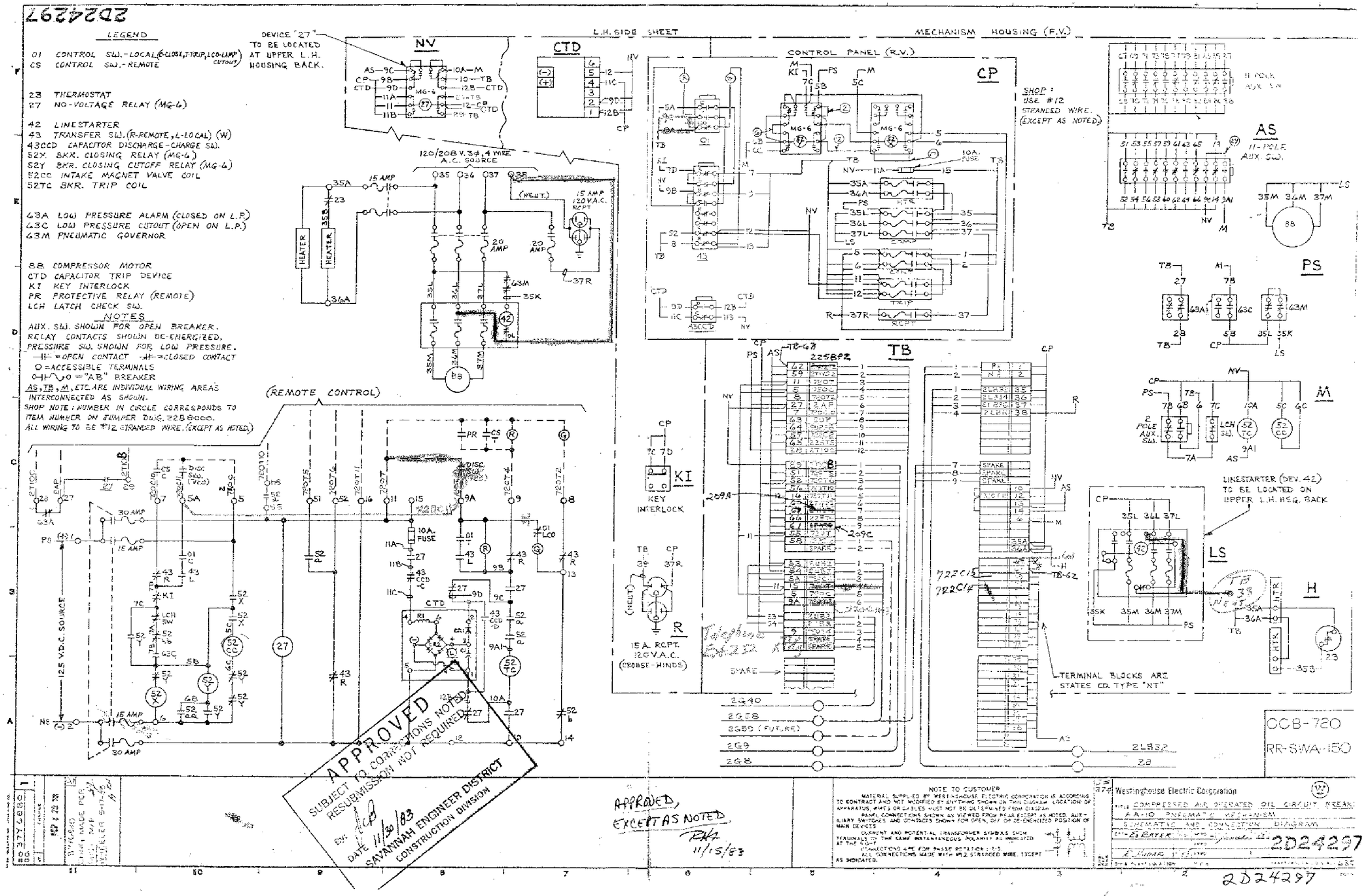
101RRP_CESAS_R002_RR5E1002.DGN
101RRP_TBLK.DGN
CESAS_RR5E1002.TIF

...\101rrp_r002_cesas_rr5e1002.dgn 11/03/2003 02:24:39 PM



I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r003_wec_2d24296.dgn
11/03/2003
k6enxndt

...\101rrp_r003_wec_2d24296.dgn 11/03/2003 02:25:40 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-4

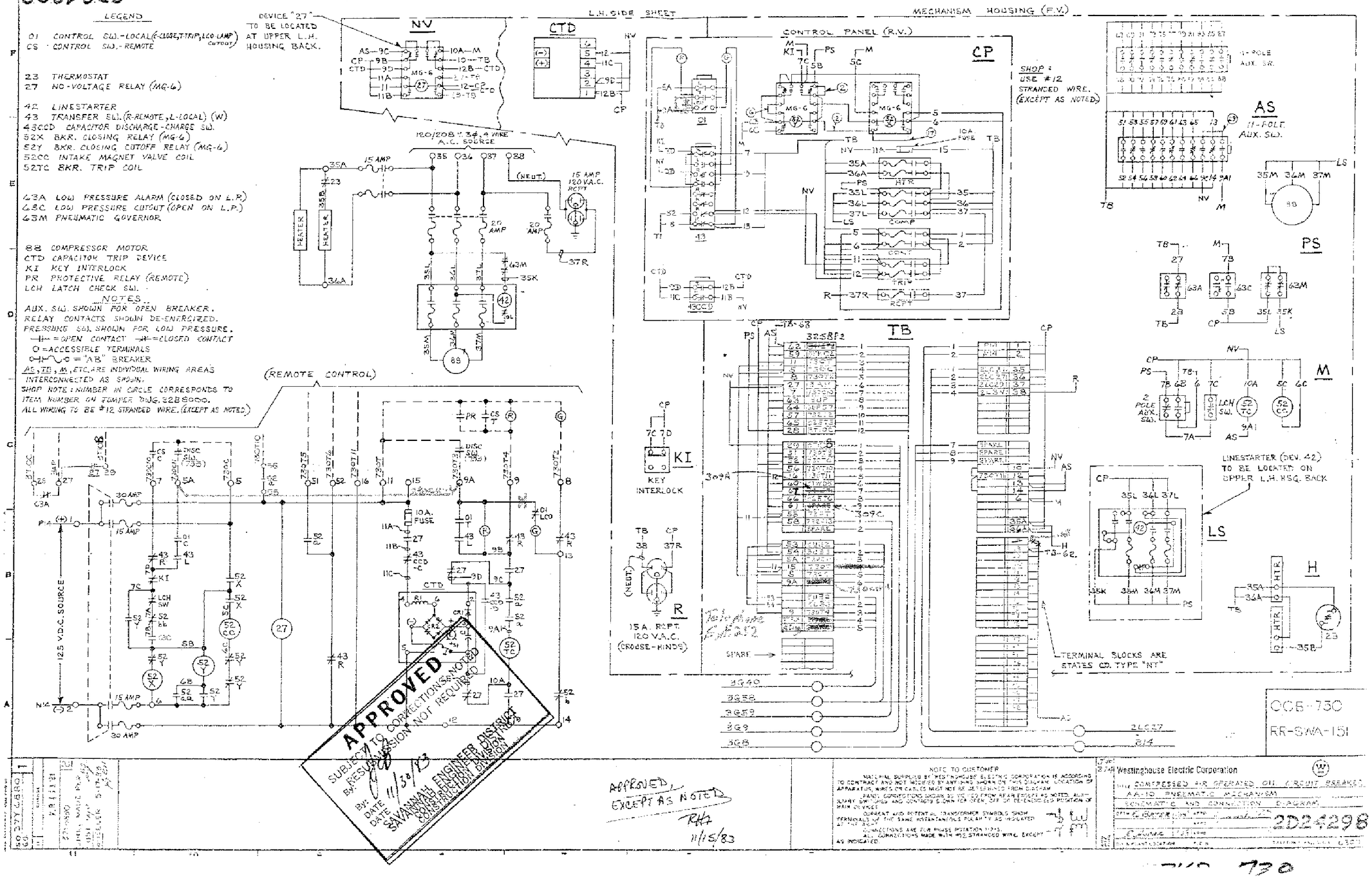
SCALE: NONE SHEET

101RRP_R004_WEC_2D24297.DGN
101RRP_TBLK.DGN
WEC_2D24297.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r004_wec_2d24297.dgn
11/03/2003
k6enxndt

...\101rrp_r004_wec_2d24297.dgn 11/03/2003 02:26:24 PM

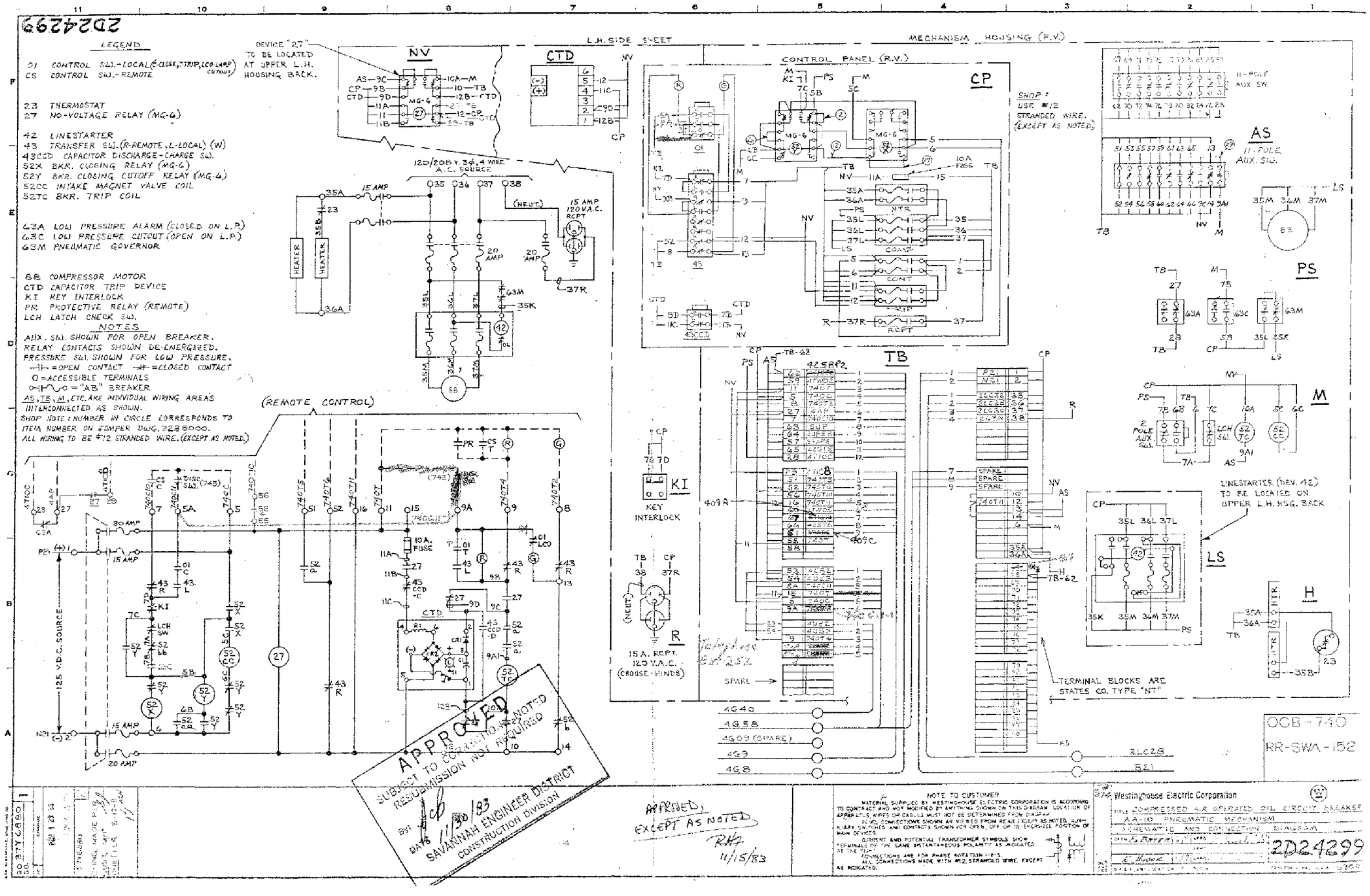
2D24298



FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r005_wec_2d24298.dgn
11/03/2003
k6enxndt

...\101rrp_r005_wec_2d24298.dgn 11/03/2003 02:27:01 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

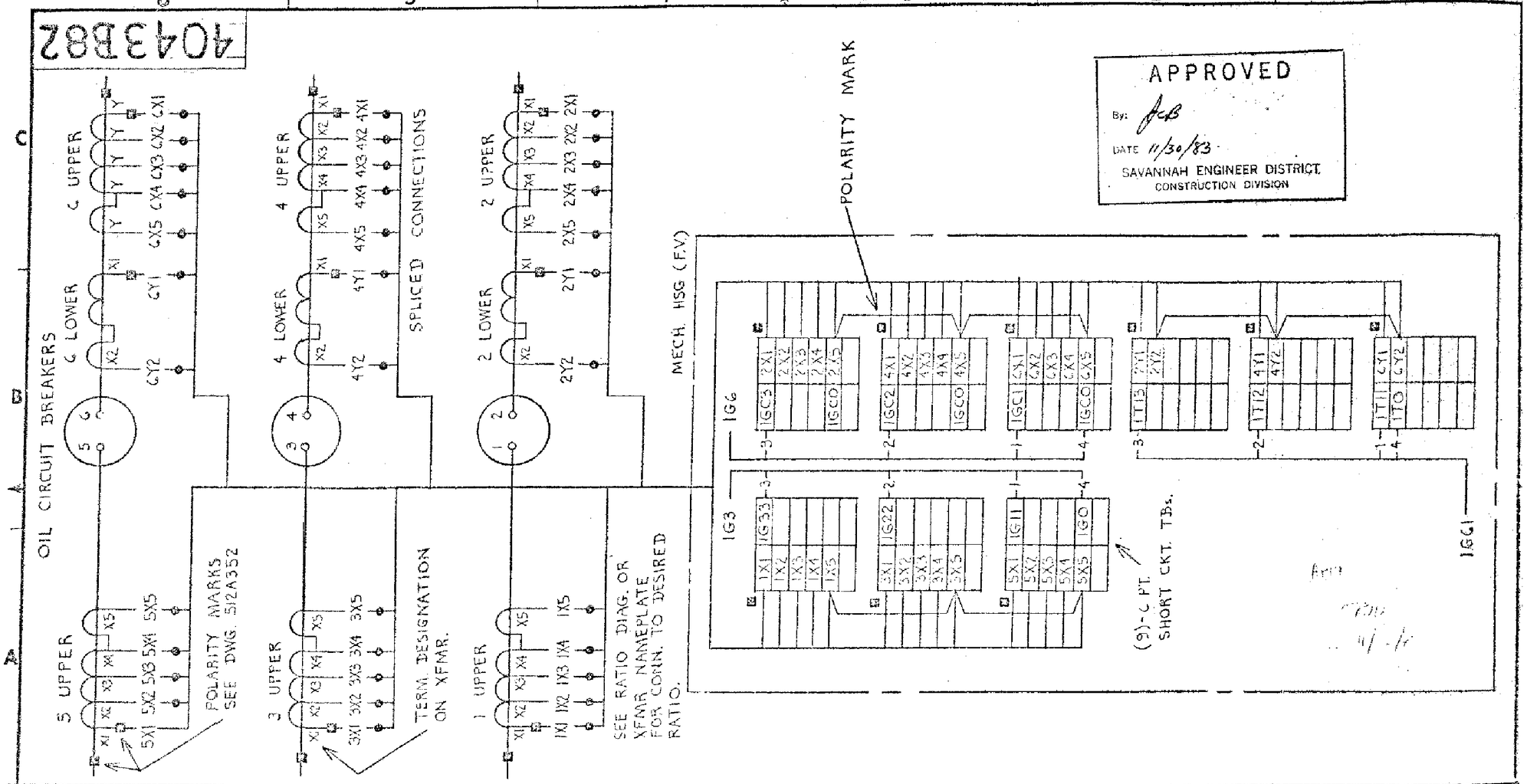
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-6

SCALE: NONE SHEET

101RRP_R006_WEC_2D24299.DGN
101RRP_TBLK.DGN
WEC_2D24299.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r006_wec_2d24299.dgn
11/03/2003
k6enxndt

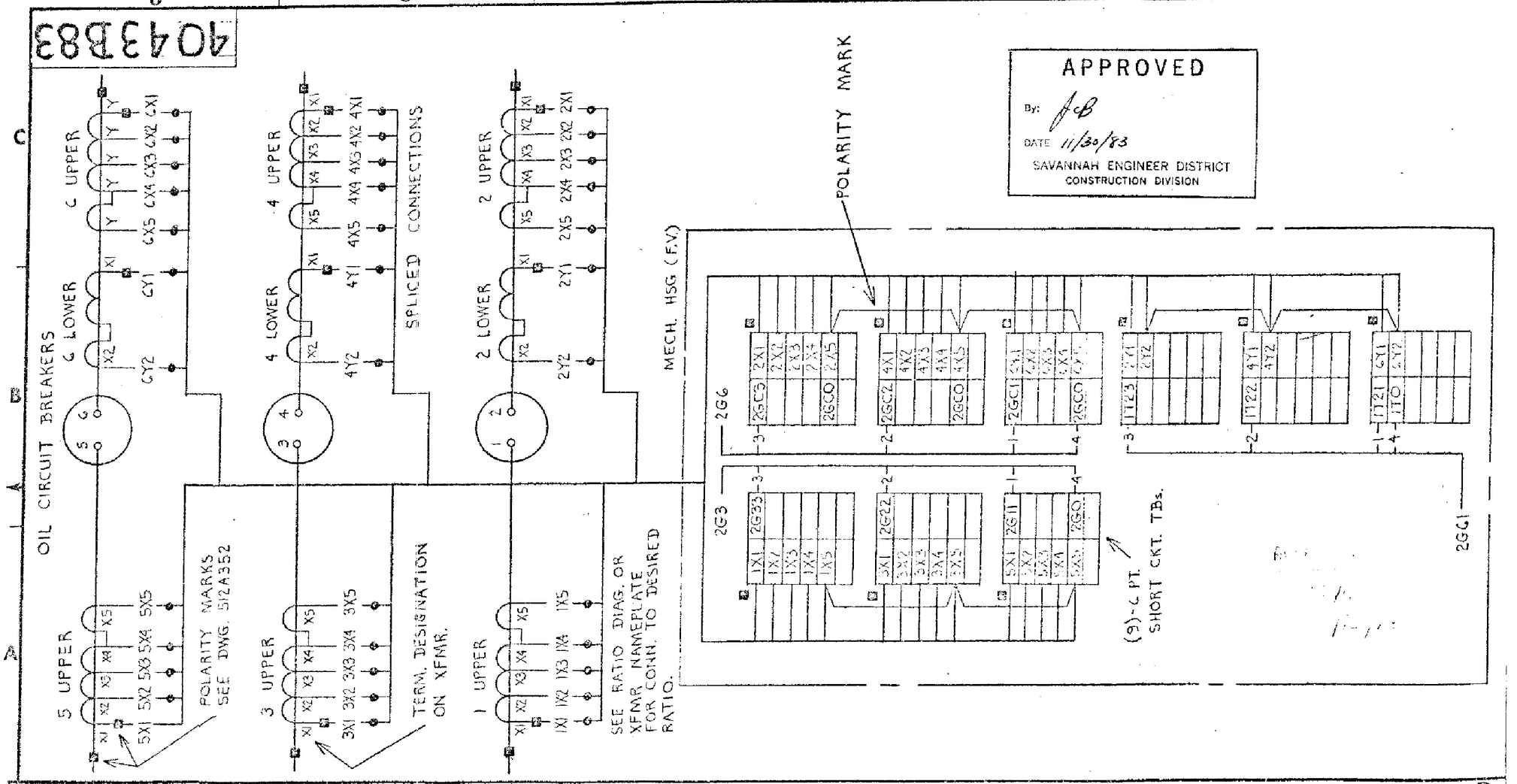
...\101rrp_r006_wec_2d24299.dgn 11/03/2003 02:27:41 PM



FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r007_wec_4043b82.dgn
11/03/2003
k6enxndt

...\101rrp_r007_wec_4043b82.dgn 11/03/2003 02:28:30 PM



APPROVED
By: JCB
DATE 11/30/83
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

4043B83

Brkr-720
RR-SWA-154

Westinghouse Electric Corporation
TITLE BUSHING TYPE CURRENT TRANSFORMER
CONNECTIONS ON OIL CIRCUIT BREAKER
DIMENSIONS IN INCHES - SCALE
DFTM S. Tomko
APPD
APPD
APPD
4043B83
DIV & PLANT LOCATION P.C.B. TRAFFORD, PA USA 6000
ENG. FOR DWG. 1652B89
CHANGE
SO 37Y6880
FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

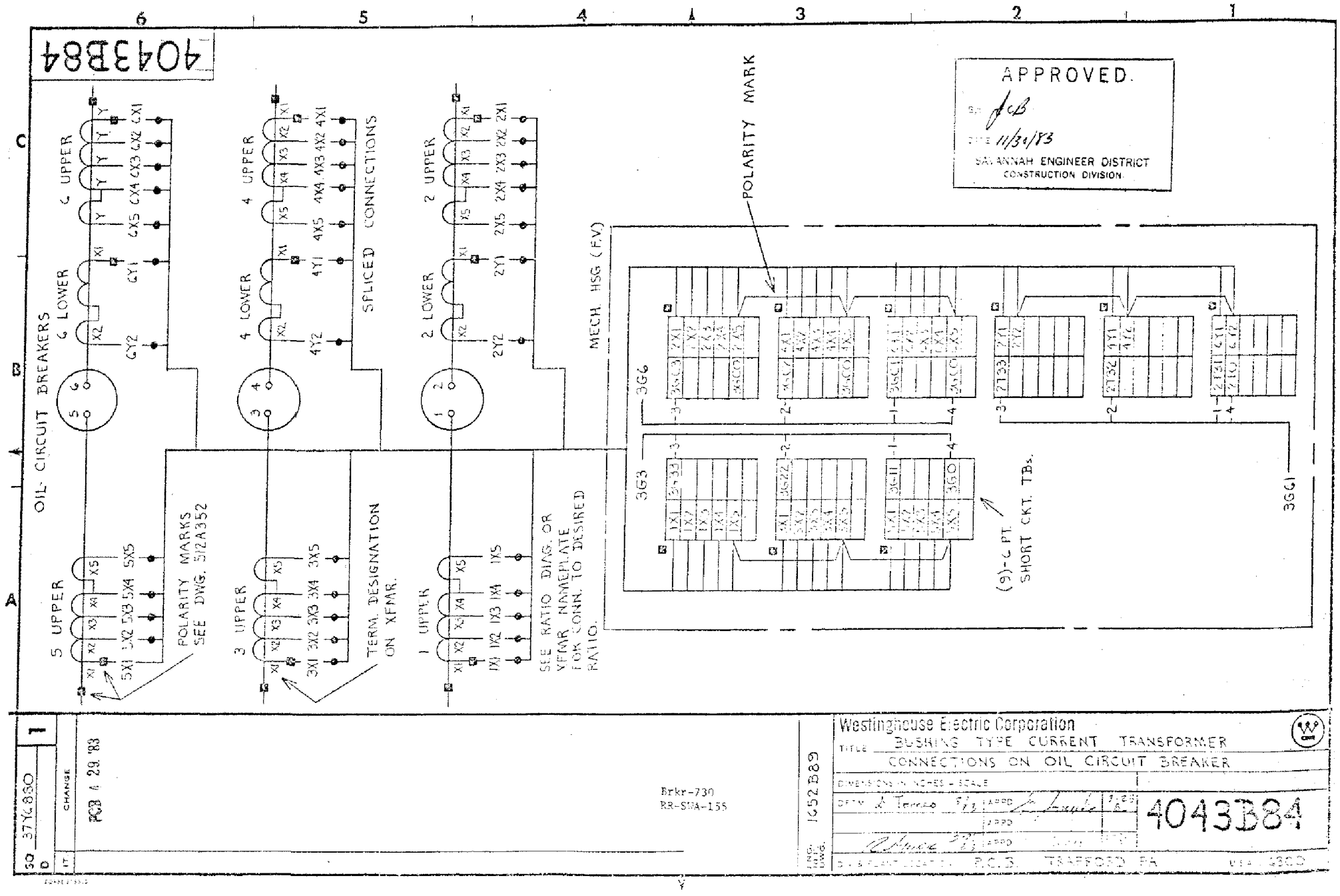
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-8

SCALE: NONE SHEET

101RRP_R008_WEC_4043B83.DGN
101RRP_TBLK.DGN
WEC_4043B83.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r008_wec_4043b83.dgn
11/03/2003
keenxndt

...\101rrp_r008_wec_4043b83.dgn 11/03/2003 02:29:06 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

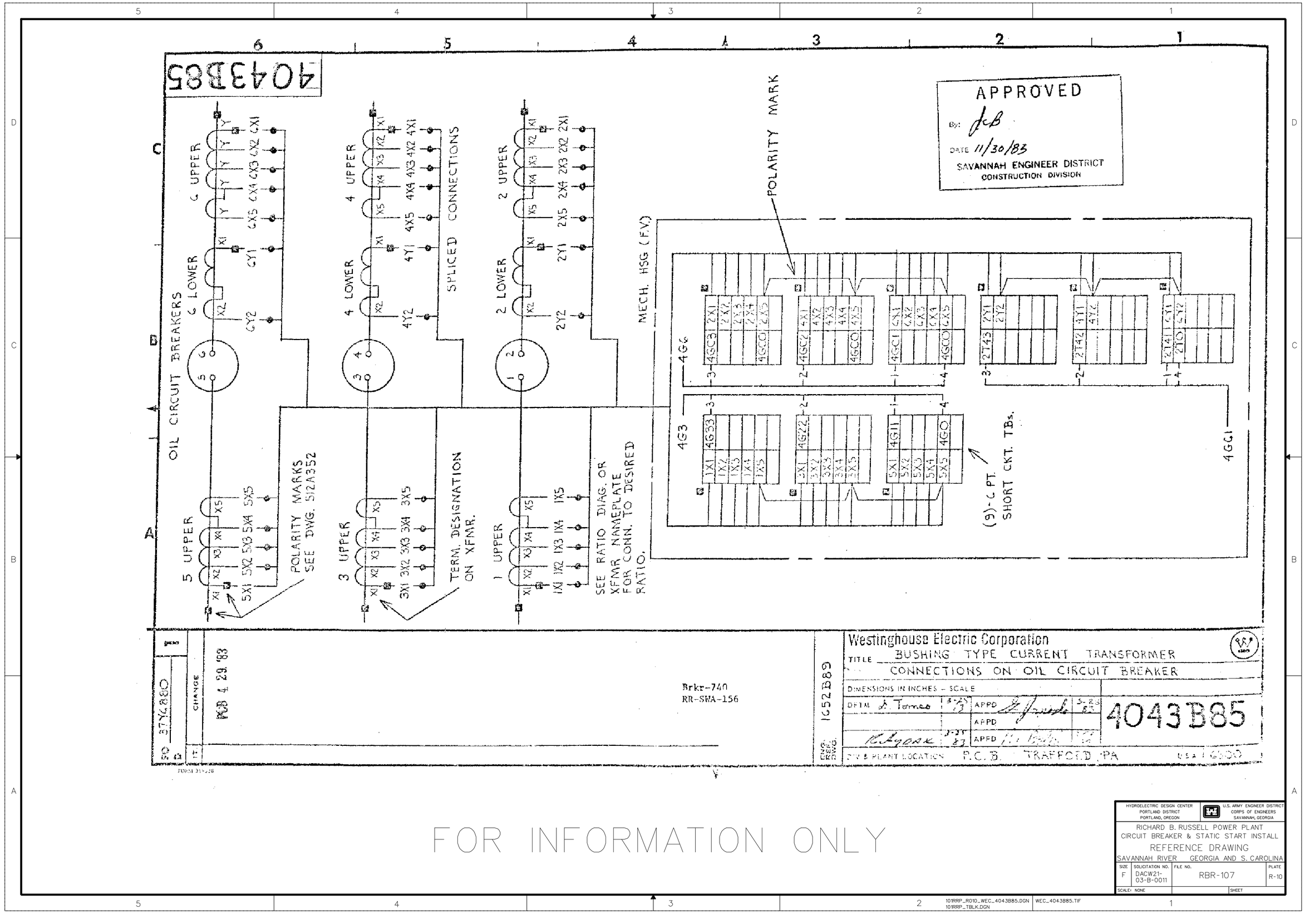
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-9

SCALE: NONE SHEET

101RRP_R009_WEC_4043B84.DGN
101RRP_TBLK.DGN
WEC_4043B84.TIF

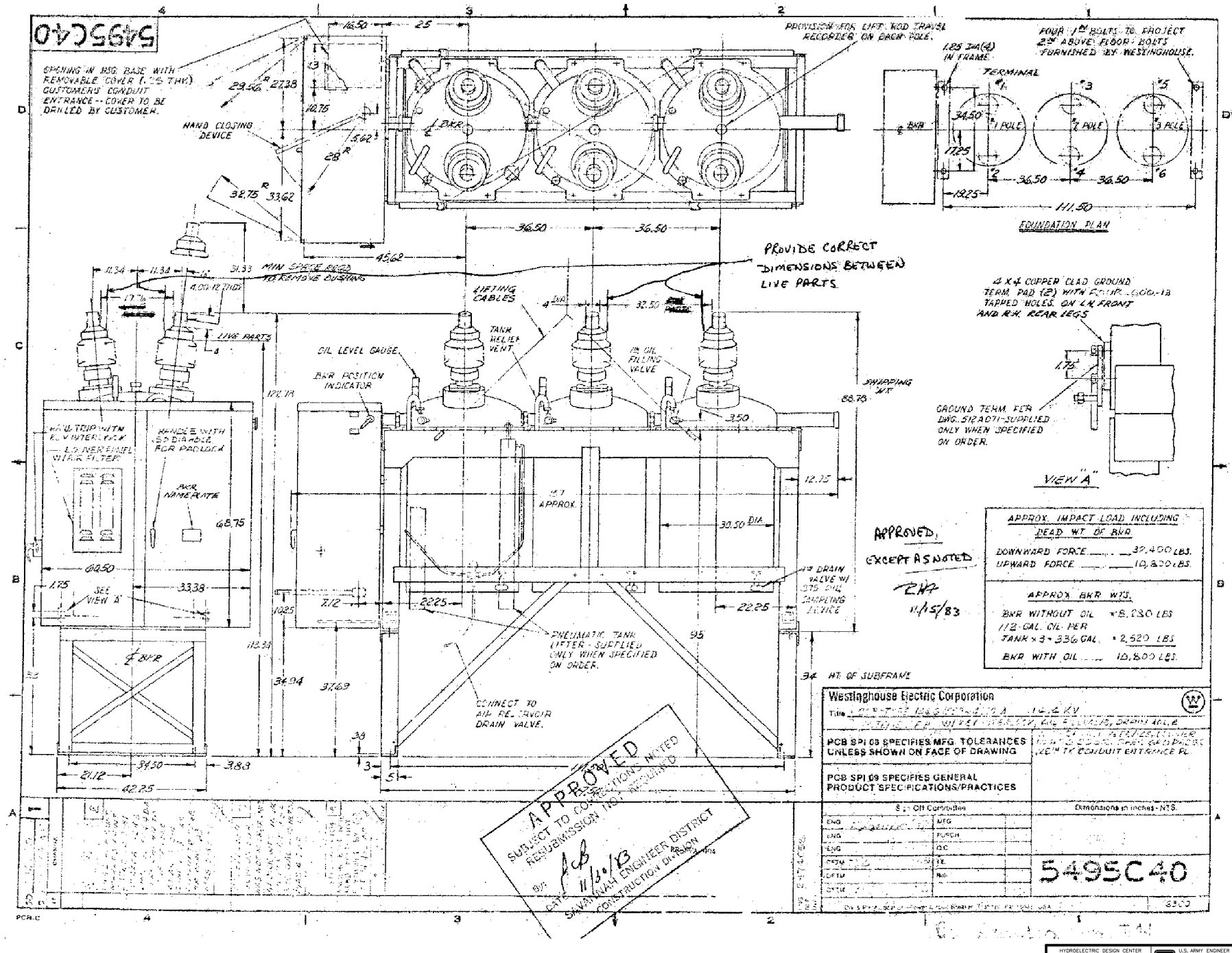
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r009_wec_4043b84.dgn
11/03/2003
koenxndt

...\101rrp_r009_wec_4043b84.dgn 11/03/2003 02:30:16 PM



I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r010_wec_4043b85.dgn
11/03/2003
k6enxndt

...\101rrp_r010_wec_4043b85.dgn 11/03/2003 02:30:50 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

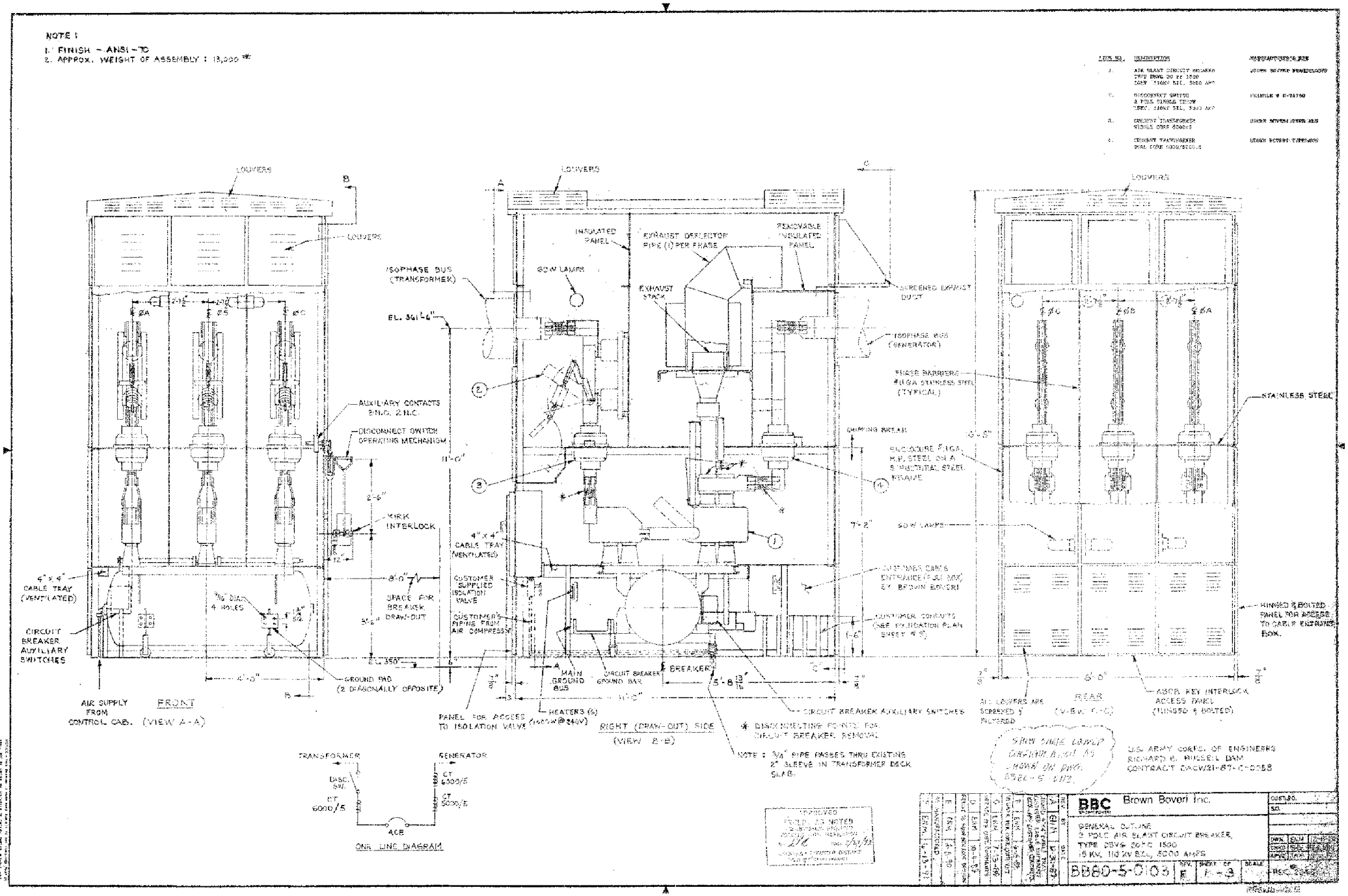
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-11

SCALE: NONE SHEET

101RRP_R011_WEC_5495C40.DGN
101RRP_TBLK.DGN
WEC_5495C40.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r011_wec_5495c40.dgn
11/03/2003
kGenxndt

...\101rrp_r011_wec_5495c40.dgn 11/03/2003 02:31:33 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

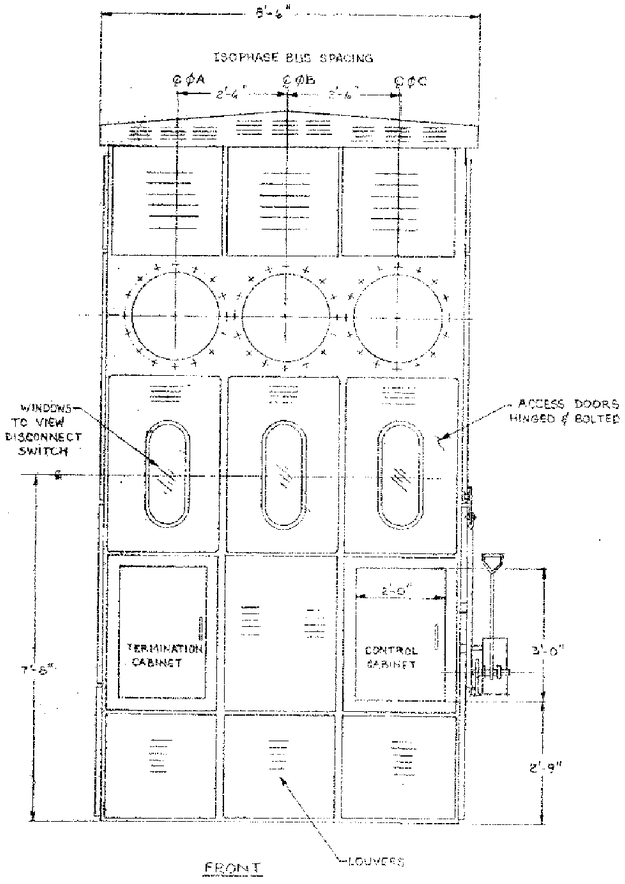
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-12

SCALE: NONE SHEET

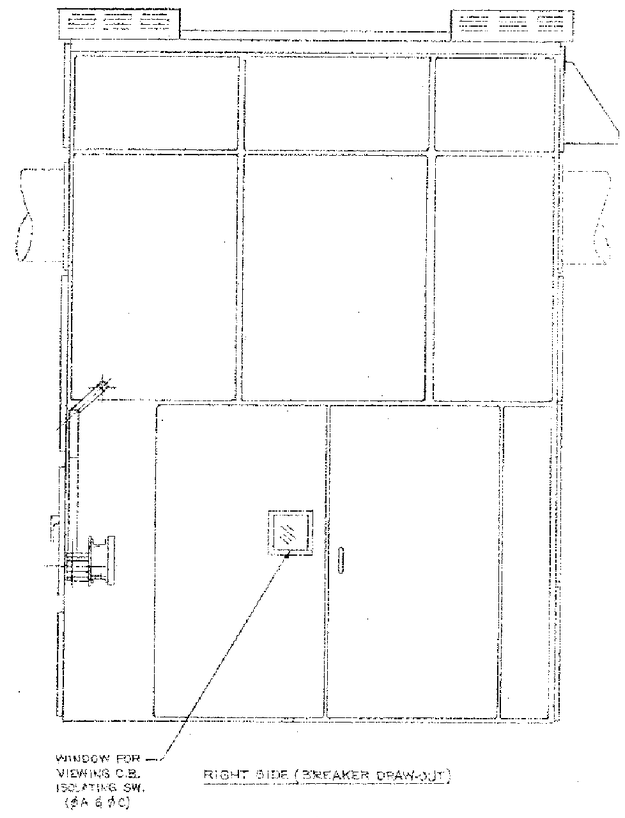
101RRP_R012_BBC_BB8050103_1.DGN
101RRP_TBLK.DGN
BBC_BB8050103_1.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r012_bbc_bb8050103_1.dgn
11/03/2003
k6enxndt

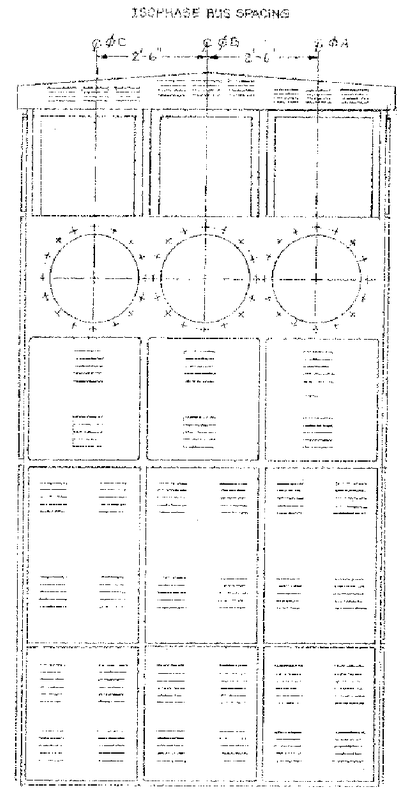
...\101rrp_r012_bbc_bb8050103_1.dg 11/03/2003 02:32:37 PM



FRONT



RIGHT SIDE (BREAKER DRAW-OUT)



REAR

SHOW SAME LOUVER CONFIGURATION AS SHOWN ON DWG. BB80-5-0102

U.S. ARMY CORPS. OF ENGINEERS
RICHARD B. RUSSELL DAM
CONTRACT DACW21-87-C-0066

APPROVED
EXCEPTIONS NOTED
SEE REVISION REQUIRED
DATE 4/4/88

REV.	BY	DATE	REVISIONS
A	BRM	12-30-87	
B	BRM	1-15-88	REVISIONS PER REVIEW COMMENTS
C	ERM	2-8-90	REVISIONS PER REVIEW COMMENTS
D	BRM	1-5-91	REVISIONS PER REVIEW COMMENTS

BBC Brown Boveri Inc.

GENERAL OUTLINE
3 POLE, AIR BLAST CIRCUIT BREAKER
TYPE DBVS 20 FC 1500
15 KV, 110 KV BIL, 5000 AMPS

CUST PO.
SO.
DWN. ERM
CHKD. BBB
APVD. JPM

BB-80-5-0103 | REV. D | SHEET 2 OF 3 | SCALE | PEC # 2845

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

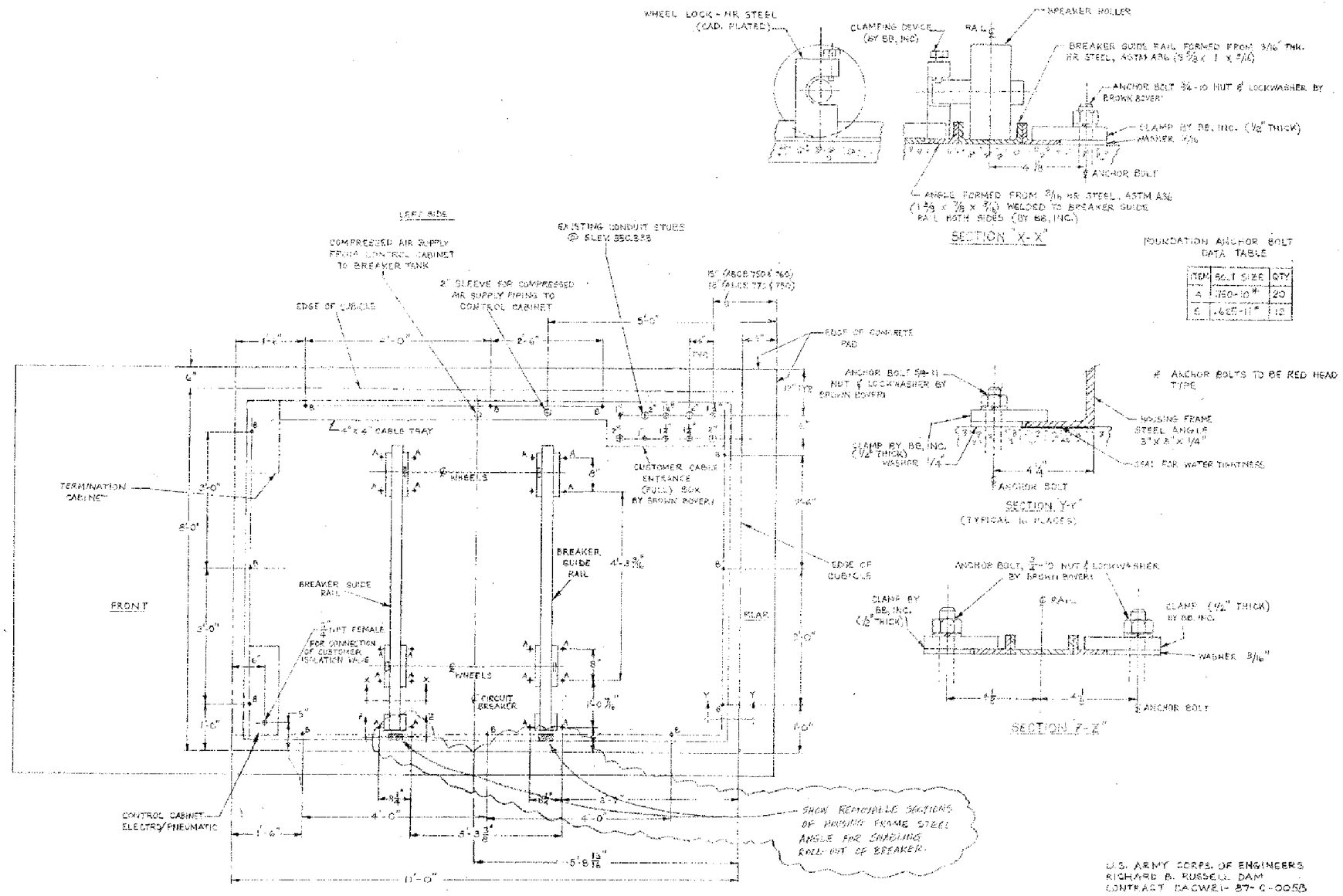
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-13

SCALE: NONE | SHEET

101RRP_R013_BBC_BB8050103_2.DGN
101RRP_TBLK.DGN
BBC_BB8050103_2.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r013_bbc_bb8050103_2.dgn
11/03/2003
k6enxndt

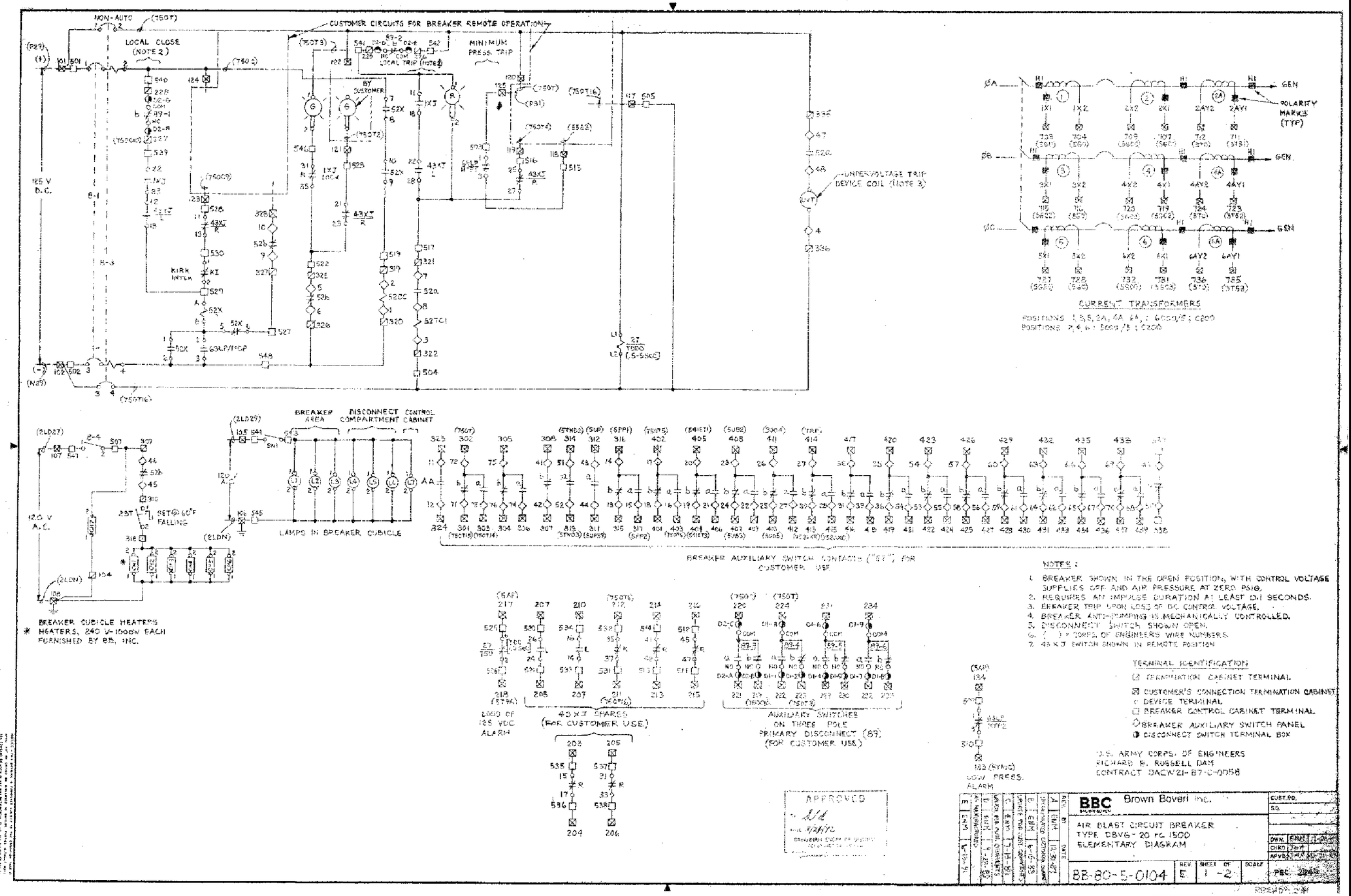
...\101rrp_r013_bbc_bb8050103_2.dg 11/03/2003 02:33:28 PM



FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r014_bbc_bb8050103_3.dgn
11/03/2003
k6enxndt

...\101rrp_r014_bbc_bb8050103_3.dg 11/03/2003 02:55:10 PM

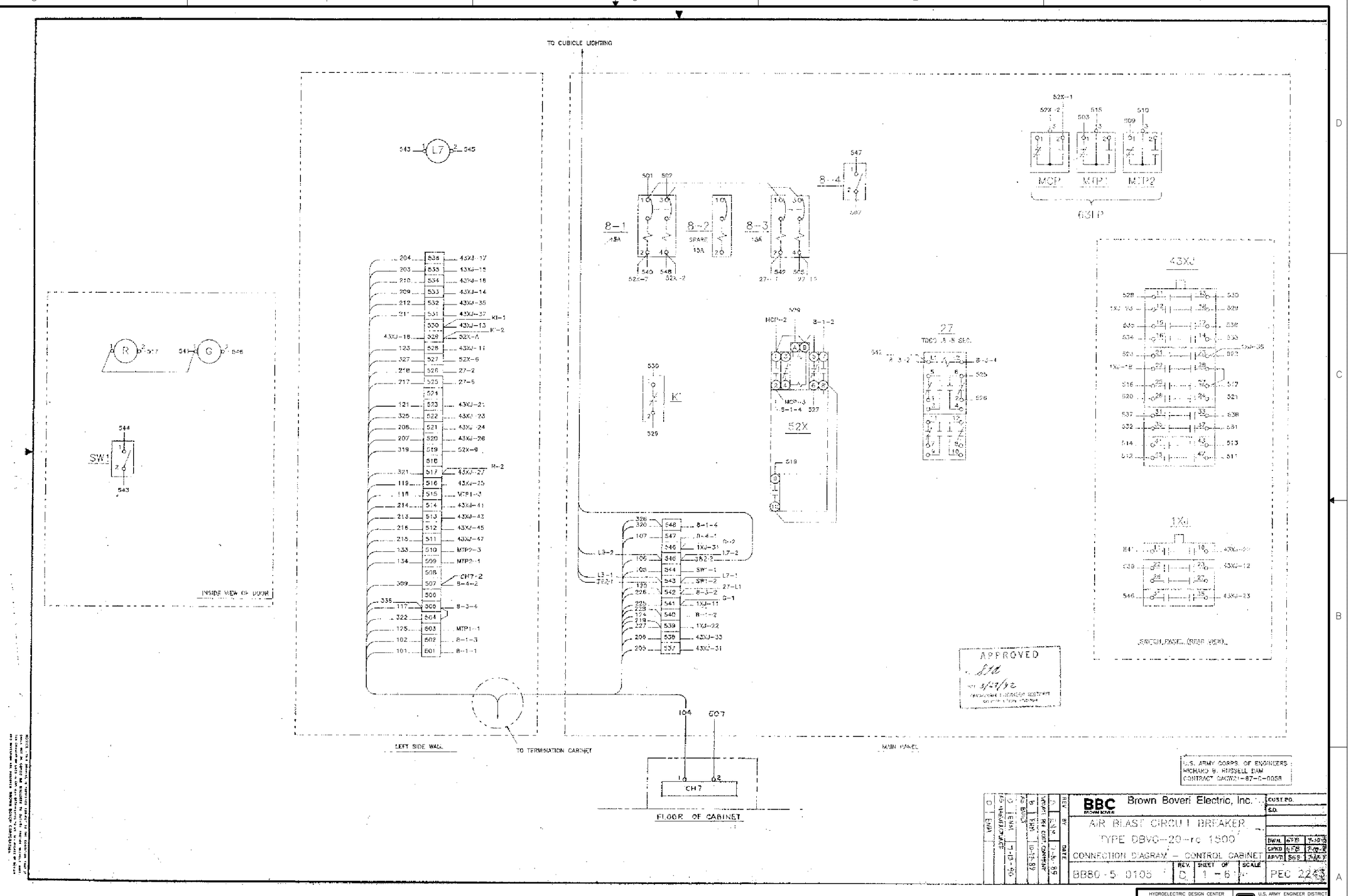


FOR INFORMATION ONLY

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r015_bbc_bb8050104_1.dgn
11/03/2003
k6enxndt

101RRP_R015_BBC_BB8050104_1.DGN
101RRP_TBLK.DGN
BBC_BB8050104_1.TIF

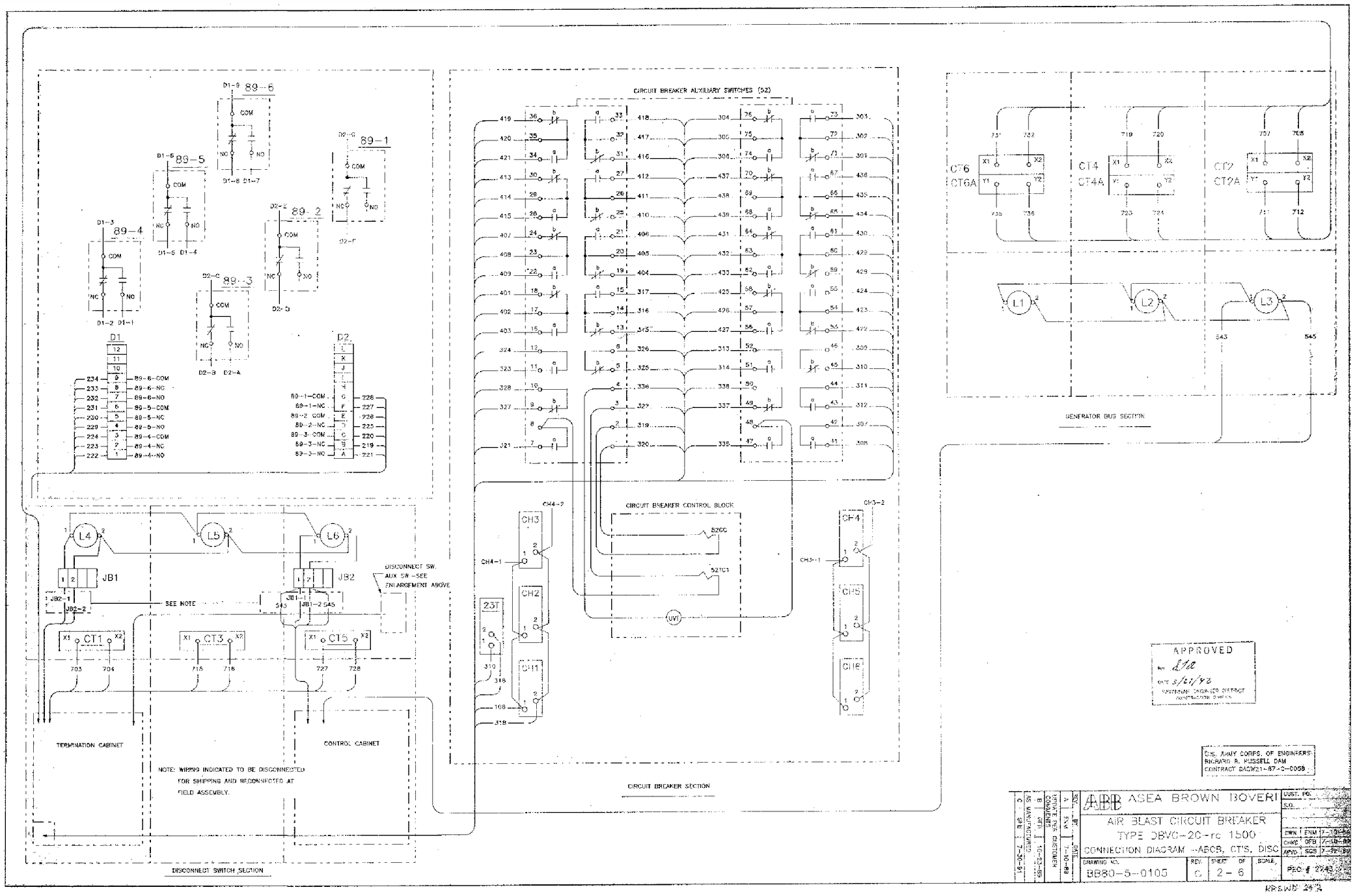
...\101rrp_r015_bbc_bb8050104_1.dg 11/03/2003 03:10:20 PM



FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r016_bbc_bb8050105_1.dgn
11/03/2003
kbenxndt

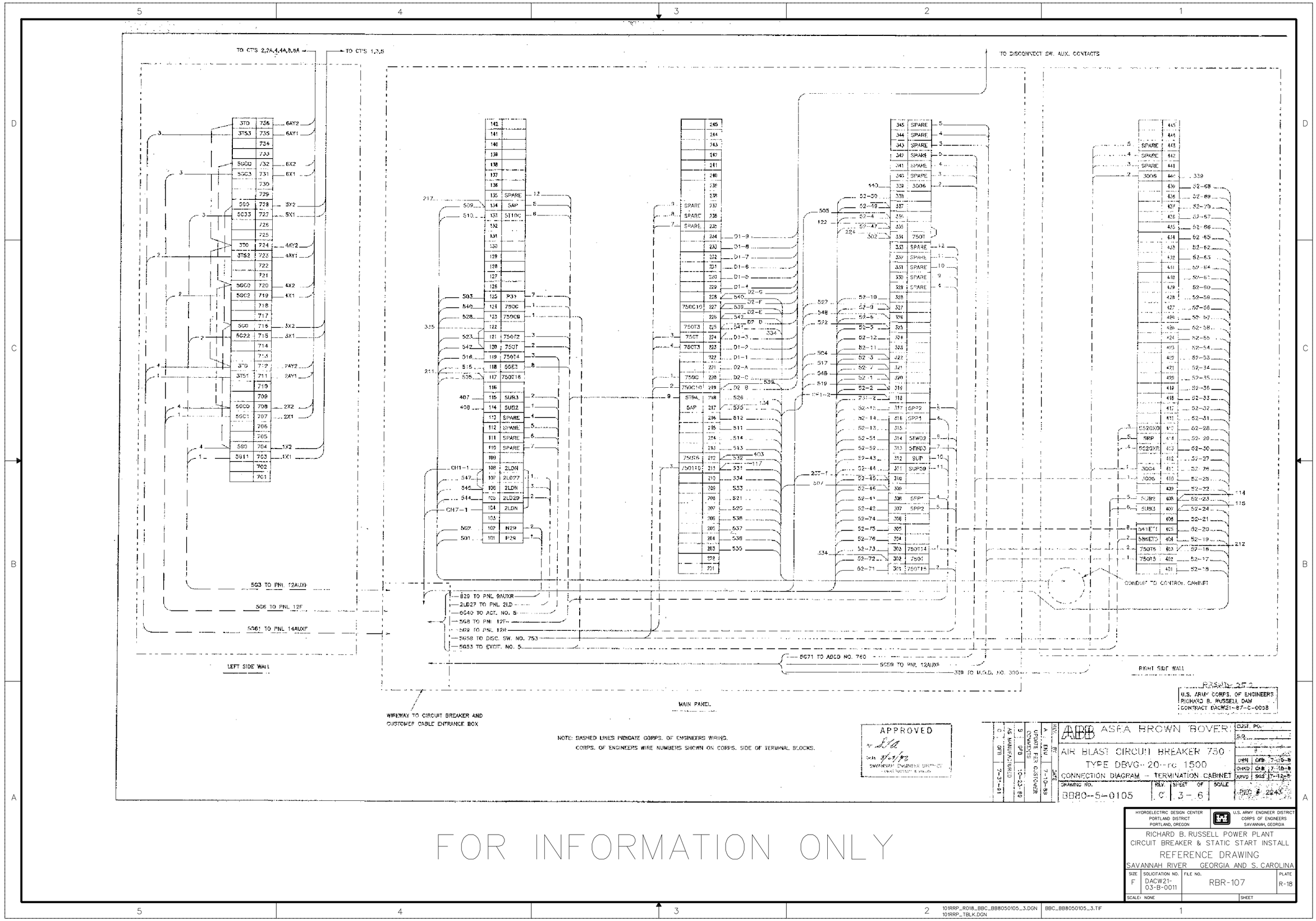
...\101rrp_r016_bbc_bb8050105_1.dg 11/03/2003 03:10:55 PM



FOR INFORMATION ONLY

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r017_bbc_bb8050105_2.dgn
11/03/2003
k6enxndt

...\101rrp_r017_bbc_bb8050105_2.dg 11/03/2003 03:11:31 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

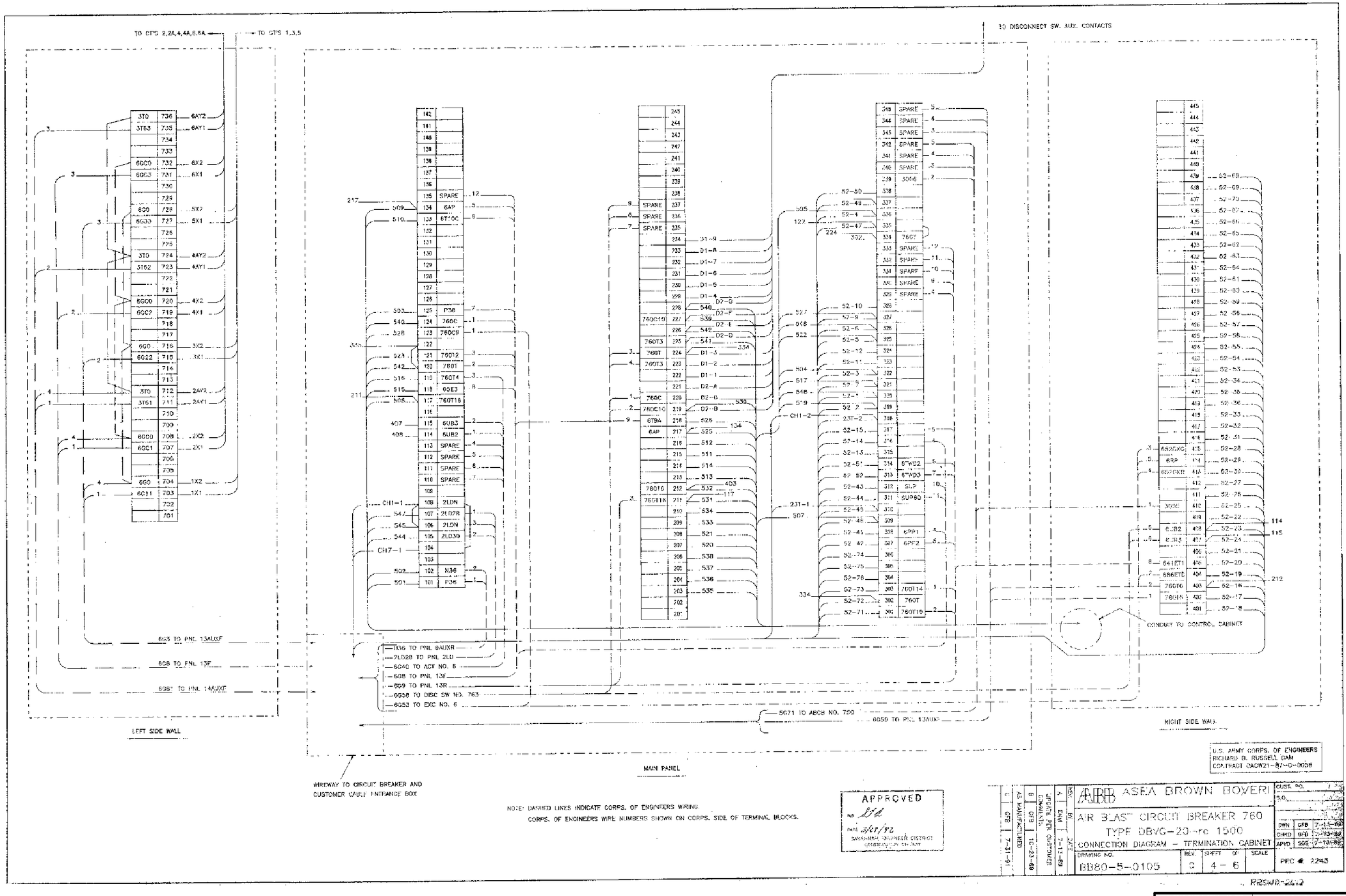
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-18

SCALE: NONE SHEET

101RRP_R018_BBC_BB8050105_3.DGN
101RRP_TBLK.DGN
BBC_BB8050105_3.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r018_bbc_bb8050105_3.dgn
11/03/2003
k6enxndt

...\101rrp_r018_bbc_bb8050105_3.dg 11/03/2003 03:12:03 PM



HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-19

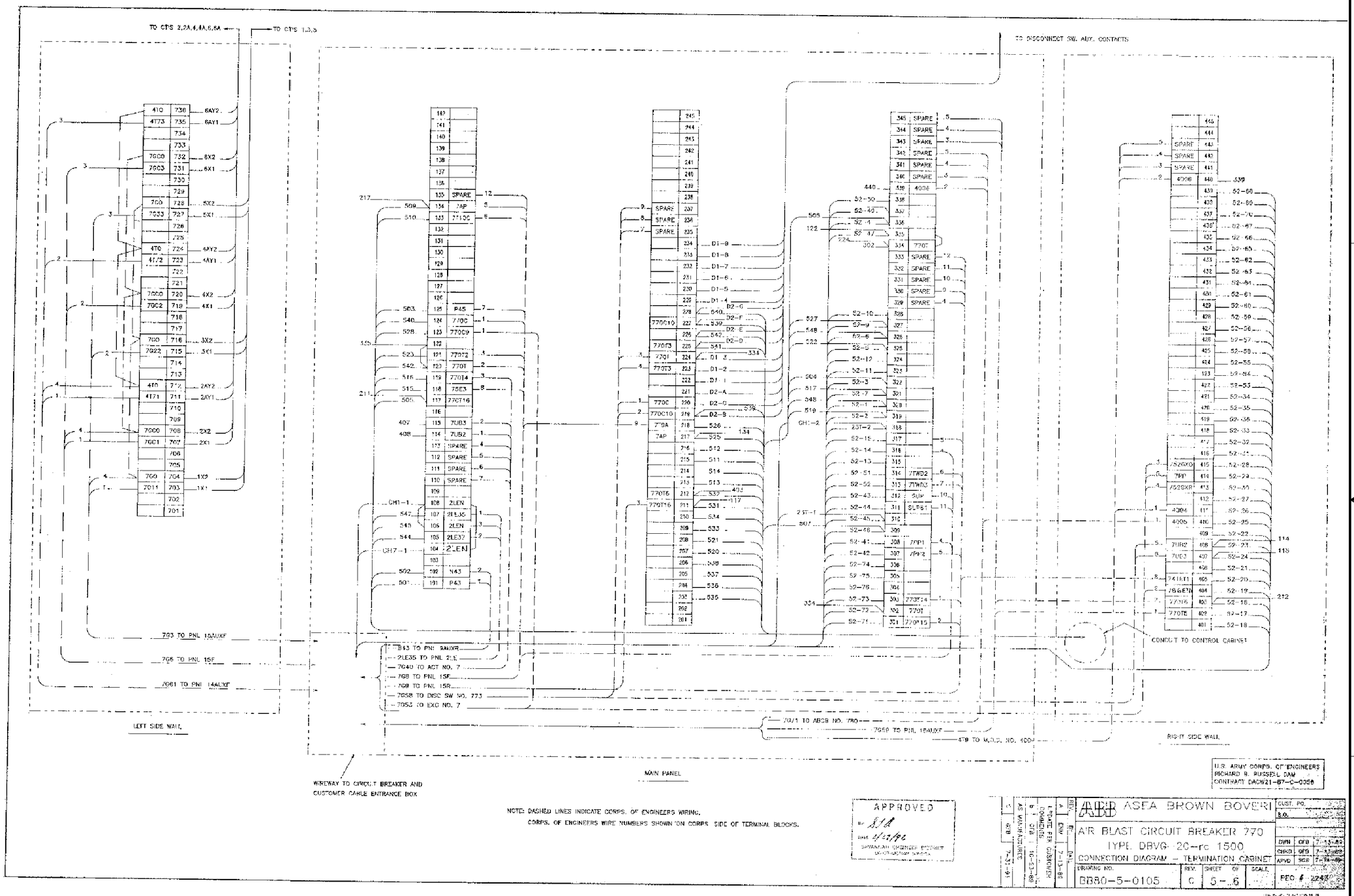
SCALE: NONE SHEET

FOR INFORMATION ONLY

101RRP_R019_BBC_BB8050105_4.DGN
101RRP_TBLK.DGN
BBC_BB8050105_4.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r019_bbc_bb8050105_4.dgn
11/03/2003
k6enxndt

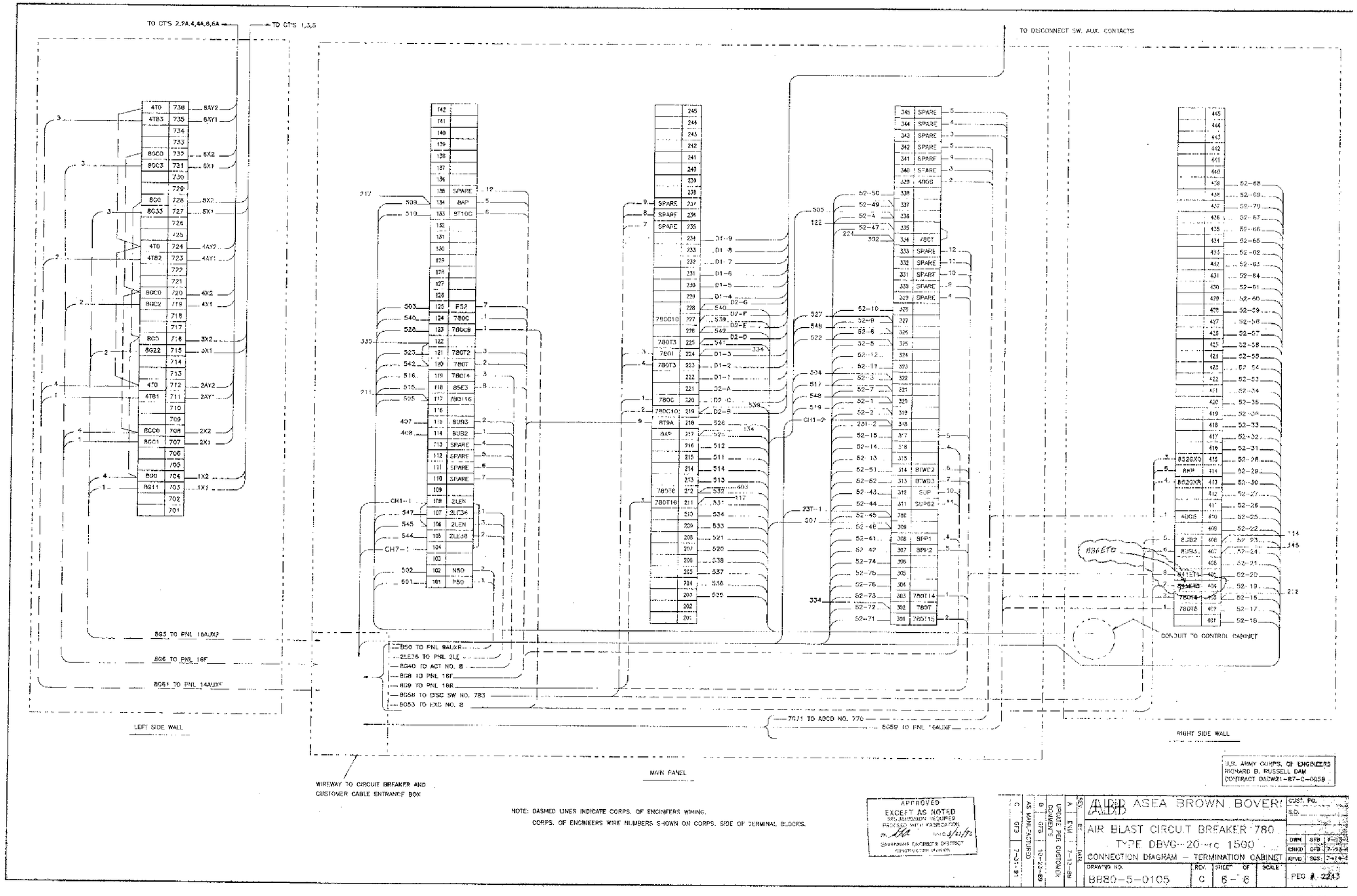
...\101rrp_r019_bbc_bb8050105_4.dg 11/03/2003 03:12:33 PM



FOR INFORMATION ONLY

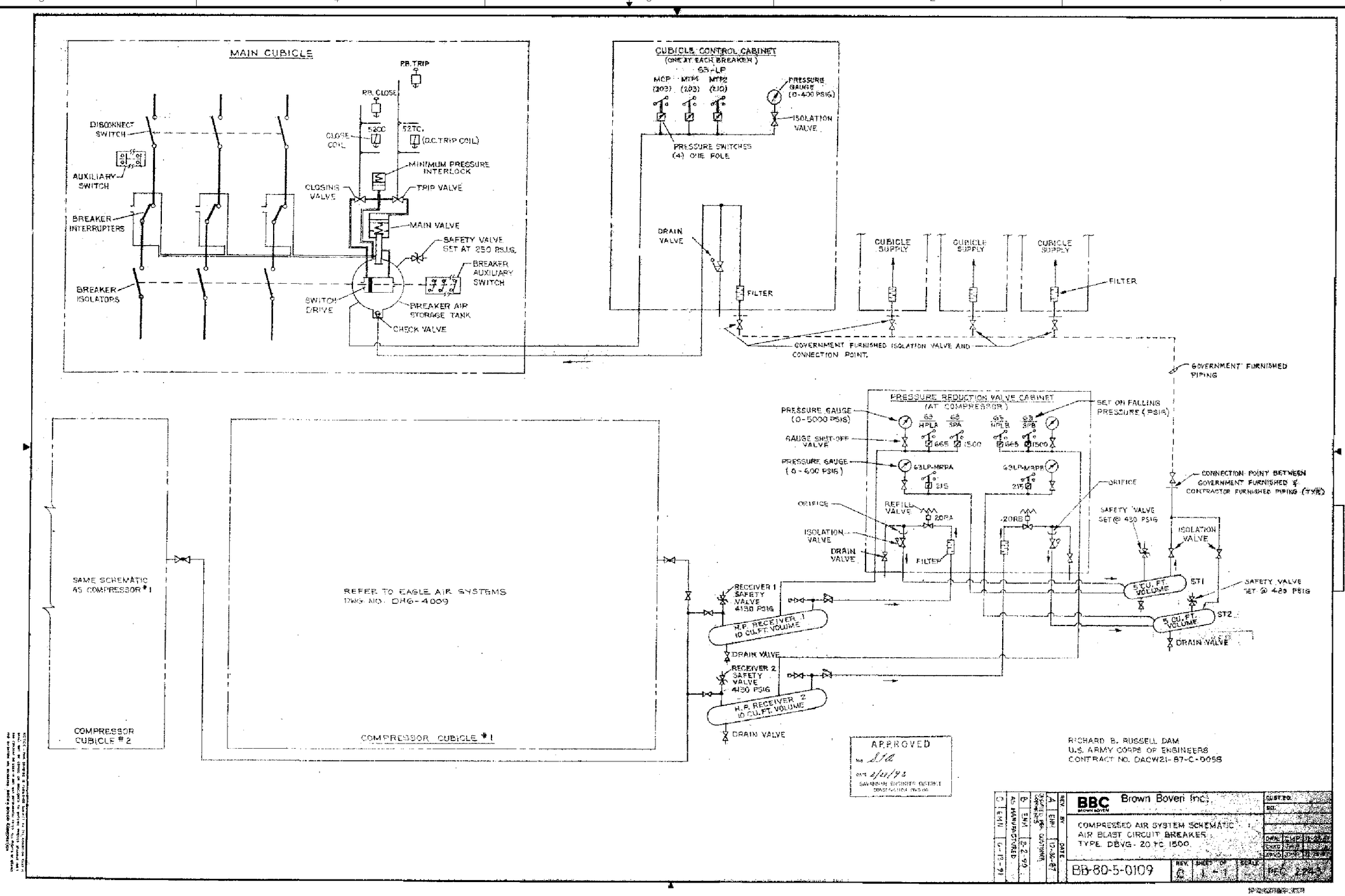
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r020_bbc_bb8050105_5.dgn
11/03/2003
k0enxndt

...\101rrp_r020_bbc_bb8050105_5.dg 11/03/2003 03:13:11 PM



i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r021_bbc_bb8050105_6.dgn
11/03/2003
k6enxndt

...\101rrp_r021_bbc_bb8050105_6.dg 11/03/2003 03:14:00 PM



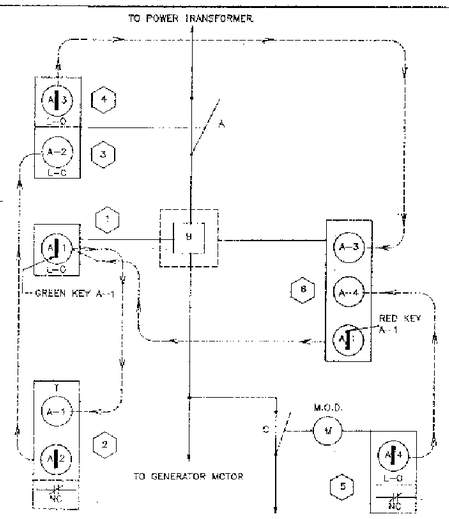
FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r022_bbc_bb8050109_1.dgn
11/03/2003
k6enxndt

...\101rrp_r022_bbc_bb8050109_1.dg 11/03/2003 03:49:25 PM

101RRP_R022_BBC_BB8050109.DGN
101RRP_TBLK.DGN
BBC_BB8050109.TIF

KEY INTERLOCK SCHEME FOR GENERATOR-MOTOR CIRCUIT BREAKER, UNIT DISCONNECT SWITCH AND STARTING BUS M.O.D. SWITCH



UNIT ABCB 750, M.O.D.757

INTERLOCK	TYPE	BOLT PROJECTION	KEY REMOVABLE *	LOCATION	KEY/CYL. #
1	B	1"	E	ABCB CONTROL BLOCK	16800
2	M2TS	N/A	N/A	CONTROL CABINET INSIDE	16800, 16715
3	B	2"	E	CUBICLE DISCONNECT	16715
4	F	3/8"	E	CUBICLE DISCONNECT	16717
5			E	MOTOR OPER. DISC.	16711
6	M3D	N/A	W E E	CUBICLE MAIN DOOR	16800, 16711, 16717

* E=BOLT EXTENDED
W=BOLT WITHDRAWN

UNIT ABCB 760, M.O.D.767

INTERLOCK	TYPE	BOLT PROJECTION	KEY REMOVABLE *	LOCATION	KEY/CYL. #
1	B	1"	E	ABCB CONTROL BLOCK	16801
2	M2TS	N/A	N/A	CONTROL CABINET INSIDE	16801, 16719
3	B	2"	E	CUBICLE DISCONNECT	16719
4	F	3/8"	E	CUBICLE DISCONNECT	16721
5			E	MOTOR OPER. DISC.	16712
6	M3D	N/A	W E E	CUBICLE MAIN DOOR	16801, 16712, 16720

* E=BOLT EXTENDED
W=BOLT WITHDRAWN

UNIT ABCB 770, M.O.D.777

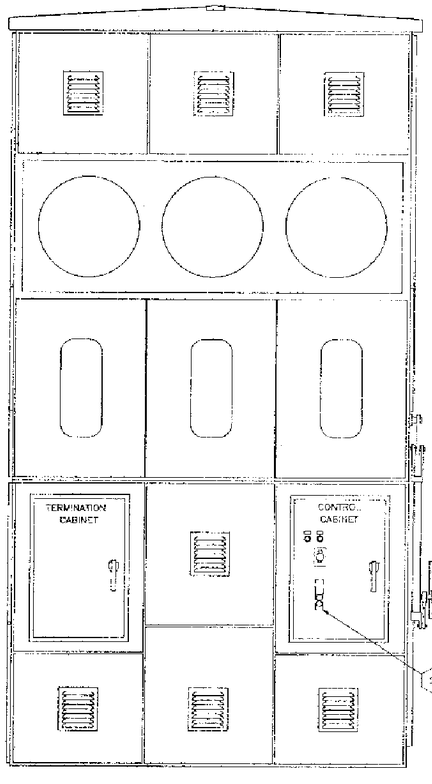
INTERLOCK	TYPE	BOLT PROJECTION	KEY REMOVABLE *	LOCATION	KEY/CYL. #
1	B	1"	E	ABCB CONTROL BLOCK	16802
2	M2TS	N/A	N/A	CONTROL CABINET INSIDE	16802, 16721
3	B	2"	E	CUBICLE DISCONNECT	16721
4	F	3/8"	E	CUBICLE DISCONNECT	16722
5			E	MOTOR OPER. DISC.	16713
6	M3D	N/A	W E E	CUBIC E MAIN DOOR	16802, 16713, 16722

* E=BOLT EXTENDED
W=BOLT WITHDRAWN

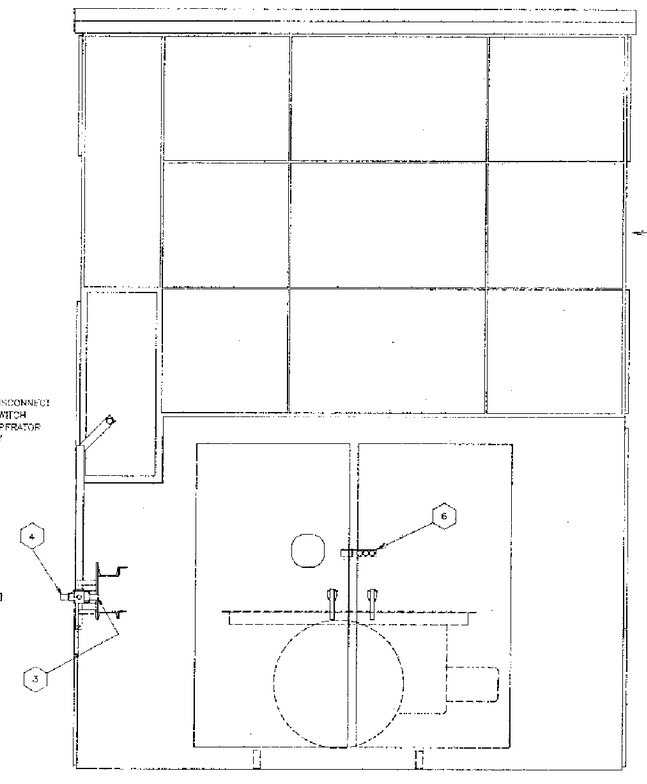
UNIT ABCB 780, M.O.D.787

INTERLOCK	TYPE	BOLT PROJECTION	KEY REMOVABLE *	LOCATION	KEY/CYL. #
1	B	1"	E	ABCB CONTROL BLOCK	16803
2	M2TS	N/A	N/A	CONTROL CABINET INSIDE	16803, 16723
3	B	2"	E	CUBICLE DISCONNECT	16723
4	F	3/8"	E	CUBICLE DISCONNECT	16724
5			E	MOTOR OPER. DISC.	16714
6	M3D	N/A	W E E	CUBICLE MAIN DOOR	16803, 16714, 16724

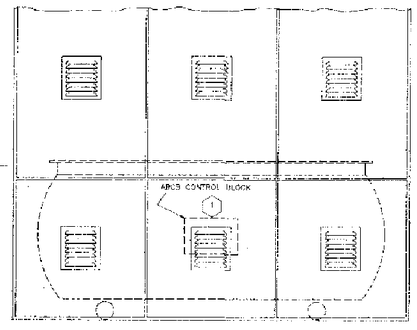
* E=BOLT EXTENDED
W=BOLT WITHDRAWN



FRONT



BREAKER DRAWOUT (RIGHT) SIDE



PARTIAL REAR VIEW "A"

Interlock Scheme:

To prevent operation of Disconnect Switch A when Breaker B is closed and to prevent access to Breaker B High Voltage area, through main doors, for testing and maintenance unless Switch A and M.O.D. Switch C are open.

Disconnect Switch A, Breaker B and M.O.D. Switch C are shown in closed position. Green key A-1 is normally held in Breaker B Interlock, Red key A-1 is held in Cubicle Door interlock. Key A-2 is held in Transfer Interlock. Keys A-3 and A-4 are held in Interlocks on Switch A and M.O.D. Switch C.

1. Open Breaker B.
2. Put Local/Remote transfer switch at control cabinet in Local position.
3. Turn Green key A-1 in L-O interlock on Breaker B to lock breaker open. Green key A-1 is now free.
4. Insert Green key A-1 in Transfer lock located in Control Cabinet. Turn key A-2. Green key A-1 is now held. Interlock Contact is now open, blocking remote close signal. Key A-2 is now free.
5. Insert key A-2 in L-O Interlock on Disconnect Switch A and turn to unlock. Key A-2 is now held. Open Disconnect Switch A.
6. Turn key A-3 in L-O Interlock on Disconnect Switch A to lock open. Key A-3 is now free.
7. Insert key A-3 in Cubicle Door Interlock.
8. Open M.O.D. Switch C.
9. Turn key in L-O Interlock on M.O.D. Switch C to lock switch open. Key A-1 is now free.
10. Insert Key A-4 in Cubicle Door Interlock.
11. Turn Red key A-1 in Cubicle Door Interlock. Red key A-1 is now free. Keys A-2 and A-4 are now held. High voltage area is now accessible.
12. Insert Red key A-1 in L-O Interlock on Breaker B and turn to unlock for operation during servicing.

Reverse above sequence to restore service.

APPROVED
EXCEPT AS NOTED
RESUBMISSION REQUIRED
PROCEED WITH FABRICATION
BY [illegible] DATE 8/27/02
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

U.S. ARMY CORPS OF ENGINEERS
RICHARD B. RUSSELL DAM
CONTRACT DACW21-87-C-0058

REV.	BY	DATE	DESCRIPTION
C	[illegible]	[illegible]	[illegible]
B	EHM	7/13/95	[illegible]

ABB ASEA BROWN BOVERI

AIR BLAST CIRCUIT BREAKER
TYPE DBVG-20-rc 1500
KEY INTERLOCK SCHEME

DRAWING NO. 5B80-5-0112 | REV. C | SHEET 1 OF 1 | SCALE

CUST. PO.
S.O.
DWN. [illegible] 7/13/95
CHKD. [illegible] 7/13/95
APVD. [illegible] 7/13/95
PEC 1 2001

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-23

SCALE: NONE | SHEET

FOR INFORMATION ONLY

101RRP_R026_BBC_BB8050112.DGN
101RRP_TBLK.DGN
BBC_BB8050112.TIF

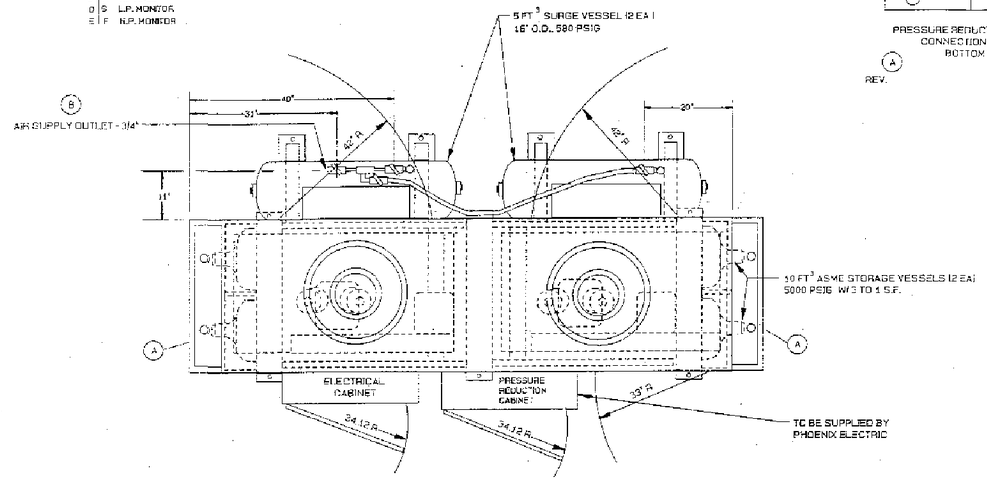
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r023_bbc_bb8050112_1.dgn
11/03/2003
kbenxndt

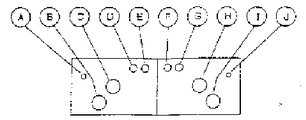
...\101rrp_r023_bbc_bb8050112_1.dg 11/03/2003 03:50:13 PM

PRESSURE REDUCTION CABINET CONNECTIONS

REV.

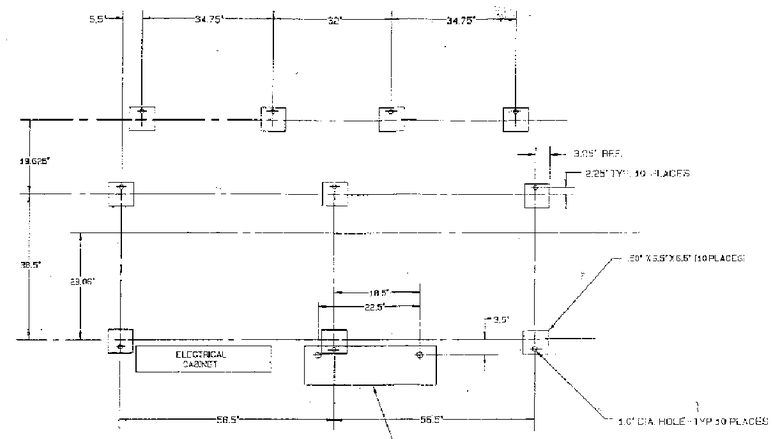
UNIT "A"	UNIT "B"	DESCRIPTION
A	J	3/4 DRAIN LINES
B	I	OUTLET TO SINGLE TANK
C	H	N.P. INLET
D	G	L.P. MONITOR
E	F	N.P. MONITOR



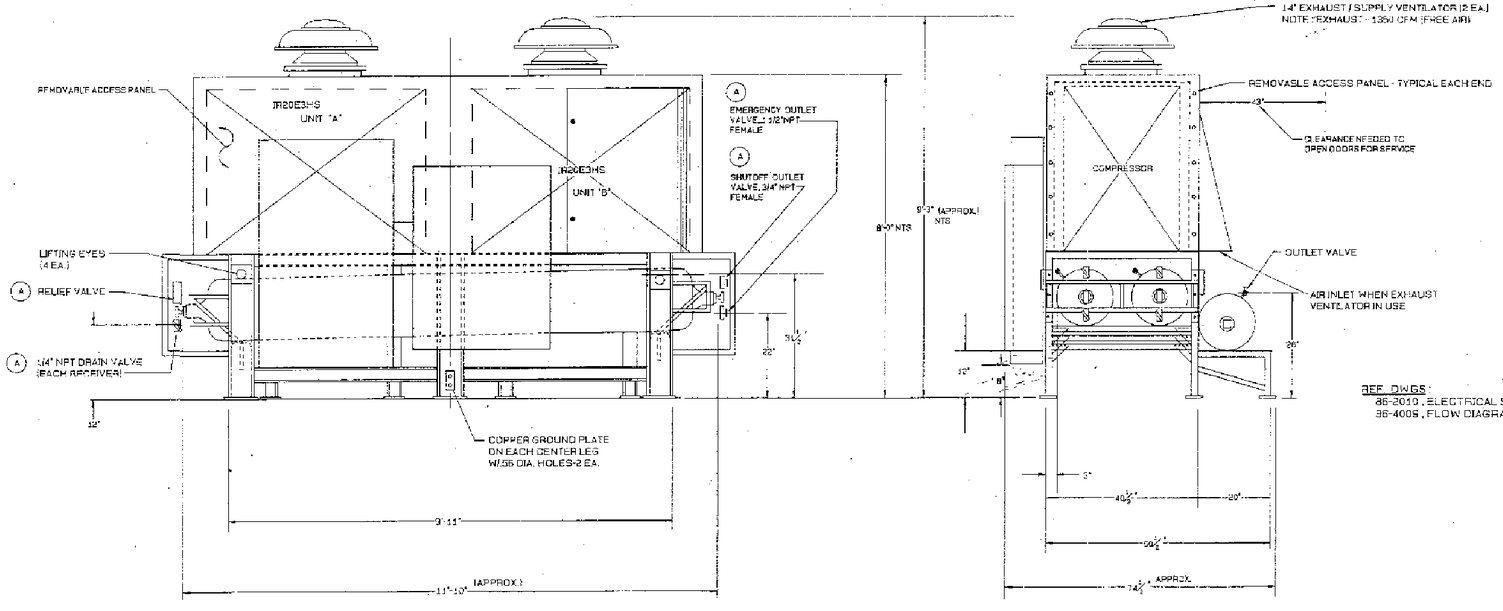


PRESSURE REDUCTION CABINET CONNECTION LAYOUT BOTTOM VIEW

REV.



ANCHOR PLATES PLAN VIEW



REF. DWGS:
36-2010, ELECTRICAL SCHEMATIC
36-4005, FLOW DIAGRAM

NOTES:
1. LIFTING SLINGS SPREADER BARS MUST BE USED.
2. MUST HAVE 36" CLEARANCE ON ALL SIDES.
3. APPROX. WT. 6000 LBS.
4. INTERIOR AND EXTERIOR SURFACES OF ALL BASE METAL FABRICATIONS TO BE:
a. CLEANED AFTER FABRICATION BY SANDBLASTING.
b. COATED WITH GRAY OXIDE PRIMER.
c. COVERED WITH TWO COATES OF SYNTHETIC ENAMEL, WITH SEMI-GLOSS FINISH, ANSI INDOOR LIGHT GRAY NO. 61 IN COLOR.
d. MIN. PAINT THICKNESS TO BE .002" - .003".

REV. C	REVISED NOMENCLATURE	7-19-90
REV. B	LOCATED AIR SUPPLY OUTLET	7-20-89
REV. A	MOVED EMERGENCY OUTLET, SHUTOFF OUTLET DRAIN VALVE, AND ADDED REDUCTION CABINET VIEW	8-18-88

COMPRESSED AIR PLANT

RICHARD B. RUSSELL DAM

CONTRACT NO. DACW21-87-C-0058

SCHEDULE "A" ITEM 0002

EAGLE AIR SYSTEMS

SCALE NONE	APPROVED BY	DRAWN BY	WK
DATE 9-29-88		REVISED	

GENERAL ARRANGEMENT
DUPLEX 6120 COMPRESSOR UNIT

DRAWING NUMBER D 861024

RRS WD-9.5

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

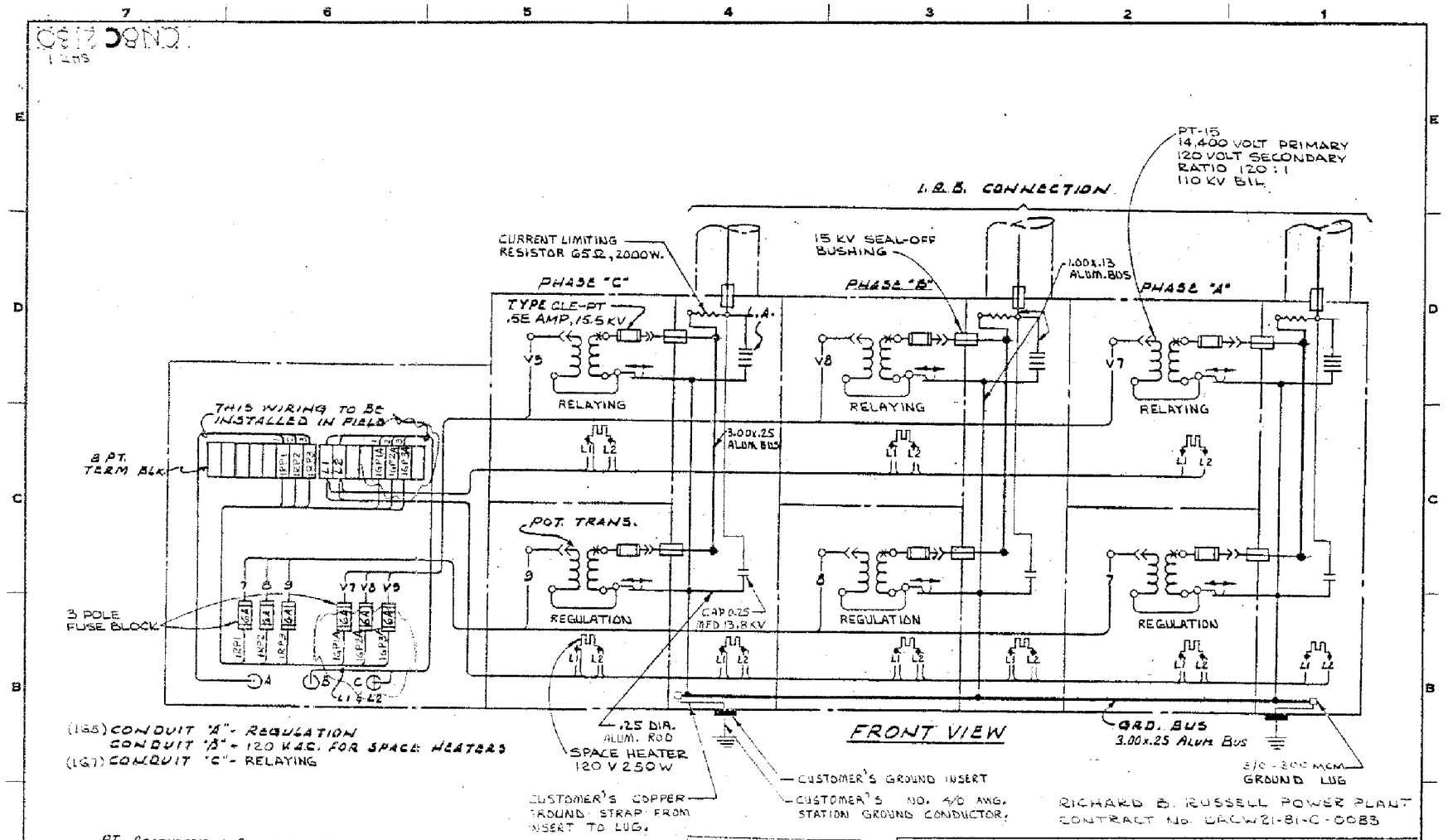
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-24

SCALE: NONE SHEET

101RRP_R024_EAS_D861024.DGN
101RRP_TBLK.DGN
EAS_D861024.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r024_eas_d861024.dgn
11/04/2003
k6enxndt

...\101rrp_r024_eas_d861024.dgn 11/04/2003 07:53:45 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

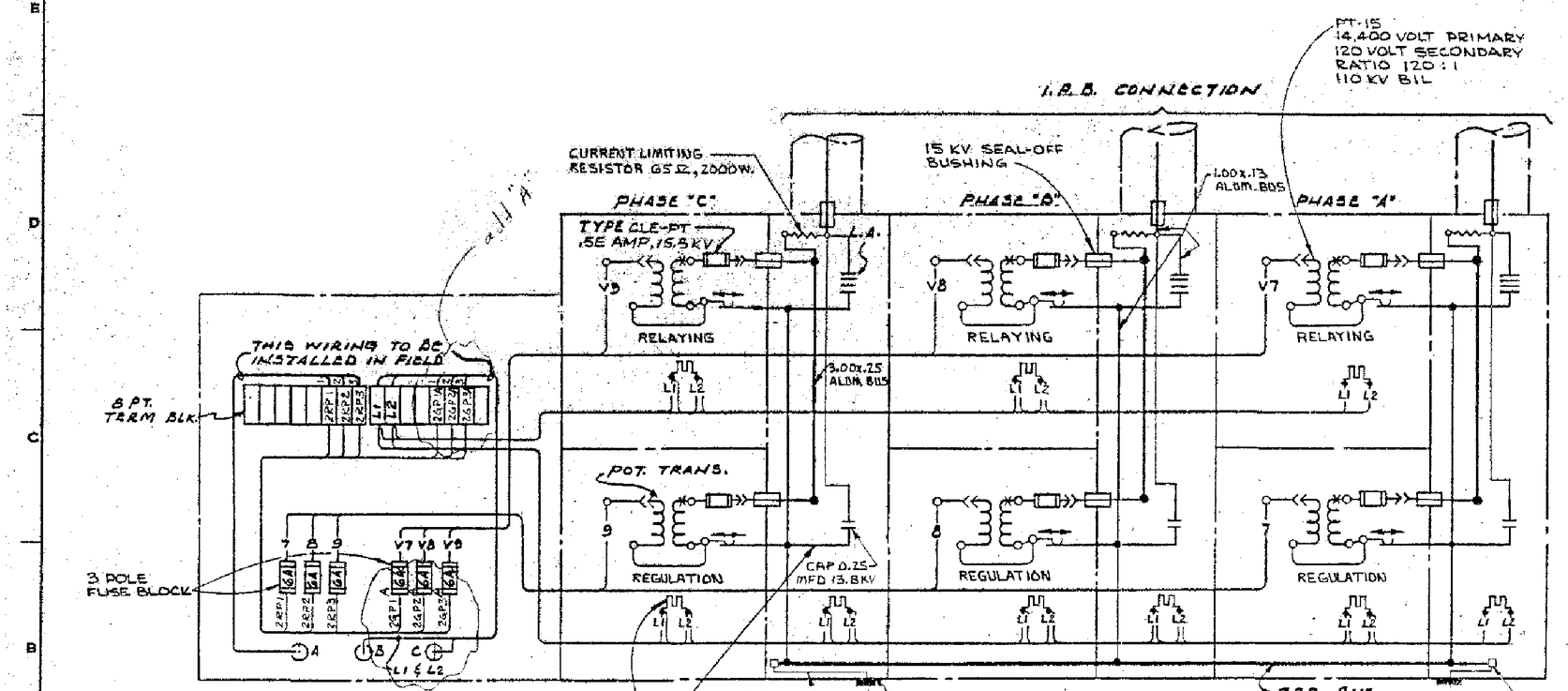
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-25

SCALE: NONE SHEET

101RRP_R025_WEC_CN8C2130_1.DGN
101RRP_TBLK.DGN
WEC_CN8C2130_1.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r025_wec_cn8c2130_1.dgn
11/04/2003
k6enxrdt

...\101rrp_r025_wec_cn8c2130_1.dgn 11/04/2003 07:54:26 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

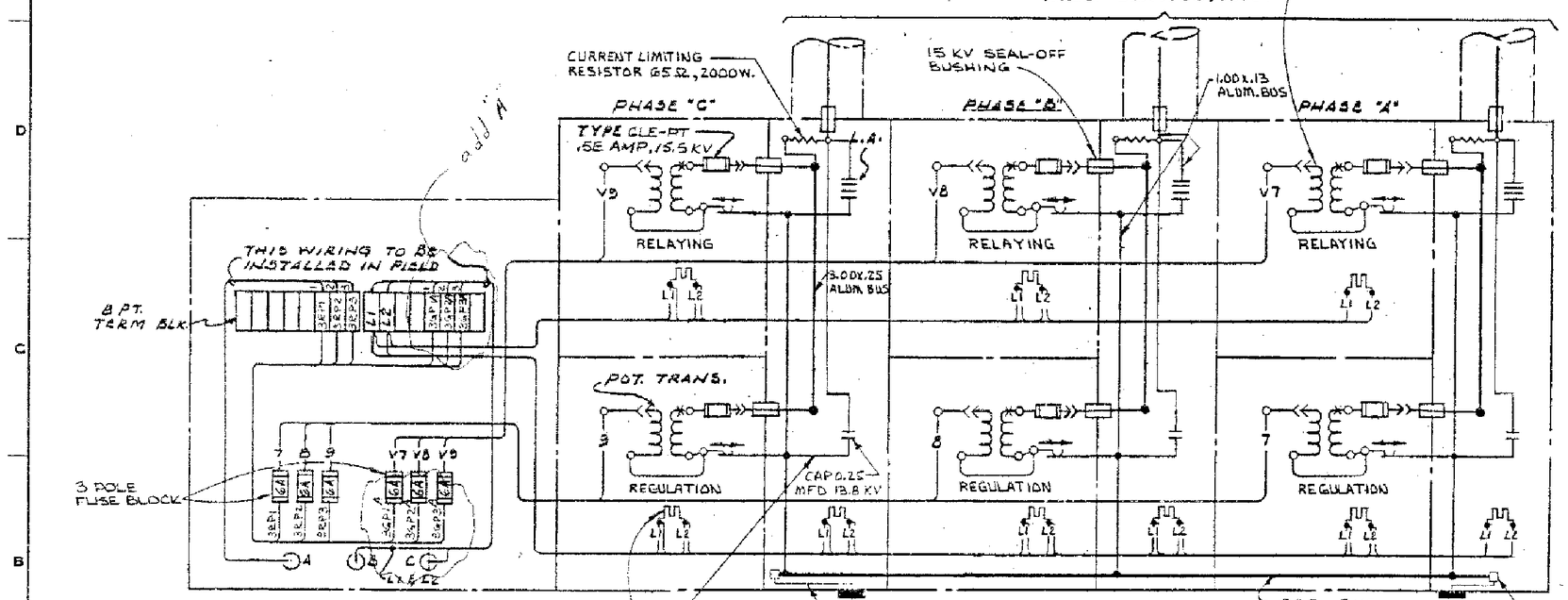
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-26

SCALE: NONE SHEET

101RRP_R026_WEC_CN8C2130_2.DGN
101RRP_TBLK.DGN
WEC_CN8C2130_2.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r026_wec_cn8c2130_2.dgn
11/04/2003
kbenxndt

...\101rrp_r026_wec_cn8c2130_2.dgn 11/04/2003 07:57:11 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

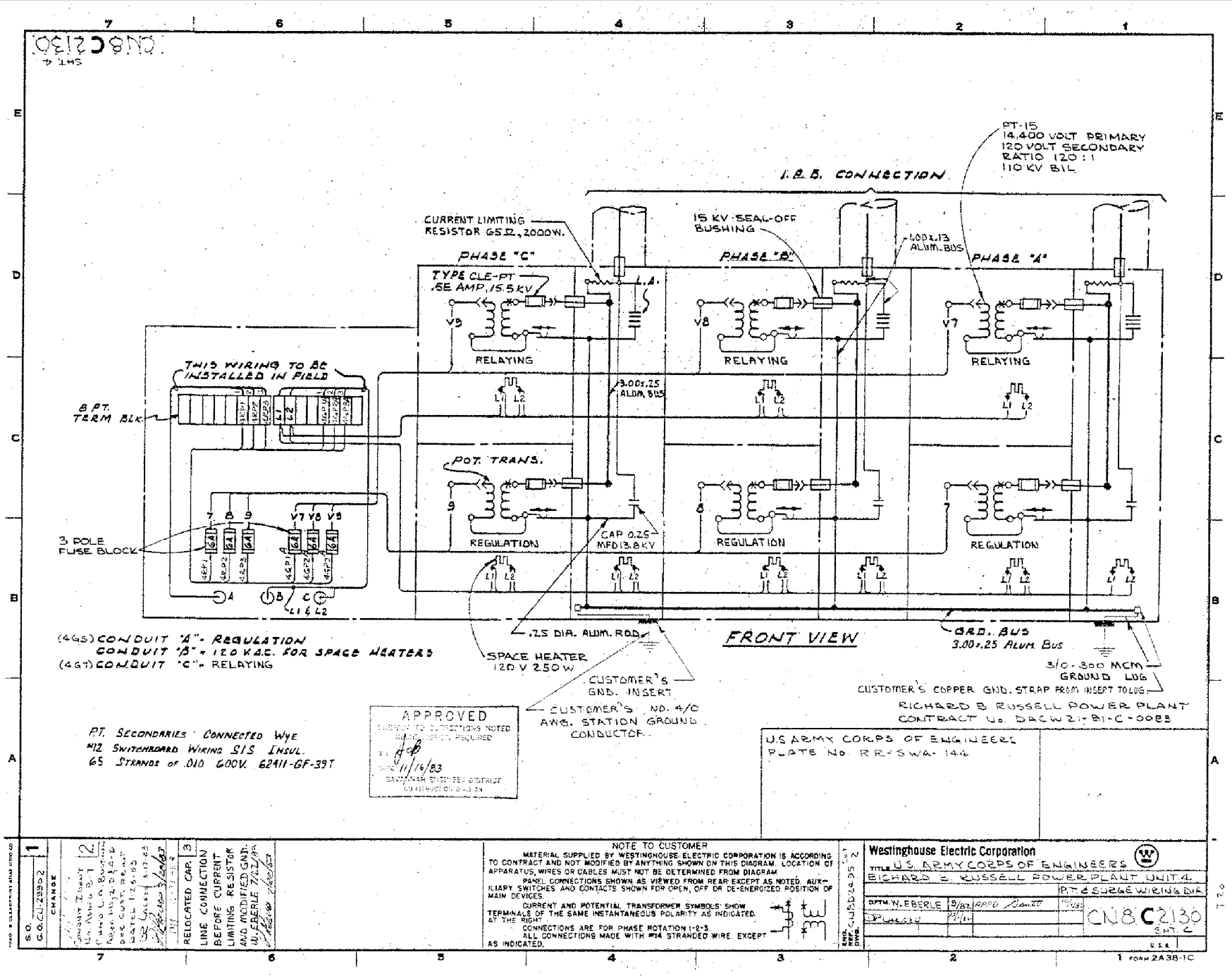
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-27

SCALE: NONE SHEET

101RRP_R027_WEC_CN8C2130_3.DGN
101RRP_TBLK.DGN
WEC_CN8C2130_3.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r027_wec_cn8c2130_3.dgn
11/04/2003
k6enxrdt

...\101rrp_r027_wec_cn8c2130_3.dgn 11/04/2003 07:57:54 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

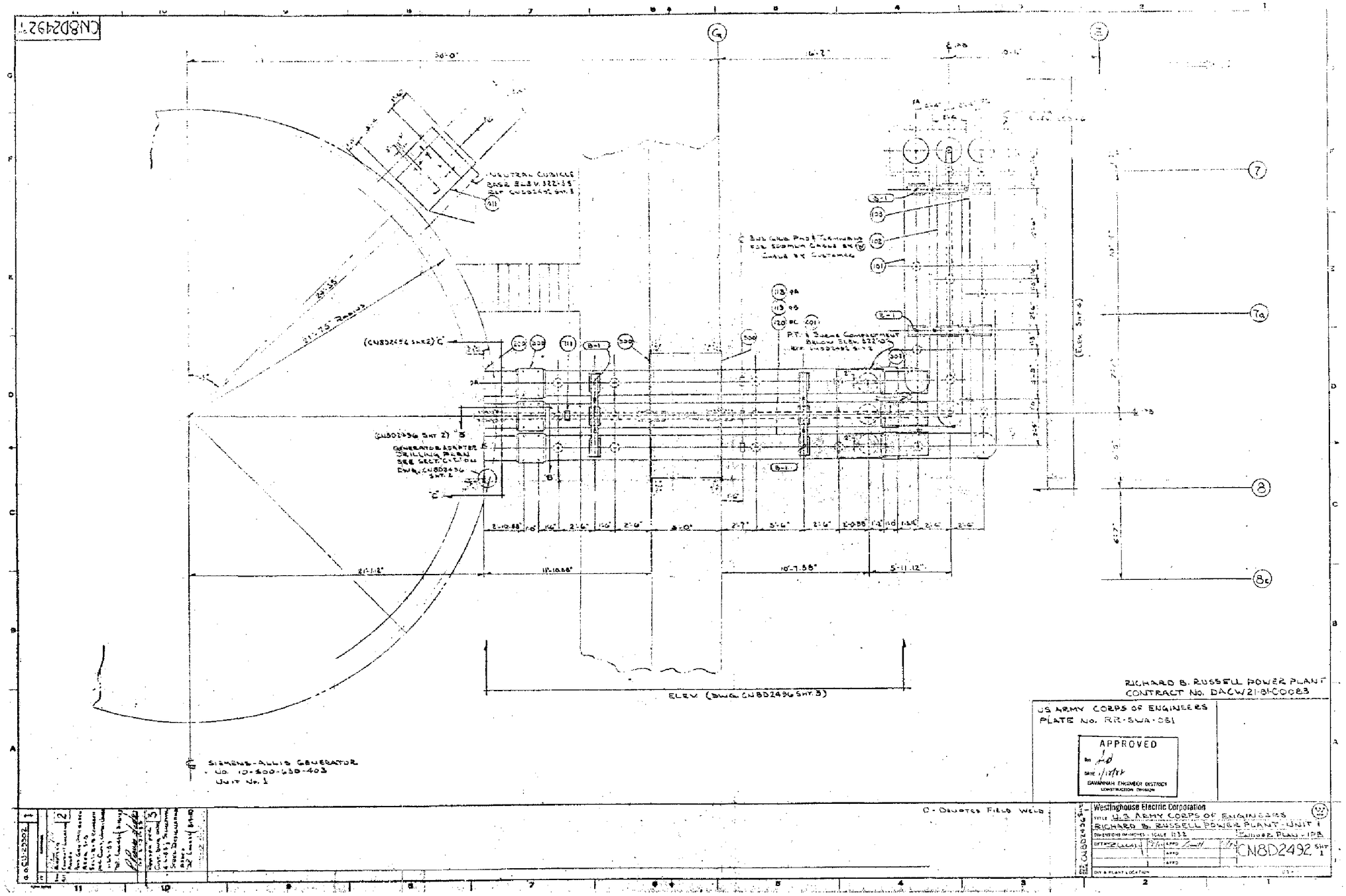
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-28

SCALE: NONE SHEET

101RRP_R028_WEC_CN8C2130_4.DGN
101RRP_TBLK.DGN
WEC_R035_CN8C2130_4.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r028_wec_cn8c2130_4.dgn
11/04/2003
k6enxndt

...\101rrp_r028_wec_cn8c2130_4.dgn 11/04/2003 07:58:40 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

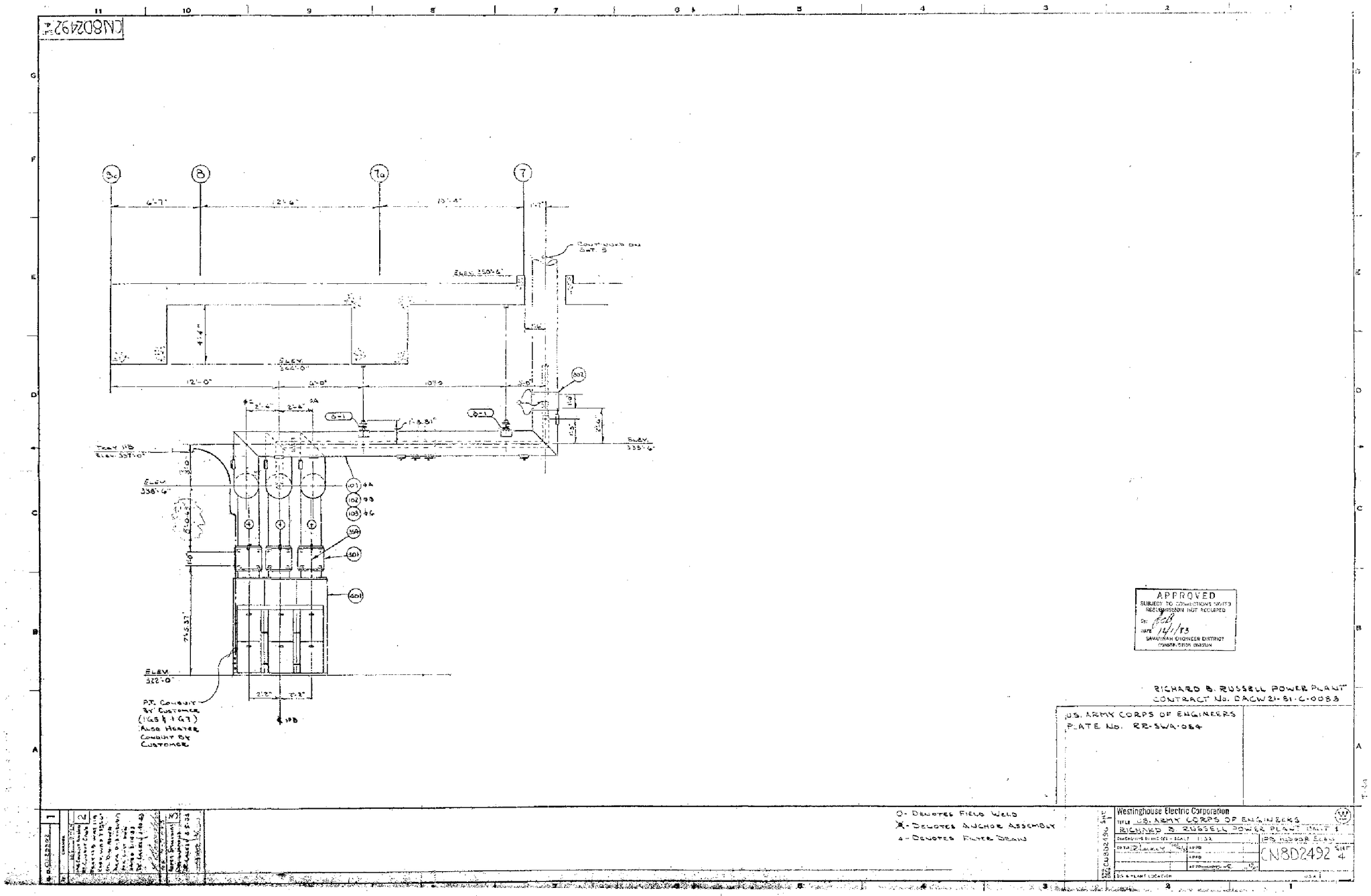
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-29

SCALE: NONE SHEET

101RRP_R029_WEC_CN8D2492_01.DGN
101RRP_TBLK.DGN
WEC_CN8D2492_01.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r029_wec_cn8d2492_01.dgn
11/04/2003
k6enxndt

...\101rrp_r029_wec_cn8d2492_01.dg 11/04/2003 07:59:09 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

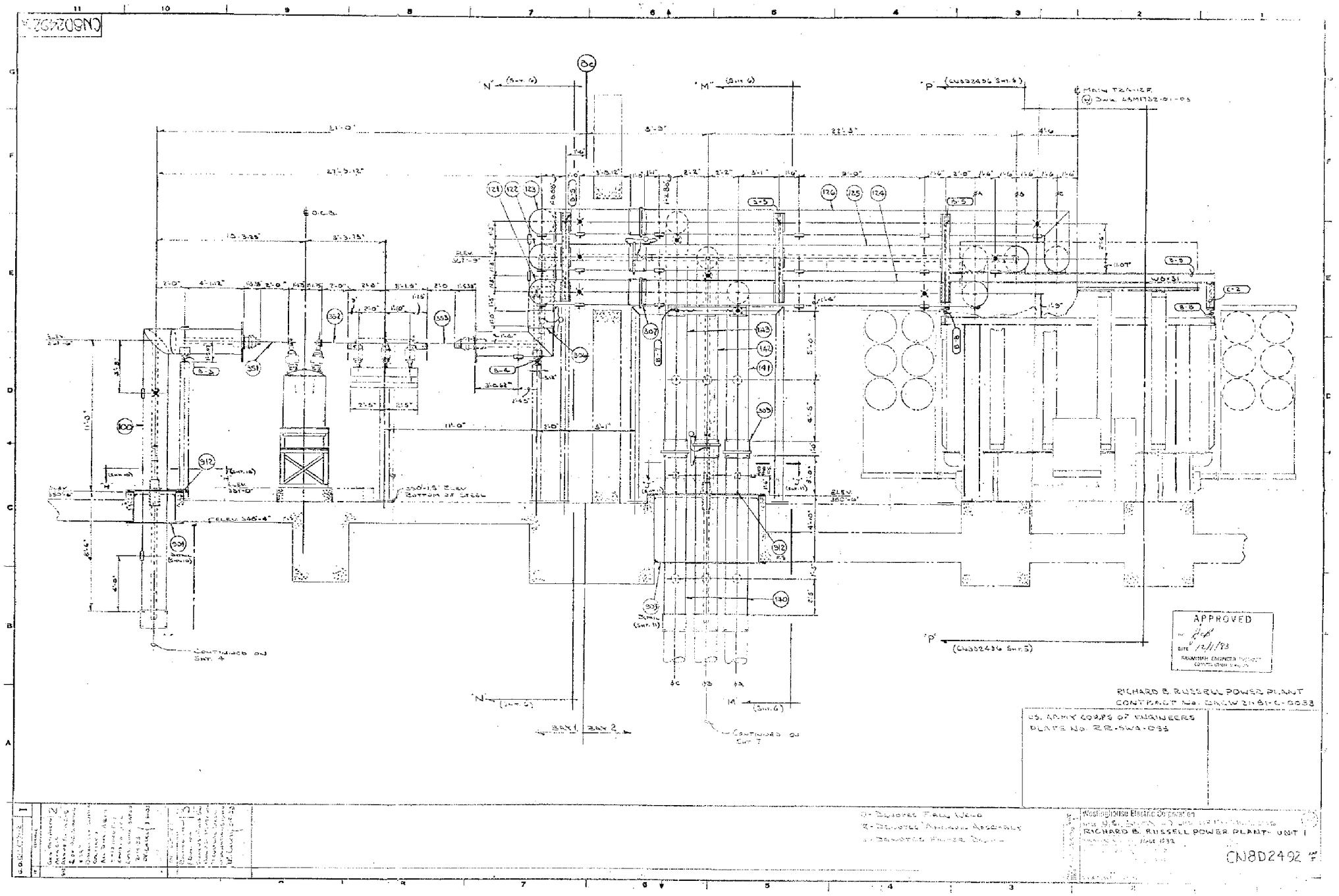
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-30

SCALE: NONE SHEET

101RRP_R030_WEC_CN8D2492_04.DGN
101RRP_TBLK.DGN
WEC_CN8D2492_04.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r030_wec_cn8d2492_04.dgn
11/04/2003
k6enxndt

...\101rrp_r030_wec_cn8d2492_04.dg 11/04/2003 07:59:58 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

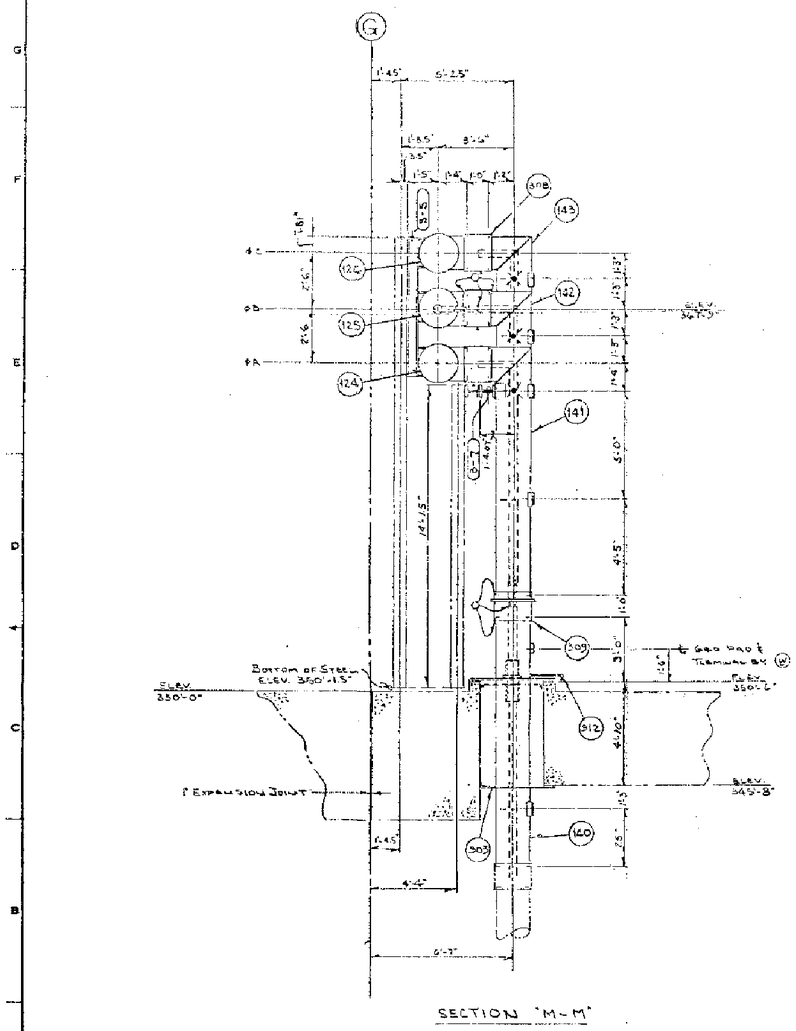
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-31

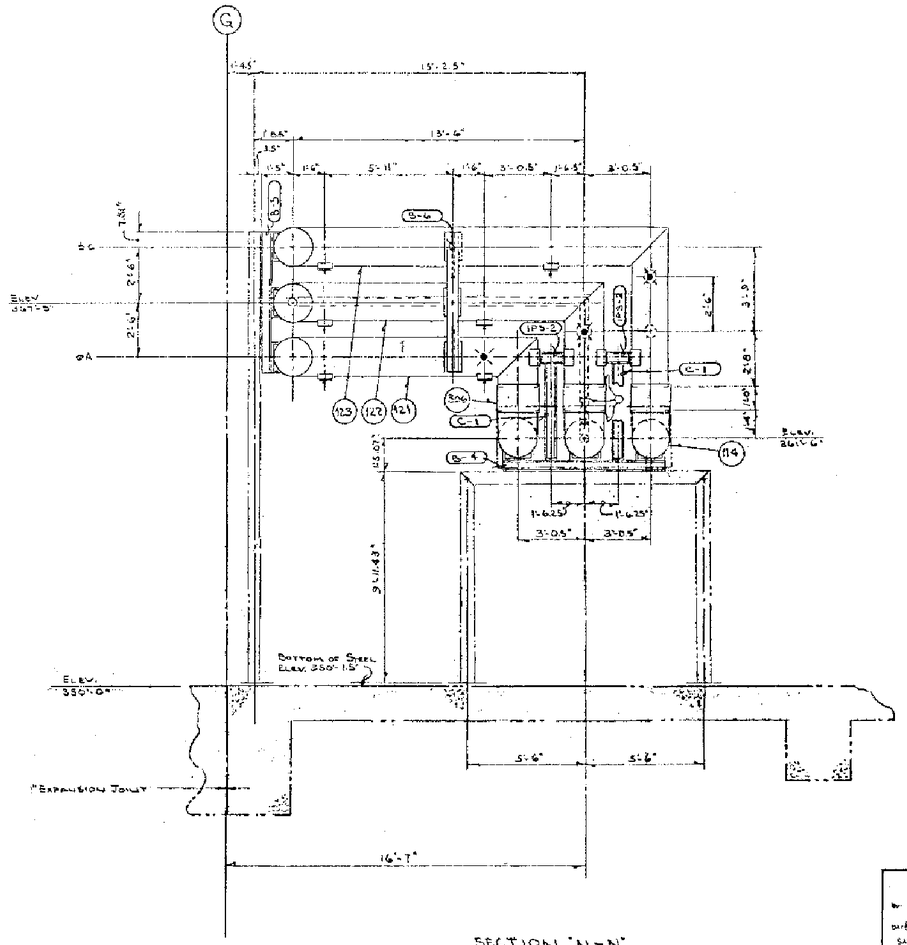
SCALE: NONE SHEET

101RRP_R031_WEC_CN8D2492_05.DGN
101RRP_TBLK.DGN
WEC_CN8D2492_05.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r031_wec_cn8d2492_05.dgn
11/04/2003
k6enxndt

...\101rrp_r031_wec_cn8d2492_05.dg 11/04/2003 08:00:55 AM





APPROVED
12/1/83
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

RICHARD B RUSSELL POWER PLANT
CONTRACT NO. DACW21-81-C-0083

U.S. ARMY CORPS OF ENGINEERS
PLATE NO. RR-SWA-056

O - DENOTES FIELD WELD
⊠ - DENOTES ANCHOR ASSEMBLY
△ - DENOTES FILTER DRAIN

Westinghouse Electric Corporation
U.S. ARMY CORPS OF ENGINEERS
RICHARD B. RUSSELL POWER PLANT - UNIT 1
1ST CUTDOOR SECT.
CN8D2492 SHT 6

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

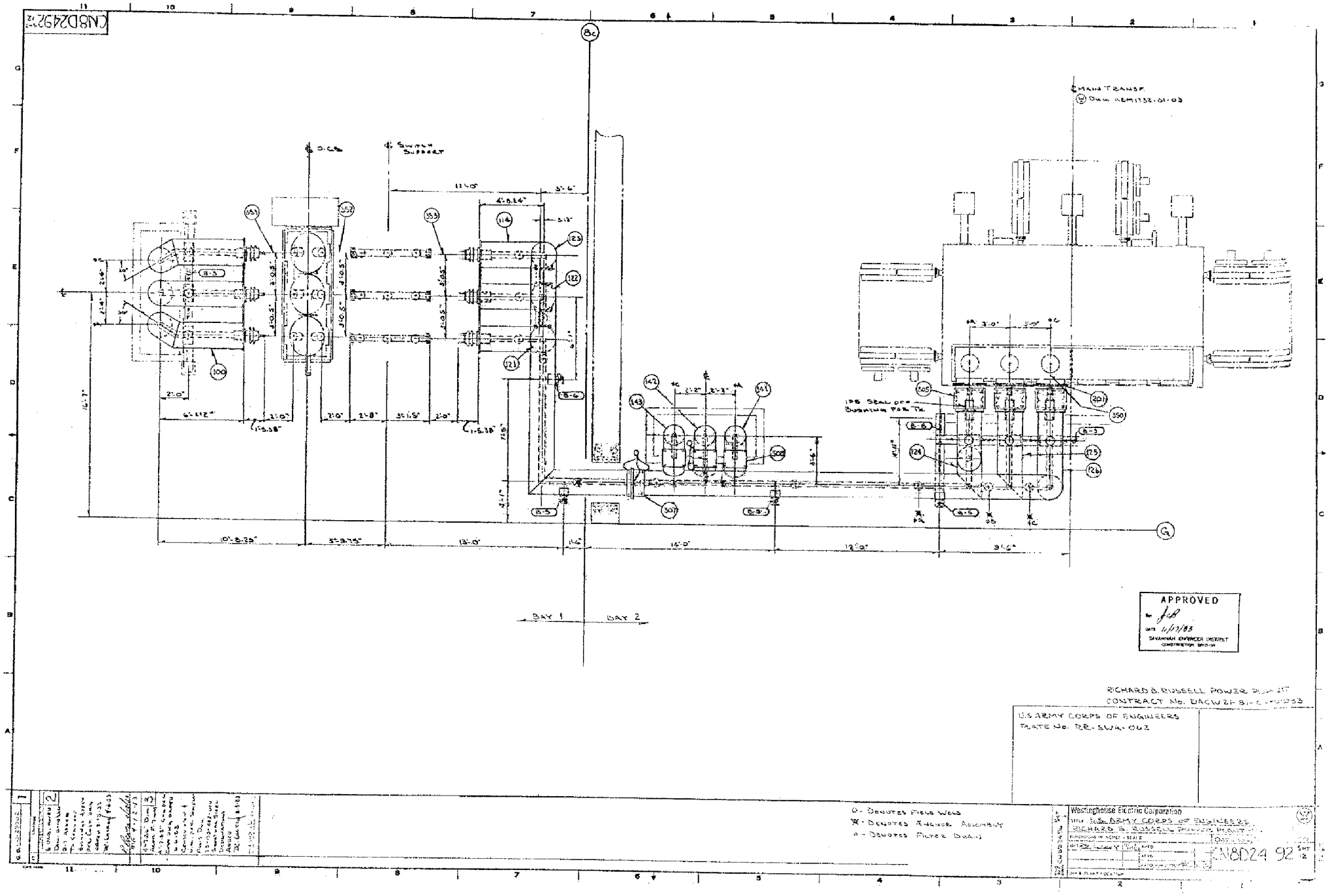
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-32

SCALE: NONE SHEET

101RRP_R032_WEC_CN8D2492_06.DGN
101RRP_TBLK.DGN
WEC_CN8D2492_06.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r032_wec_cn8d2492_06.dgn
11/04/2003
k6enxndt

...\101rrp_r032_wec_cn8d2492_06.dg 11/04/2003 08:01:43 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

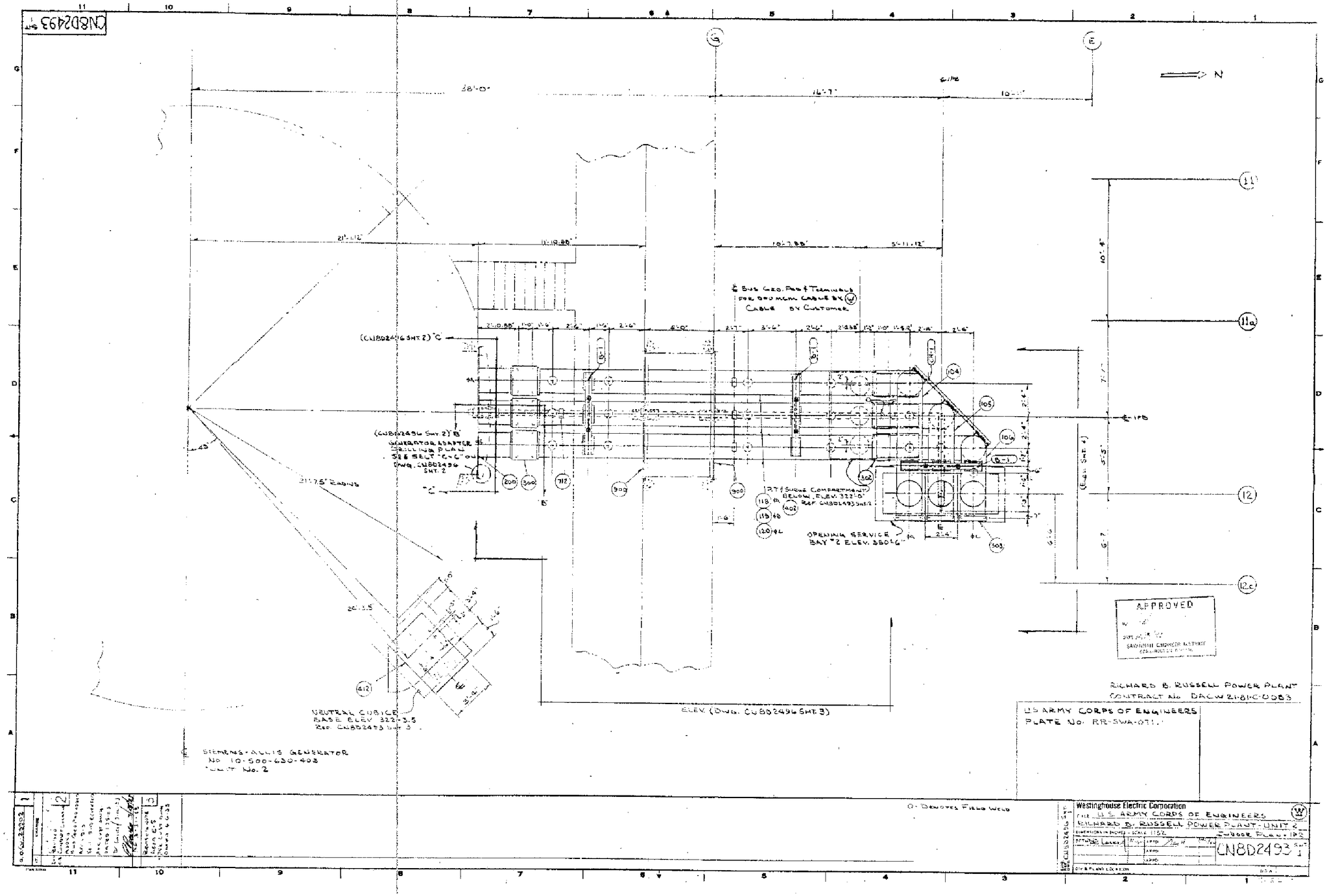
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-33

SCALE: NONE SHEET

101RRP_R033_WEC_CN8D2492_12.DGN
101RRP_TBLK.DGN
WEC_CN8D2492_12.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r033_wec_cn8d2492_12.dgn
11/04/2003
k6enxndt

...\101rrp_r033_wec_cn8d2492_12.dg 11/04/2003 08:24:23 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

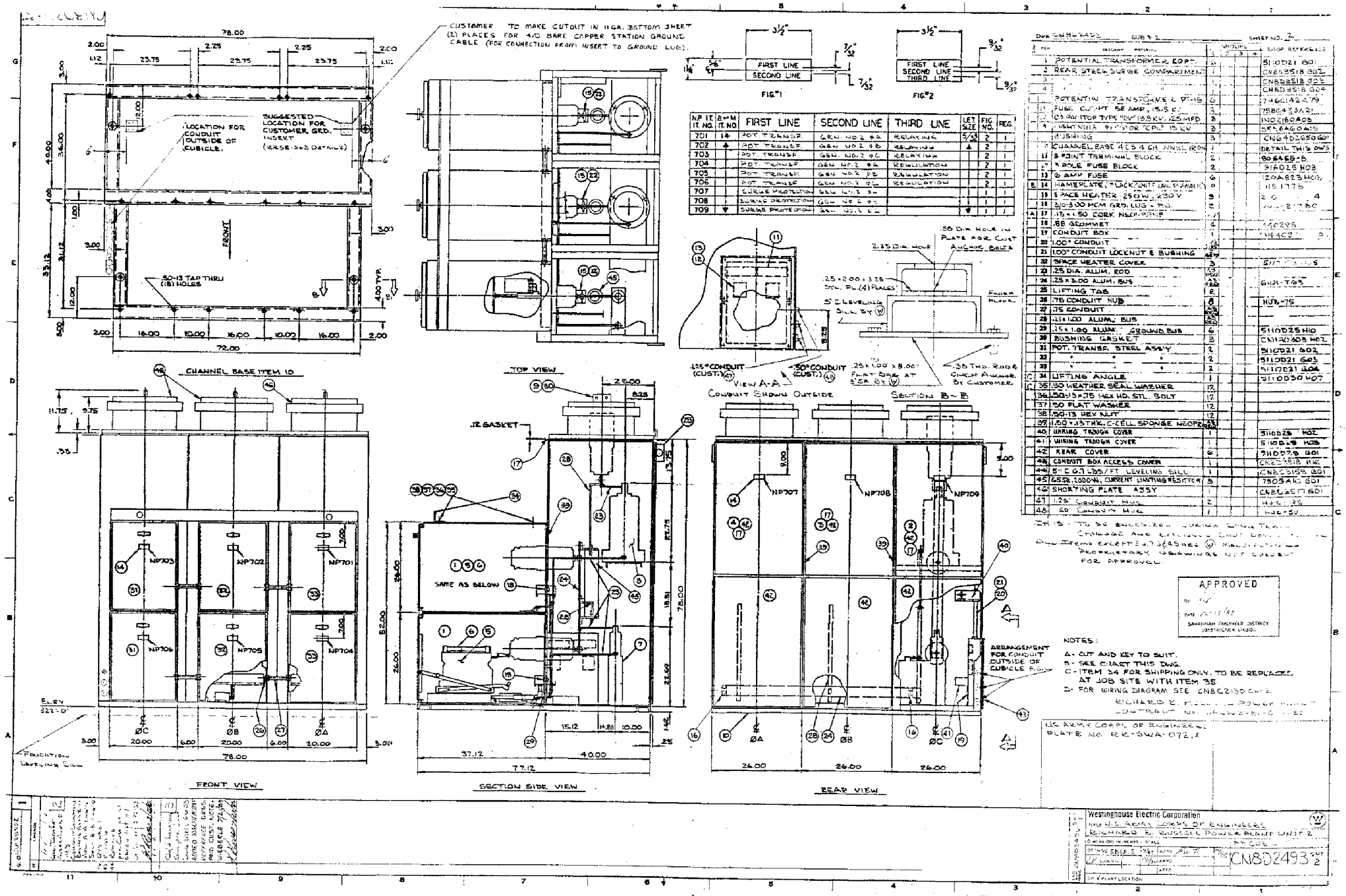
RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-34
SCALE: NONE		SHEET	

101RRP_R034_WEC_CN8D2493_01.DGN
101RRP_TBLK.DGN
WEC_CN8D2493_01.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r034_wec_cn8d2493_01.dgn
11/04/2003
k6enxndt

...\101rrp_r034_wec_cn8d2493_01.dg 11/04/2003 08:24:53 AM



NP IT. IT. NO.	B+M IT. NO	FIRST LINE	SECOND LINE	THIRD LINE	LET SIZE	FIG. NO.	REQ.
701	14	POT. TRANSF.	GEN. NO. 2 ØA	RELAYING	5/32	2	1
702	▲	POT. TRANSF.	GEN. NO. 2 ØB	RELAYING	▲	2	1
703		POT. TRANSF.	GEN. NO. 2 ØC	RELAYING		2	1
704		POT. TRANSF.	GEN. NO. 2 ØA	REGULATION		2	1
705		POT. TRANSF.	GEN. NO. 2 ØB	REGULATION		2	1
706		POT. TRANSF.	GEN. NO. 2 ØC	REGULATION		2	1
707		SURGE PROTECTION	GEN. NO. 2 ØA			1	1
708		SURGE PROTECTION	GEN. NO. 2 ØB			1	1
709	▼	SURGE PROTECTION	GEN. NO. 2 ØC		▼	1	1

DWG CN8D2493 SUB # 2 SHEET NO. 2

ITEM	QUANT.	MATERIAL	GROUPS 1	2	3	4	MAJOR REFERENCE
1	POTENTIAL TRANSFORMER, EQPT.	6					5110D21 G01
2	REAR STEEL SURGE COMPARTMENT	1					CN8D2518 G02
3		1					CN8D2518 G03
4		1					CN8D2518 G04
	POTENTIAL TRANSFORMER, PT-15	6					7T466142A79
11	FUSE CUT-OUT 5E AMP, 15.5 KV	3					7586443JA21
12	0.5 GAL ITOP TYPE "DW" 15.5 KV, .25 MFD	3					1N0X160A05
13	LIGHTNING ARRESTOR "CPL" 15 KV	3					5E4A460A15
	BUSHING	3					CN8D2265G01
	CHANNEL BASE 4 C 5.4 GA. ANGLE IRON	1					DETAIL THIS DWG
14	8 POINT TERMINAL BLOCK	2					8064E5-B
	1" POLE FUSE BLOCK	2					9TA026H03
13	6 AMP FUSE	6					120A623H01
B 14	NAMEPLATE, "LOCK UNIT UNL. PANEL"	0					115 1775
15	5 PACE HEATER, 250 W., 230 V	3					2 0 . 4
16	3/0-3/0 MCM GRD. LUG - TYP.	2					7U-121T80
A 17	.75 x 1.50 CORK NEOPRENE	1					
18	.88 GROMMET	4					1A10295
19	CONDUIT BOX	1					1N6402
20	1.00" CONDUIT	1					
21	1.00" CONDUIT LOCKNUT & BUSHING	ASM					
22	SPACE HEATER COVER	3					5110D25 H05
23	.25 DIA. ALUM. ROD	3					
24	.25 x 3.00 ALUM. BUS	ASM					6U01-T25
25	LIFTING TAB	2					
26	.75 CONDUIT HUB	8					HUB-75
27	.75 CONDUIT	ASM					
28	.25 x 1.00 ALUM. BUS	ASM					
29	.25 x 1.00 ALUM. GROUND BUS	6					5110D25 H10
30	BUSHING GASKET	3					CN8D2303 H02
31	POT. TRANSF. STEEL ASS'Y	2					5110D21 G02
32	" " "	2					5110D21 G03
33	" " "	2					5110D21 G04
C 34	LIFTING ANGLE	1					5110D30 H07
C 35	.50 WEATHER SEAL WASHER	12					
36	.50-13 x .75 HEX HD. STL. BOLT	12					
37	.50 FLAT WASHER	12					
38	.50-13 HEX NUT	12					
39	1.50 x .13 THK. C-CELL SPONGE NEOPRENE	ASM					
40	WIRING TROUGH COVER	1					5110D25 H02
41	WIRING TROUGH COVER	1					5110D25 H03
42	REAR COVER	6					5110D25 G01
43	CONDUIT BOX ACCESS COVER	1					CN8D2518 H16
44	5" C 6.7 LBS/FT LEVELING SILL	1					CN8C3155 G01
45	6.5 SQ. 1.000 W. CURRENT LIMITING RESISTOR	3					7B03A10 G01
46	SHORTING PLATE ASS'Y	1					CN8U4E17 G01
47	.125" CONDUIT HUB	2					HUB-125
48	.50 CONDUIT HUB	1					HUB-50

NOTE: ITEMS TO BE ENCLOSED DURING SHIPMENT THROUGH AND EXTENDED SHIP DOWN ITEMS EXCEPT 2, 3, 4, 45 AND 46 ARE PROPRIETARY DRAWINGS NOT SUBMITTED FOR APPROVAL.

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

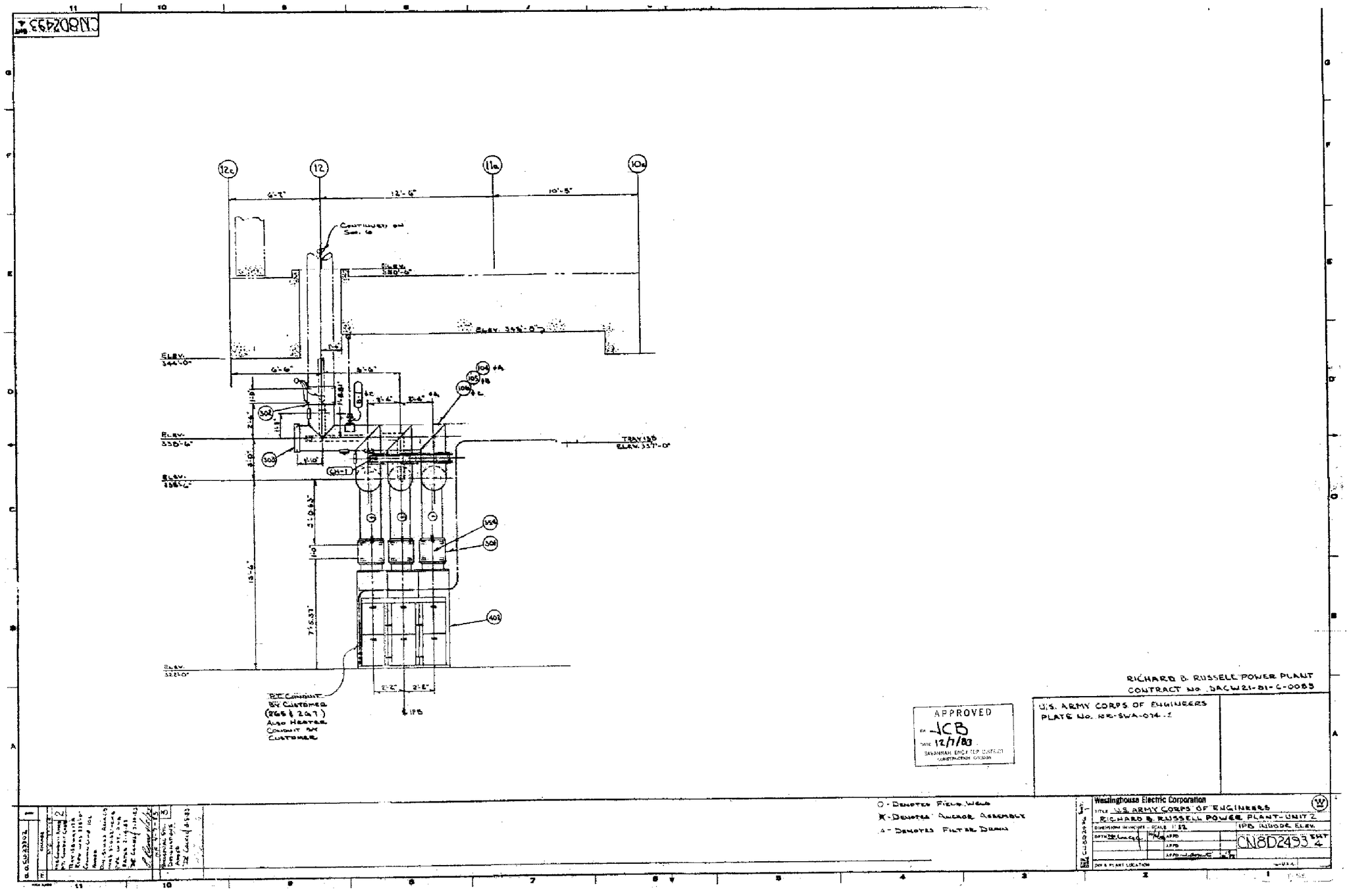
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-35

SCALE: NONE SHEET

101RRP_R035_WEC_CN8D2493_02.DGN
101RRP_TBLK.DGN
WEC_CN8D2493_02.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r035_wec_cn8d2493_02.dgn
11/04/2003
k6enxndt

...\101rrp_r035_wec_cn8d2493_02.dg 11/04/2003 08:25:34 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

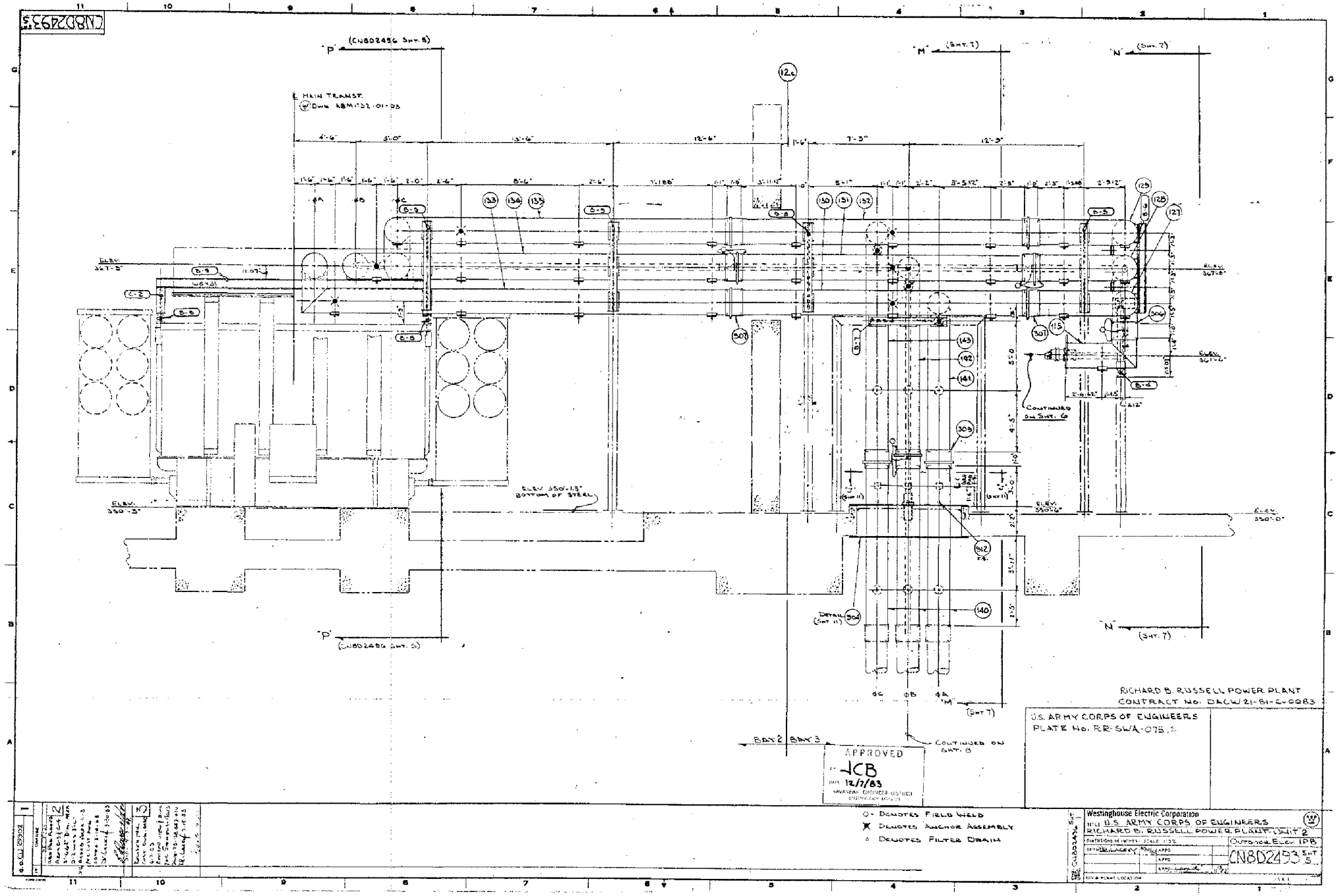
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-36

SCALE: NONE SHEET

101RRP_R036_WEC_CN8D2493_04.DGN
101RRP_TBLK.DGN
WEC_CN8D2493_04.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r036_wec_cn8d2493_04.dgn
11/04/2003
k6enxndt

...\101rrp_r036_wec_cn8d2493_04.dg 11/04/2003 08:26:17 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

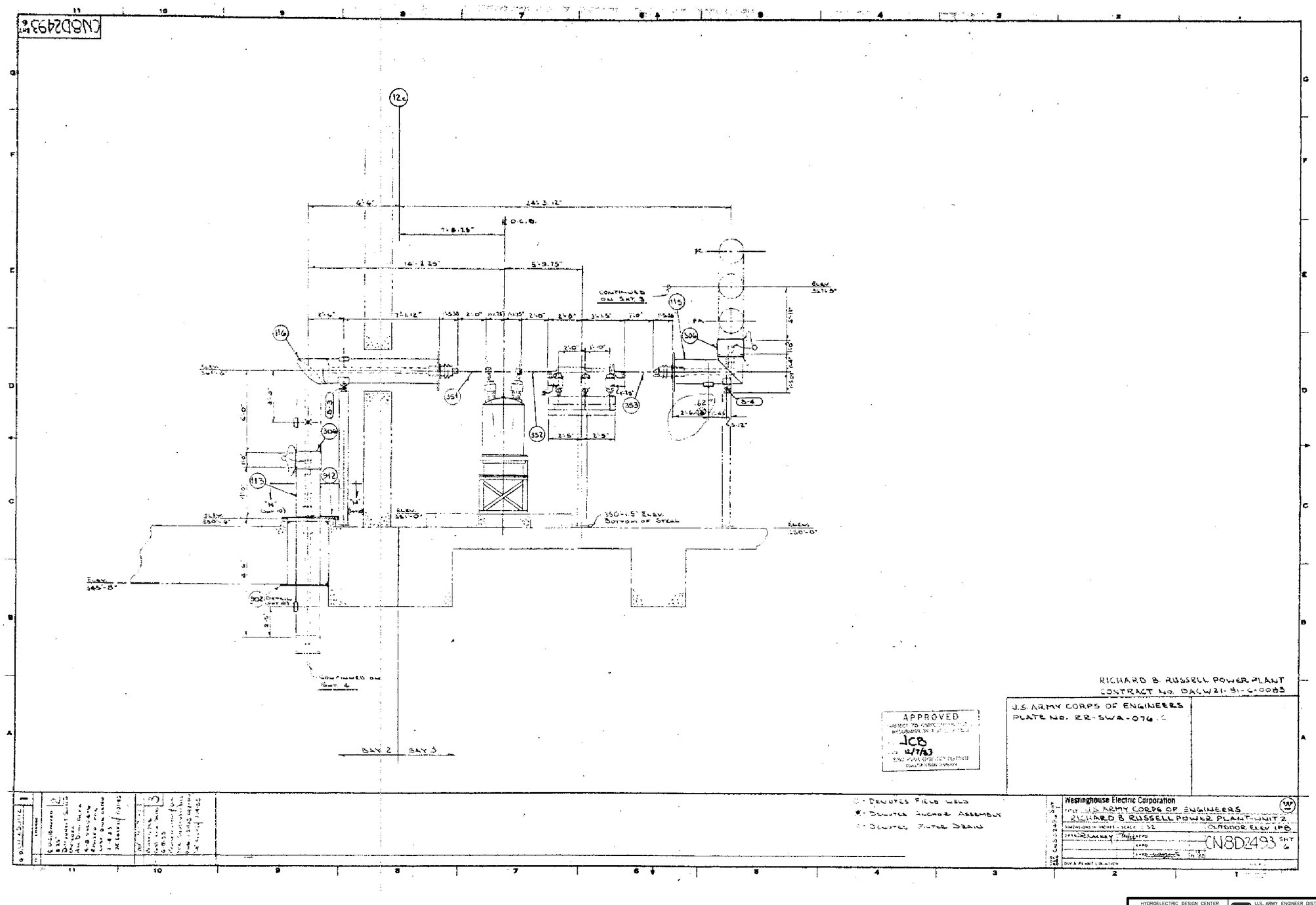
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-37

SCALE: NONE SHEET

101RRP_R037_WEC_CN8D2493_05.DGN
101RRP_TBLK.DGN
WEC_CN8D2493_05.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r037_wec_cn8d2493_05.dgn
11/04/2003
k6enxndt

...\101rrp_r037_wec_cn8d2493_05.dg 11/04/2003 08:48:18 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

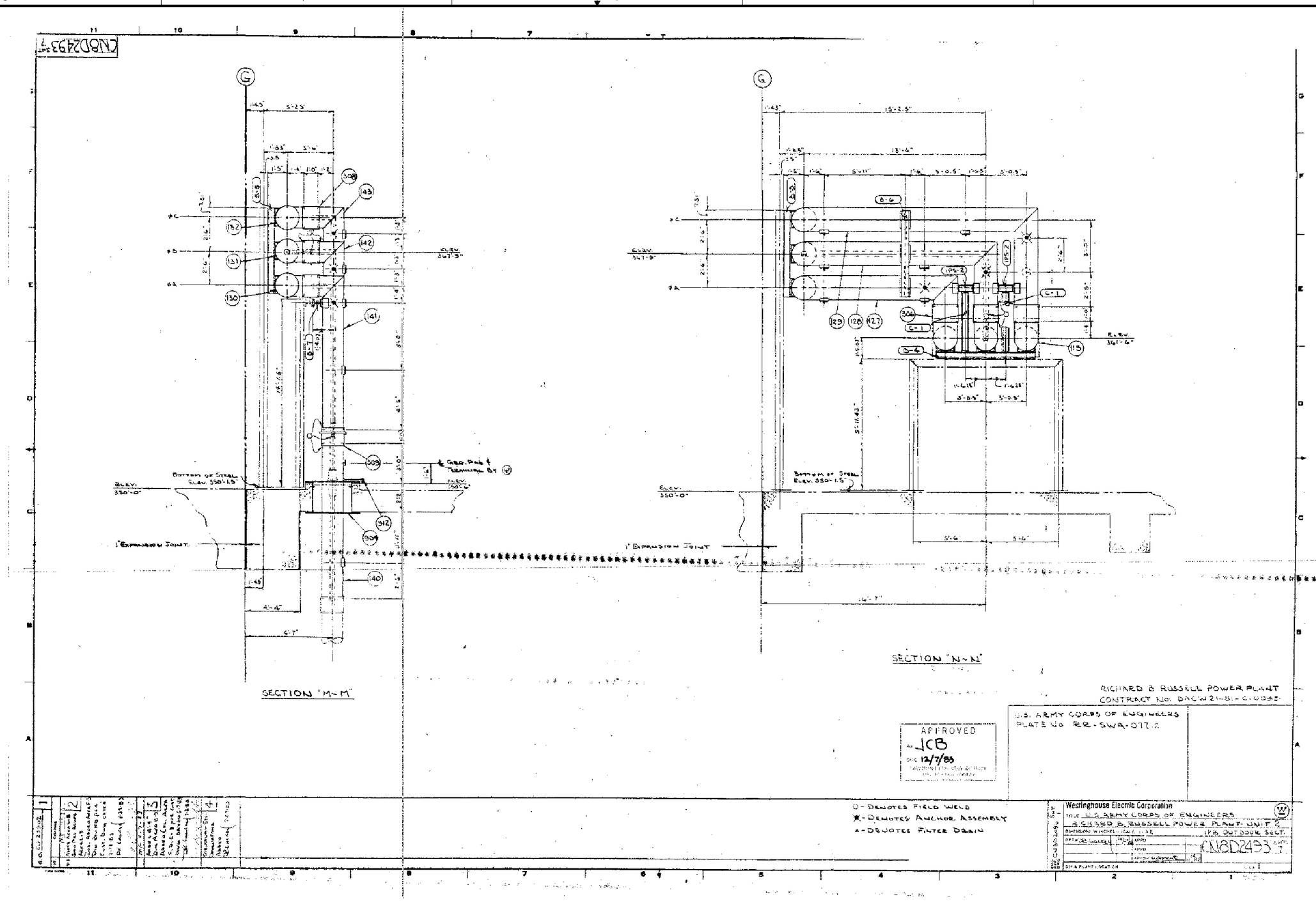
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-38

SCALE: NONE SHEET

101RRP_R038_WEC_CN8D2493_06.DGN
101RRP_TBLK.DGN
WEC_CN8D2493_06.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r038_wec_cn8d2493_06.dgn
11/04/2003
k6enxndt

...\101rrp_r038_wec_cn8d2493_06.dg 11/04/2003 08:49:08 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL

REFERENCE DRAWING

SAVANNAH RIVER GEORGIA AND S. CAROLINA

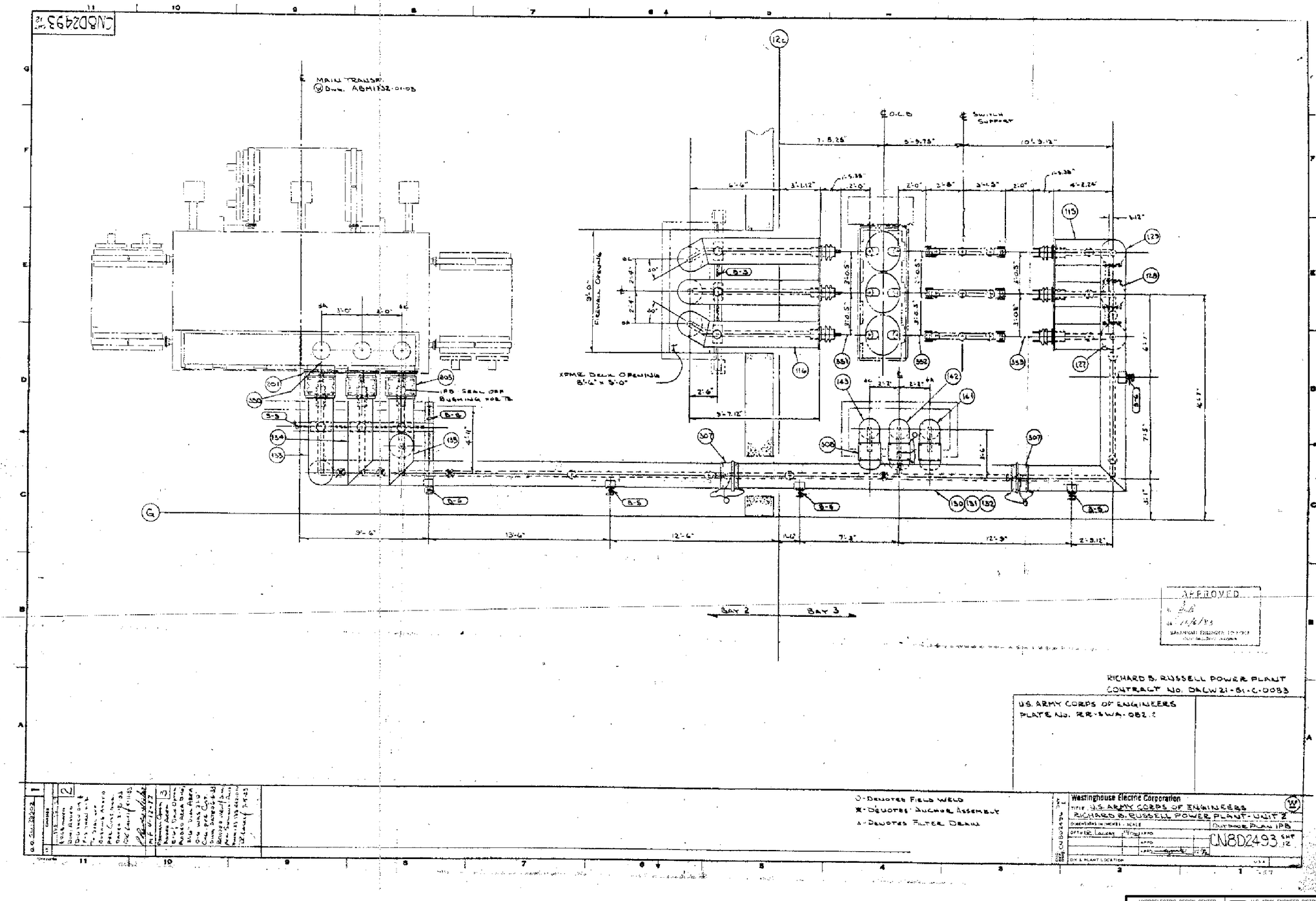
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-39

SCALE: NONE SHEET

101RRP_R039_WEC_CN8D2493_07.DGN
101RRP_TBLK.DGN
WEC_CN8D2493_07.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r039_wec_cn8d2493_07.dgn
11/04/2003
k6enxndt

...\101rrp_r039_wec_cn8d2493_07.dg 11/04/2003 01:26:43 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

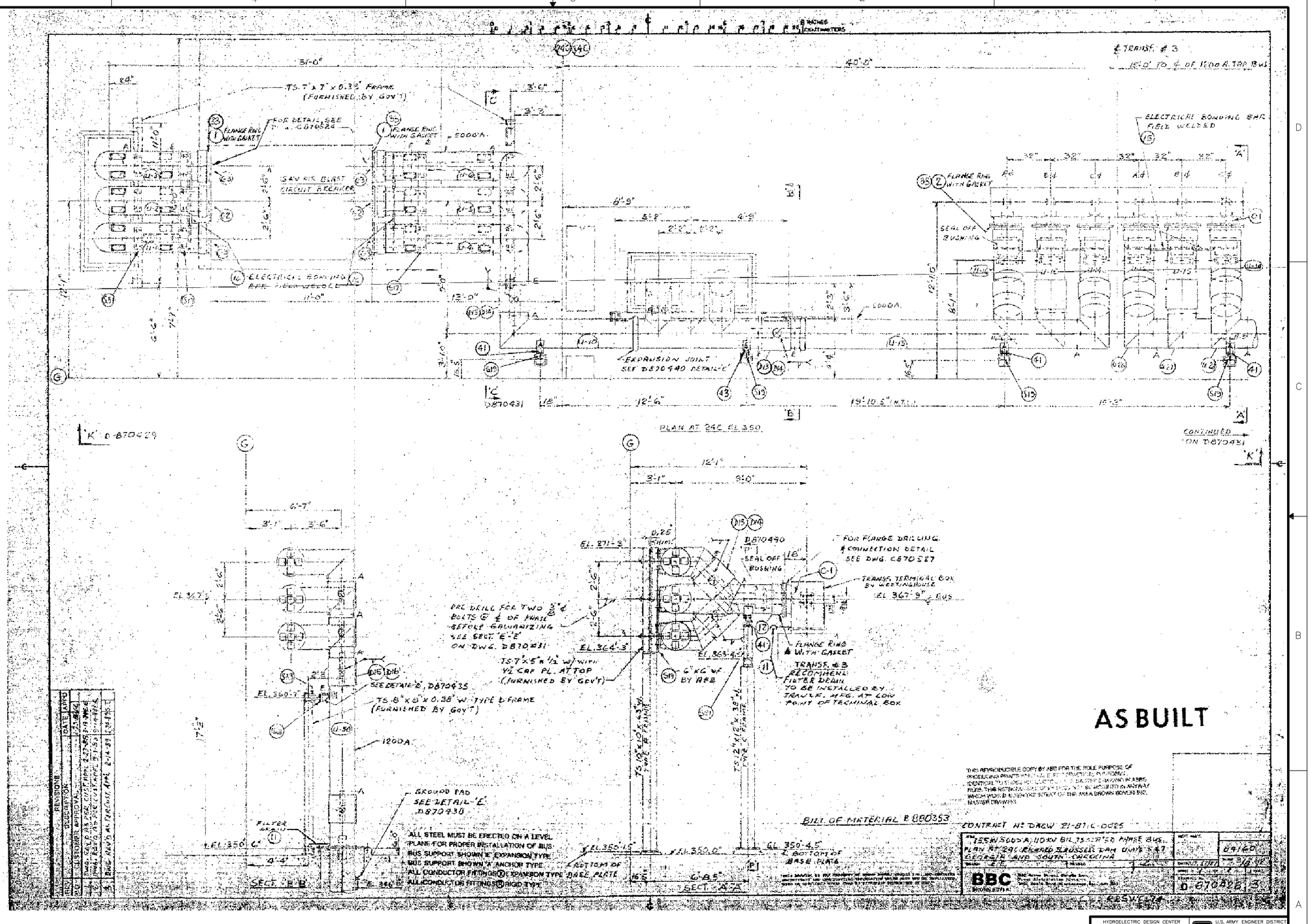
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-40

SCALE: NONE SHEET

101RRP_R040_WEC_CN8D2493_12.DGN
101RRP_TBLK.DGN
WEC_CN8D2493_12.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r040_wec_cn8d2493_12.dgn
11/04/2003
k6enxndt

...\101rrp_r040_wec_cn8d2493_12.dg 11/04/2003 01:29:25 PM



HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

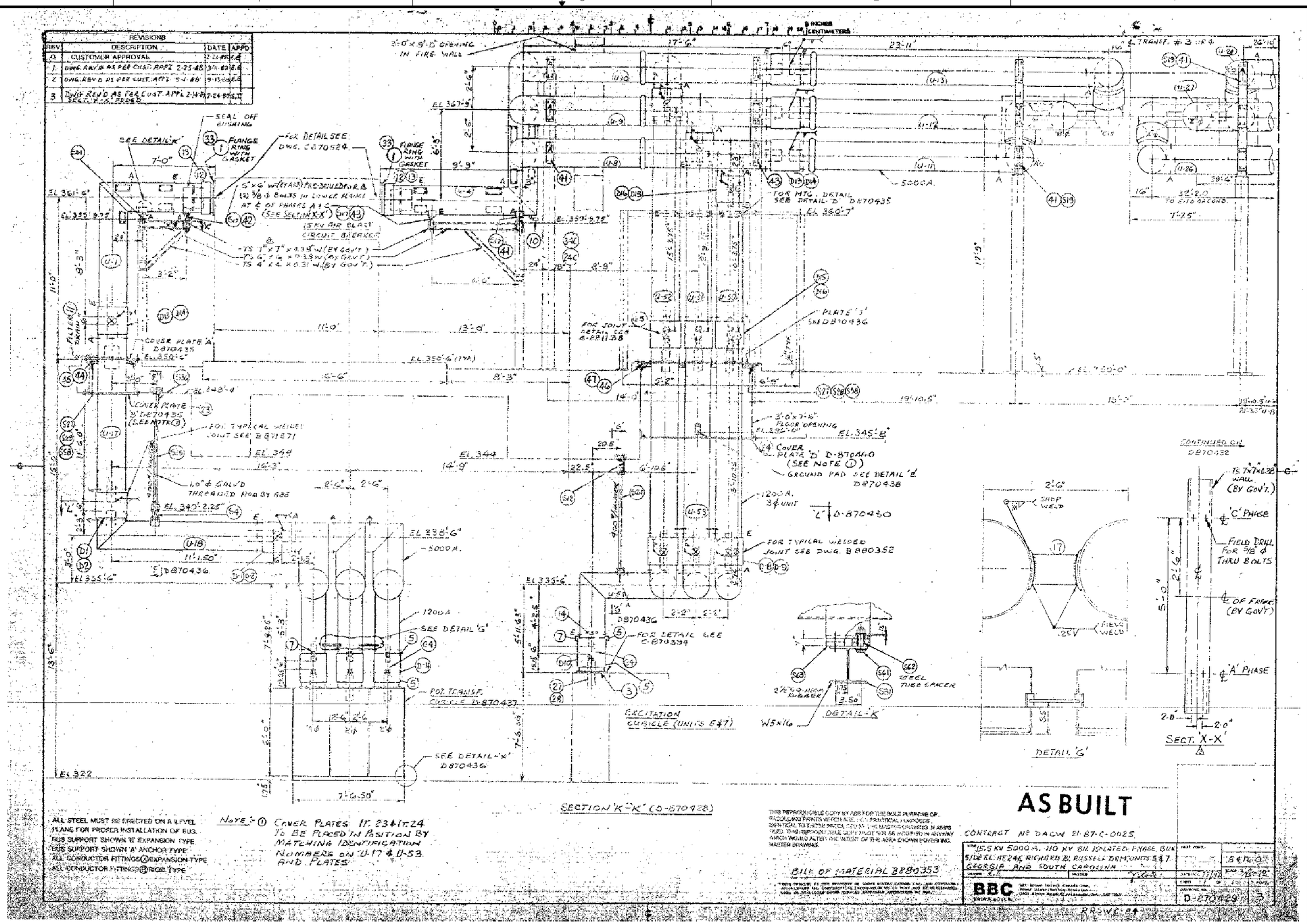
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-41

SCALE: NONE SHEET

101RRP_R041_BBC_D870428.DGN
101RRP_TBLK.DGN
BBC_D870428.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r041_bbc_d870428.dgn
11/04/2003
k6enxndt

...\101rrp_r041_bbc_d870428.dgn 11/04/2003 01:30:05 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-42

SCALE: NONE SHEET

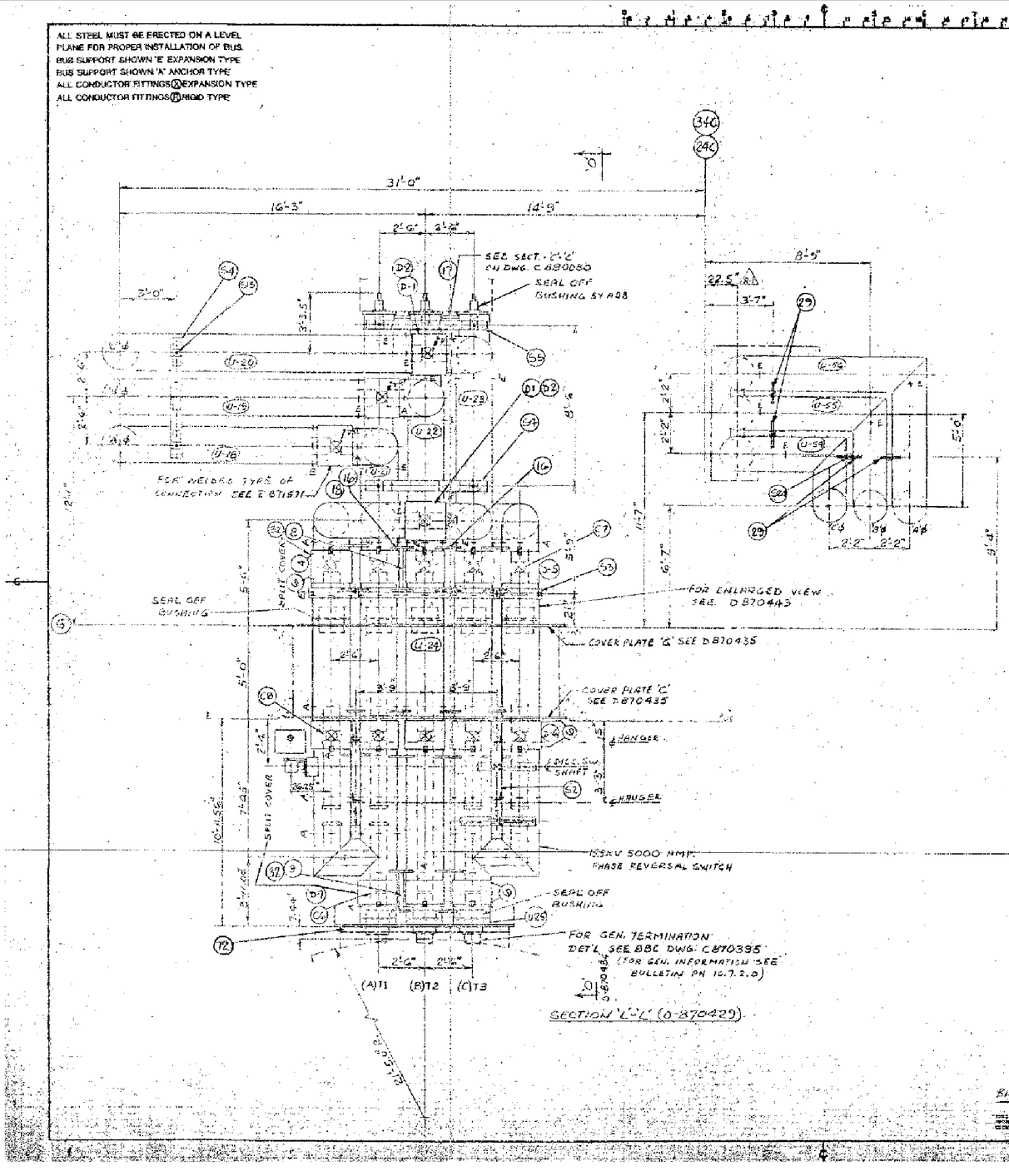
101RRP_R042_BBC_D870429.DGN
101RRP_TBLK.DGN
BBC_D870429.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r042_bbc_d870429.dgn
11/04/2003
k6enxndt

...\101rrp_r042_bbc_d870429.dgn 11/04/2003 01:32:31 PM

ALL STEEL MUST BE ERECTED ON A LEVEL PLANE FOR PROPER INSTALLATION OF BUS.
BUS SUPPORT SHOWN 'E' EXPANSION TYPE
BUS SUPPORT SHOWN 'A' ANCHOR TYPE
ALL CONDUCTOR FITTINGS (X) EXPANSION TYPE
ALL CONDUCTOR FITTINGS (R) RIGID TYPE

REVISIONS			
REV.	DESCRIPTION	DATE	APPD
0	CUSTOMER APPROVAL	2-23-88	[illegible]
1	DWG. REV'D AS PER CUST. APPL 2-23-88 DIM. G2.5" WAS 2'-0"	3-24-88	E.O.
2	DWG. REV'D AS PER CUST. APPL 9-1-88	9-12-88	[illegible]
3	S1, SW22, E3 REMOVED ONLY UP THRU 5TH	[illegible]	[illegible]



AS BUILT

THIS REPRODUCIBLE COPY IS FOR THE SOLE PURPOSE OF REPRODUCING PRINTS WHICH ARE FOR PRACTICAL PURPOSES IDENTICAL TO THOSE REPRODUCED FROM THE MASTER DRAWING IN ACTIVE FILE. THIS REPRODUCIBLE COPY IS NOT TO BE MODIFIED IN ANY WAY WHICH WOULD ALTER THE INTENT OF THE MASTER BROWN BOVERI DWG. MASTER DRAWING.

CONTRACT No. DACW 21-87-C-0025

BILL OF MATERIAL B 880353

THIS DRAWING IS THE PROPERTY OF BROWN BOVERI INC. AND SHALL NOT BE REPRODUCED OR COPIED IN WHOLE OR IN PART WITHOUT THE WRITTEN CONSENT OF BROWN BOVERI INC.

BBC BROWN BOVERI

TITLE: 15.5KV 5000A 110KV BIL ISOLATED PHASE BUS PLAN AT EL 322 RICHARD B. RUSSELL DAM UNITS 5 & 7 GEORGIA AND SOUTH CAROLINA

SHEET SIZE: 34"x48"

DRAWN E.C. | TRACED | CHECKED | DATE 3/4/82

SHEET 1 OF 1 | SCALE NONE | SUPERSEDES | SUPERSEDED BY

D-870430

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

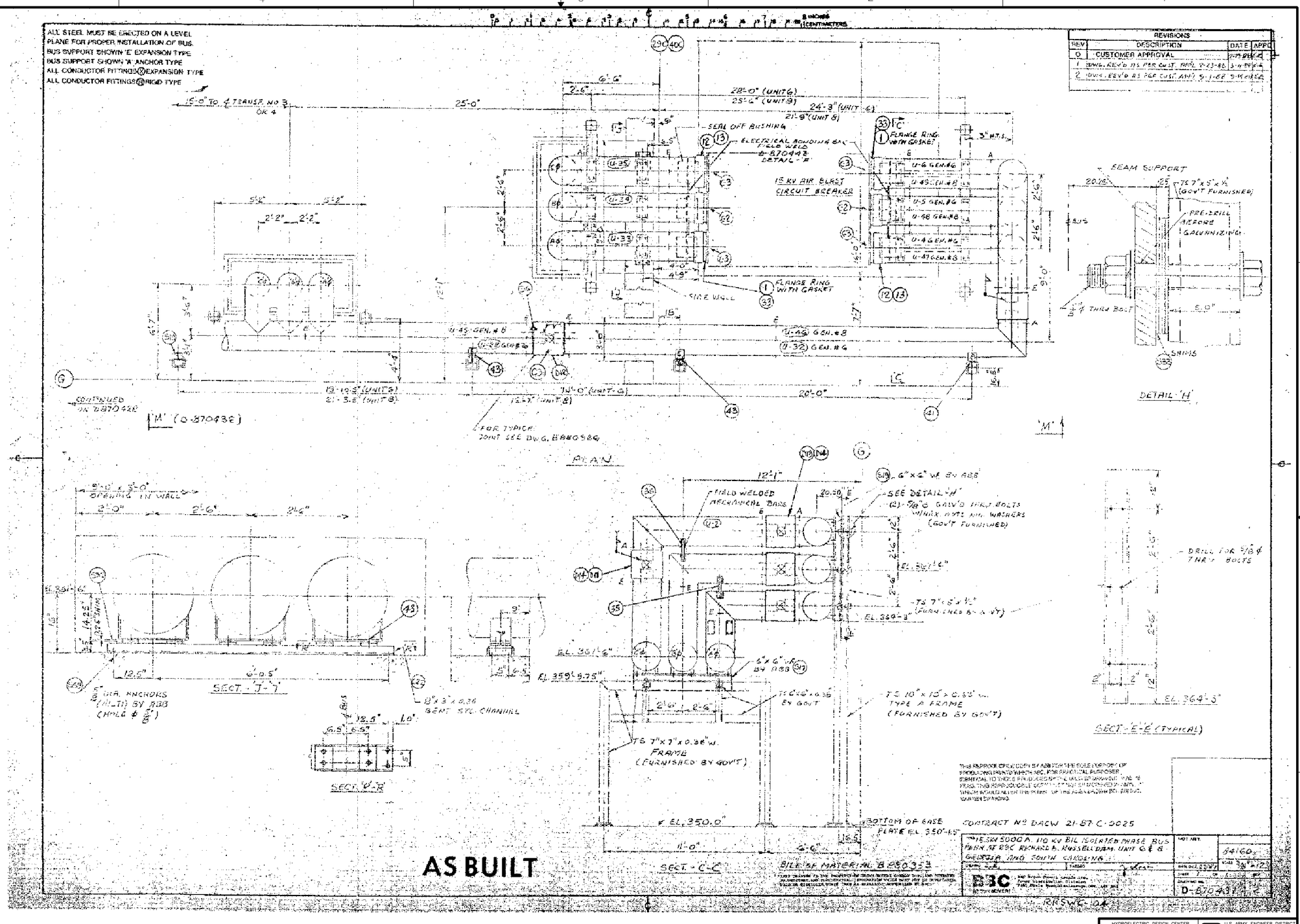
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-43

SCALE: NONE | SHEET

101RRP_R043_BBC_D870430.DGN
101RRP_TBLK.DGN
BBC_D870430.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r043_bbc_d870430.dgn
11/04/2003
kbenxndt

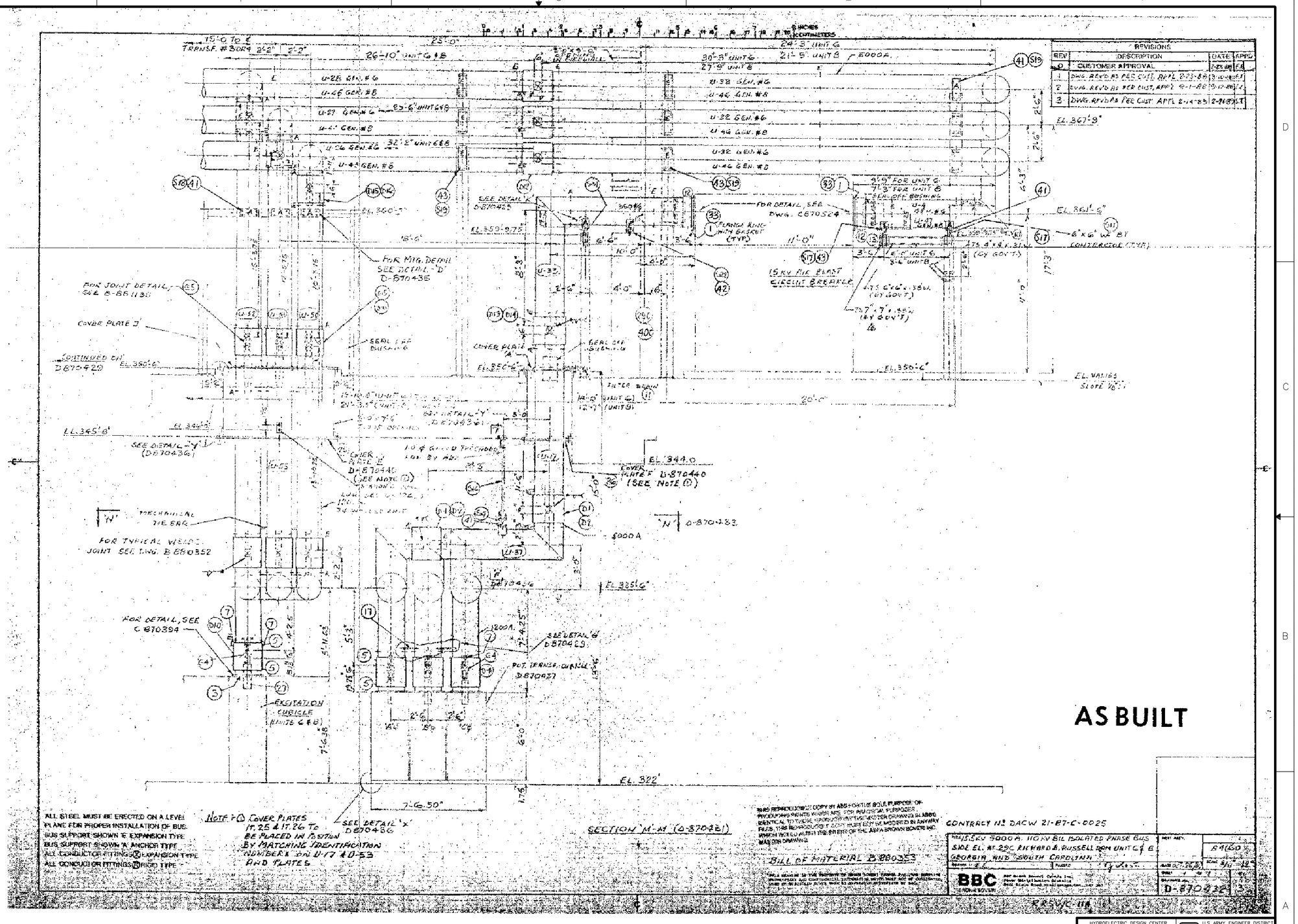
...\101rrp_r043_bbc_d870430.dgn 11/04/2003 01:34:34 PM



I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r044_bbc_d870431.dgn
11/04/2003
k6enxrdt

101RRP_R044_BBC_D870431.DGN
101RRP_TBLK.DGN
BBC_D870431.TIF

...\101rrp_r044_bbc_d870431.dgn 11/04/2003 01:37:17 PM

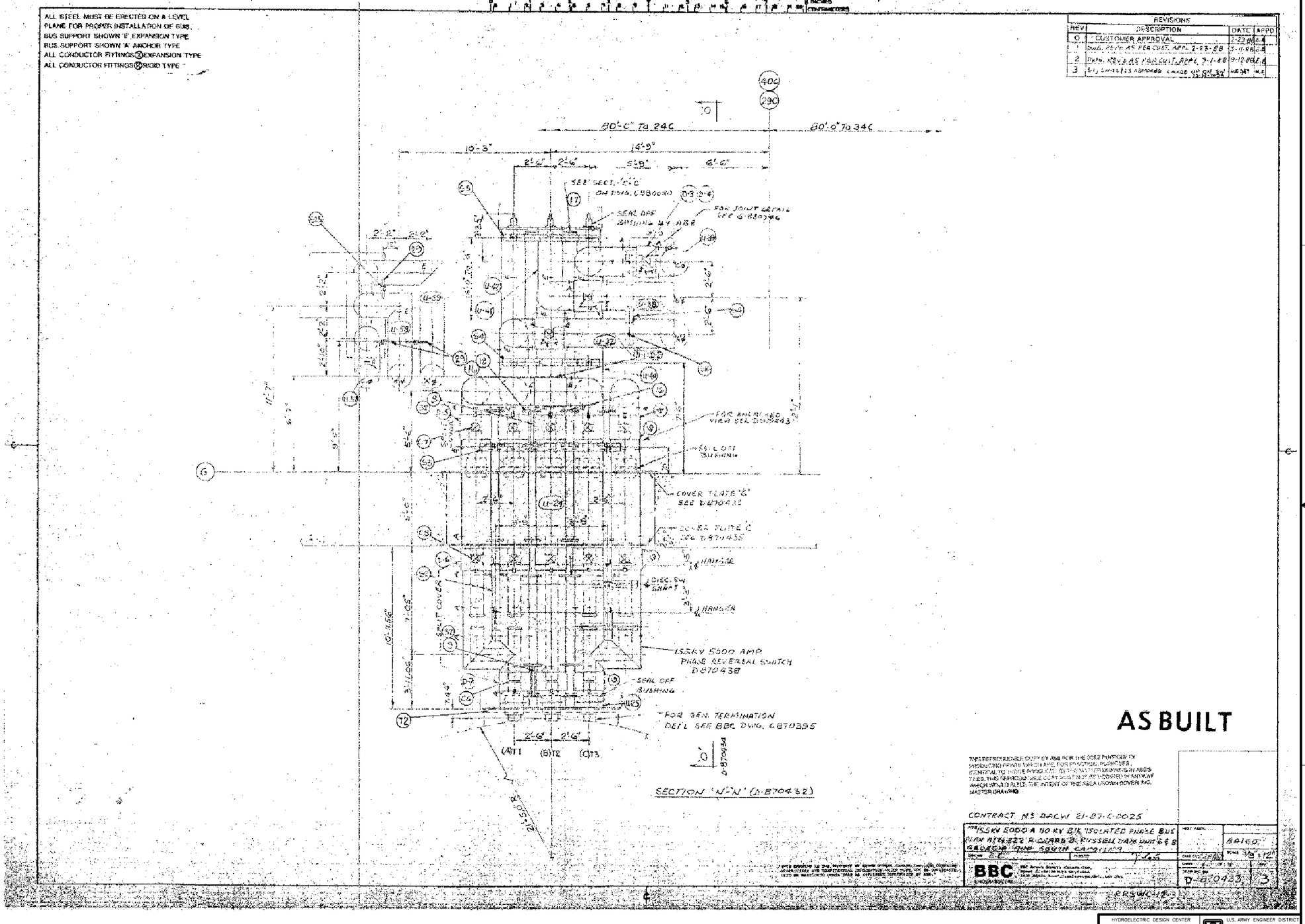


I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r045_bbc_d870432.dgn
11/04/2003
k6enxndt

...\101rrp_r045_bbc_d870432.dgn 11/04/2003 01:37:53 PM

ALL STEEL MUST BE ERECTED ON A LEVEL PLANE FOR PROPER INSTALLATION OF BUS.
BUS SUPPORT SHOWN 'E' EXPANSION TYPE
BUS SUPPORT SHOWN 'A' ANCHOR TYPE
ALL CONDUCTOR FITTINGS (X) EXPANSION TYPE
ALL CONDUCTOR FITTINGS (R) RIGID TYPE

REVISIONS			
REV	DESCRIPTION	DATE	APPD
0	CUSTOMER APPROVAL	2-22-88	
1	DWG. REVD AS PER CUST. APPL. 2-23-88	3-11-88	
2	DWG. REVD AS PER CUST. APPL. 3-1-88	3-10-88	
3	SEE CHANGES REMARKED CHANGED BY CM. SW 13-10-94	10-13-94	



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-46

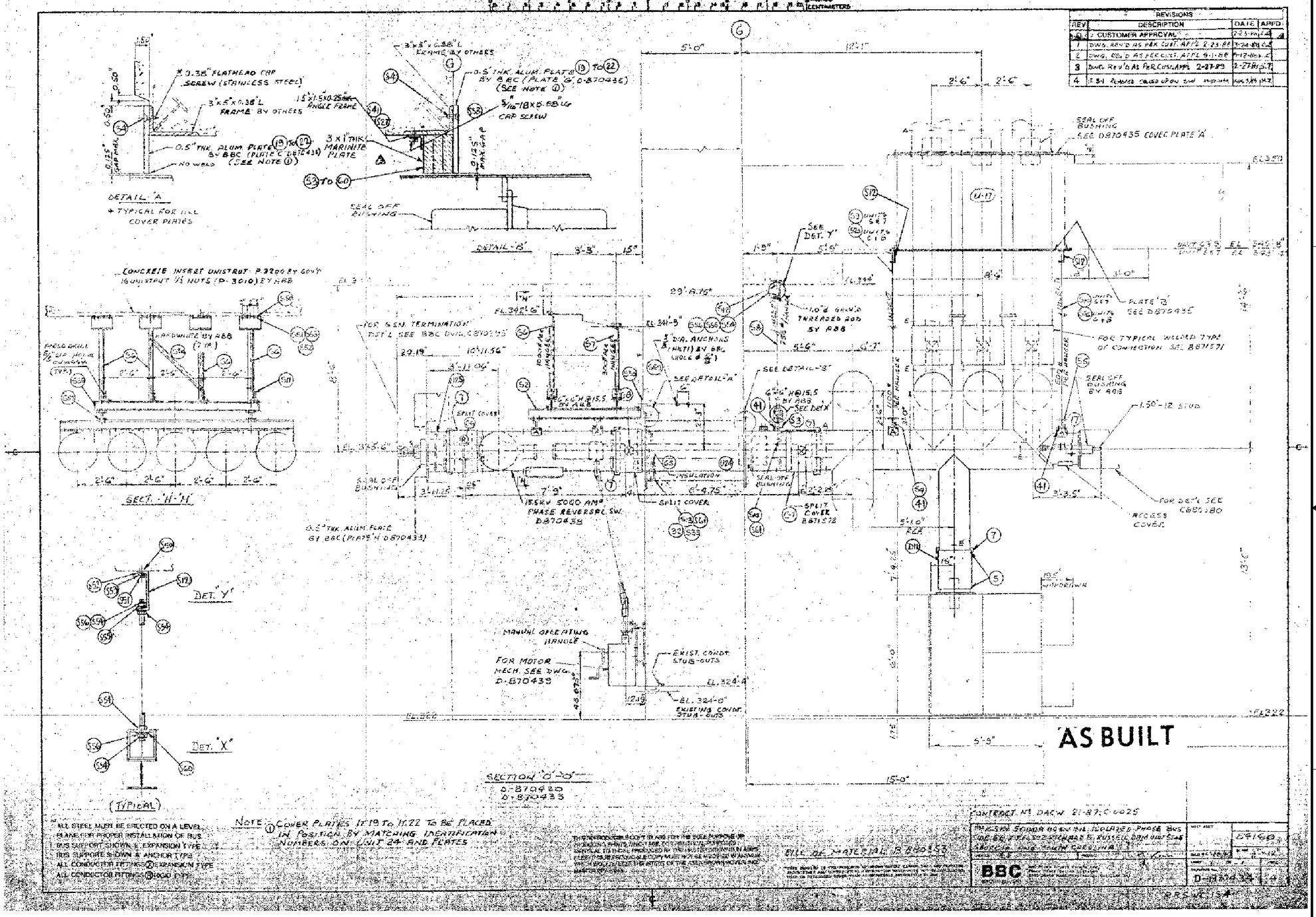
SCALE: NONE SHEET

101RRP_R046_BBC_D870433.DGN
101RRP_TBLK.DGN
BBC_D870433.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r046_bbc_d870433.dgn
11/04/2003
k6enxndt

...\101rrp_r046_bbc_d870433.dgn 11/04/2003 01:38:36 PM

REV	DESCRIPTION	DATE	APPD
0	CUSTOMER APPROVAL	2-23-99	
1	DWG. REV'D AS PER CUST. APPL 2-23-88	3-24-88	
2	DWG. REV'D AS PER CUST. APPL 9-1-88	9-12-88	
3	DWG. REV'D AS PER CUST. APPL 2-27-89	2-27-89	
4	T.S.1 REMOVED CALLED UPON SW	6-13-89	



NOTE: ① COVER PLATES 17.19 TO 17.22 TO BE PLACED IN POSITION BY MATCHING IDENTIFICATION NUMBERS ON UNIT 24 AND PLATES

ALL STEEL MUST BE ERECTED ON A LEVEL PLANE FOR PROPER INSTALLATION OF BUS.
BUS SUPPORT SHOWN & EXPANSION TYPE
BUS SUPPORTS SHOWN & ANCHOR TYPE
ALL CONDUCTOR FITTINGS ② EXPANSION TYPE
ALL CONDUCTOR FITTINGS ③ ROAD TYPE

CONTRACT No. DACW 21-87-C-0025

BBC

D-870434

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

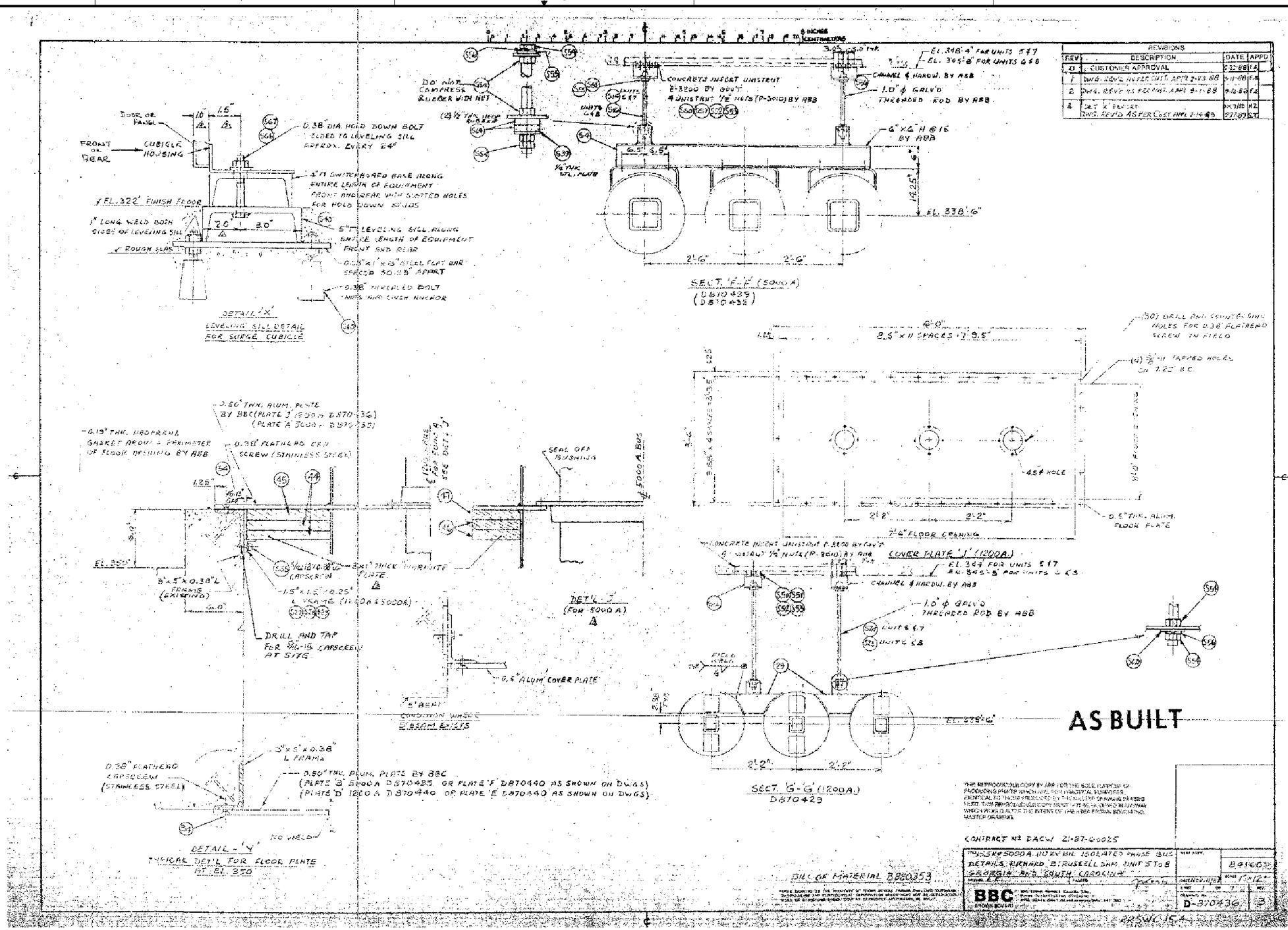
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-47

SCALE: NONE SHEET

101RRP_R047_BBC_D870434.DGN
101RRP_TBLK.DGN
BBC_D870434.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r047_bbc_d870434.dgn
11/04/2003
k6enxrdt

...\101rrp_r047_bbc_d870434.dgn 11/04/2003 01:39:48 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

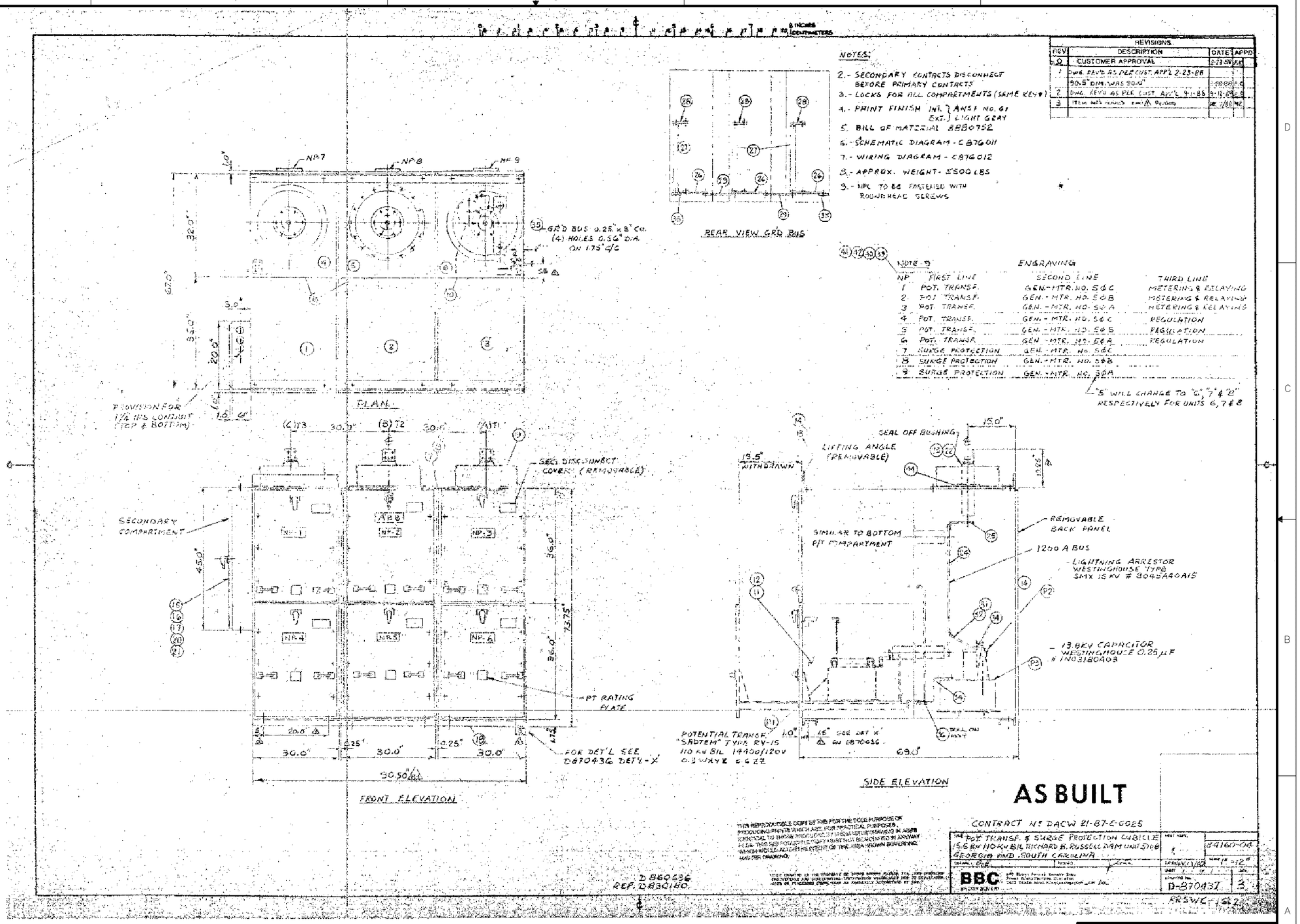
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-48

SCALE: NONE SHEET

101RRP_R048_BBC_D870436.DGN
101RRP_TBLK.DGN
BBC_D870436.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r048_bbc_d870436.dgn
11/04/2003
k0enxndt

...\101rrp_r048_bbc_d870436.dgn 11/04/2003 01:40:21 PM



REV	DESCRIPTION	DATE	APPD
0	CUSTOMER APPROVAL	2-23-88	F.E.
1	DWG. REV'D AS PER CUST. APP'L 2-23-88 90.5" DIM. WAS 90.0"	2-28-88	F.E.
2	DWG. REV'D AS PER CUST. APP'L 4-1-88	9-12-88	F.E.
3	ITEM NO'S ADDED	1/88	MZ

NOTE 9 ENGRAVING

NP	FIRST LINE	SECOND LINE	THIRD LINE
1	POT. TRANSF.	GEN.-MTR. NO. 5 & C	METERING & RELAYING
2	POT. TRANSF.	GEN.-MTR. NO. 5 & B	METERING & RELAYING
3	POT. TRANSF.	GEN.-MTR. NO. 5 & A	METERING & RELAYING
4	POT. TRANSF.	GEN.-MTR. NO. 5 & C	REGULATION
5	POT. TRANSF.	GEN.-MTR. NO. 5 & B	REGULATION
6	POT. TRANSF.	GEN.-MTR. NO. 5 & A	REGULATION
7	SURGE PROTECTION	GEN.-MTR. NO. 5 & C	
8	SURGE PROTECTION	GEN.-MTR. NO. 5 & B	
9	SURGE PROTECTION	GEN.-MTR. NO. 5 & A	

"5" WILL CHANGE TO "6", "7" & "8" RESPECTIVELY FOR UNITS 6, 7 & 8

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

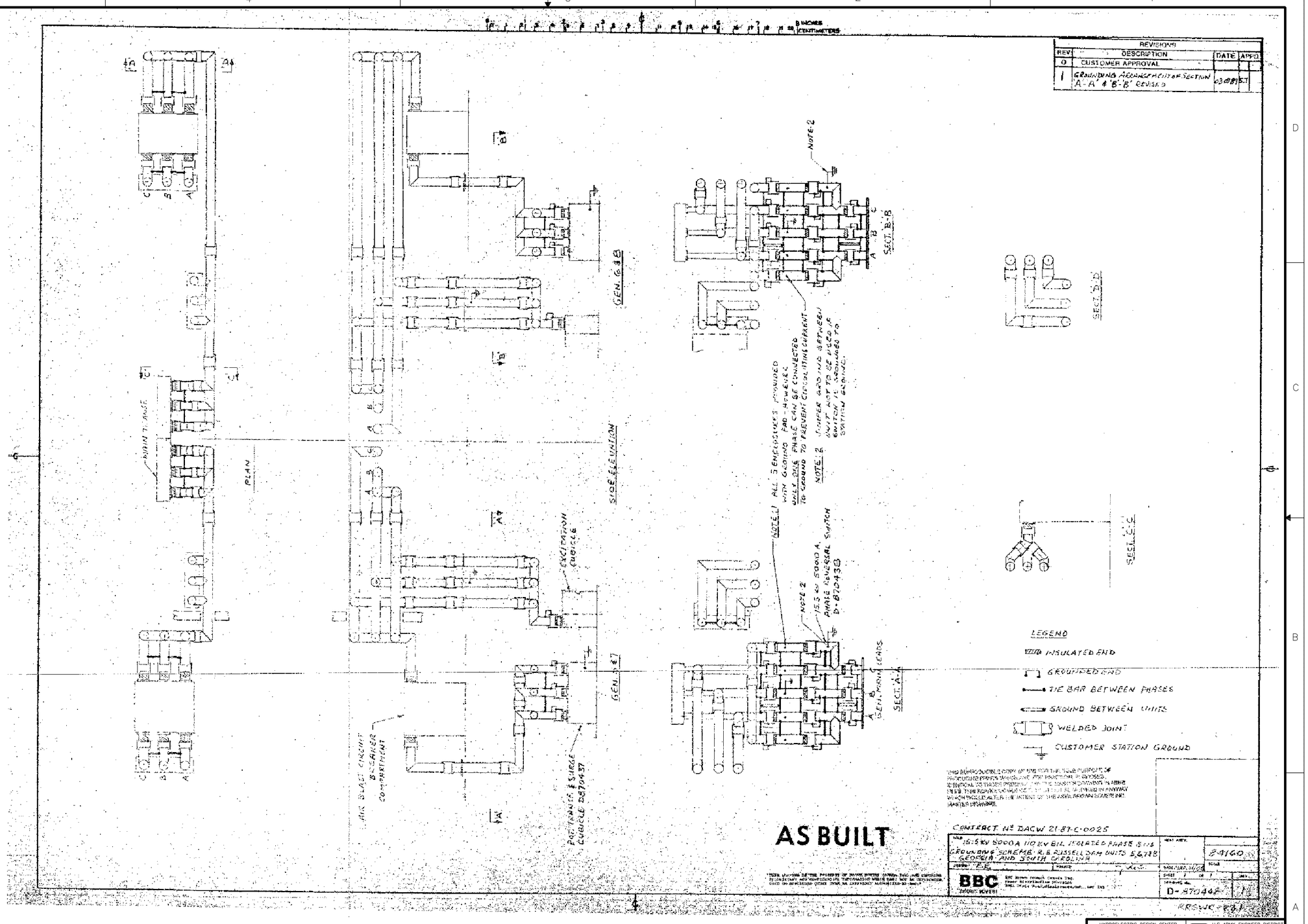
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-49

SCALE: NONE SHEET

101RRP_R049_BBC_D870437.DGN
101RRP_TBLK.DGN
BBC_D870437.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r049_bbc_d870437.dgn
11/04/2003
k6enxndt

...\101rrp_r049_bbc_d870437.dgn 11/04/2003 01:41:20 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

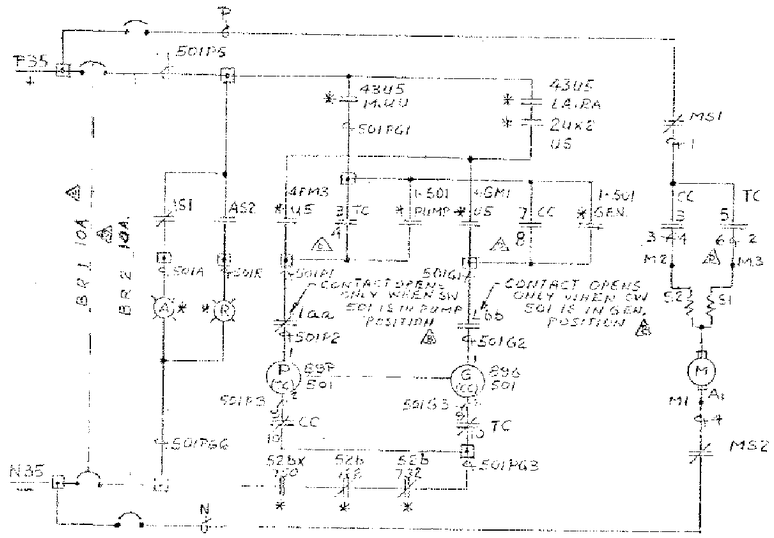
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-50

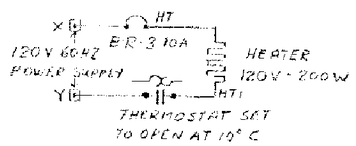
SCALE: NONE SHEET

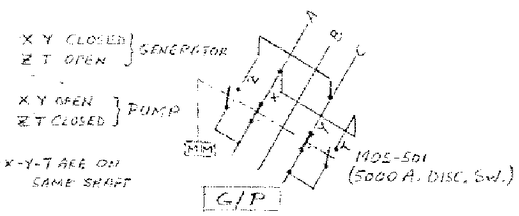
101RRP_R050_BBC_D870442.DGN
101RRP_TBLK.DGN
BBC_D870442.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r050_bbc_d870442.dgn
11/04/2003
k6enxndt

...\101rrp_r050_bbc_d870442.dgn 11/04/2003 01:41:50 PM







AUXILIARY SWITCHES
(CONTACTS SHOWN IN GEN. POSITION)

CONTACT	FUNCTION	WIRES
AS1	AMB. LT. (G)	501PG - 501A
AS2	RED LT. (P)	501PG - 501R
AS3	S2TC - 750 (P)	750T10 - 750T11
AS4	S2CC - 722 (P)	722C5 - 722C6
AS5	S2TC - 750 (G)	750T10 - 750T8
AS6	S2CC - 732 (P)	732C5 - 732C6
AS7	3PR - US (P)	5PUR5 - 5PUR6
AS8	SUPY (P)	SUP - SUP135P
AS9	SUPY (G)	SUP - SUP135G
AS10	GSS - US (G)	SS10 - SS11
AS11	SP (G)	111 - 112
AS12	SP (G)	121 - 122
AS13	SP (P)	131 - 132
AS14	SP (P)	141 - 142

CONTACTS ARE ADJUSTABLE TO OPEN OR CLOSE

NOTE: AUX AND LIMIT SWITCHES ARE OMRON 125 VDC CAT Nº A-20GV2-B7

LIMIT SWITCHES
(CONTACTS SHOWN IN GEN POSITION)

CONTACT	FUNCTION	WIRES
Laa	OPEN TC CIRCUIT	501P1 - 501P2
Lbb	OPEN CC CIRCUIT	501G1 - 501G2

CONTACTOR	FUNCTION
(P) (TC) BSP 501	TO OPEN 501XY & CLOSE 501ZT OPEN CC CIRCUIT
(G) (CC) BSG 501	TO CLOSE 501XY & OPEN 501ZT OPEN TC CIRCUIT

MS1 OPEN - IF MANUAL OP. HANDLE INSERTED
MS2 CLOSE - IF MANUAL OP. HANDLE IS REMOVED

☐ TERMINAL
* REMOTE ELEMENTS

REVISIONS			
REV	DESCRIPTION	DATE	APP'D
0	CUSTOMER APPROVAL	6-2-88	E.C.
A	DWG. REV'D AS PER CUST. APPR. 9-1-88	9-15-88	E.C.
B	FUSE SIZE REDUCED WAS 15A AUX AND LIMIT SWITCHES CAT Nº REVISED REVISED AS PER CUSTOMER MARKED UP APPROVAL. Date DATED 6-1-89	11-30-88 2-23-89	S.T. S.T.
C	10A WAS 5A, ET WAS E6	8-11-89	M.Z. S.T.
D	REV AS BUILT	MAR 1-99	M.Z. S.T.

AS BUILT

WIRING DIAGRAM # C876014

MOTOR MECHANISM # D870439

TITLE SCHEMATIC DIAGRAM FOR PHASE REVERSAL DISCONNECTING SWITCH MOTOR MECHANISM FOR B. RUSSELL DAM GEORGIA AND SOUTH CAROLINA

DRAWN E.E. CHECKED

BBC BROWN BOVERI — BBC Brown Boveri Canada Inc., Power Transmission Division, 2000 Argentia Road, Mississauga, Ont., L5N 2K3

NEXT ASSY. 84160-03

SCALE

DATE 5-27-88

SHEET 1 OF 1

DRAWING No. C-876013 REV D

RRSWC-26.2

"THIS DRAWING IS THE PROPERTY OF BROWN BOVERI CANADA INC., AND CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION WHICH MUST NOT BE DISCLOSED, COPIED OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY BBC."

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

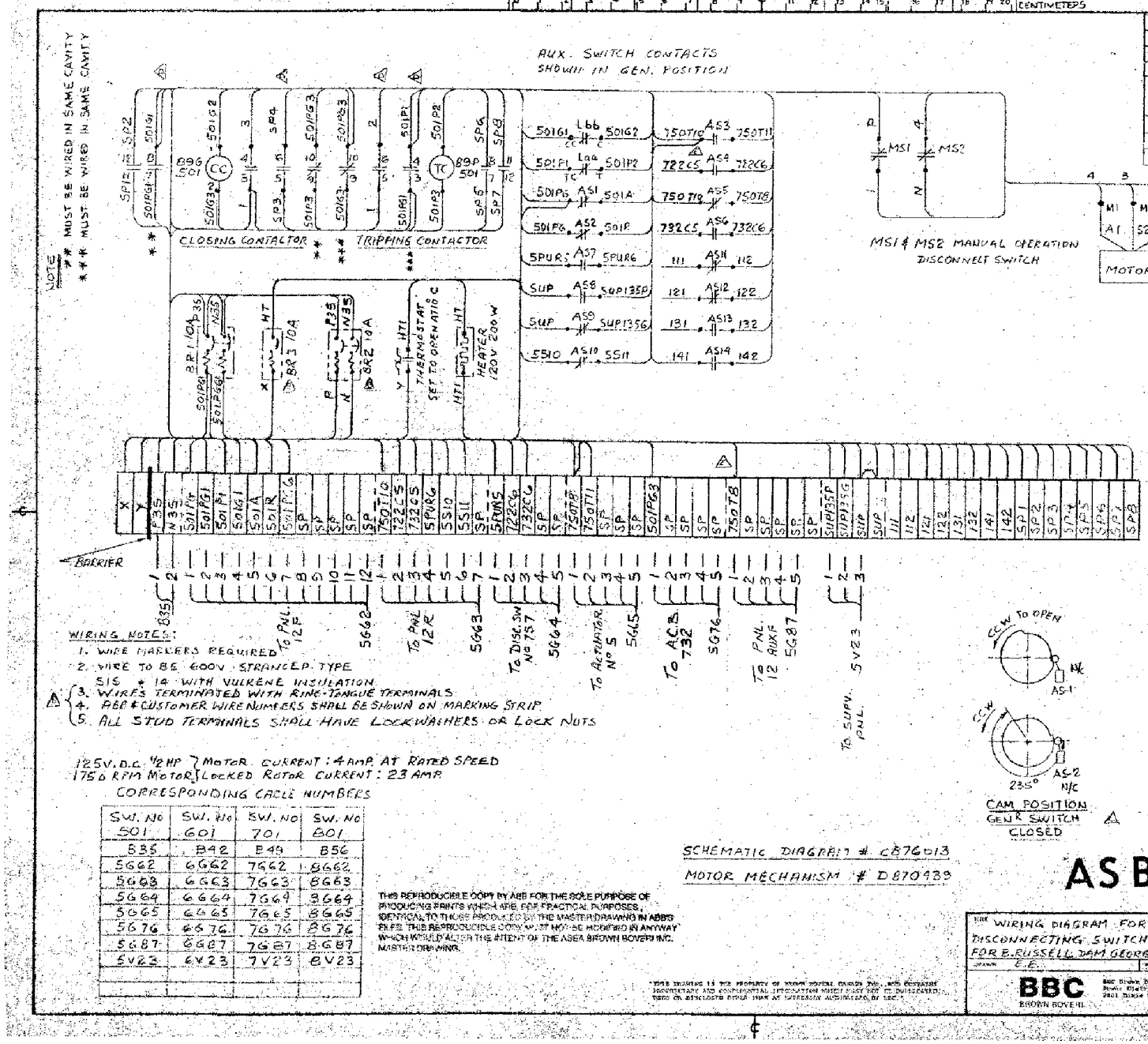
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-51

SCALE: NONE SHEET

101RRP_R051_BBC_C876013.DGN
101RRP_TBLK.DGN
BBC_C876013.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r051_bbc_c876013.dgn
11/04/2003
k6enxndt

...\101rrp_r051_bbc_c876013.dgn 11/04/2003 01:42:46 PM



REV	DESCRIPTION	DATE	APPD
0	CUSTOMER APPROVAL	6-7-88	
A	DWG. REVD AS PER CUST. APP'L 9-1-88	9-15-88	
B	NOTES 3, 4 & 5 ADDED. REVISED AS PER CUSTOMER MARKED UP APPROVAL DWG. DATED 02-14-89	4-1-89	ST
C	CAM POSITION SHOWN	6-17-91	MZ
D	REVISED AS BUILT	MAR 1991	MZ
E	N NOTE ADDED, 750T10 JUMPER REMOVED	OCT 9/00	MZ

CORRESPONDING WIRE NUMBERS

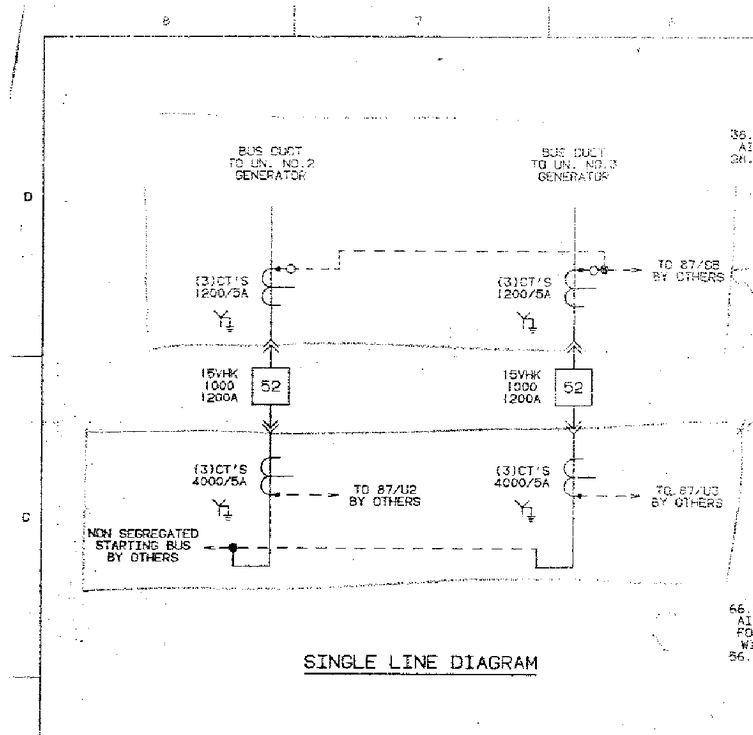
MOS 501	MOS 601	MOS 701	MOS 801
P35	P42	P49	P56
N35	N42	N49	N56
501PG	601PG	701PG	801PG
501PG1	601PG1	701PG1	801PG1
501P1	601P1	701P1	801P1
501G1	601G1	701G1	801G1
501A	601A	701A	801A
501R	601R	701R	801R
501PG6	601PG6	701PG6	801PG6
501PG3	601PG3	701PG3	801PG3
750T10	760T10	770T10	780T10
722C5	722C7	722C9	722C11
732C5	732C7	732C9	732C11
5PUR5	6PUR5	7PUR5	8PUR5
5PUR6	6PUR6	7PUR6	8PUR6
722C6	722C8	722C10	722C12
732C6	732C8	732C10	732C12
750T8	760T8	770T8	780T8
750T11	760T11	770T11	780T11
SUP135P	SUP136P	SUP137P	SUP138P
SUP135G	SUP136G	SUP137G	SUP138G
501P3	601P3	701P3	801P3
501G3	601G3	701G3	801G3
5S10	6S10	7S10	8S10
5S11	6S11	7S11	8S11

CORRESPONDING CABLE NUMBERS

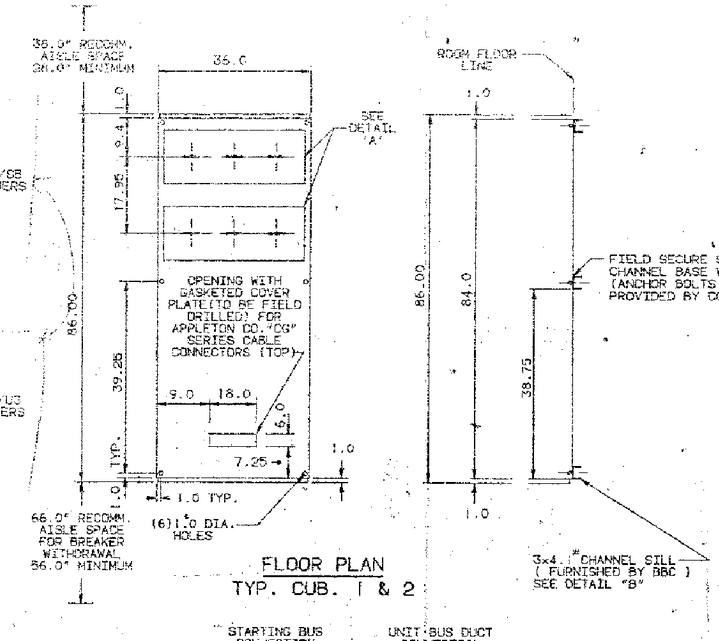
SW. NO 501	SW. NO 601	SW. NO 701	SW. NO 801
5S35	6S42	7S49	8S56
5G62	6G62	7G62	8G62
5G63	6G63	7G63	8G63
5G64	6G64	7G64	8G64
5G65	6G65	7G65	8G65
5G76	6G76	7G76	8G76
5G87	6G87	7G87	8G87
5V23	6V23	7V23	8V23

THIS REPRODUCIBLE COPY BY ABB FOR THE SOLE PURPOSE OF PRODUCING PRINTS WHICH ARE, FOR PRACTICAL PURPOSES, IDENTICAL TO THOSE PRODUCED BY THE MASTER DRAWING IN ABB'S FILES. THIS REPRODUCIBLE COPY MUST NOT BE MODIFIED IN ANYWAY WHICH WOULD ALTER THE INTENT OF THE ASEA BROWN BOVERI INC. MASTER DRAWING.

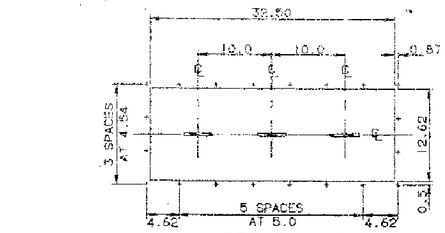
THIS DRAWING IS THE PROPERTY OF BROWN BOVERI CORPS INC. AND CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN AUTHORIZATION.



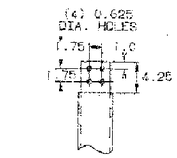
SINGLE LINE DIAGRAM



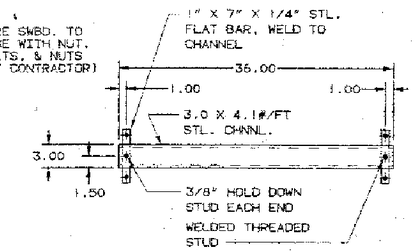
FLOOR PLAN
TYP. CUB. 1 & 2



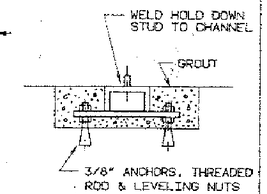
DETAIL 'A'



END BUS DETAIL



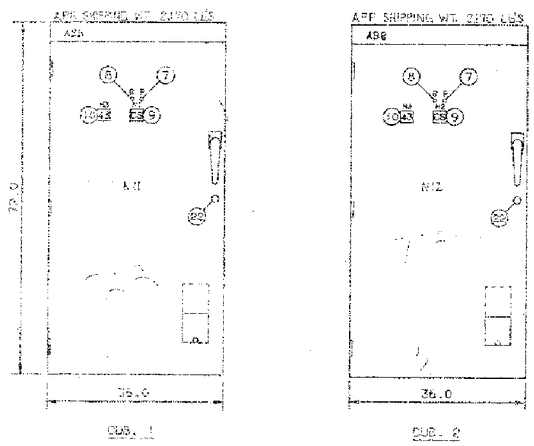
DETAIL 'B'
(3-PER FRAME)



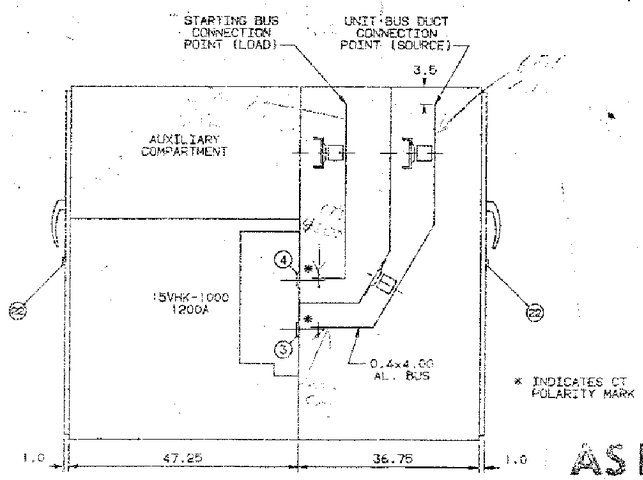
NOTES:

1. OVERALL SHIPPING DIMENSIONS ARE NOT LIMITED TO HOUSING DIMENSIONS SHOWN. SHIPPING SECTIONS MAY BE INCREASED BY EXTENSIONS OF BUSHINGS, BUS ETC., ON EITHER OR BOTH ENDS OF SPLIT. IF DIMENSIONS OF SHIPPING SECTIONS ARE CRITICAL, REFER TO HOME OFFICE FOR FIRM OVERALL DIMENSIONS.
2. REFER TO DWG. 837695 FOR STANDARD SINGLE LINE SYMBOLS.
3. STANDARD BROWN BOVERI FINISHES (UNLESS OTHERWISE SPECIFIED) INDOOR - LIGHT GRAY, ANSI 61
4. V.C.B. WEIGHTS, 15VHK-1000,1200A WEIGHT = 628 LBS. SWITCHGEAR WEIGHT = 2000LBS./FRAME
5. 3 POINT LATCH & DOOR STOPS REQUIRED.
6. NUMBER IN CIRCLE INDICATES PIECE NUMBER ELECTRICAL BILL OF MATERIAL BBC(ABB) DRAWING NUMBER 60211-B0401
7. SPECIAL PHYSICAL BUS ARRANGEMENT 3-2-1(C-B-A) LEFT TO RIGHT,TOP TO BOTTOM,FRONT TO REAR WHEN VIEWED FROM BREAKER WITHDRAWAL SIDE — NOTE 1

CONTRACT NO. DACW21-87-C-0059
CONTRACT NAME :
RICHARD B. RUSSELL PWR. PLANT



FRONT VIEW



SECTION VIEW

AS BUILT

ITEM A01

15VHK-1000,1200A. INDOOR METALCLAD SWITCHGEAR 15KV.,3PH.,3W.,60HZ.

GENERAL ARRANGEMENT

SOLD TO: U.S. ARMY CORP OF ENGINEERS
DISTRICT,SAVANNAH
P.O.BOX 889
SAVANNAH,GA. 31402-0889

USER: U.S. ARMY ENGINEERS
RICHARD B. RUSSELL POWER PLANT
ELBERTON,GA

NO.	REVISIONS	BY & DATE	CHD.	APP.	DWN
3	REVISED FOR AS BUILT	J.D.M. 9/26/91	N.H.	JCK	
2	REVISED PER CUST. MARKED PRINT DATED 8/2/88	JWP 2/11/89	N.H.		
1	REVISED PER CUST. APPROVAL DRAWING DATED 3-16-88	COM 6-26-88	NH	JCK	

BBC Brown Boveri, Inc. 60211-D0426 3
SIZE D REV. 1 OF 1 REV.
ASSY. PVT.C.O.MORRISON CHK. N HAMOUD APP. J KINSEY
P.O.DACW21-87-C-0059 DATE 12-10-87 DATE 6/2/88 DATE 6/2/88 J.O. 37-60211
TYPE PROC. DRAWN THIS DRAWING IS THE PROPERTY OF BROWN BOVERI AND CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION WHICH MAY NOT BE COPIED, USED, OR DISCLOSED WITHOUT PRIOR AUTHORIZATION BY BROWN BOVERI, INC.

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

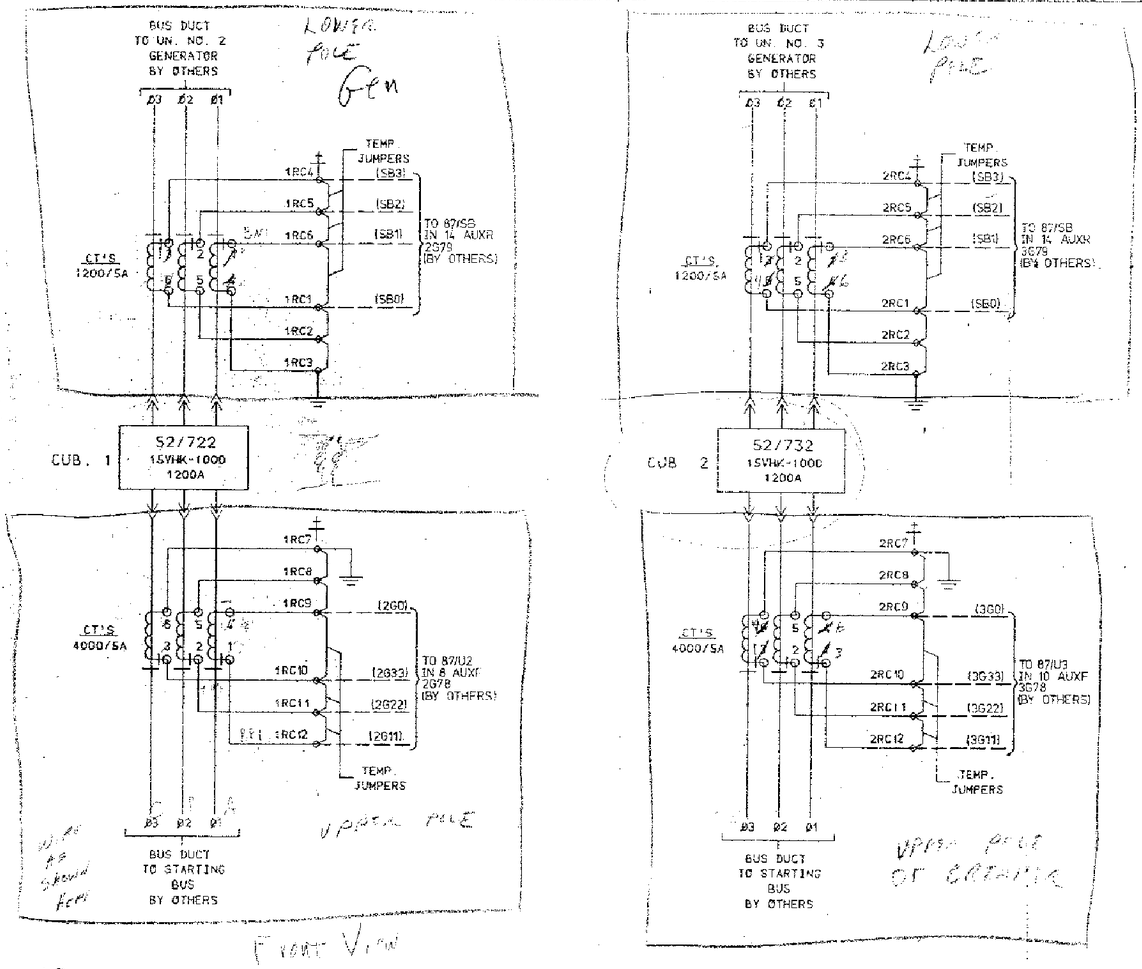
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-53

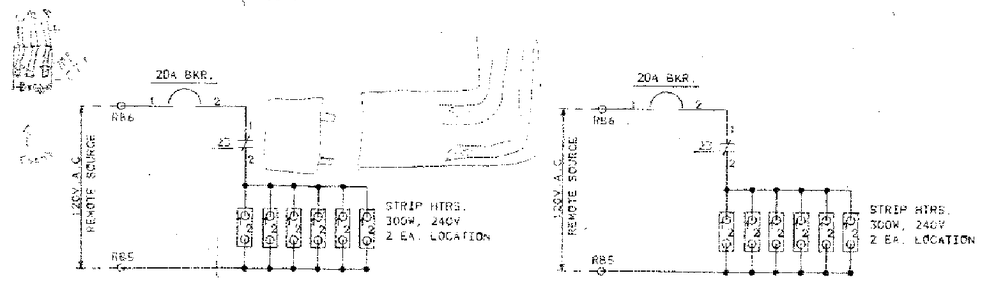
SCALE: NONE SHEET

101RRP_R053_BBC_60211D0426.DGN
101RRP_TBLK.DGN
BBC_60211D0426.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r053_bbc_60211d0426.dgn
11/04/2003
k6enxndt

...\101rrp_r053_bbc_60211d0426.dgn 11/04/2003 01:52:57 PM





NOTES:

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. MATERIAL FURNISHED BY B.B.C. WILL BE IN ACCORDANCE WITH THE CONTRACT AND IS NOT TO BE CHANGED BY ANYTHING ON THIS DRAWING.
2. REFER TO BILL OF MATERIAL FOR TABLE SHOWING APPLICATION OF THIS DRAWING.
3. ALL INSTRUMENTS AND RELAYS ARE SHOWN CONNECTED FOR ELECTRICAL PHASE SEQUENCE 1-2-3.(A-B-C)
4. ⊥ INDICATES SHORT CIRCUITING TERMINAL BLOCK FOR CURRENT TRANSFORMER CIRCUITS.
5. NOTE! SPECIAL PHYSICAL BUS ARRANGEMENT: 3-2-1(C-B-A) LEFT TO RIGHT, TOP TO BOTTOM & FRONT TO REAR WHEN VIEWED FROM BREAKER WITHDRAWAL SIDE.
6. FOR STANDARDS USED IN PREPARING THIS DRAWING, REFER TO IB-3.1.0.7.
7. CORPS OF ENGINEER TERMINAL BLOCK DESIGNATIONS/ WIRE NUMBERS IN PARENTHESIS( ).

CONTRACT NO: DACW21-87-C-0059
CONTRACT NAME: RICHARD B. RUSSELL POWER PLANT

AS BUILT

ITEM A01

15VHK-1000, 1200A, INDOOR METALCLAD SWGR., 15KV,3PH.,3W,60HZ

ELEMENTARY DIAGRAM

SOLD TO: U.S. ARMY CORP OF ENGINEERS
DISTRICT, SAVANNAH
P.O. BOX 889
SAVANNAH, GA. 31402-0889

FOR: U.S. ARMY CORP OF ENGINEERS
RICHARD B. RUSSELL POWER PLANT
ELBERTON, GA.

BBC Brown Boveri Inc. | 60211-D0476 | 1

REV.	DESCR.	CUST.	APP.	F.J.H.
1	CHG. DATEL 3-X-88			8-2-88

NO.	REVISIONS	BY & DATE	CHKD.	APPR.	TRIP	NO.	REVISIONS	BY & DATE	CHKD.	APPR.	TRIP

BY BERGERGRUS DATE 5-JAN-88
KIND OF MATERIAL
DATE
SCALE
SIZE D SHEET NO. 1 CONT. ON NO. REV.
WORK: 0-01-37-60211

THIS DRAWING IS THE PROPERTY OF BBC BROWN BOVERI INC. AND CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION WHICH MUST NOT BE DISCLOSED OR OTHERWISE MADE AVAILABLE TO THIRD PARTIES WITHOUT THE WRITTEN AUTHORIZATION OF BBC.

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

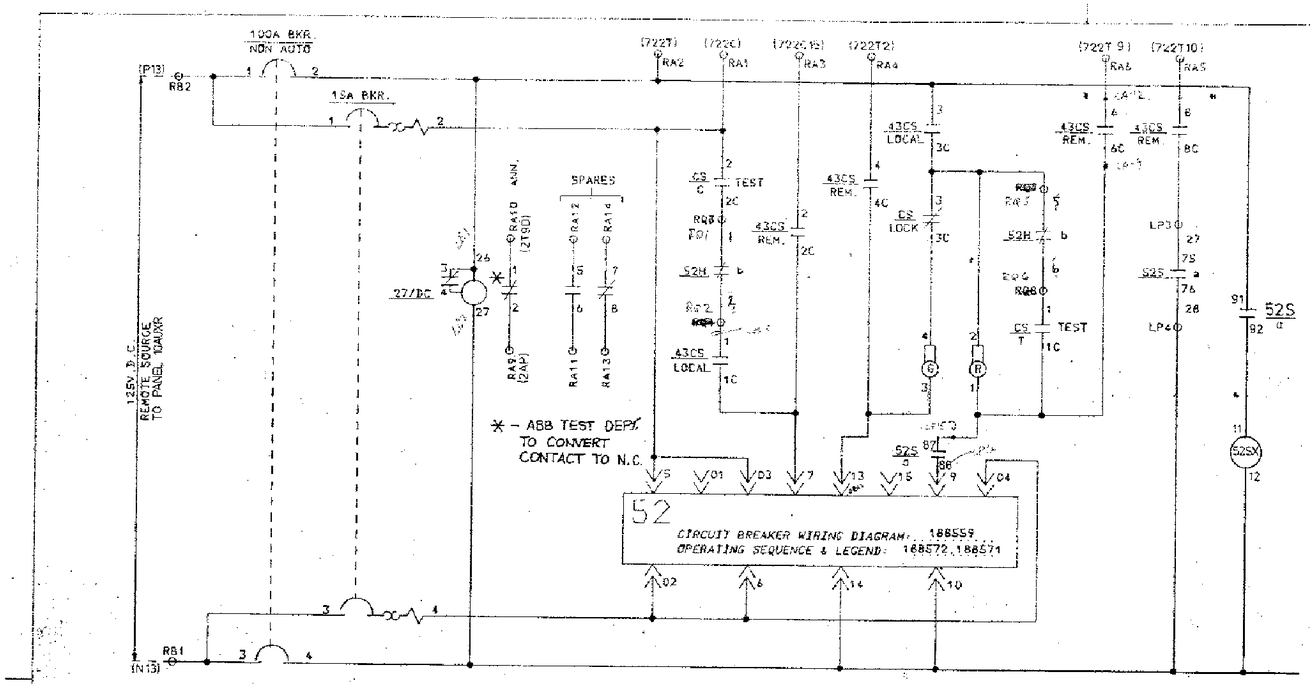
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-54

SCALE: NONE | SHEET

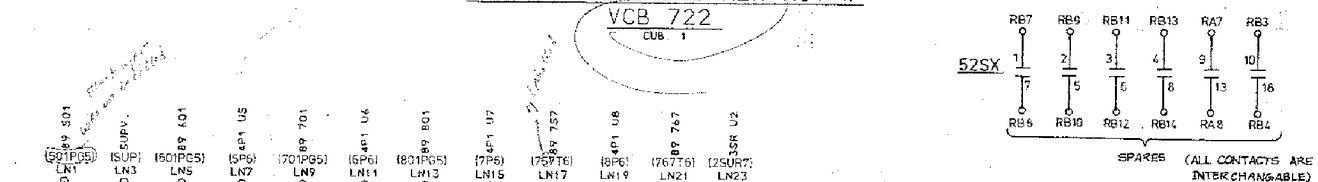
101RRP_R054_BBC_60211D0476.DGN
101RRP_TBLK.DGN
BBC_60211D0476.TIF

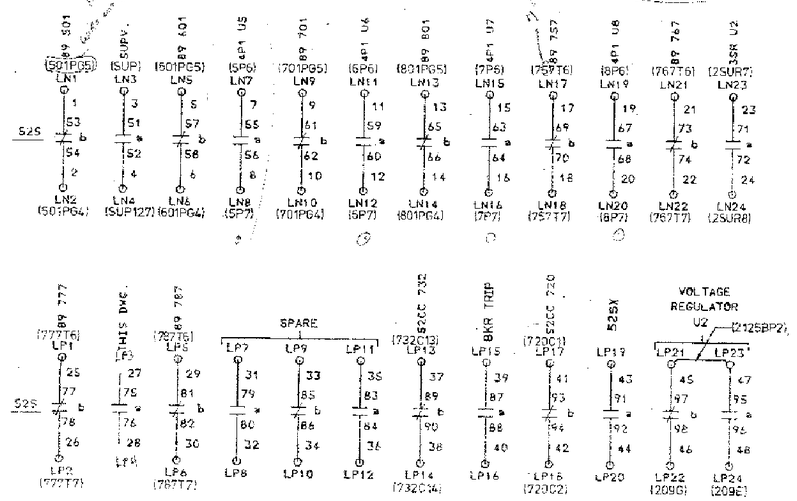
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r054_bbc_60211d0476.dgn
11/04/2003
k6enxndt

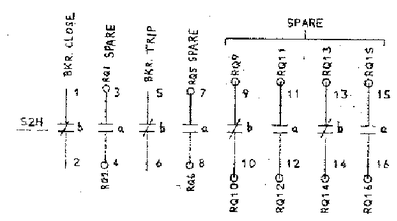
...\101rrp_r054_bbc_60211d0476.dgn 11/04/2003 01:53:45 PM



STARTING BUS BREAKER NO 1
VCB 722
CUB. 1







(BBC TEST DEPARTMENT TO REMOVE JUMPER 3C-4C)

10 43CS

CONTACTS HANDLE END ODD	EVEN		REMOTE	LOCAL
1 1C	2C 2	1		X
		2	X	
3 3C	4C 4	3		X
		4	X	
5 5C	6C 6	5		X
		6	X	
7 7C	8C 8	7		X
		8	X	

LOCAL-REMOTE CONTROL SW.
G.E. TYPE SBM
CAT. NO. 10AA053

9 CS

CONTACTS HANDLE END ODD	EVEN		CLOSE	NORMAL	TRIP	PULL TO LOCK
1 1C	2C 2	1			X	X
		2	X			
3 3C	4C 4	3	X	X	X	
		4	X	X		

BREAKER CONTROL SW.
G.E. TYPE SBM
CAT. NO. 10AA114
PISTOL GRIP
PULL-TO-LOCK

NOTES:

1. THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. MATERIAL FURNISHED BY B.B.C. WILL BE IN ACCORDANCE WITH THE CONTRACT AND IS NOT TO BE CHANGED BY ANYTHING ON THIS DRAWING.
2. REFER TO BILL OF MATERIAL FOR TABLE SHOWING APPLICATION OF THIS DRAWING.
3. ALL INSTRUMENTS AND RELAYS ARE SHOWN CONNECTED FOR ELECTRICAL PHASE SEQUENCE 1-2-3:(A-B-C)
4. ⊥ INDICATES SHORT CIRCUITING TERMINAL BLOCK FOR CURRENT TRANSFORMER CIRCUITS.
5. NOTE1: SPECIAL PHYSICAL BUS ARRANGEMENT: 3-2-1(C-B-A) LEFT TO RIGHT, TOP TO BOTTOM & FRONT TO REAR WHEN VIEWED FROM BREAKER WITHDRAWAL SIDE.
6. FOR STANDARDS USED IN PREPARING THIS DRAWING, REFER TO 18-3.1.0.7:
CORPS OF ENGINEER TERMINAL BLOCK DESIGNATIONS/ WIRE NUMBERS IN PARENTHESIS( ).

CONTRACT NO: DACW21-87-C-0059
CONTRACT NAME: RICHARD B. RUSSELL POWER PLANT

AS BUILT

ITEM A01

(5VHK-1000, 1200A, INDOOR METALCLAD SWGR., 15KV,3PH.,3W,60HZ

SCHEMATIC DIAGRAM

SOLD TO: U.S. ARMY CORP OF ENGINEERS
DISTRICT, SAVANNAH
P.O. BOX 889
SAVANNAH, GA. 31402-0889

FOR: U.S. ARMY CORP OF ENGINEERS
RICHARD B. RUSSELL POWER PLANT
ELBERTON, GA.

NO.	REVISIONS	BY & DATE	CHKD.	APPR.	INSP.	AUD.
3	REV. PER AS BUILTS	T.L.N. 6-21-93	A.V.			
2	REV. PER. CUST. MKD. PRINTS DATED 9-2-88	W.V.G. 1-6-89	W.H.			
1	REV. PER CUST. APP. DWG. DATED 4-16-88	P.J.M. 5-31-88	N.K.			

REVISIONS

BBC Brown Boveri Inc.

60211-D0477 3

SIZE D SHEET NO. 1 CONT. OF 2 NO.

BY OSBORGHAUS DATE 5/20/88 | CHD. N. Kraus DATE 1/6/88 | APP. DATE 1/6/88 | DRGS. 30-37-60211

P.O. DACW21-87-C-0059

TYPE PROJ. CLASS

THIS DRAWING IS THE PROPERTY OF BROWN BOVERI, INC. AND CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED, OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY BROWN BOVERI, INC.

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

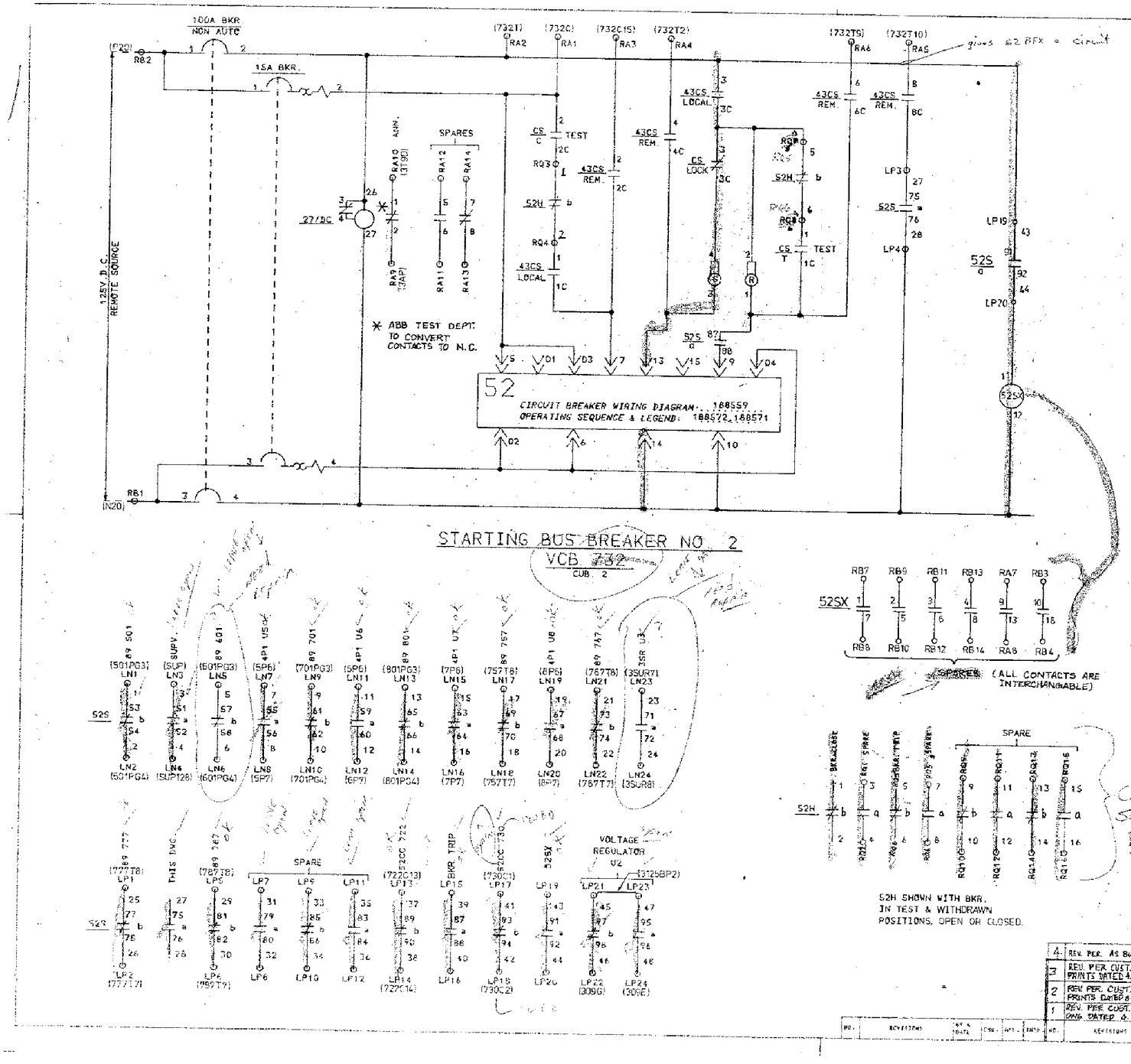
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-55

SCALE: NONE SHEET

101RRP_R055_BBC_60211D0477_1.DGN
101RRP_TBLK.DGN
BBC_60211D0477_1.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r055_bbc_60211d0477_1.dgn
11/04/2003
k6enxndt

...\101rrp_r055_bbc_60211d0477_1.d 11/04/2003 01:54:16 PM



NOTES:

- THIS DRAWING SHOWS ELECTRICAL CONNECTIONS ONLY. MATERIAL FURNISHED BY B.B.C. WILL BE IN ACCORDANCE WITH THE CONTRACT AND IS NOT TO BE CHANGED BY ANYTHING ON THIS DRAWING.
- REFER TO BILL OF MATERIAL FOR TABLE SHOWING APPLICATION OF THIS DRAWING.
- ALL INSTRUMENTS AND RELAYS ARE SHOWN CONNECTED FOR ELECTRICAL PHASE SEQUENCE 1-2-3. (A-B-C)
- ‡ INDICATES SHORT CIRCUITING TERMINAL BLOCK FOR CURRENT TRANSFORMER CIRCUITS.
- SPECIAL PHYSICAL BUS ARRANGEMENT: 3-2-1 (C-B-A) LEFT TO RIGHT, TOP TO BOTTOM & FRONT TO REAR WHEN VIEWED FROM BREAKER WITHDRAWAL SIDE.
- FOR STANDARDS USED IN PREPARING THIS DRAWING, REFER TO 18-3.1.0.7.
- CORPS OF ENGINEER TERMINAL BLOCK DESIGNATIONS/ WIRE NUMBERS IN PARENTHESIS( )

CONTRACT NO: DACW21-87-C-0059

CONTRACT NAME: RICHARD B. RUSSELL POWER PLANT

AS BUILT

ITEM A01

15VHK-1000, 1200A, INDOOR METALCLAD SWGR., 15KV.3PH.,3W,60HZ

SCHEMATIC DIAGRAM

SOLD TO: U.S. ARMY CORP OF ENGINEERS
DISTRICT, SAVANNAH
P.O. BOX 889
SAVANNAH, GA. 31402-0889

FOR: U.S. ARMY CORP OF ENGINEERS
RICHARD B. RUSSELL POWER PLANT
ELBERTON, GA.

BBC Brown Boveri Inc.

60211-00477 4

NO.	REVISIONS	BY & DATE	CHK.	APP.	ENGR.
4	REV. PER. AS BUILTS	T.J.K. 6-21-89			
3	REV. PER. CUST. MKD PRINTS DATED 4.17.89	D.E.S. 8-24-87			
2	REV. PER. CUST. MKD PRINTS DATED 6.2.88	Y.V.S. 1-12-89			
1	REV. PER CUST. APP. DWG. DATED 4.15.88	T.J.M. 5-31-88			

DRAWN BY DEBERSHAUS DATE 5 JAN 88

CHKD. BY DATE 1/8/88

APP. DATE 1/8/88

P.O. DACW21-87-C-0059

SIZE D SHEET NO. 2 SHEET OF NEXT REV. 4

DWG. NO. 6-0-37-60211

TYPE PROD-FLOOR

THIS DRAWING IS THE PROPERTY OF BROWN BOVERI INC. AND CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION WHICH MUST NOT BE DUPLICATED, USED, OR DISCLOSED OTHER THAN AS EXPRESSLY AUTHORIZED BY BROWN BOVERI INC.

RRSWF-27.2

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-56

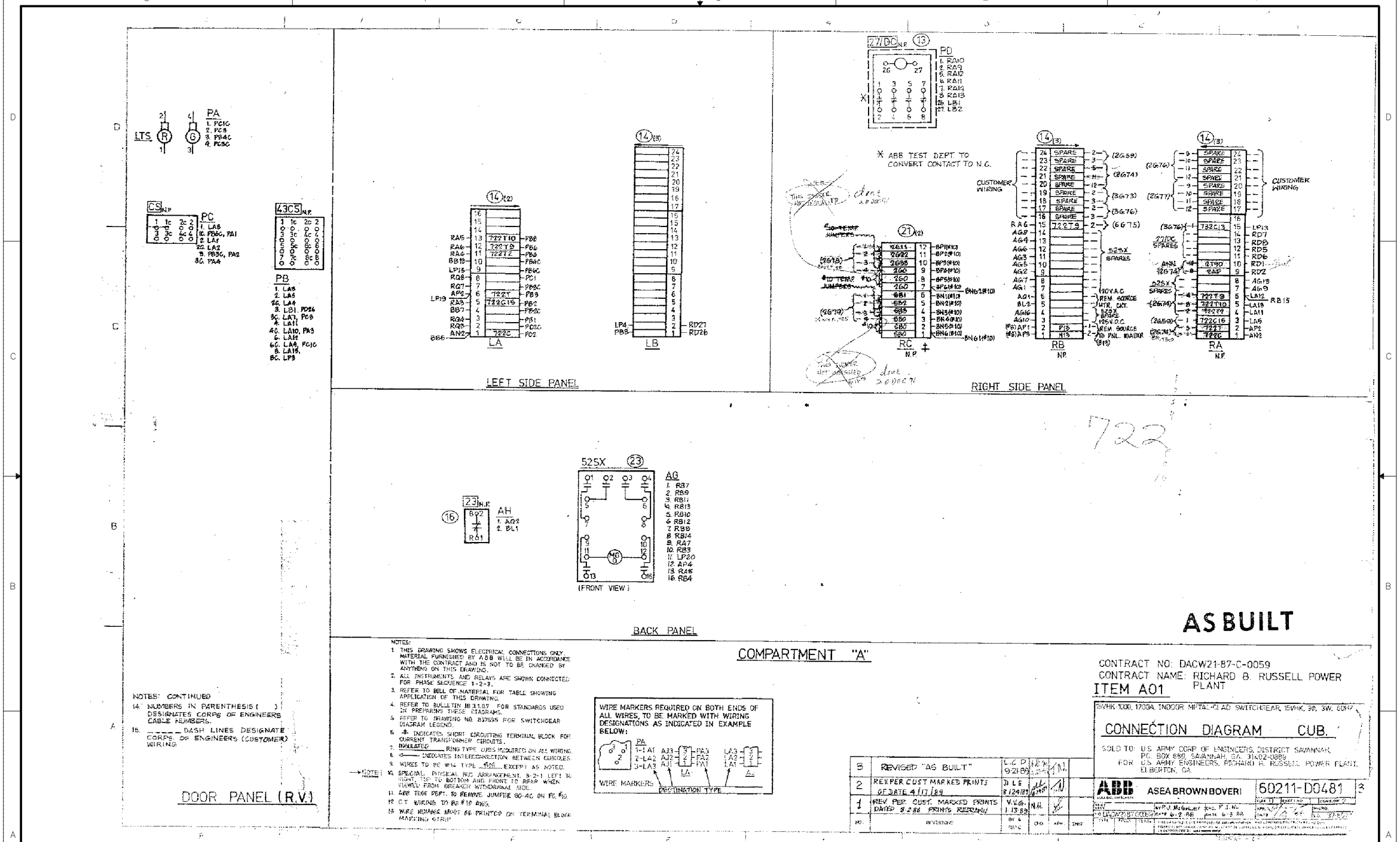
SCALE: NONE SHEET

FOR INFORMATION ONLY

101RRP_R056_BBC_60211D0477_2.DGN
101RRP_TBLK.DGN
BBC_60211D0477_2.TIF

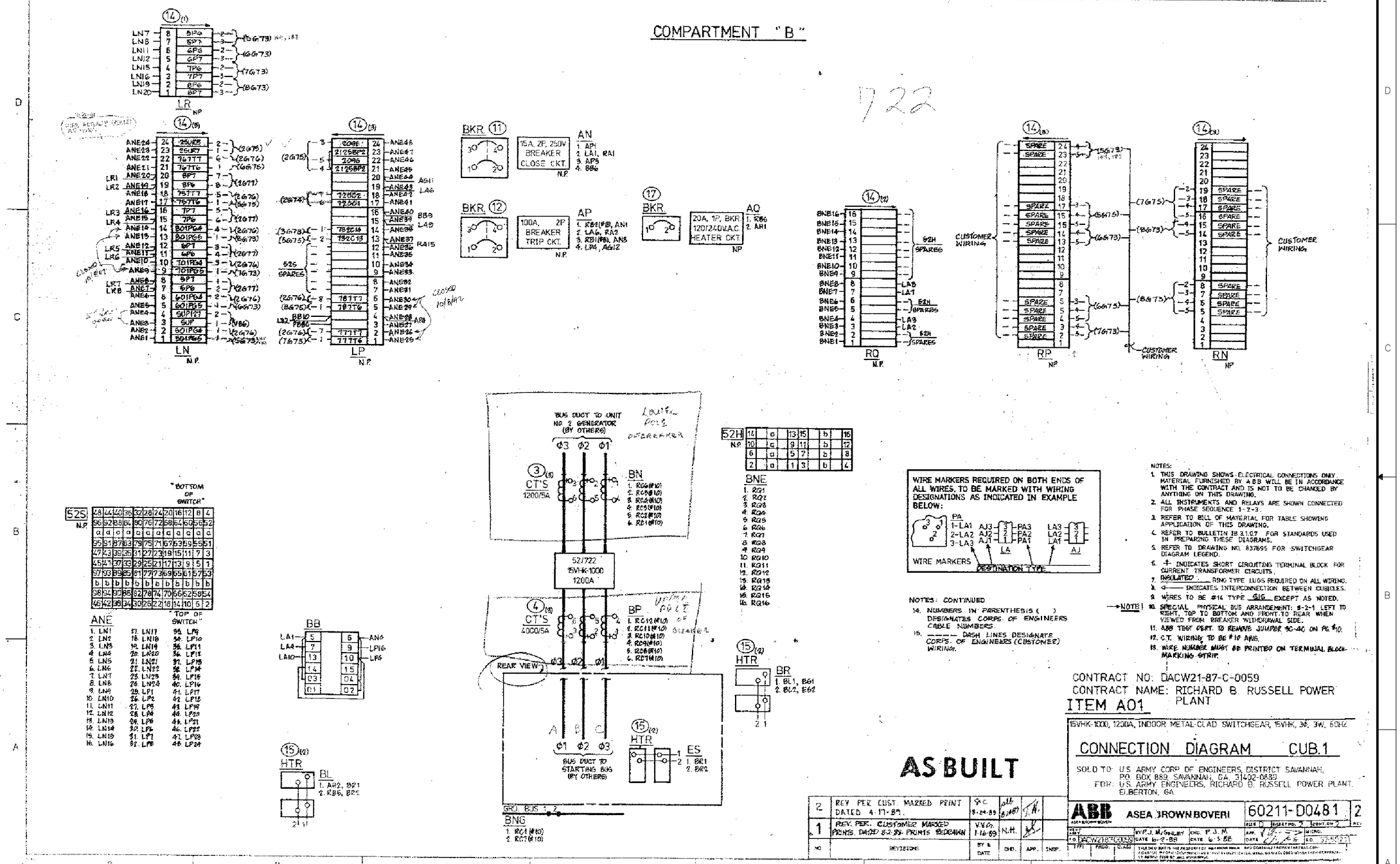
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r056_bbc_60211d0477_2.dgn
11/04/2003
k6enxndt

...\101rrp_r056_bbc_60211d0477_2.d 11/04/2003 01:54:49 PM

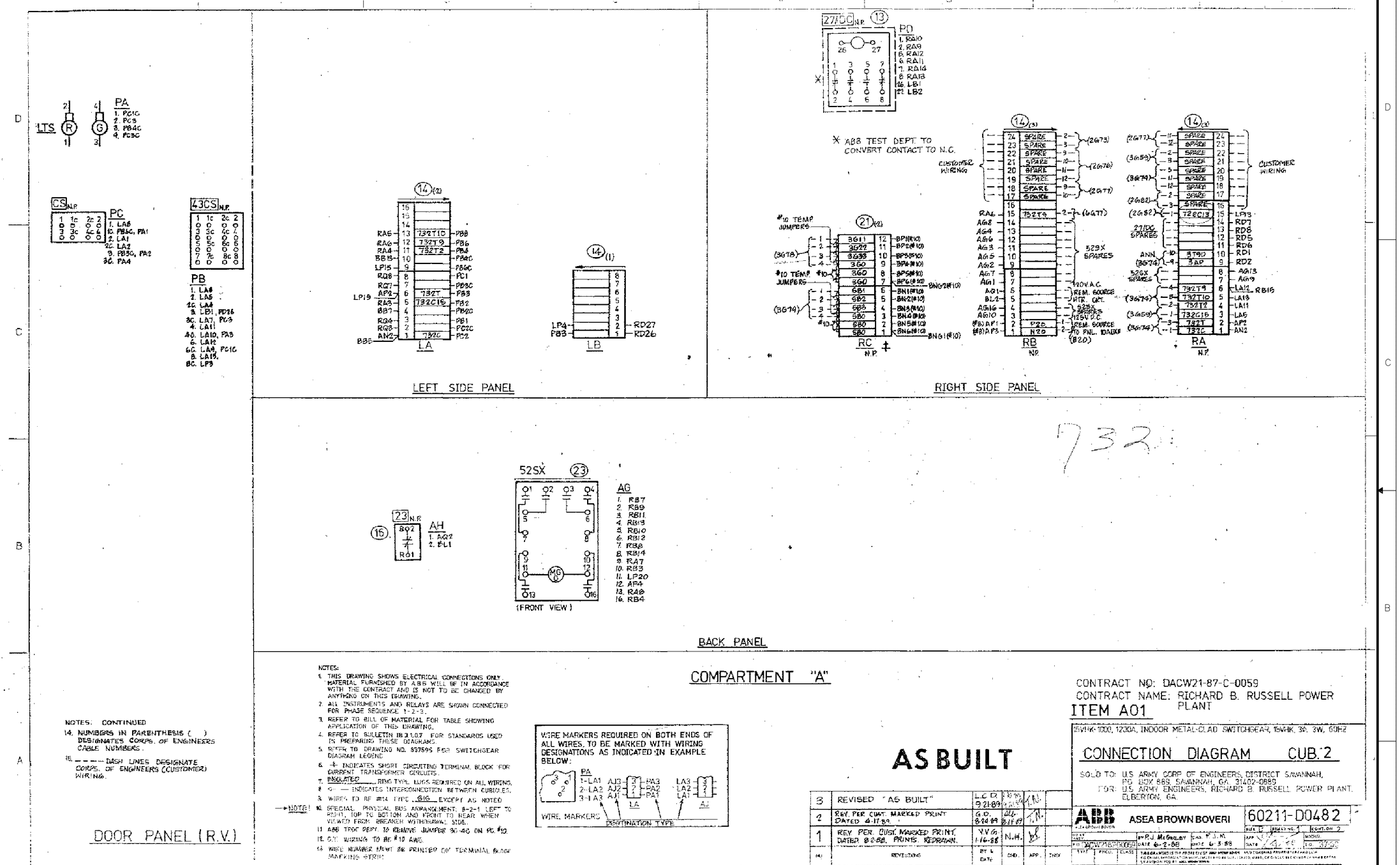


FOR INFORMATION ONLY

COMPARTMENT "B"



FOR INFORMATION ONLY

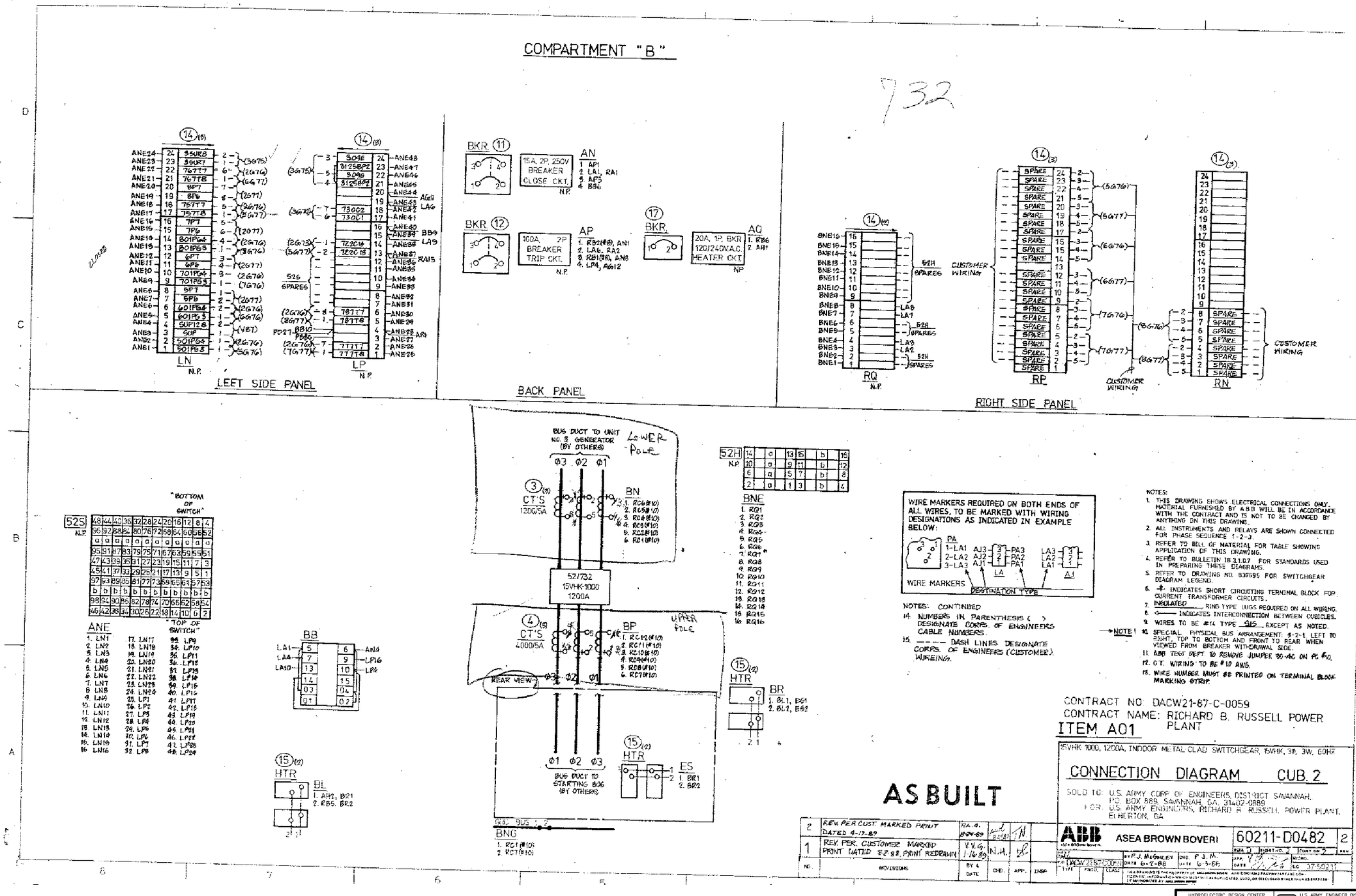


FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r059_bbc_60211d0482_1.dgn
11/04/2003
koenxndt

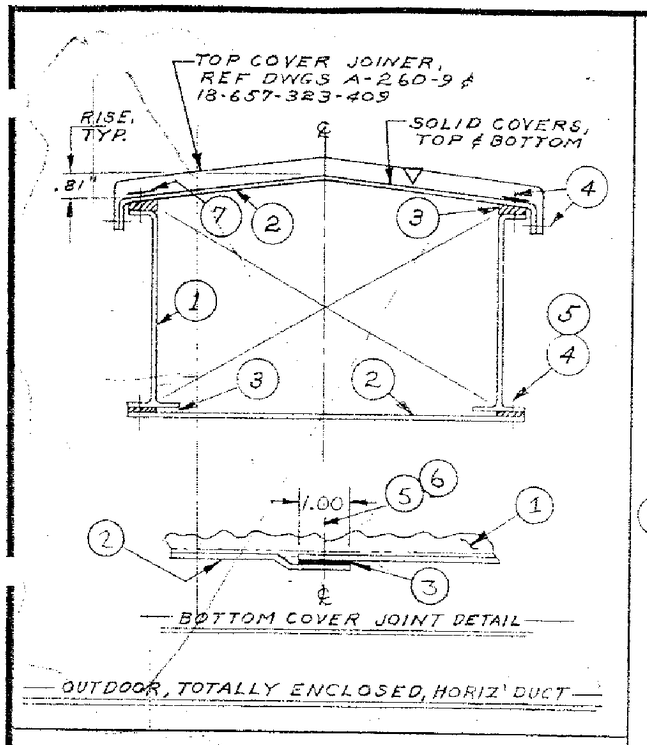
...\101rrp_r059_bbc_60211d0482_1.d 11/04/2003 01:57:09 PM

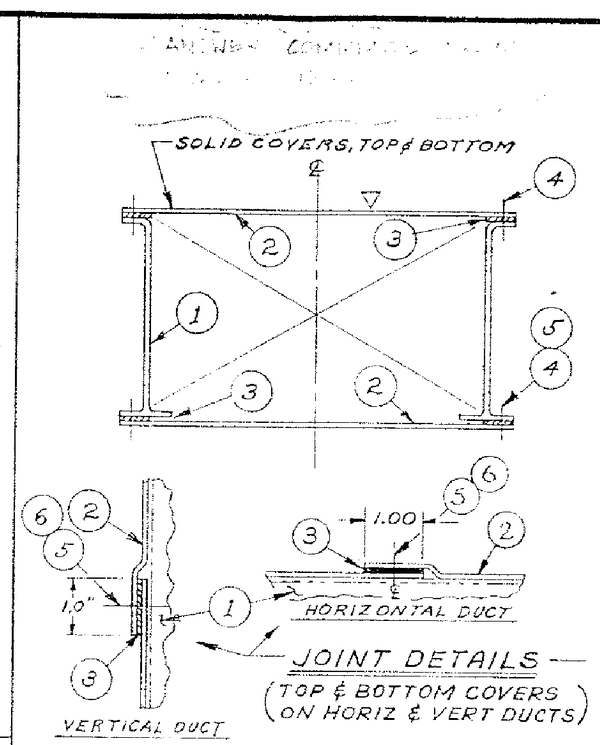
COMPARTMENT "B"

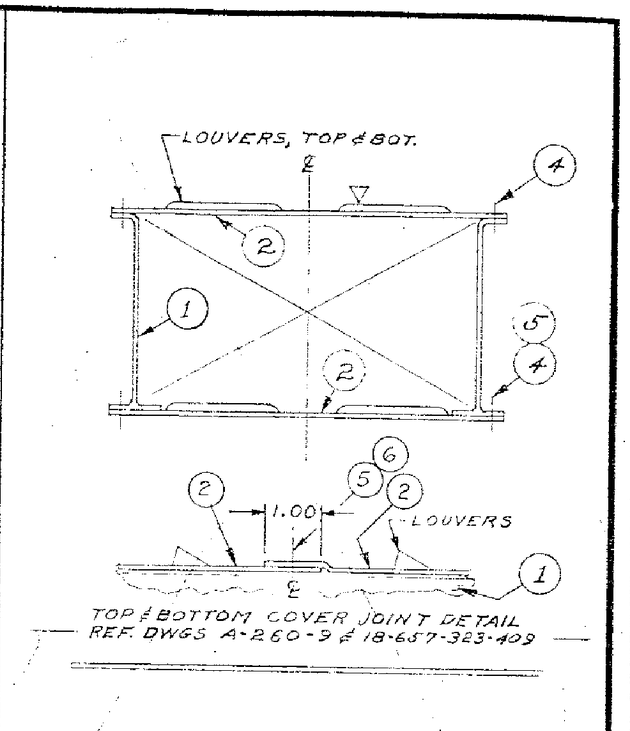


FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r060_bbc_60211d0482_2.dgn
11/04/2003
k6enxndt

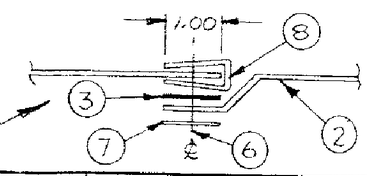






NOTES

1.– DUCT SIDE RAILS, ALUMINUM OR STEEL.
2.– TOP & BOTTOM COVERS, ALUMINUM OR STEEL.
3.– GASKETING.
4.– 1/4-20 SCREWS, TOP COVERS & BOT' SPLICE COVERS.
5.– RIVETS, BOTTOM COVERS.
6.– 1/4-20 COVER SCREWS FOR REMOVABLE PORTION.
7.– "BARTITE", GASKETED, SEAL WASHERS, USED ON OUTDOOR DUCT W/ ITEM Nº 4.
8.– 1/4-20 TINNERMAN CLIP (SPACED ACROSS DUCT NOT TO EXCEED 6" O.C.) FOR SPLICE LOCATIONS ONLY



APPROVED
EXCEPT AS NOTED
RESUBMISSION AND APPROVAL REQUIRED PRIOR TO FABRICATION
BY DC DATE 7/8/81
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

DATE	ISS	REVISIONS	BY
5-22-81	4	REV. INDR VENT & CLIP	GB/DA
5-29-78	3	CORR CENTER PICTURE	GB
3-20-78	2	ADD. ITEM 8 & DETAIL	WWM
6-29-73	1	CERT FOR CONST	R.F.E.

SYMBOLS
- ⬡ DENOTES A BUS SPLICE OR END
- ⬭ DENOTES A BUS SUPPORT
- △ DENOTES REMOVABLE COVER SIDE OF BUS
- ✱ DIMENSION REQ'D FOR FABRICATION

BAR BUS, COVER & JOINER ASSEMBLY

The CALVERT Company
ROCKY RIVER, OHIO 44116

DRAWN R.F.E. APP. NAH	DATE 6-29-73
SCALE N.T.S.	ISS. NO. 4
CUSTOMER ORDER NO. STANDARD	B-260-30

RRSWF-19.1

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

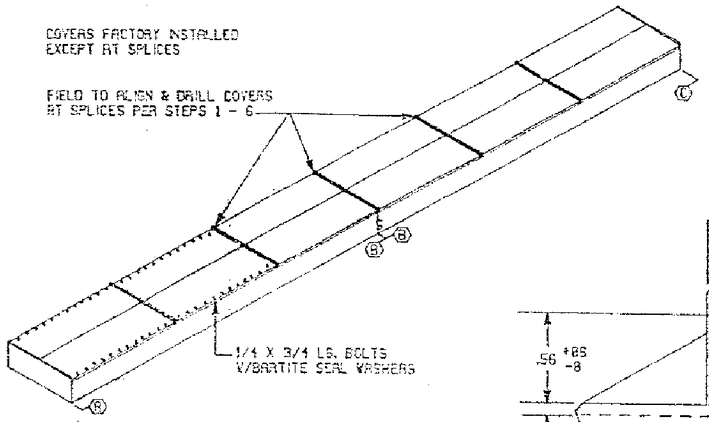
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-61

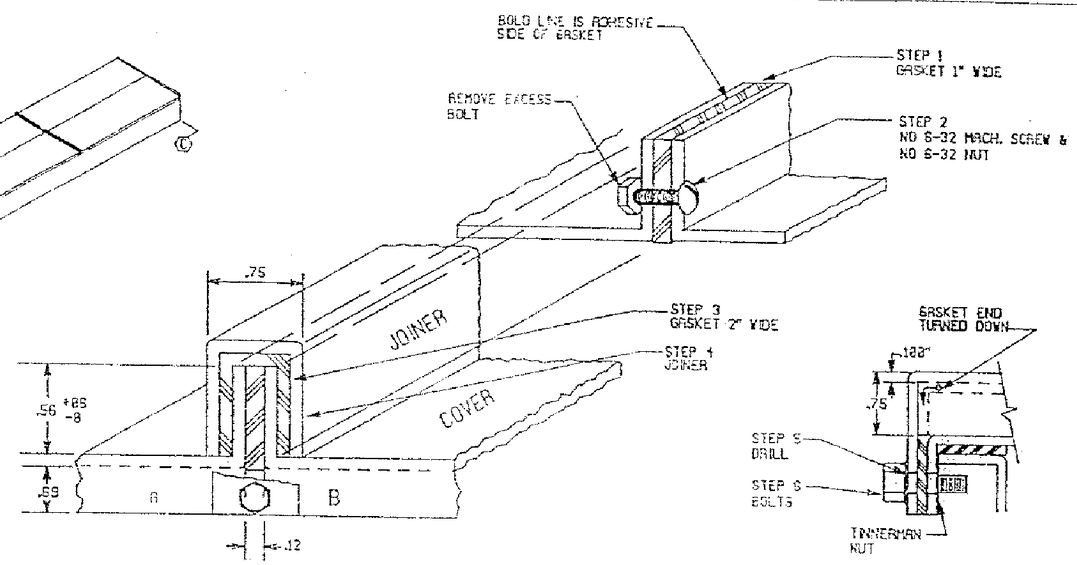
SCALE: NONE SHEET

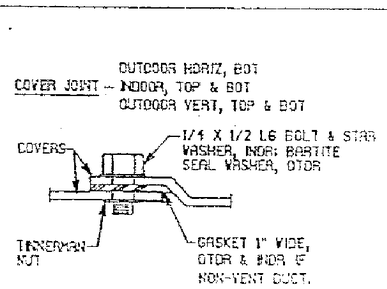
101RRP_R061_CAL_B26030.DGN
101RRP_TBLK.DGN
CAL_B26030.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r061_cal_b26030.dgn
11/04/2003
k6enxndt

...\101rrp_r061_cal_b26030.dgn 11/04/2003 02:00:27 PM







COVER JOINT - OUTDOOR

STEP:

1. ATTACH GASKET TO COVER 'A'
2. JOIN COVER 'A' TO COVER 'B' WITH 3 SCREWS, 1 ON CENTER & 1 APPROX 8.00 EITHER SIDE OF CENTERLINE (TRIM EXCESS GASKET FROM STEP 1).
3. CUT A LENGTH OF GASKET 3.00 LONGER THAN COVER WIDTH. ATTACH GASKET CENTERED OVER COVERS 'A' & 'B' BEND GASKET ENDS DOWN AGAINST COVER SIDE OVERLAP.
4. INSTALL COVER JOINER OVER JOINT.
5. DRILL .25 DIA HOLE THRU JOINER & COVERS 'A' & 'B' (℄ JOINER, .25 UP)
6. INSTALL 1/4 X 3/4 LG SS BOLT, NUT & BARTITE SEAL WASHER THRU JOINER & COVERS. (TRIM EXPOSED EXCESS GASKET)

APPROVED
BY: SLB
DATE 12/21/90
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

5	12-19-86 PK/	COVER & JOINER ASSEMBLY	The CALVERT Company, JACKSON, MS 39208
	REDRAWN		DRN. DA / CH. R.H. / APP. WD
			DATE 6-6-86 / SCALE NTS / USS. S
			CUSTOMER ORDER NO. STANDARD / B-260-109

0

RRSWF-31.0

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-62

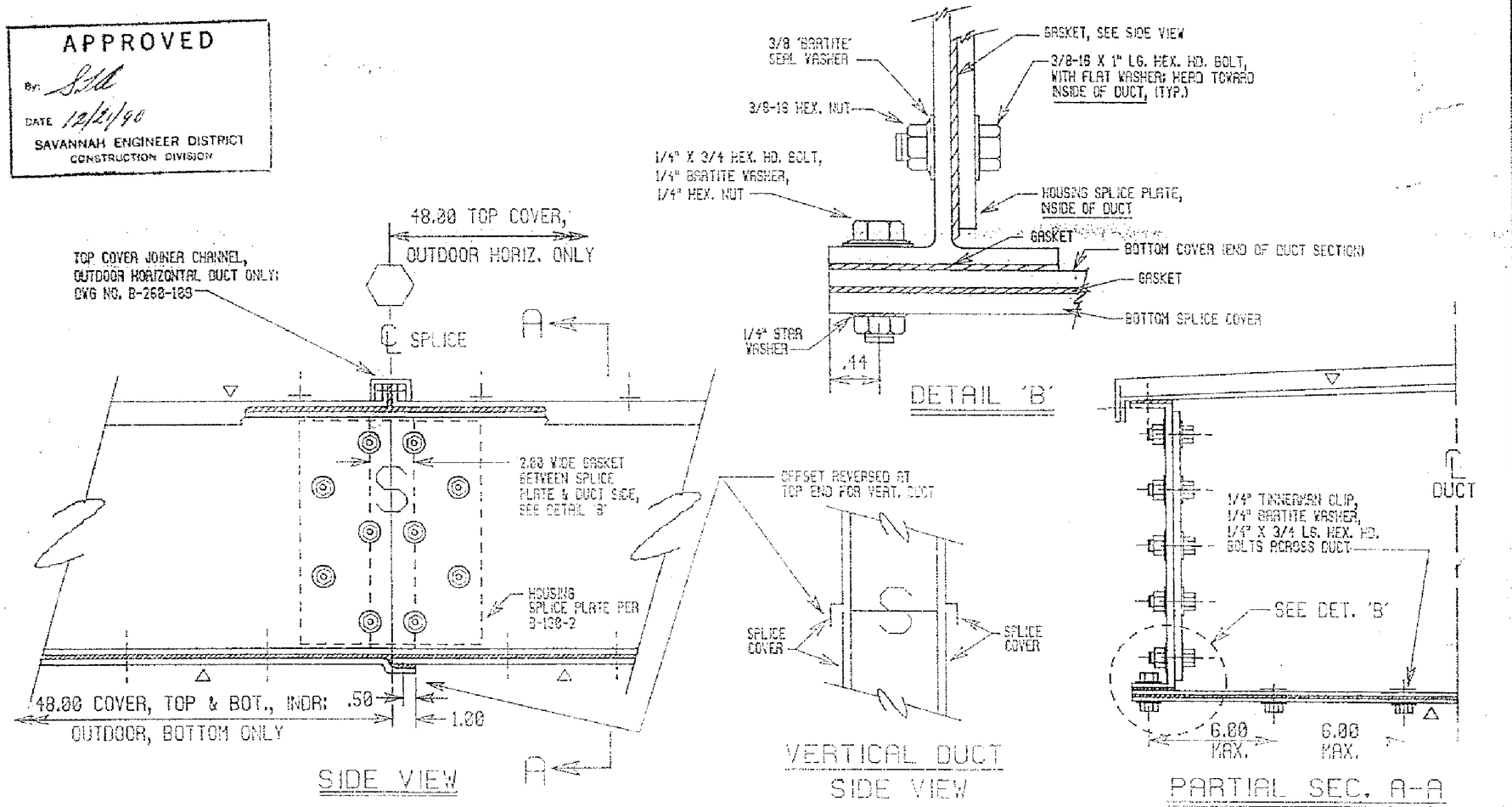
SCALE: NONE SHEET

101RRP_R062_CAL_B260109.DGN
101RRP_TBLK.DGN
CAL_B260109.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r062_cal_b260109.dgn
11/04/2003
k6enxndt

...\101rrp_r062_cal_b260109.dgn 11/04/2003 02:01:36 PM

APPROVED
By: [signature]
DATE 12/21/90
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION



3	3-31-86 VC/	REDRAWN
4	1-15-87 FK/	ADDED SPLICE PLATE NO.

NON-VENTILATED BUS DUCT HOUSING SPLICE DETAIL

The CALVERT Company
JACKSON, MS 39219

DRN. VC	CH.	APP.
DATE 3-31-86	SCALE NTS	ISS. 4
CUSTOMER ORDER NO. STANDARD	B-260-136	

RRSWF-24.3

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

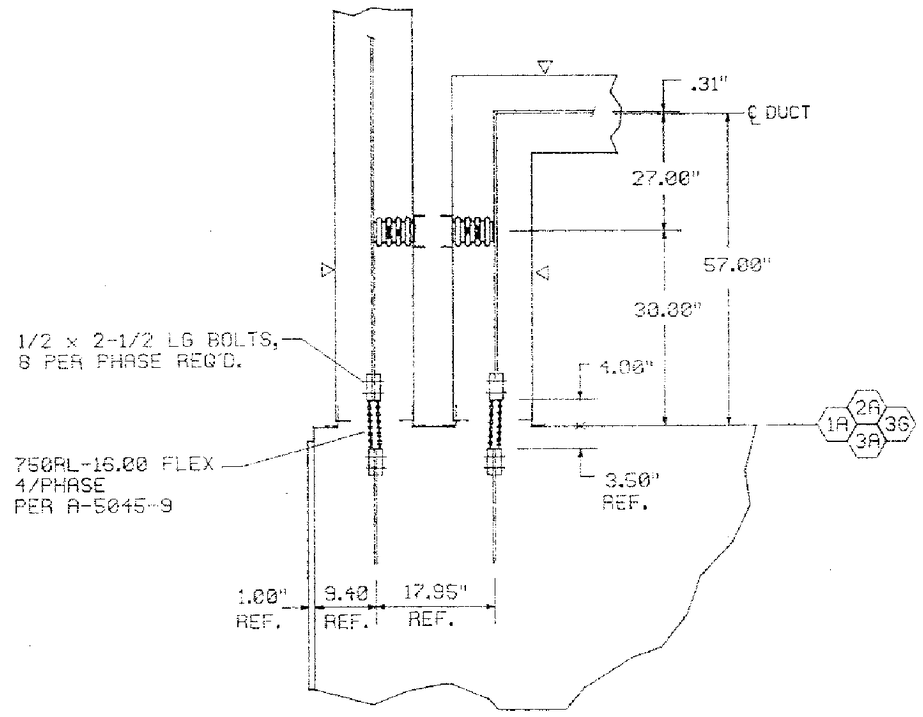
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-63

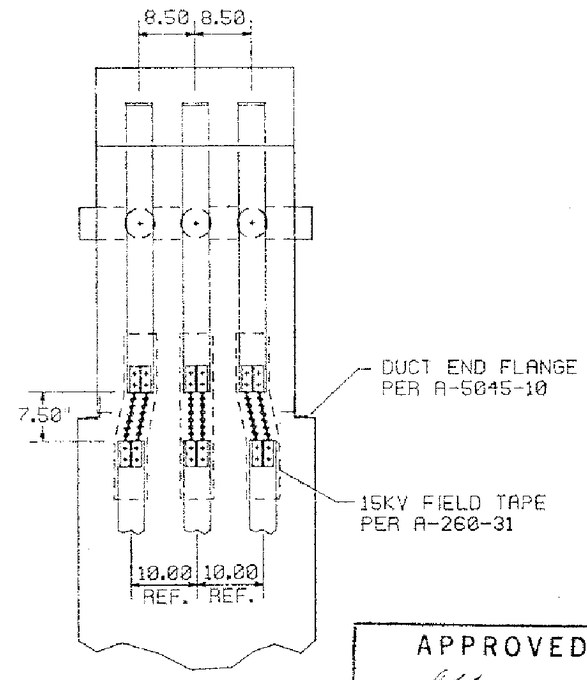
SCALE: NONE SHEET

101RRP_R063_CAL_B260136.DGN
101RRP_TBLK.DGN
CAL_B260136.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r063_cal_b260136.dgn
11/04/2003
k6enxndt

...\101rrp_r063_cal_b260136.dgn 11/04/2003 02:02:05 PM





APPROVED
By: SJA
DATE 12/21/90
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

0

3	9-17-90 CM/ A.H. CERT. FOR CONST.	1	1-30-89 DKH/ FOR APPROVAL
		2	8-7-89 JHS/ FOR 2ND APPROVAL

CIRCUIT BREAKER TERM'N DETAIL

CUST: U.S. ARMY CORP OF ENGINEERS
FOR: RICHARD B. RUSSELL POWER

The CALVERT Company
JACKSON, MS 39218

DRN. DKH	CH. A.H.	APP.
DATE 1-30-89	SCALE	ISS. 3
CUSTOMER ORDER NO. DACW21-88-C-0007	B-5045-15	

RRSWF-15.2

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

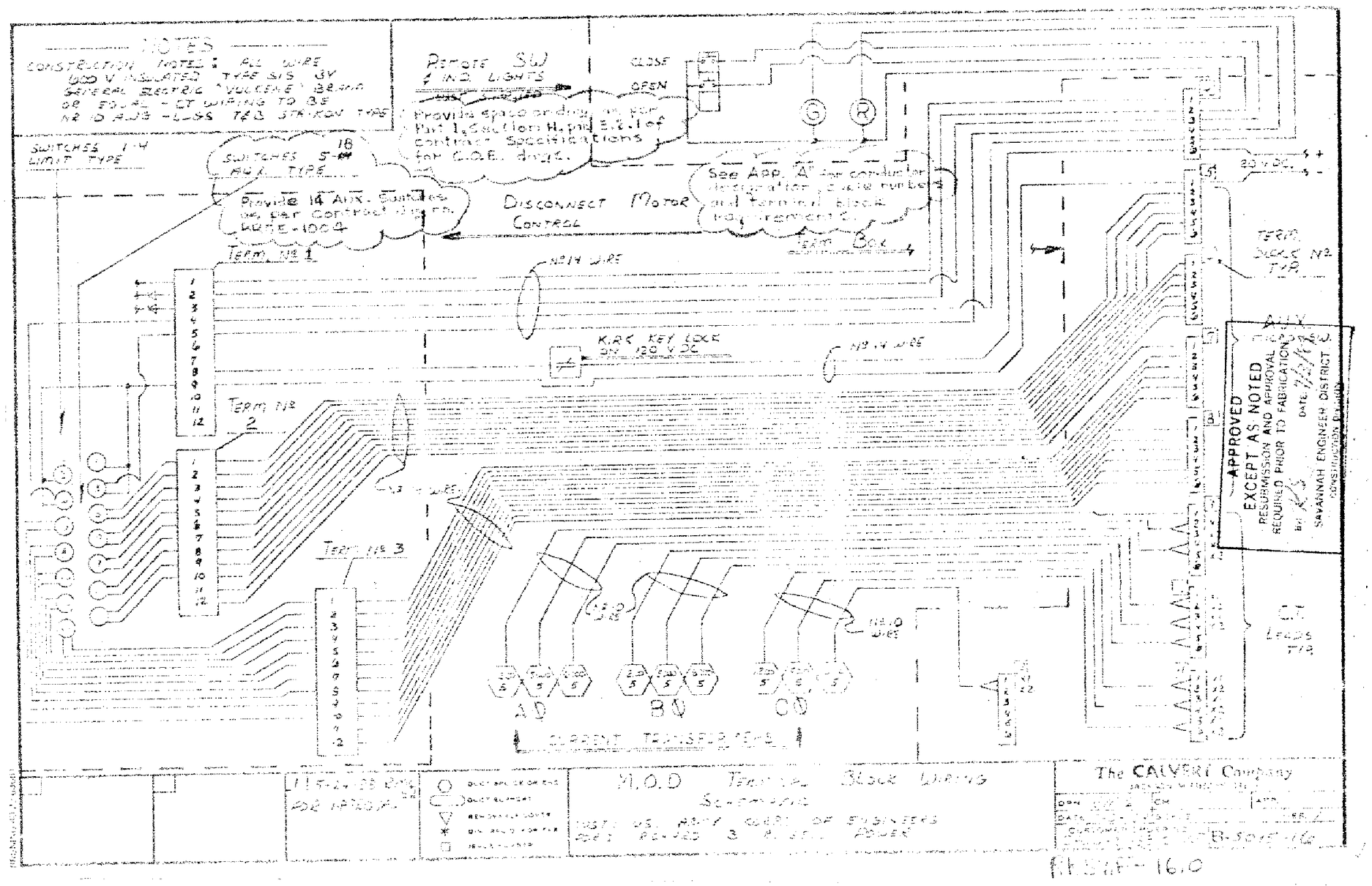
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-64

SCALE: NONE SHEET

101RRP_R064_CAL_B504515.DGN
101RRP_TBLK.DGN
CAL_B504515.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r064_cal_b504515.dgn
11/04/2003
k6enxndt

...\101rrp_r064_cal_b504515.dgn 11/04/2003 02:02:39 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

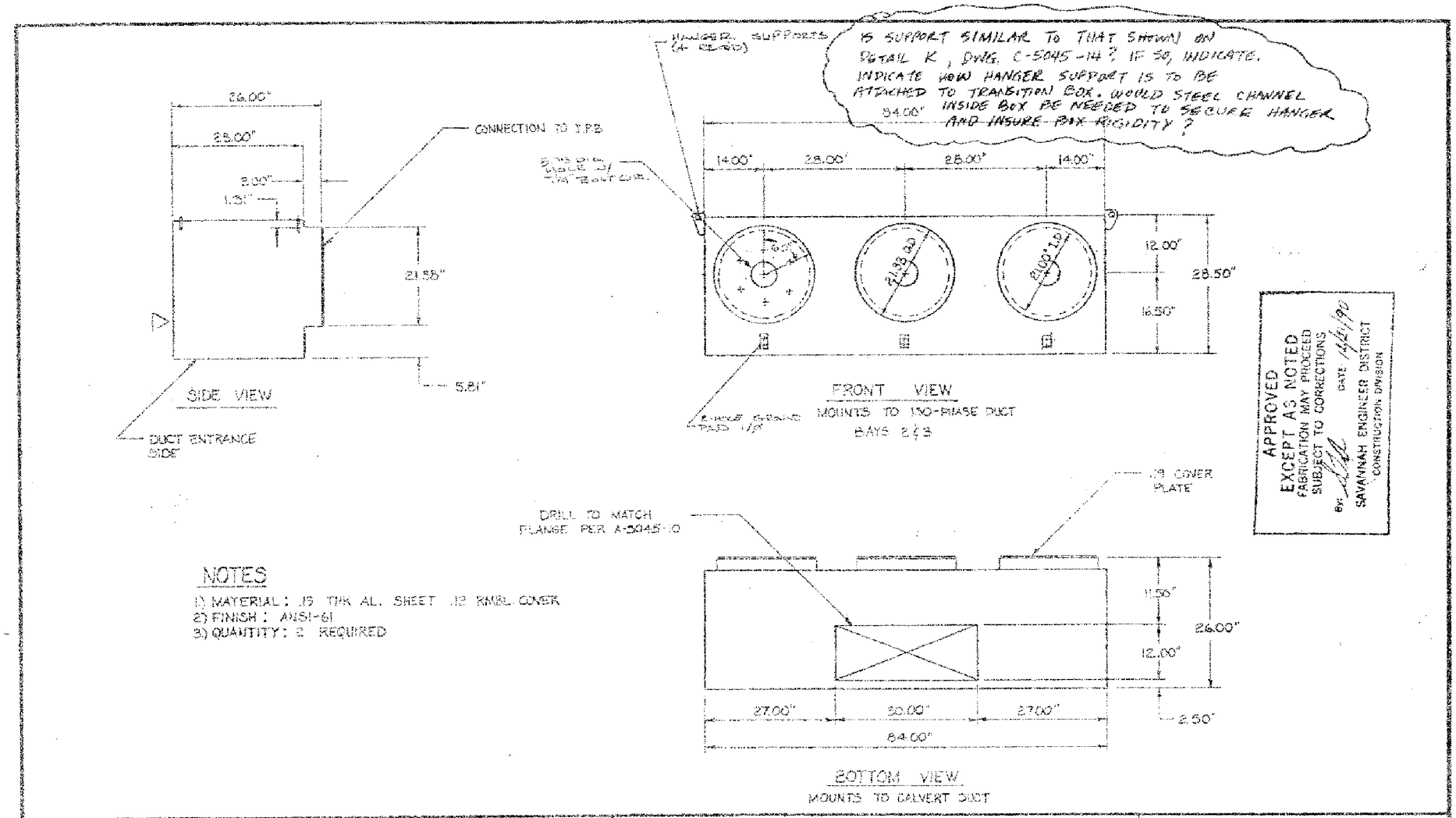
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-65

SCALE: NONE SHEET

101RRP_R065_CAL_B504516.DGN
101RRP_TBLK.DGN
CAL_B504516.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r065_cal_b504516.dgn
11/04/2003
k6enxndt

...\101rrp_r065_cal_b504516.dgn 11/04/2003 02:03:10 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

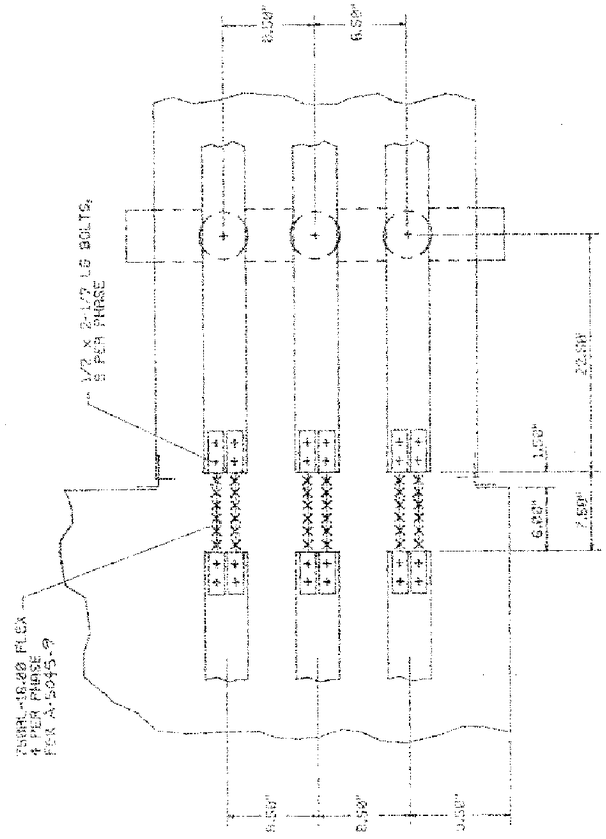
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-66

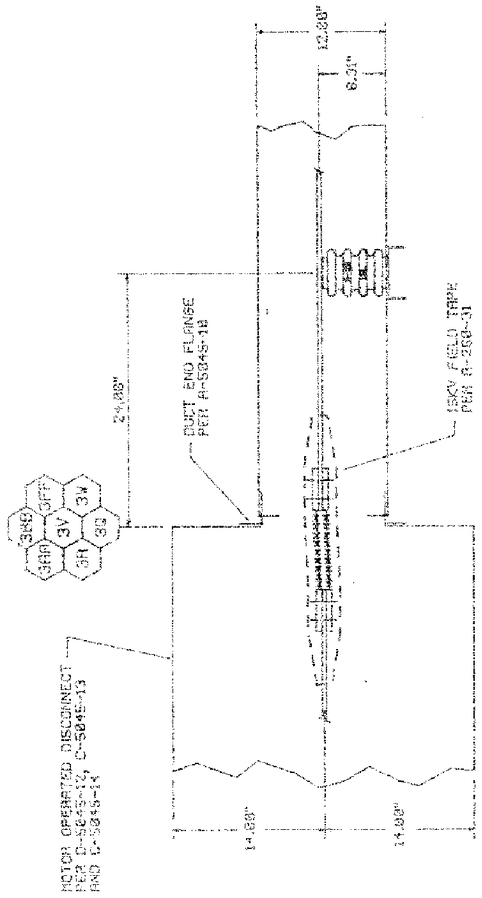
SCALE: NONE SHEET

101RRP_R066_CAL_B504517.DGN
101RRP_TBLK.DGN
CAL_B504517.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r066_cal_b504517.dgn
11/04/2003
k6enxndt

...\101rrp_r066_cal_b504517.dgn 11/04/2003 02:12:05 PM





APPROVED
BY
DATE 12/21/90
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

2		1 1-31-89 DRAWN FOR APPROVAL 2 9-6-89 RC/AR 2ND APPROVAL

M.O.D. TERMINATION TO DUCT

PUBLIC U.S. ARMY CORP OF ENGINEERS
FOR RICHARD B. RUSSELL POWER

The CALVERT Company
JACKSON, MS 39218

DRN.	CH.	APP.
DATE 1-31-89	SCALE	ISS. 2

CUSTOMER ORDER NO. B-5045-18
DRW-31-89-C-0087

RRSWF-18.2

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

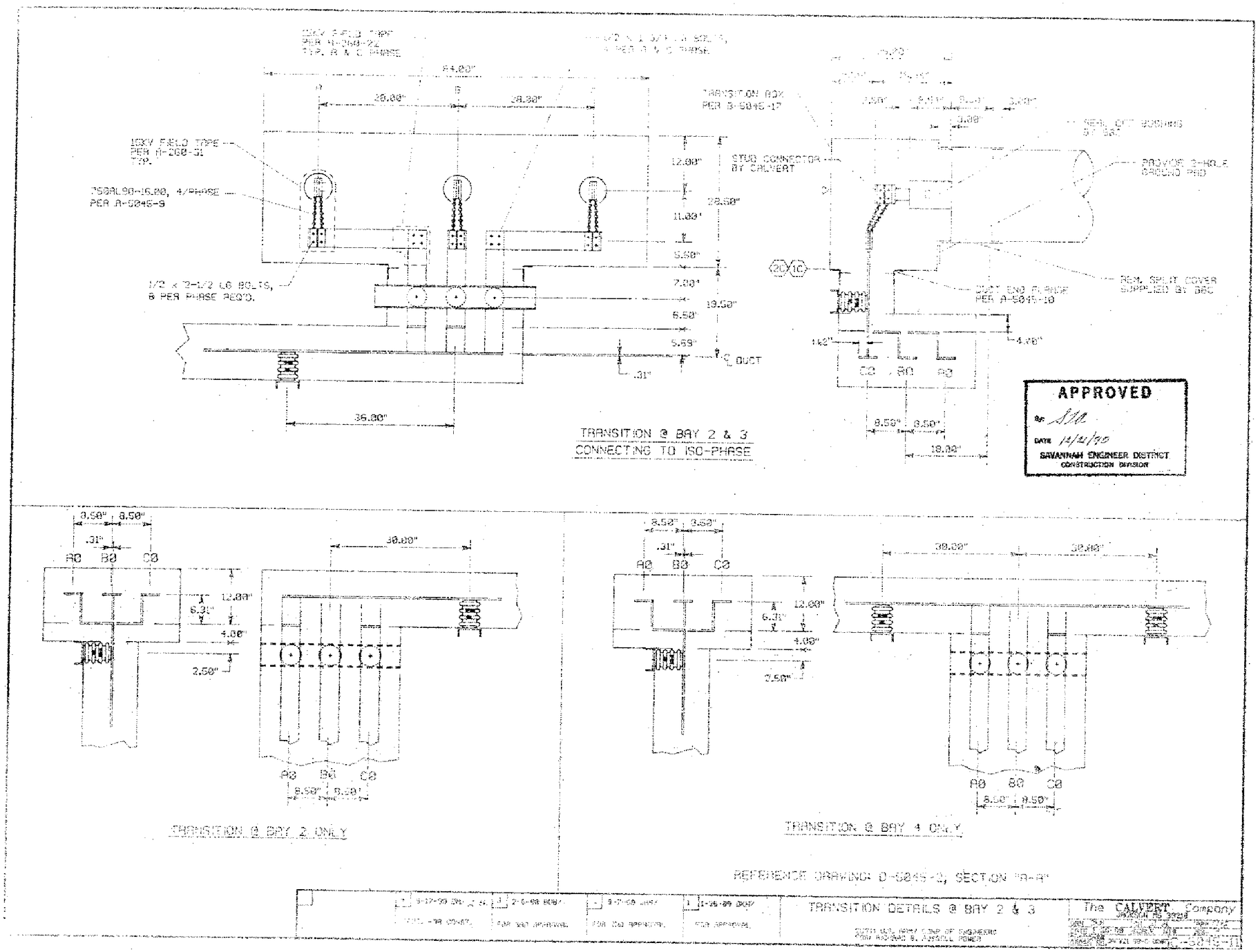
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-67

SCALE: NONE SHEET

101RRP_R067_CAL_B504518.DGN
101RRP_TBLK.DGN
CAL_B504518.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r067_cal_b504518.dgn
11/04/2003
kbenxndt

...\101rrp_r067_cal_b504518.dgn 11/04/2003 02:13:28 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

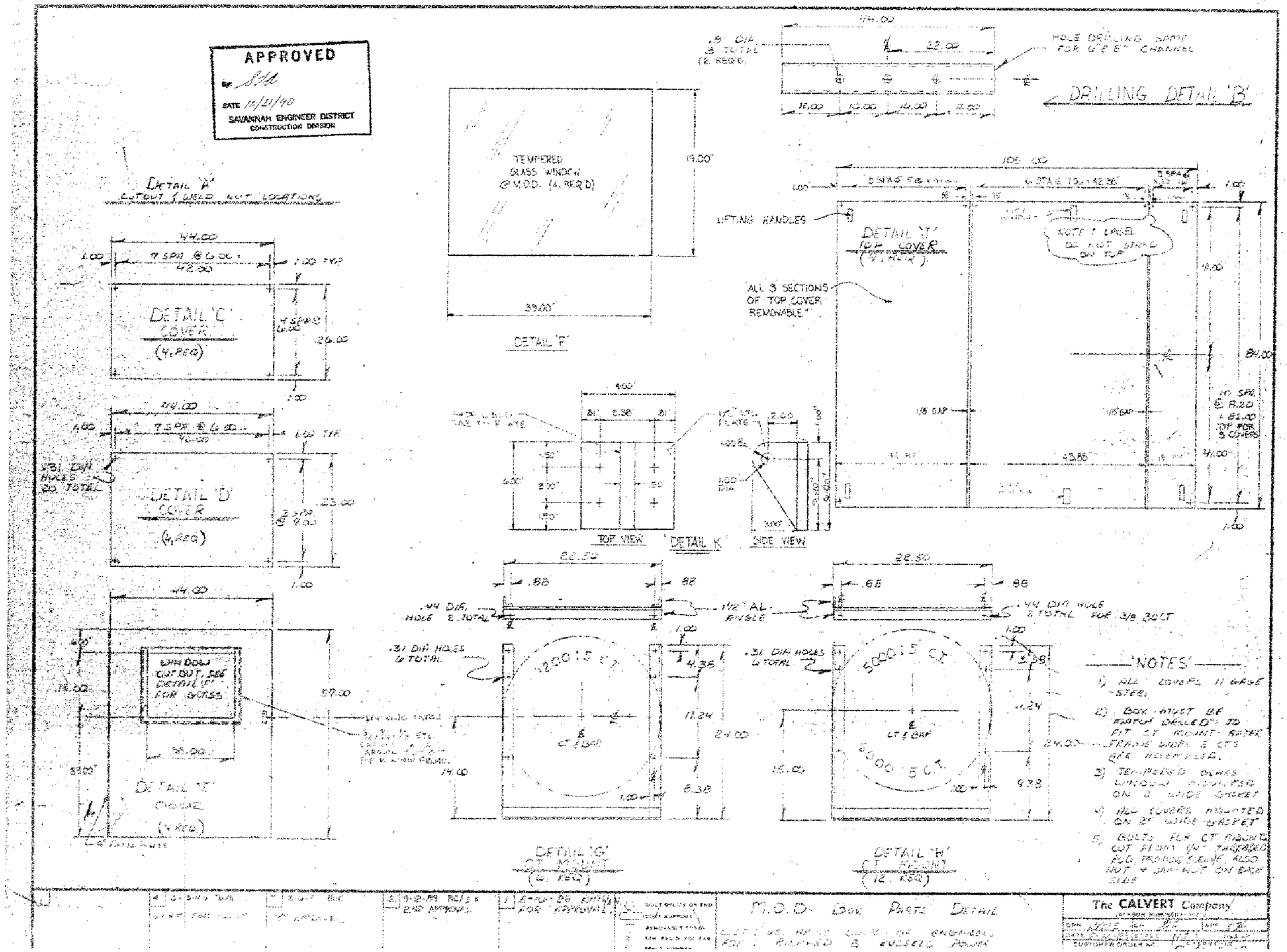
RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-68
SCALE: NONE		SHEET	

101RRP_R068_CAL_C504511.DGN
101RRP_TBLK.DGN
CAL_C504511.TIF

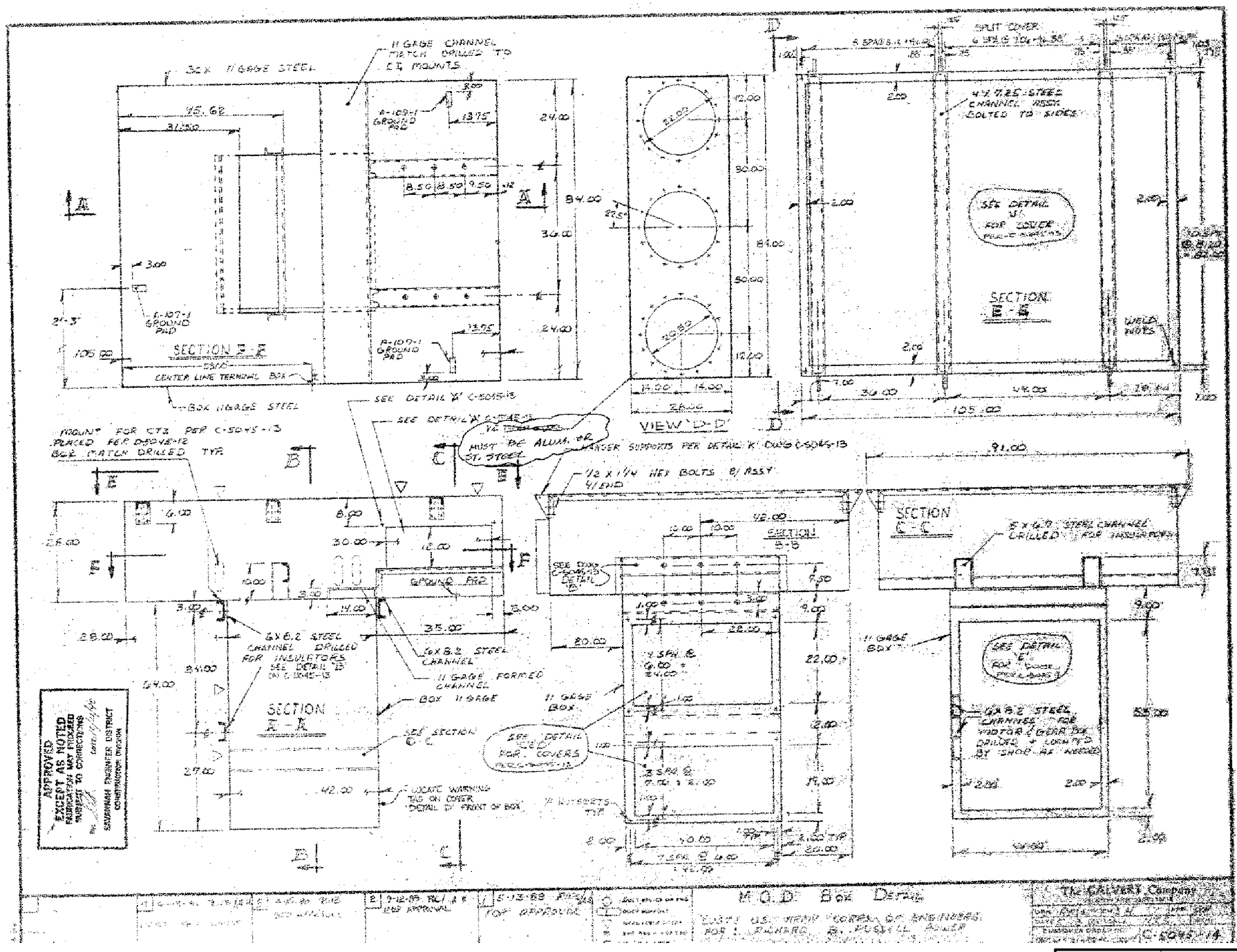
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r068_cal_c504511.dgn
11/04/2003
k6enxndt

...\101rrp_r068_cal_c504511.dgn 11/04/2003 02:14:01 PM



I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r069_cal_c504513.dgn
11/04/2003
k6enxrdt

...\101rrp_r069_cal_c504513.dgn 11/04/2003 02:14:51 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

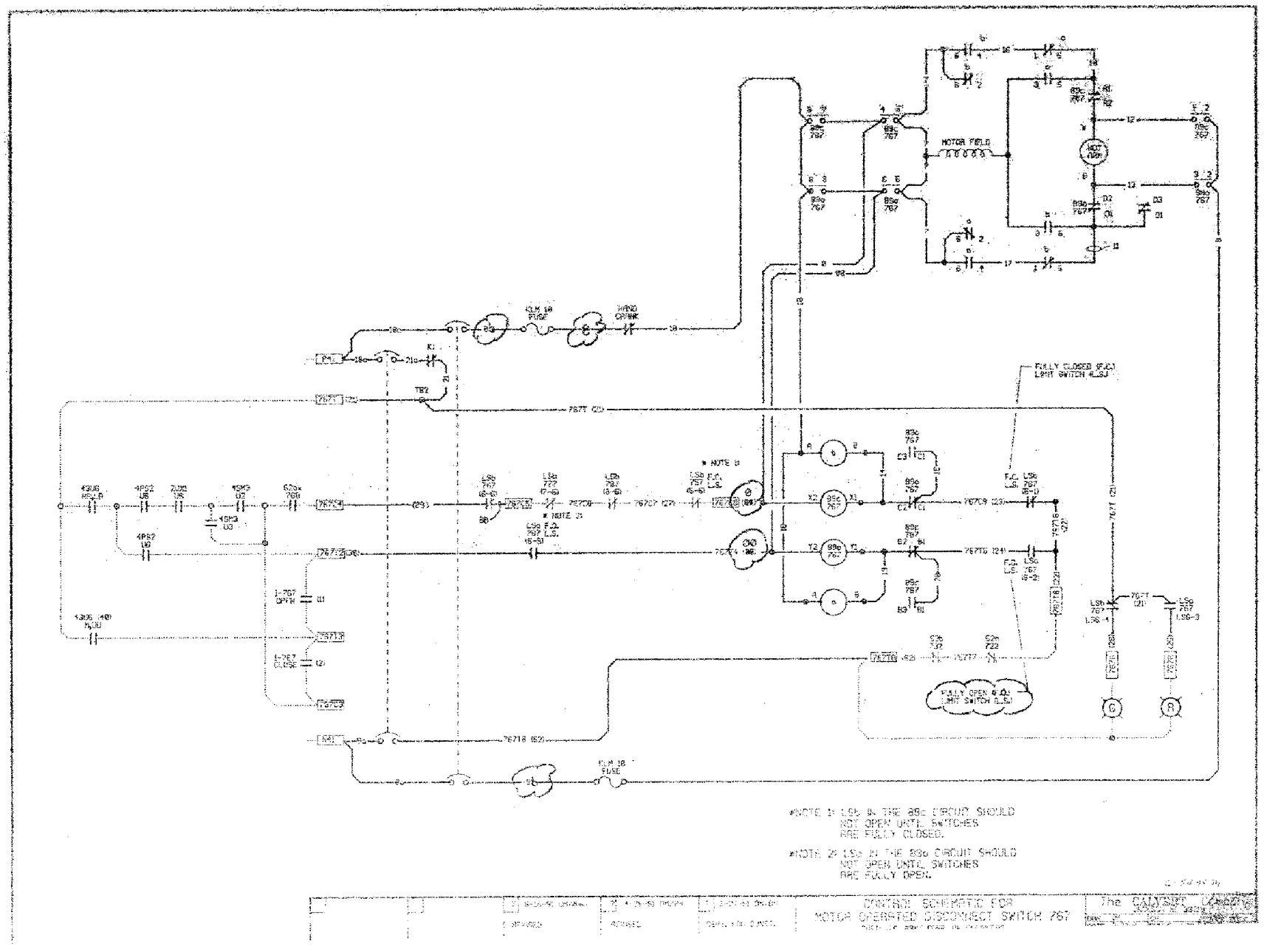
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-70

SCALE: NONE SHEET

101RRP_R070_CAL_C504514.DGN
101RRP_TBLK.DGN
CAL_C504514.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r070_cal_c504514.dgn
11/04/2003
kbenxndt

...\101rrp_r070_cal_c504514.dgn 11/04/2003 02:16:10 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

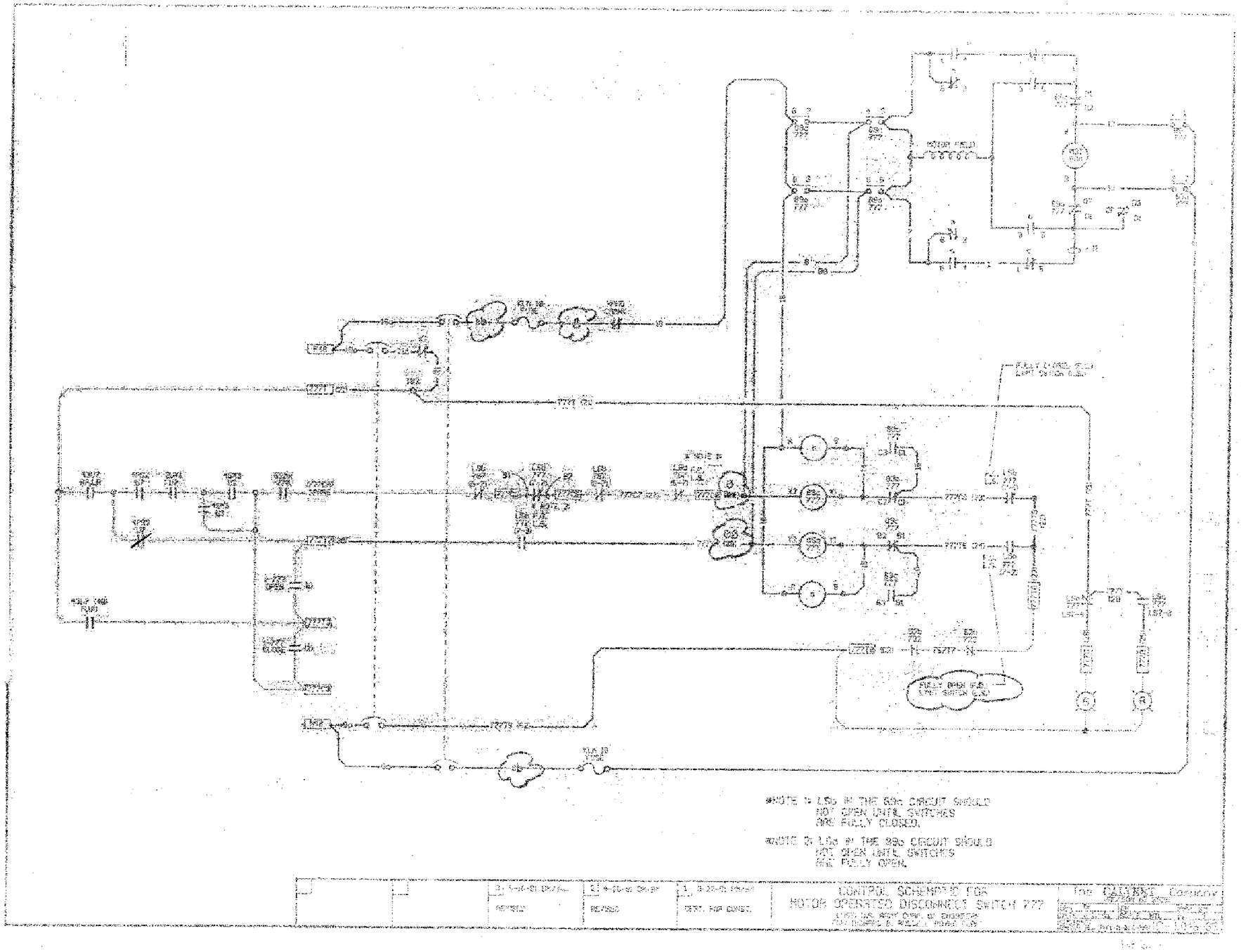
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-71

SCALE: NONE SHEET

101RRP_R071_CAL_C504532.DGN
101RRP_TBLK.DGN
CAL_C504532.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r071_cal_c504532.dgn
11/04/2003
k6enxndt

...\101rrp_r071_cal_c504532.dgn 11/04/2003 02:16:40 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

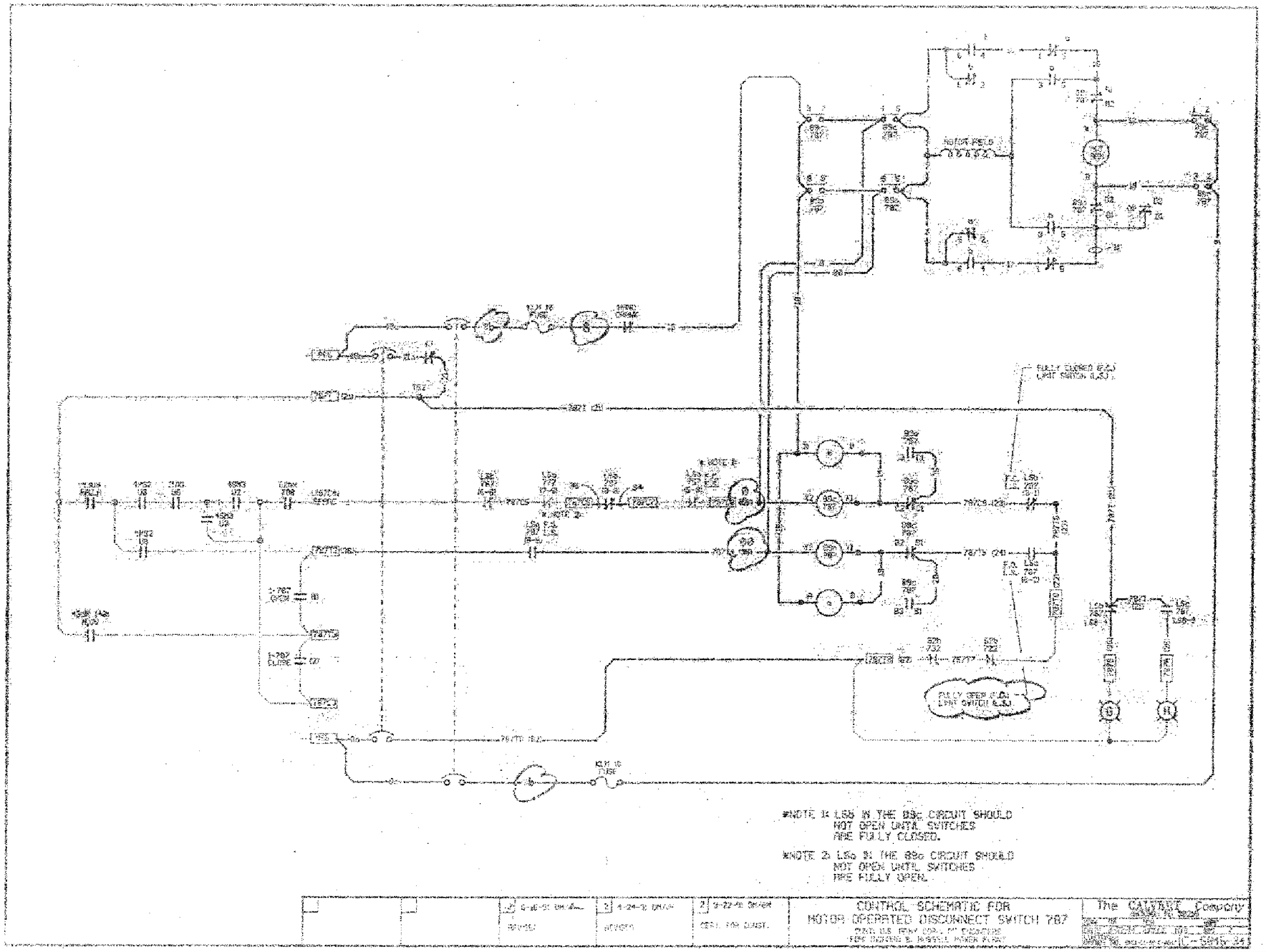
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-72

SCALE: NONE SHEET

101RRP_R072_CAL_C504533.DGN
101RRP_TBLK.DGN
CAL_C504533.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r072_cal_c504533.dgn
11/04/2003
k6enxndt

...\101rrp_r072_cal_c504533.dgn 11/04/2003 02:17:26 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

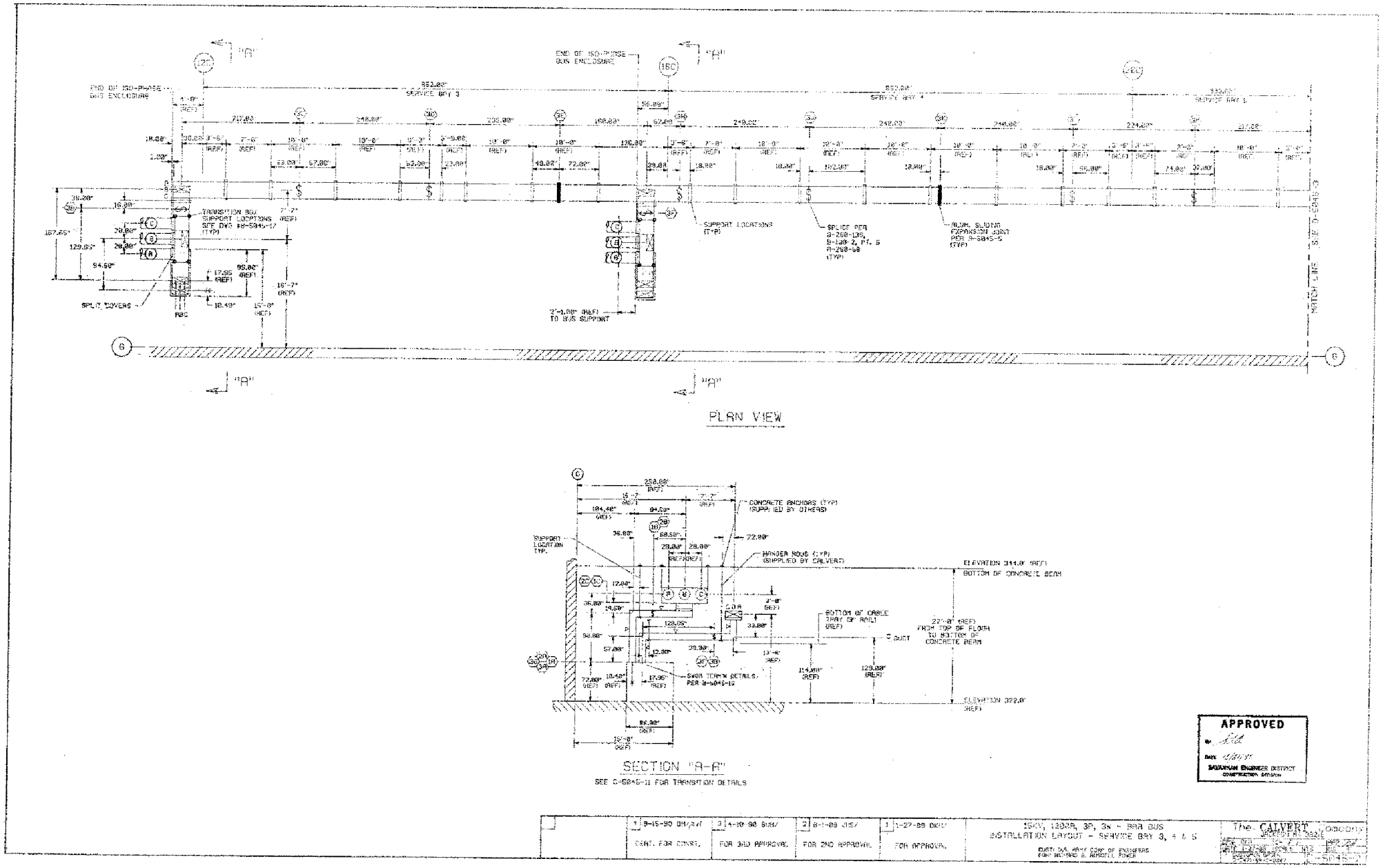
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-73

SCALE: NONE SHEET

101RRP_R073_CAL_C504534.DGN
101RRP_TBLK.DGN
CAL_C504534.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r073_cal_c504534.dgn
11/04/2003
k6enxndt

...\101rrp_r073_cal_c504534.dgn 11/04/2003 02:18:26 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

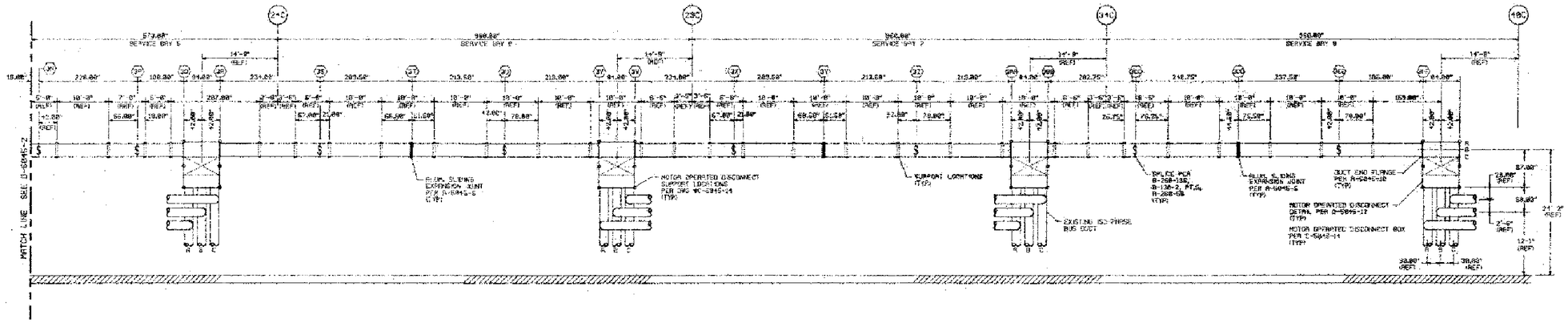
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-74

SCALE: NONE SHEET

101RRP_R074_CAL_D50452.DGN
101RRP_TBLK.DGN
CAL_D50452.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r074_cal_d50452.dgn
11/04/2003
k6enxndt

...\101rrp_r074_cal_d50452.dgn 11/04/2003 02:18:55 PM



APPROVED
BY
DATE
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

3 8-17-98 CERT. FOR CONST.	2 8-4-98 FOR 240 APPROVAL	1 1-27-98 FOR APPROVAL	15KV, 1200A, 3P, 3W - BAA BUS INSTALLATION LAYOUT - SERVICE BAY 5, 6, 7 & 8

DUSTIN W. ALL ARMY CORP OF ENGINEERS
FORT RICHARD B. RUSSELL POWER

THE CALVERT COMPANY
JACKSON, MS 39205

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

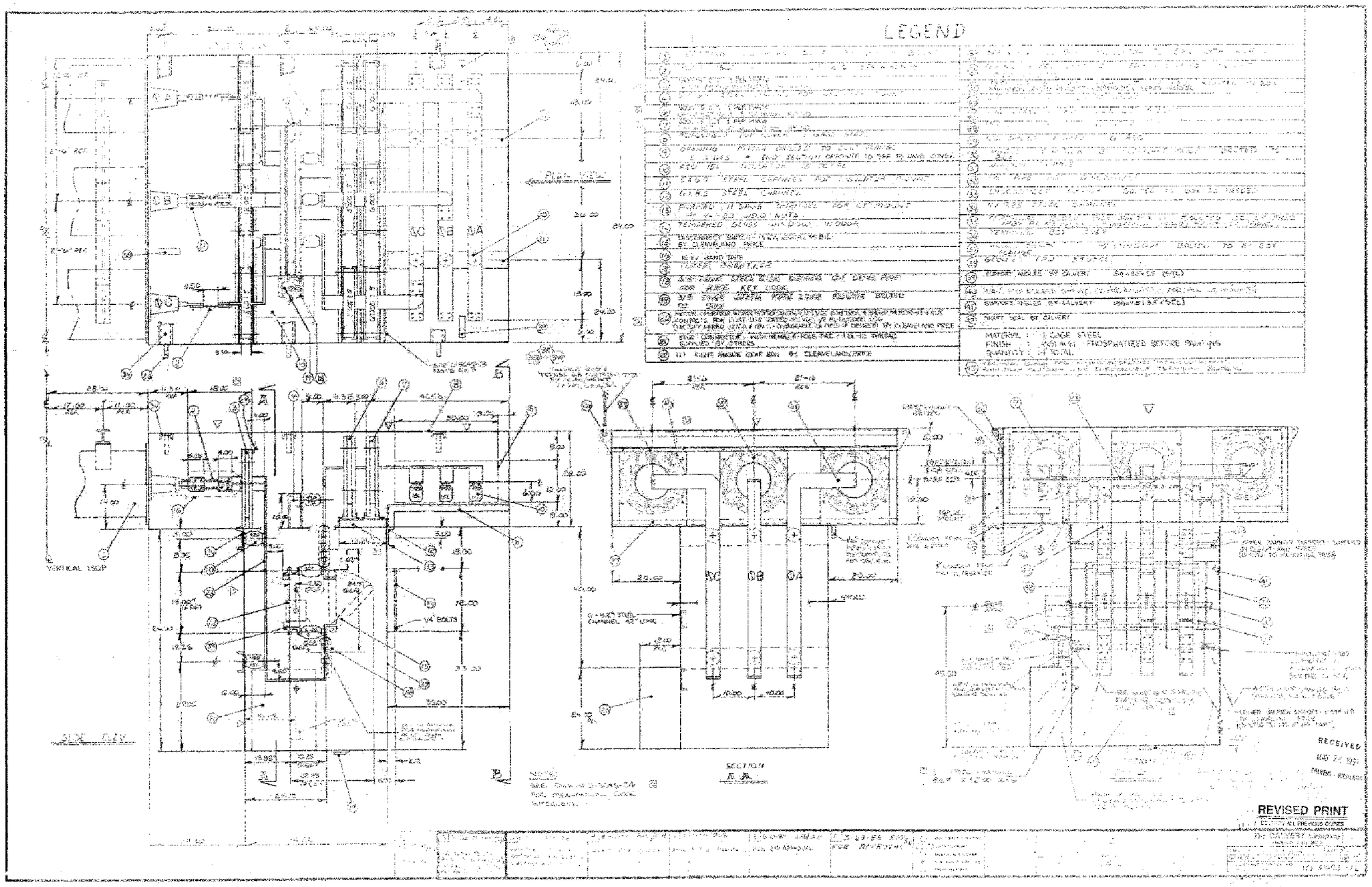
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-75

SCALE: NONE SHEET

101RRP_R075_CAL_D50453.DGN
101RRP_TBLK.DGN
CAL_D50453.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r075_cal_d50453.dgn
11/04/2003
k6enxndt

...\101rrp_r075_cal_d50453.dgn 11/04/2003 02:20:00 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

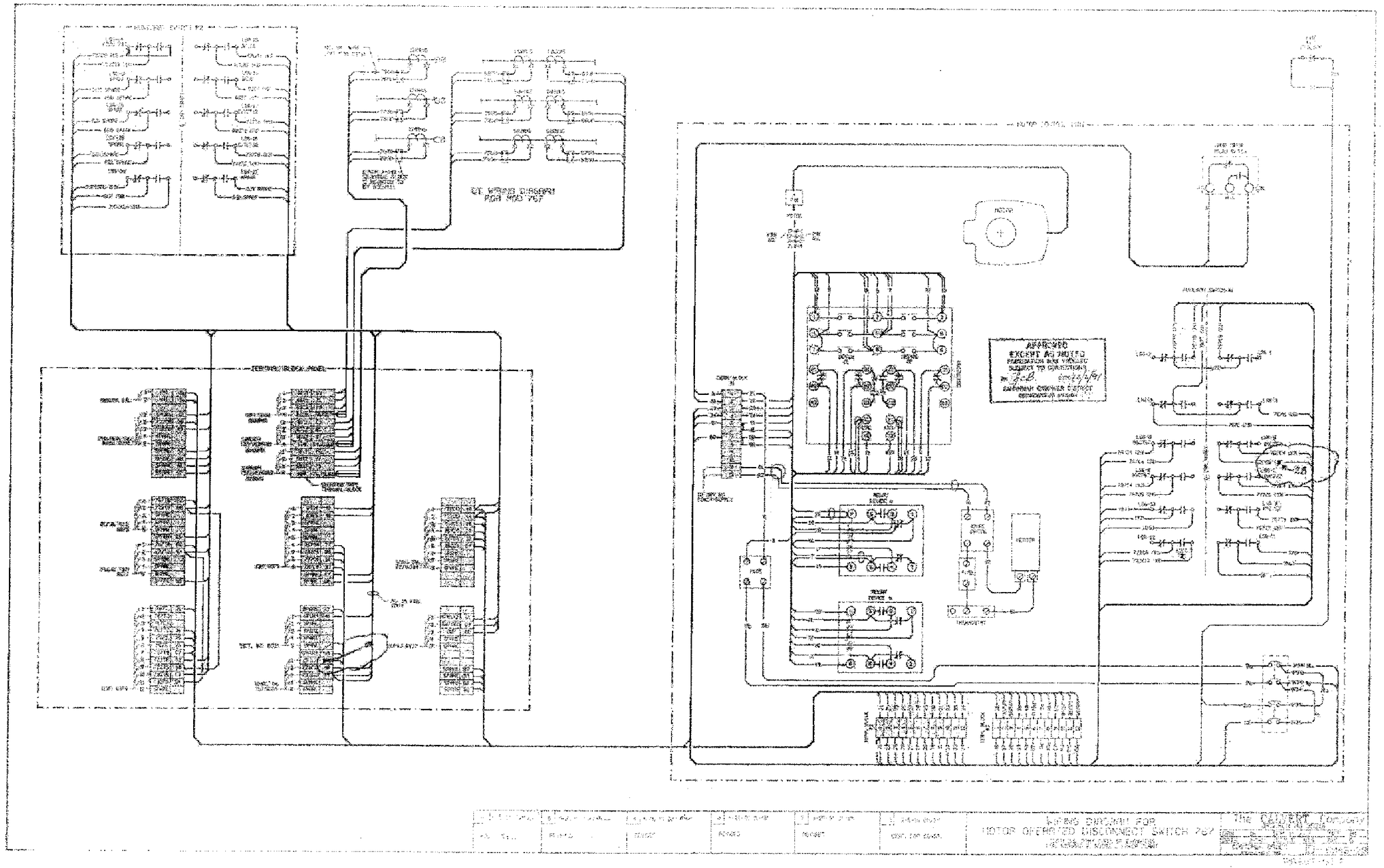
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-76

SCALE: NONE SHEET

101RRP_R076_CAL_D504512.DGN
101RRP_TBLK.DGN
CAL_D504512.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r076_cal_d504512.dgn
11/04/2003
k6enxndt

...\101rrp_r076_cal_d504512.dgn 11/04/2003 02:20:37 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

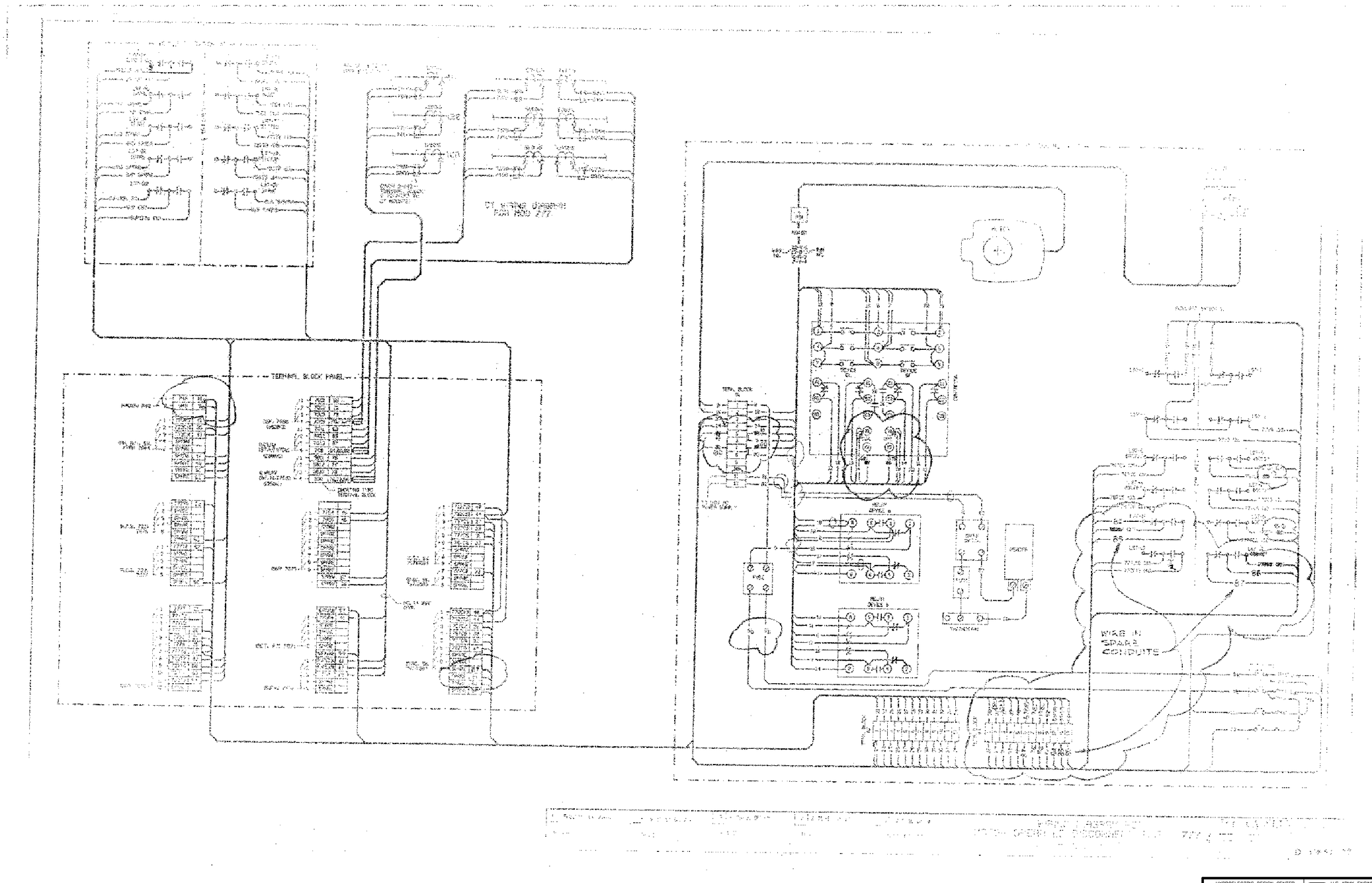
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-77

SCALE: NONE SHEET

101RRP_R077_CAL_D504528.DGN
101RRP_TBLK.DGN
CAL_D504528.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r077_cal_d504528.dgn
11/04/2003
k6enxndt

...\101rrp_r077_cal_d504528.dgn 11/04/2003 02:21:11 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

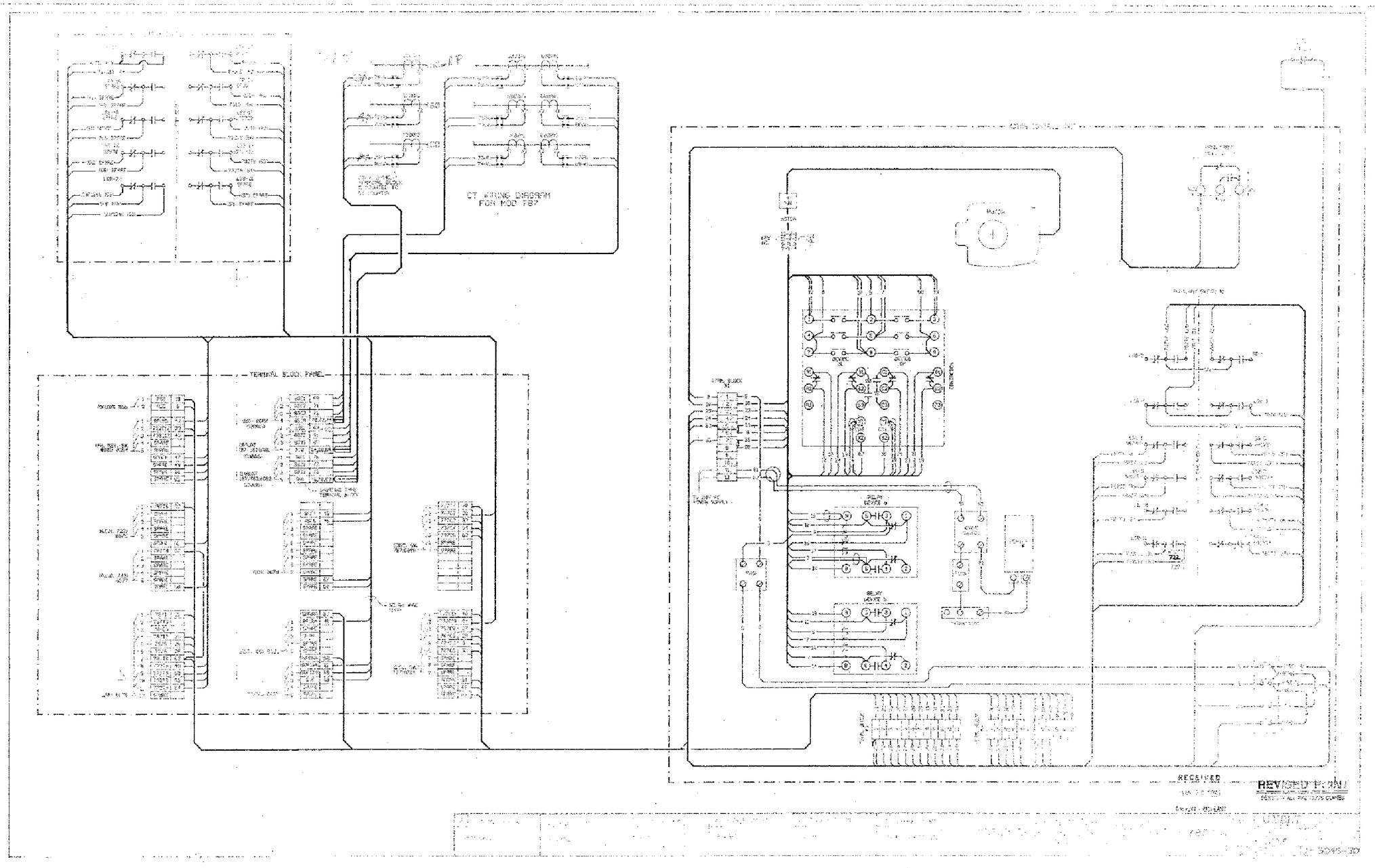
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-78

SCALE: NONE SHEET

101RRP_R078_CAL_D504529.DGN
101RRP_TBLK.DGN
CAL_D504529.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r078_cal_d504529.dgn
11/04/2003
k6enxndt

...\101rrp_r078_cal_d504529.dgn 11/04/2003 02:29:33 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

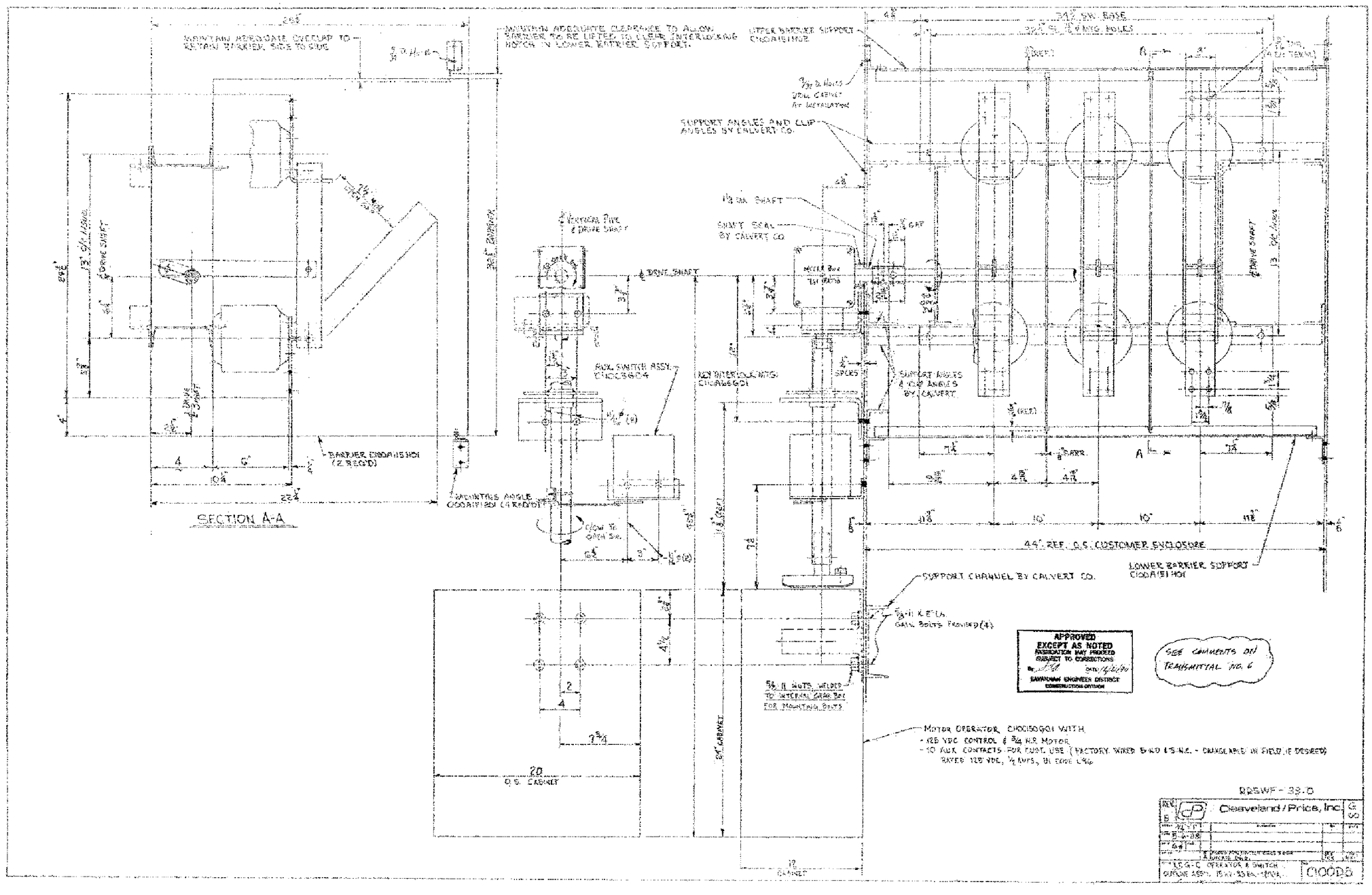
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-79

SCALE: NONE SHEET

101RRP_R079_CAL_D504530.DGN
101RRP_TBLK.DGN
CAL_D504530.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r079_cal_d504530.dgn
11/04/2003
k6enxndt

...\101rrp_r079_cal_d504530.dgn 11/04/2003 02:30:07 PM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-80

SCALE: NONE SHEET

101RRP_R080_CLE_C110D8.DGN
101RRP_TBLK.DGN
CLE_C110D8.TIF

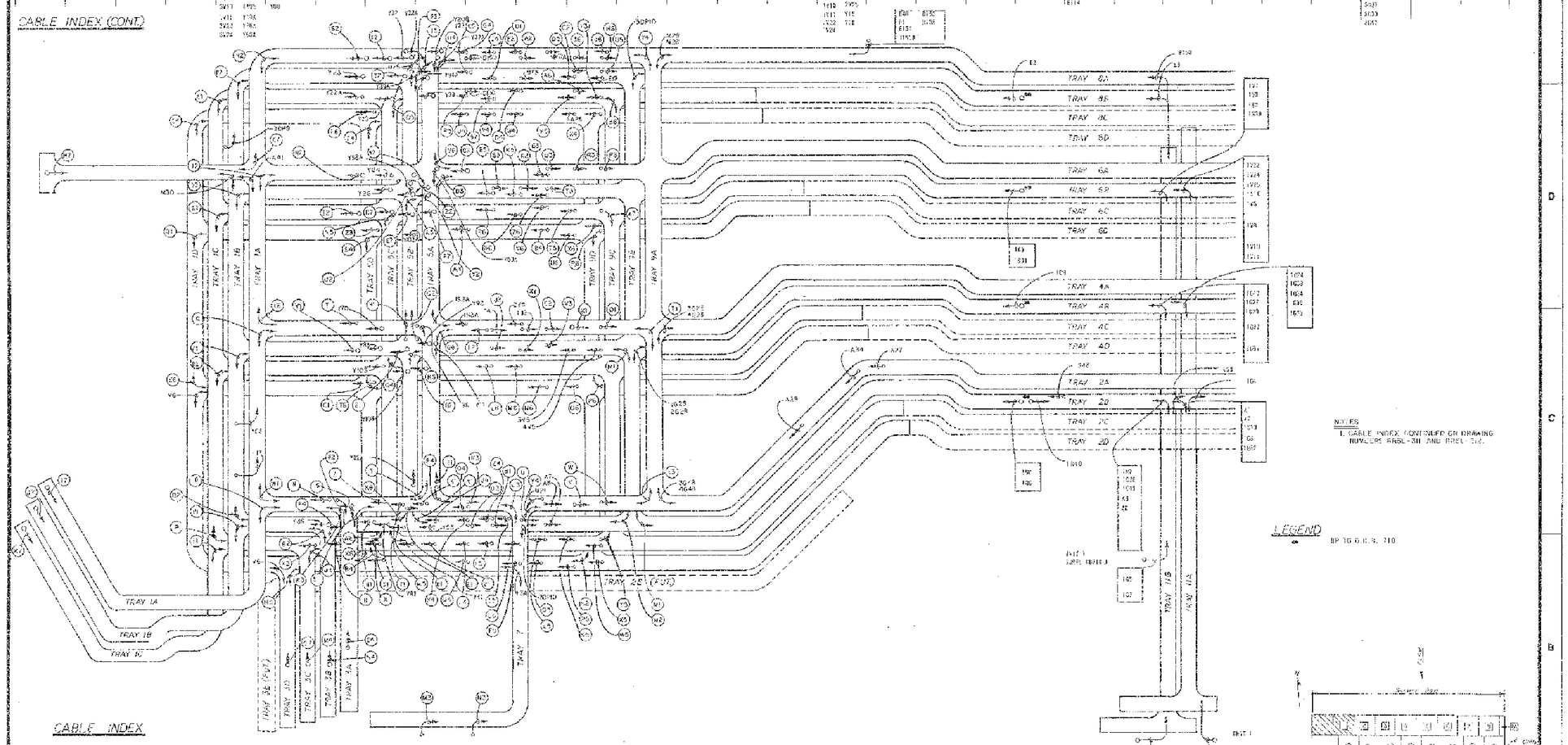
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r080_cle_c100d8.dgn
11/04/2003
kbenxndt

...\101rrp_r080_cle_c100d8.dgn 11/04/2003 02:30:53 PM

CORPS OF ENGINEERS

U. S. ARMY

CABLE INDEX (CONT.)



CABLE INDEX

FOR INFORMATION ONLY

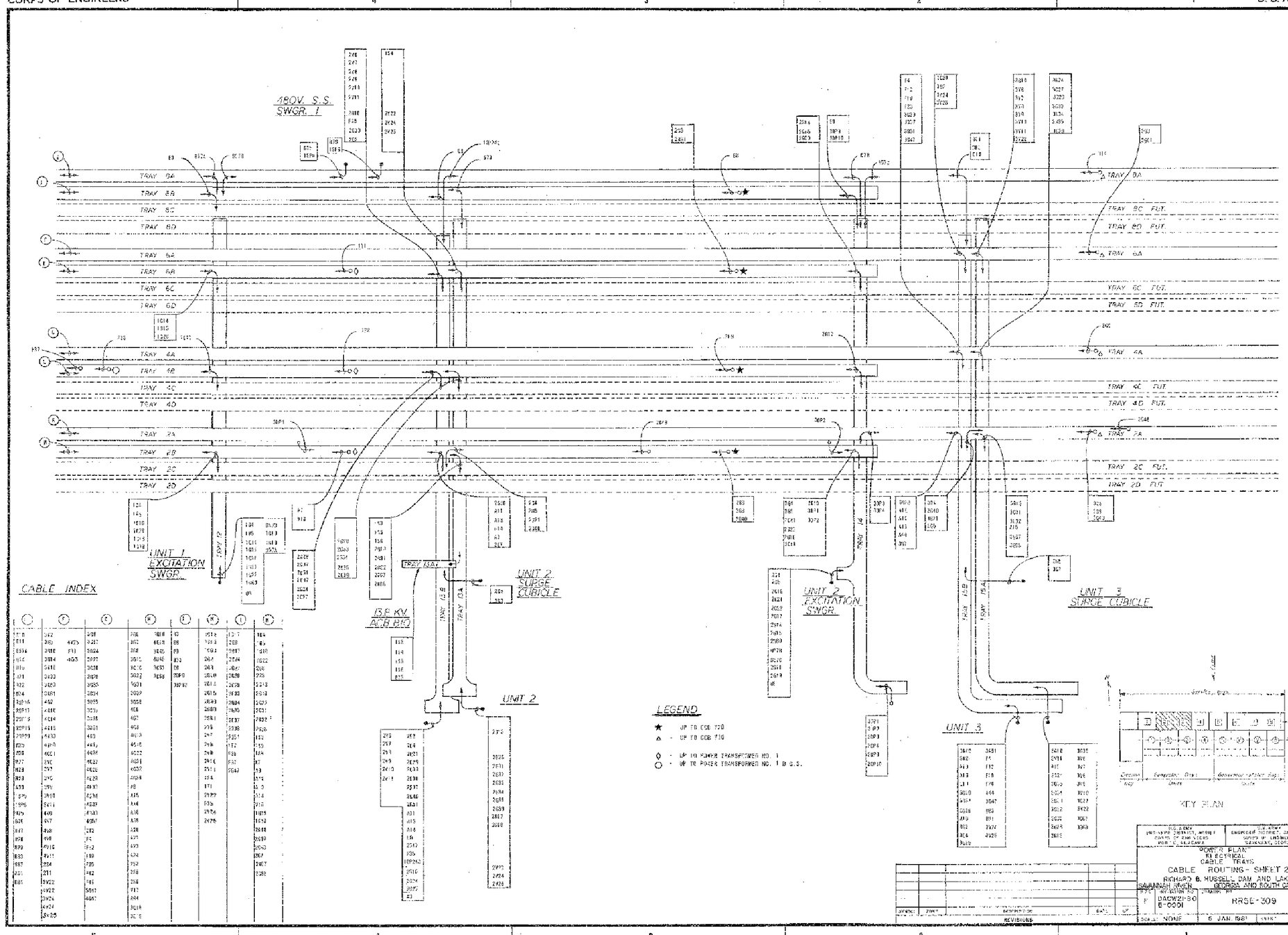
HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT CIRCUIT BREAKER & STATIC START INSTALL REFERENCE DRAWING SAVANNAH RIVER GEORGIA AND S. CAROLINA	
SIZE: F / SOLICITATION NO.: DACW21-03-B-0011	FILE NO.: RBR-107 / PLATE: R-81
SCALE: NONE	SHEET

101RRP_R081_CESAS_RR5E308.DGN
101RRP_TBLK.DGN
CESAS_RR5E308.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r081_cesas_rr5e308.dgn
11/04/2003
k6enxrdt

...\101rrp_r081_cesas_rr5e308.dgn 11/04/2003 02:31:29 PM

CORPS OF ENGINEERS — U. S. ARMY



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT CIRCUIT BREAKER & STATIC START INSTALL REFERENCE DRAWING SAVANNAH RIVER GEORGIA AND S. CAROLINA	

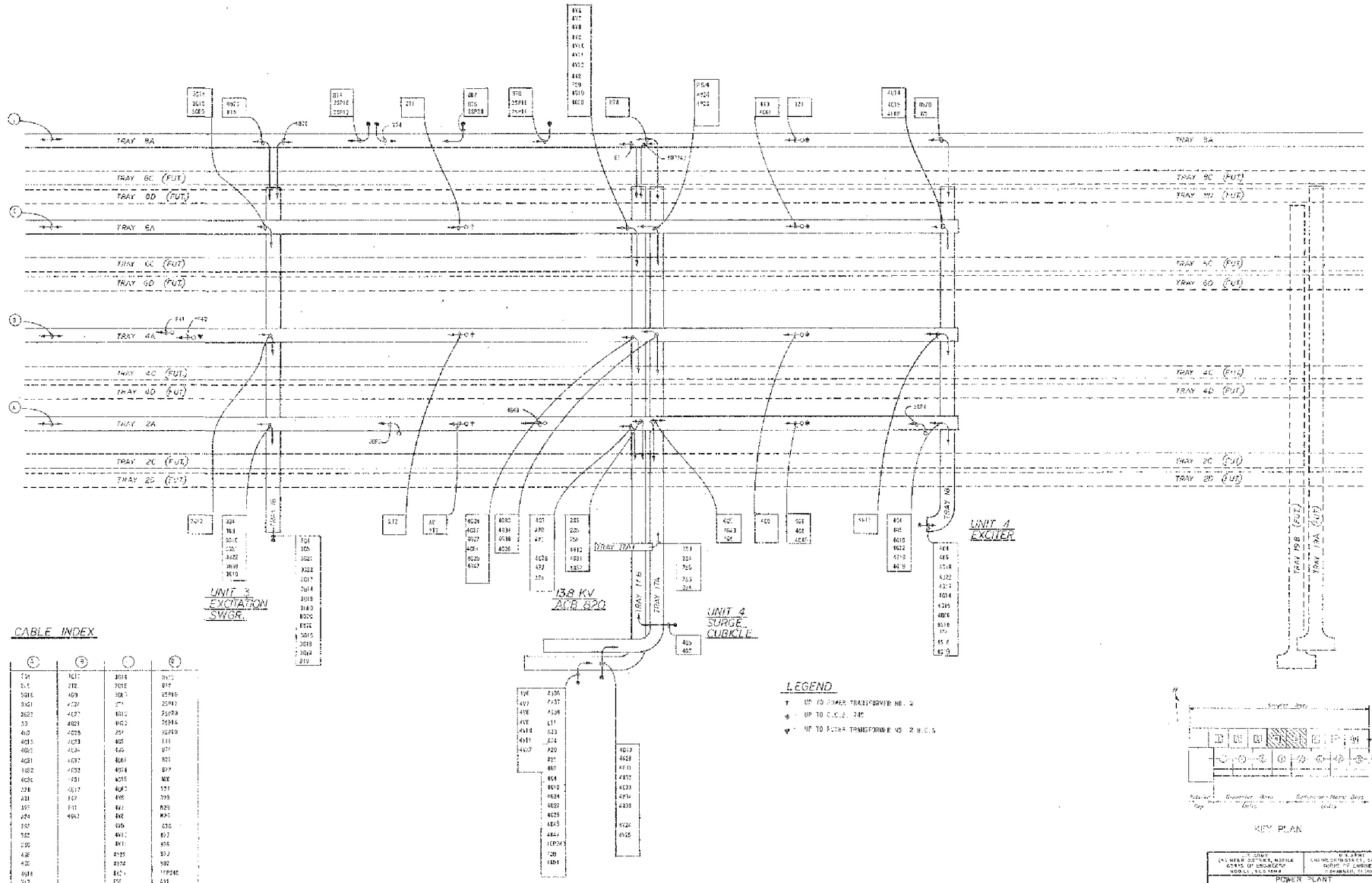
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-82
SCALE: NONE		SHEET	

101RRP_R082_CESAS_RR5E309.DGN
101RRP_TBLK.DGN
CESAS_RR5E309.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r082_cesas_rr5e309.dgn
11/04/2003
k6enxndt

...\101rrp_r082_cesas_rr5e309.dgn 11/04/2003 02:32:16 PM

CORPS OF ENGINEERS U. S. ARMY



CABLE INDEX

[illegible]	[illegible]	[illegible]	[illegible]

LEGEND

† - UP TO POWER TRANSFORMER NO. 2

* - UP TO C.S.E. 740

ψ - UP TO POWER TRANSFORMER NO. 2 B.E.S.

KEY PLAN

U. S. ARMY ENGINEER DISTRICT, MOBILE CORPS OF ENGINEERS MOBILE, ALABAMA

U. S. ARMY ENGINEER DISTRICT, SAVANNAH GROUP OF ENGINEERS SAVANNAH, GEORGIA

POWER PLANT ELECTRICAL CABLE TRAYS CABLE ROUTING - SHEET 3

RICHARD B. RUSSELL DAM AND LAKE

SAVANNAH RIVER GEORGIA AND SOUTH CAROLINA

REF. PLANS OF ARMY DRAWINGS		DRAWING NO.	PLATE
IF	DACW21-'B' 28 0001	RR5E-310	P-0788

SCALE: NONE 5 JAN. 1981 SHEET

SYMBOL	DATE	DESCRIPTION
		REVISIONS

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-83

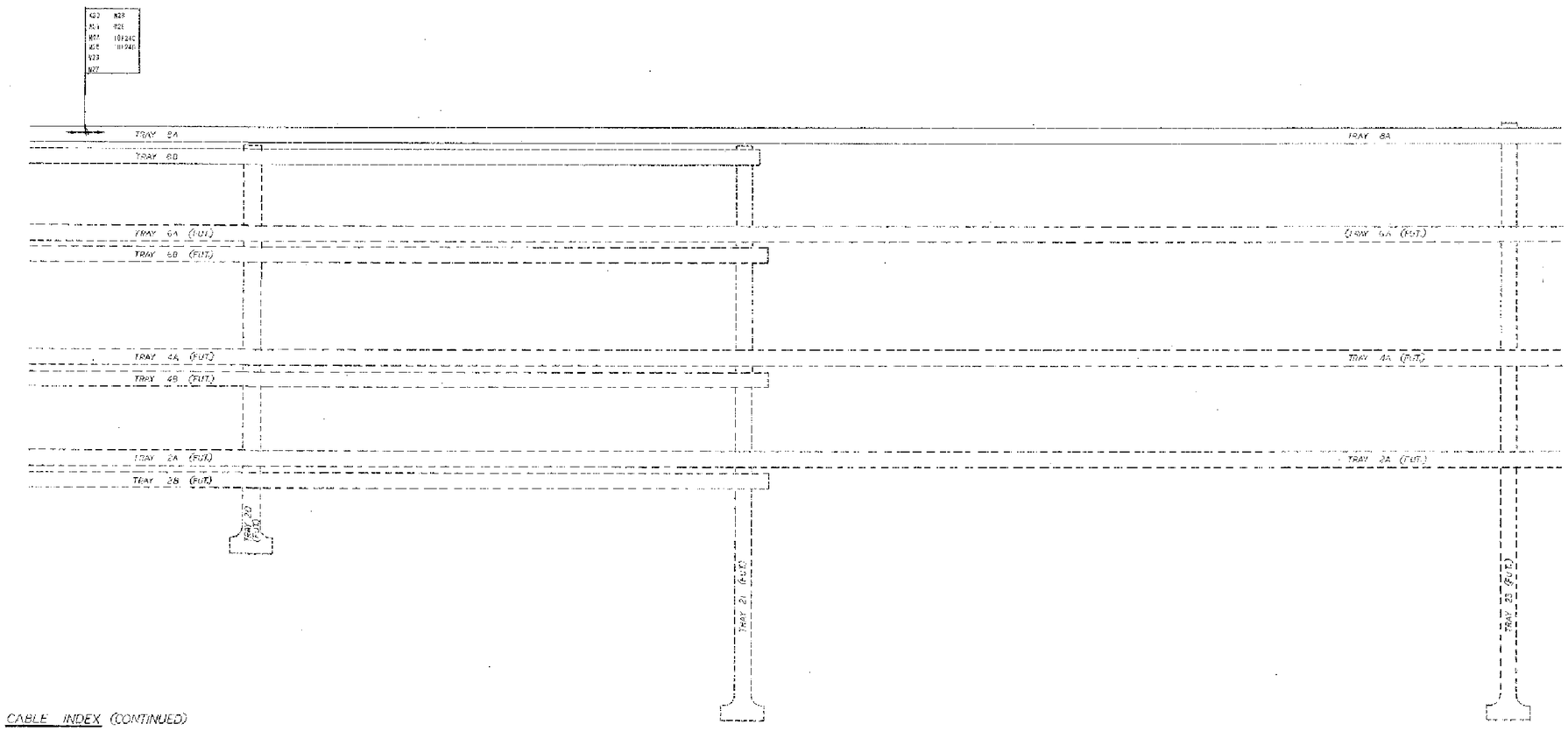
SCALE: NONE SHEET

101RRP_R083_CESAS_RR5E310.DGN 101RRP_TBLK.DGN CESAS_RR5E310.TIF

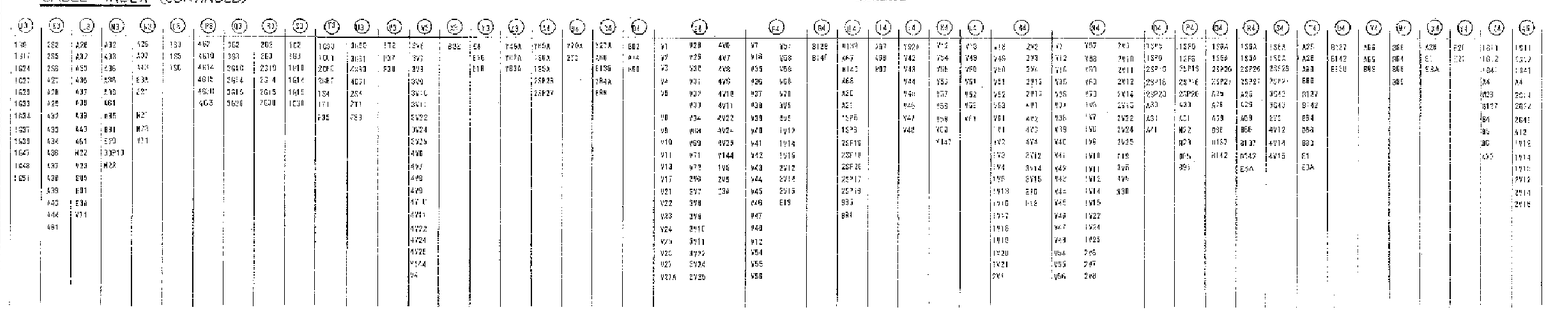
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r083_cesas_rr5e310.dgn 11/04/2003 k6enxndt

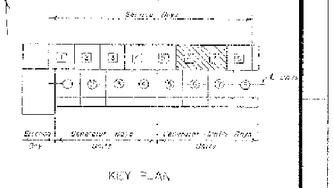
...\101rrp_r083_cesas_rr5e310.dgn 11/04/2003 02:33:01 PM

CORPS OF ENGINEERS U. S. ARMY



CABLE INDEX (CONTINUED)





KEY PLAN

U.S. ARMY ENGINEER DISTRICT, MOBILE CORPS OF ENGINEERS MOBILE, ALABAMA

U.S. ARMY ENGINEER DISTRICT, SAVANNAH CORPS OF ENGINEERS SAVANNAH, GEORGIA

POWER PLANT
ELECTRICAL
CABLE TRAYS
CABLE ROUTING - SHEET 4
RICHARD B. RUSSELL DAM AND LAKE
SAVANNAH RIVER GEORGIA AND SOUTH CAROLINA

SIZE	INVITATION NO.	DRAWING NO.	PLATE
F	DACW21-81 R-0001	RR5E-311	P 0789

SCALE: NONE NOV. 1980

SYMBOL	ZONE	DESCRIPTION	DATE	BY
		REVISIONS		

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-84

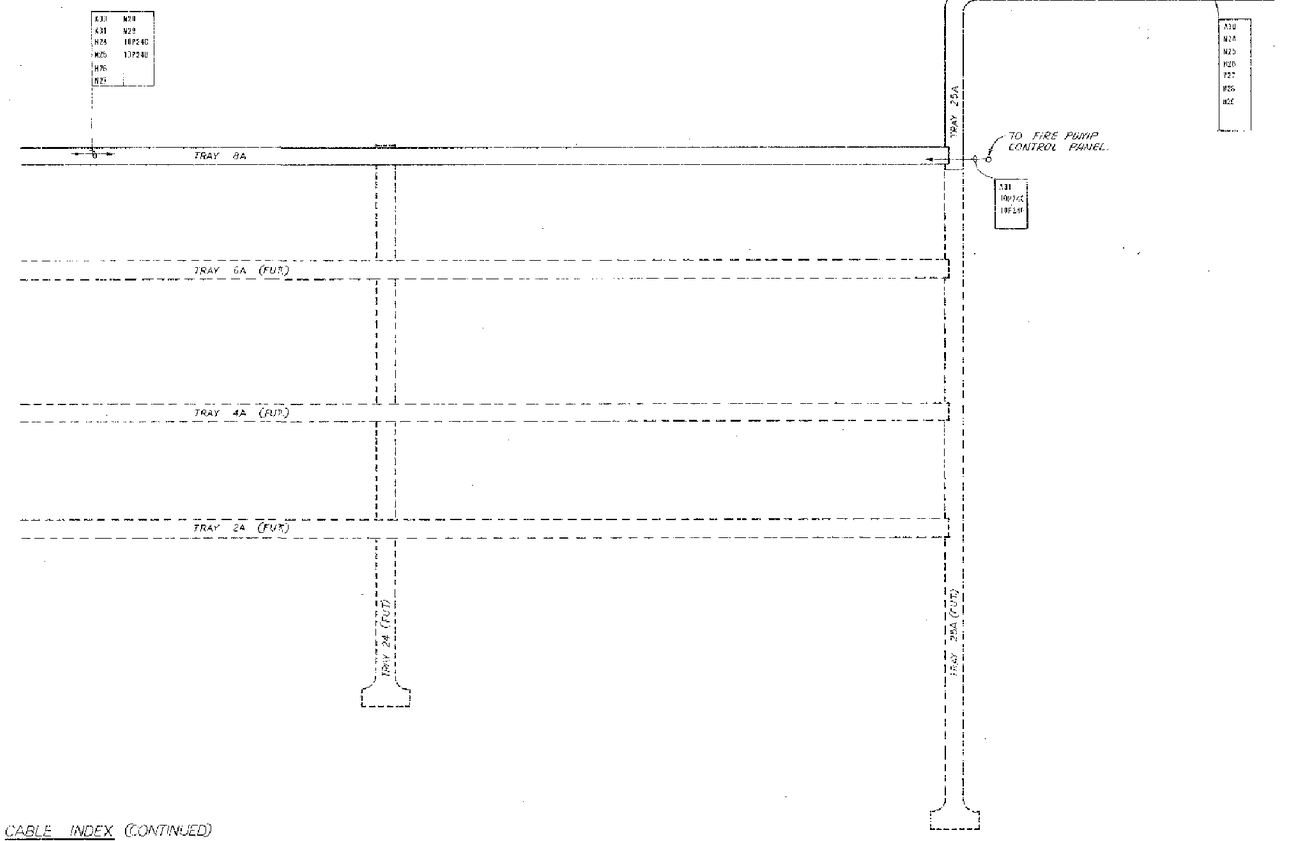
SCALE: NONE SHEET

101RRP_R084_CESAS_RR5E311.DGN
101RRP_TBLK.DGN
CESAS_RR5E311.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r084_cesas_rr5e311.dgn
11/04/2003
k6enxndt

...\101rrp_r084_cesas_rr5e311.dgn 11/04/2003 02:34:23 PM

CORPS OF ENGINEERS U. S. ARMY



CABLE INDEX (CONTINUED)

CABLE INDEX (CONTINUED)

KEY PLAN

POWER PLANT
ELECTRICAL
CABLE TRAYS
CABLE ROUTING - SHEET 5
RICHARD B. RUSSELL DAM AND LAKE
SAVANNAH RIVER GEORGIA AND SOUTH CAROLINA

SIZE	SOLICITATION NO.	DRAWING NO.	REV
F	DACW21-81-B-0001	RR5E-312	0790
SCALE: NONE		NOV. 1980	

REVISIONS

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

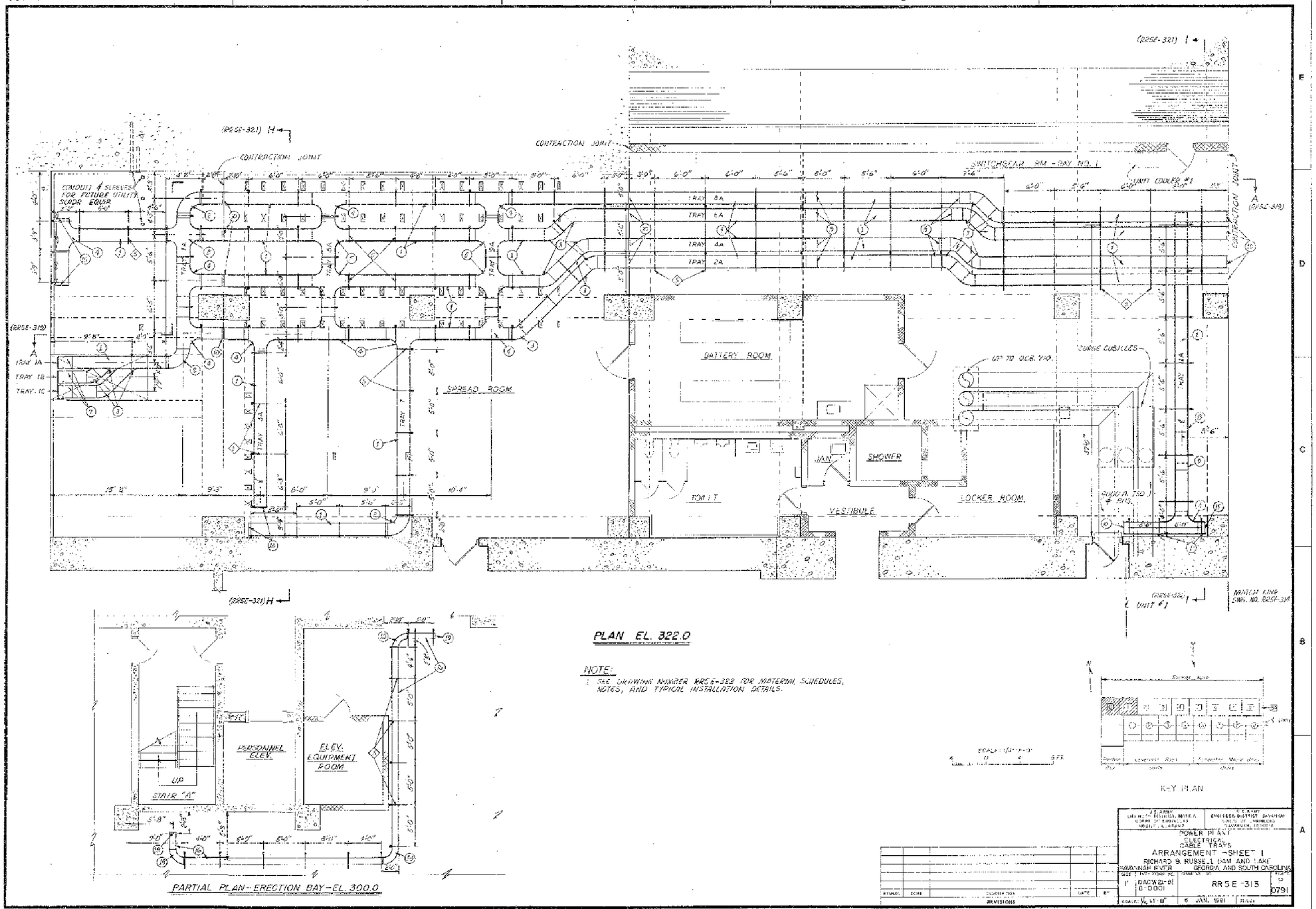
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-85
SCALE: NONE		SHEET	

101RRP_R085_CESAS_RR5E312.DGN
101RRP_TBLK.DGN
CESAS_RR5E312.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r085_cesas_rr5e312.dgn
11/04/2003
k6enxndt

...\101rrp_r085_cesas_rr5e312.dgn 11/04/2003 03:31:43 PM

CORPS OF ENGINEERS U. S. ARMY



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

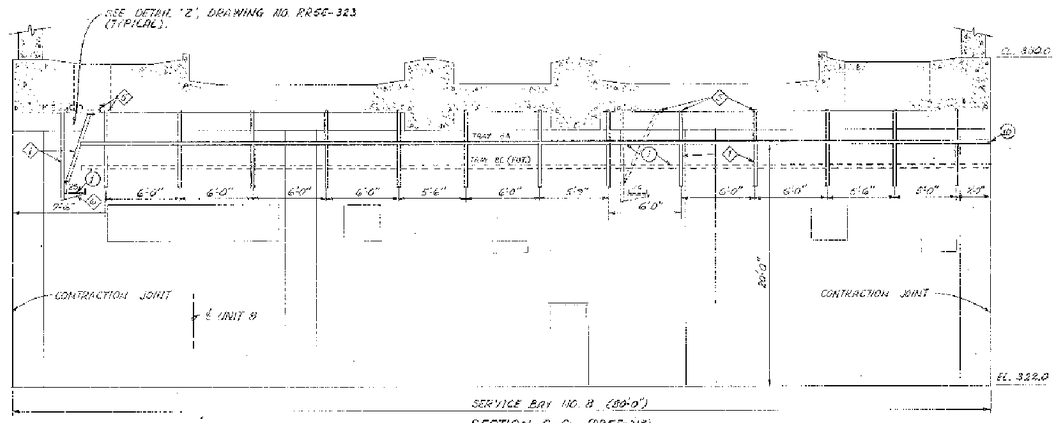
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-86
SCALE: NONE		SHEET	

101RRP_R086_CESAS_RR5E313.DGN
101RRP_TBLK.DGN
CESAS_RR5E313.TIF

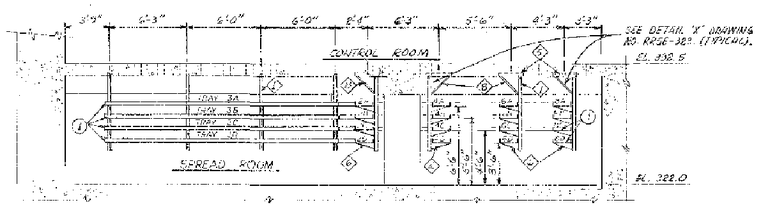
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r086_cesas_rr5e313.dgn
11/04/2003
k6enxndt

...\101rrp_r086_cesas_rr5e313.dgn 11/04/2003 03:41:35 PM

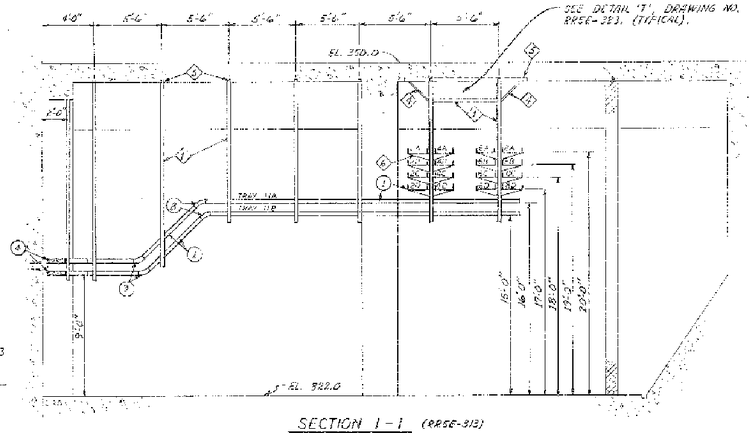
CORPS OF ENGINEERS U. S. ARMY



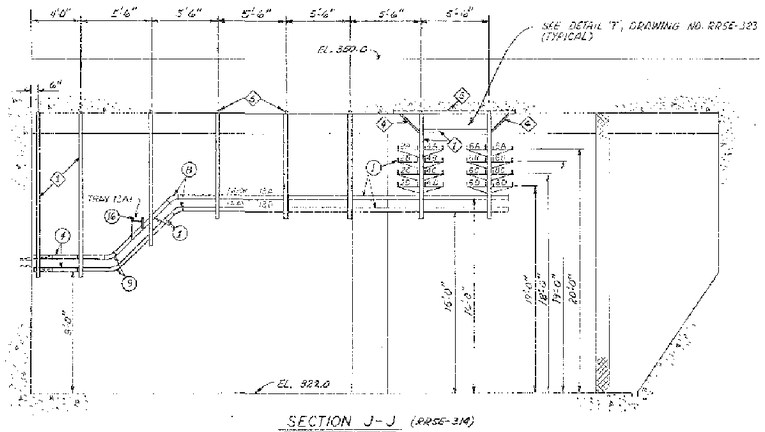
SECTION G-G (RR5E-312)



SECTION H-H (RR5E-313)

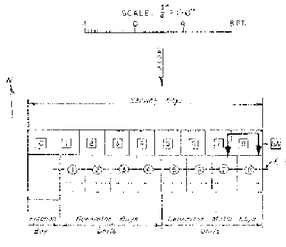


SECTION I-I (RR5E-313)



SECTION J-J (RR5E-314)

NOTE:
1. SEE DRAWING NUMBER RR5E-323 FOR MATERIAL SCHEDULES, NOTES, AND TYPICAL INSTALLATION DETAILS.



COUNCIL	ZONE	DESCRIPTION	DATE	BY

REVISIONS

U.S. ARMY ENGINEER DISTRICT, MOBILE CORPS OF ENGINEERS MOBILE, ALABAMA

U.S. ARMY ENGINEER DISTRICT, SAVANNAH CORPS OF ENGINEERS SAVANNAH, GEORGIA

POWER PLANT
ELECTRICAL
CABLE TRAYS
SECTIONS AND DETAILS - SHEET 3
RICHARD B. RUSSELL DAM AND LAKE
SAVANNAH RIVER GEORGIA AND SOUTH CAROLINA

SIZE	SOLICITATION NO.	DRAWING NO.	PLATE
F	DACW21-91-B-0001	RR5E-321	P 0799

SCALE: 1/8" = 1'-0" 5 JAN 1981 SHEET

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-87

SCALE: NONE SHEET

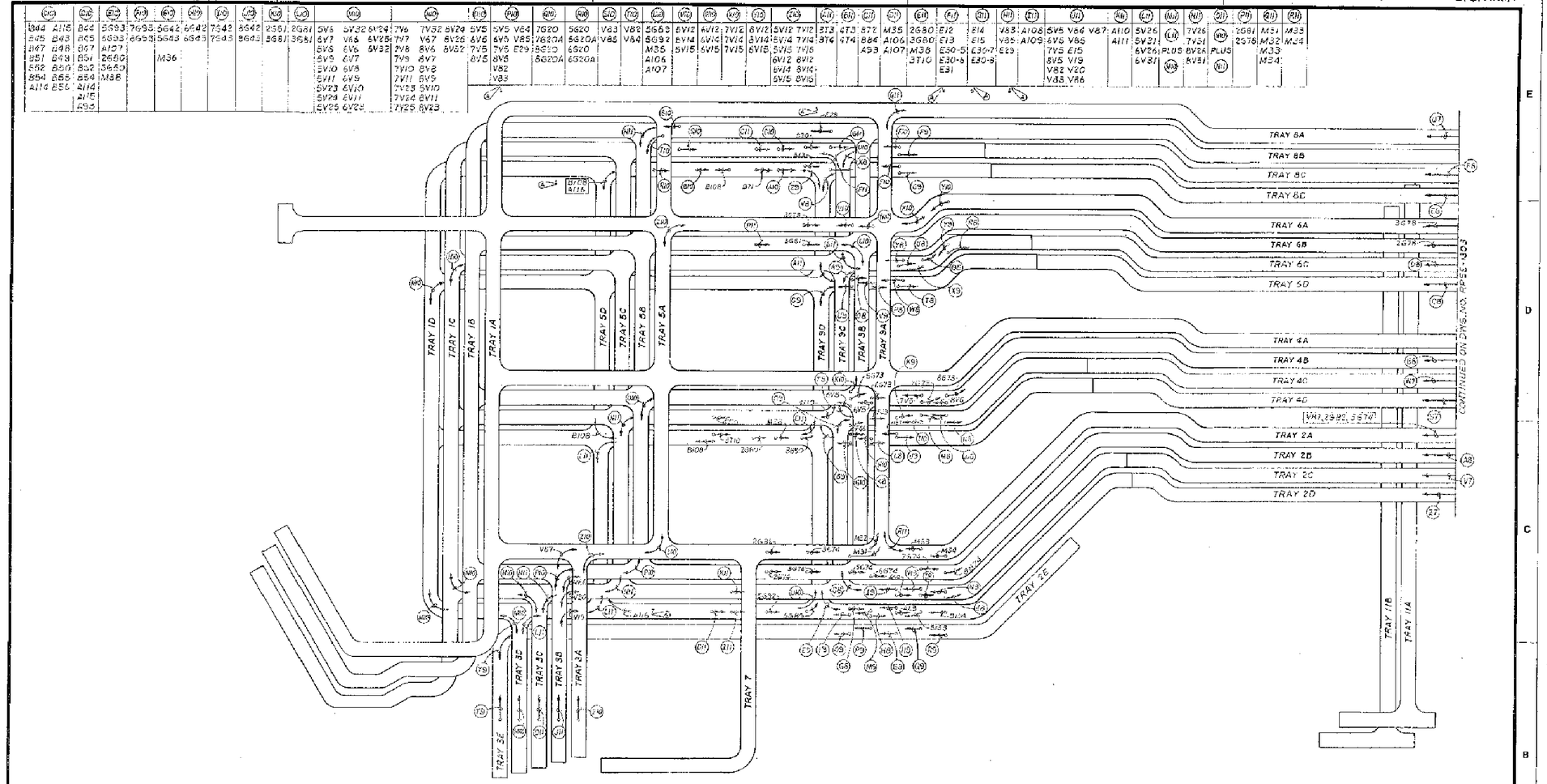
101RRP_R087_CESAS_RR5E321.DGN
101RRP_TBLK.DGN
CESAS_RR5E321.DGN

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r087_cesas_rr5e321.dgn
11/05/2003
k6enxndt

...\101rrp_r087_cesas_rr5e321.dgn 11/05/2003 07:38:07 AM

CORPS OF ENGINEERS

U. S. ARMY



CABLE GROUP INDEX

SYMBOL	ZONE	DESCRIPTION	DATE	BY
7	SEN.	CHANGED CABLE NUMBERS, ADDED CABLE.		

REVISIONS

U.S. ARMY ENGINEER DISTRICT, MOBILE CORPS OF ENGINEERS MOBILE, ALABAMA

U.S. ARMY PIONEER DISTRICT, SAVANNAH CORPS OF ENGINEERS SAVANNAH, GEORGIA

POWER PLANT
PUMPED STORAGE-ELECTRICAL
CABLE TRAYS
CABLE ROUTING — SH. 1
RICHARD B. RUSSELL DAM AND LAKE
SAVANNAH RIVER GEORGIA AND SOUTH CAROLINA

SIZE F | SOLICITATION NO. DACW21-88-B-0082 | DRAWING NO. RR5E-1302 | PLATE 8-248

SCALE: | FEBRUARY 1988 | SHEET

AMENDMENT NO. 0001

P-248 1

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-88

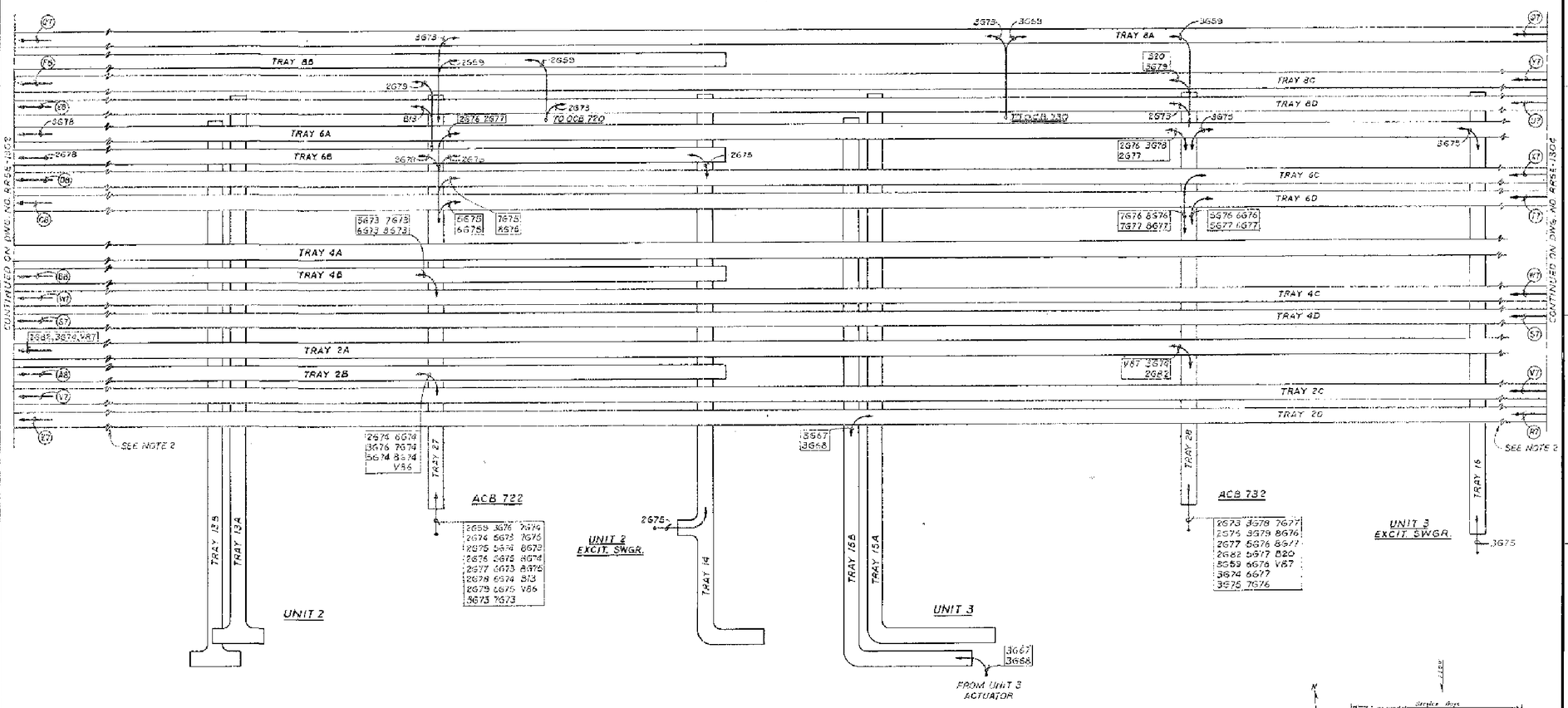
SCALE: NONE | SHEET

101RRP_R088_CESAS_RR5E1302.DGN
101RRP_TBLK.DGN
CESAS_RR5E1302.TIF

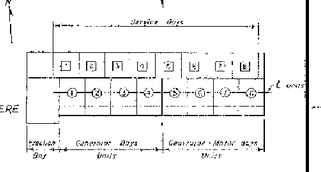
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r088_cesas_rr5e1302.dgn
11/05/2003
k6enxndt

...\101rrp_r088_cesas_rr5e1302.dgn 11/05/2003 07:38:41 AM

CORPS OF ENGINEERS U.S. ARMY



NOTES:
1. ONLY EXISTING CABLE TRAYS BEING USED TO ROUTE NEW CABLES ARE SHOWN.
2. SECTIONS OF TRAYS HAVE BEEN OMITTED WHERE NO CABLE ENTRY OR EXITING REQUIRED.
3. EXISTING CABLES IN EXISTING TRAYS NOT SHOWN.



KEY PLAN

CABLE GROUP INDEX

(A7)	(A8)	(A9)	(C8)	(D8)	(E8)	(F8)
CABLE GROUP (R7) MINUS THE FOLLOWING CABLES: 3G67 3G68	2G74 6G74 3G76 7G74 5G74 8G74 V86	5G73 7G73 6G73 8G73	CABLE GROUP (T7) MINUS THE FOLLOWING CABLES: 5G75 6G75 5G76 6G76 5G77 6G77	CABLE GROUP (X7) MINUS THE FOLLOWING CABLES: 7G75 8G75 7G76 8G76 7G77 8G77	CABLE GROUP (U7) PLUS THE FOLLOWING CABLE: B13	CABLE GROUP (P7) MINUS THE FOLLOWING CABLES: B58C 2SP31 PLUS THE FOLLOWING CABLES: B20 2G79 3G79

SYMBOL	ZONE	DESCRIPTION	DATE	BY
		REVISIONS		

U.S. ARMY ENGINEER DISTRICT, MOBILE CORPS OF ENGINEERS MOBILE, ALABAMA
U.S. ARMY ENGINEER DISTRICT, SAVANNAH CORPS OF ENGINEERS SAVANNAH, GEORGIA

POWER PLANT
PUMPED STORAGE-ELECTRICAL
CABLE TRAYS
CABLE ROUTING — SH. 2
RICHARD B. RUSSELL DAM AND LAKE
SAVANNAH RIVER GEORGIA AND SOUTH CAROLINA

SIZE	INVITATION NO.	DRAWING NO.	PLATE
F	DACW21-88-B-0082	RR5E-1303	P-249

SCALE: FEBRUARY 1988 SHEET

P-249

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON
U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

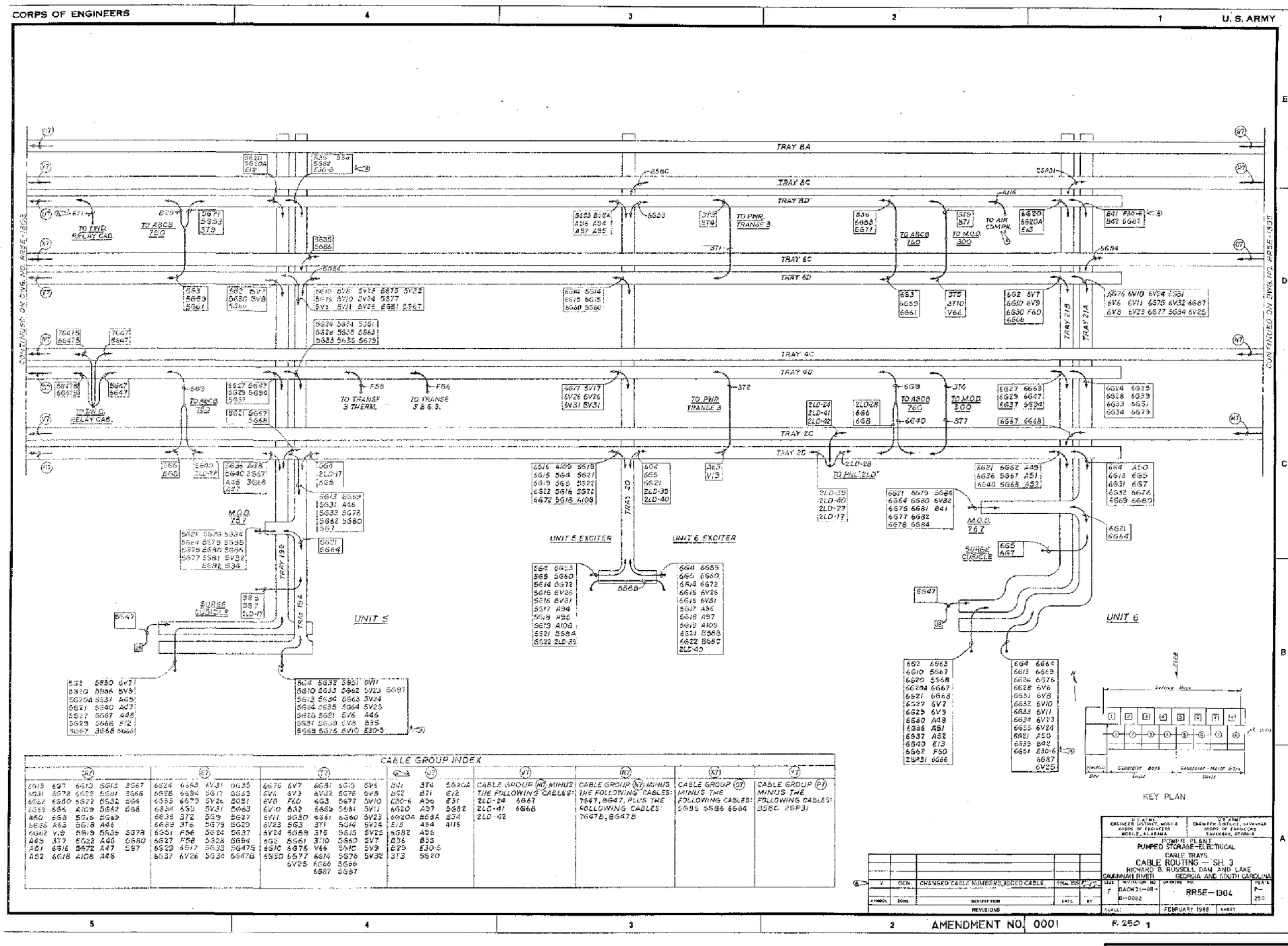
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-89

SCALE: NONE SHEET

101RRP_R089_CESAS_RR5E1303.DGN CESAS_RR5E1303.TIF
101RRP_TBLK.DGN

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r089_cesas_rr5e1303.dgn
11/05/2003
k6enxndt

...\101rrp_r089_cesas_rr5e1303.dgn 11/05/2003 07:39:20 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

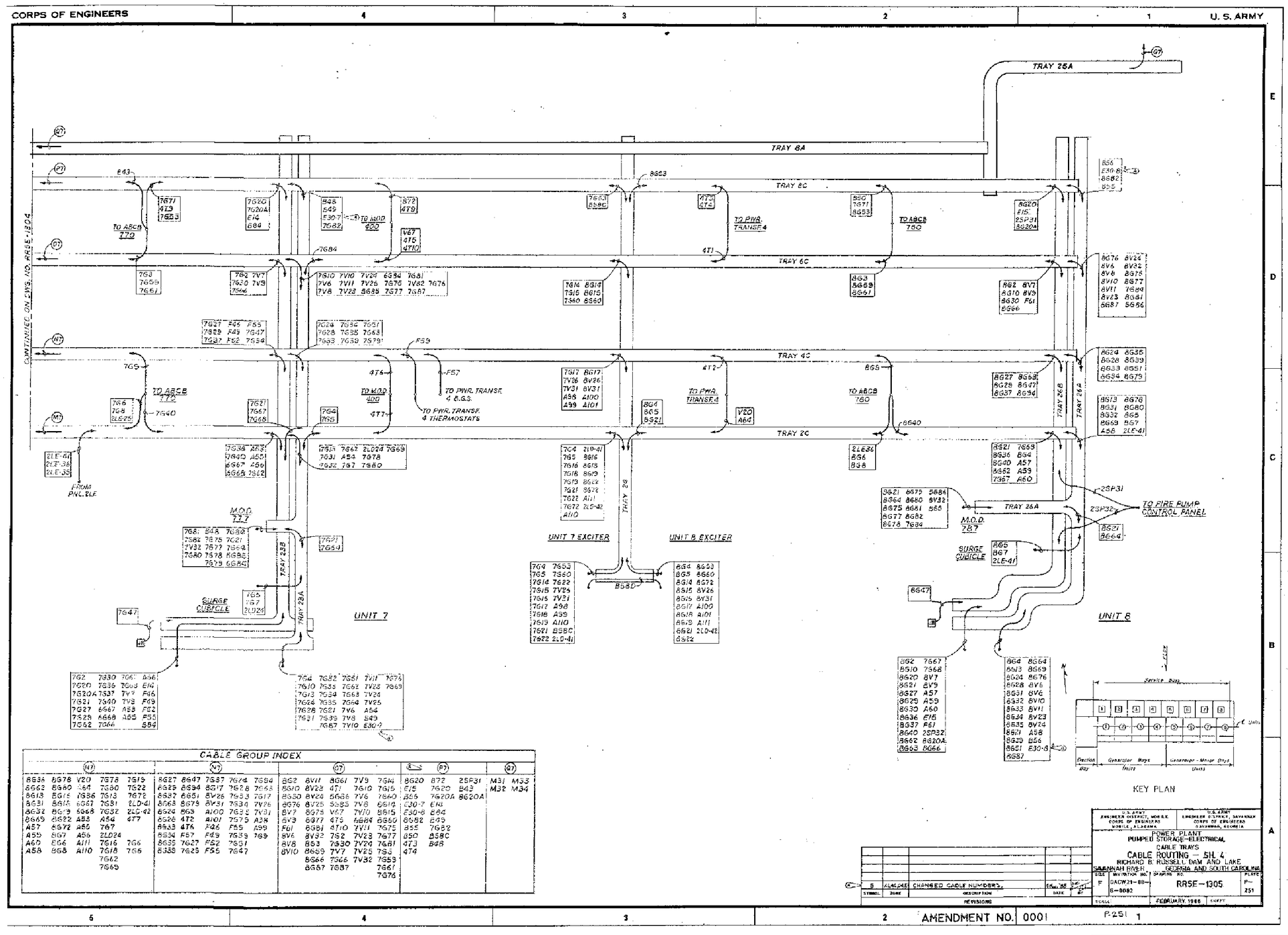
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-90

SCALE: NONE SHEET

101RRP_R090_CESAS_RR5E1304.DGN
101RRP_TBLK.DGN
CESAS_RR5E1304.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r090_cesas_rr5e1304.dgn
11/05/2003
k6enxndt

...\101rrp_r090_cesas_rr5e1304.dgn 11/05/2003 07:39:55 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-91

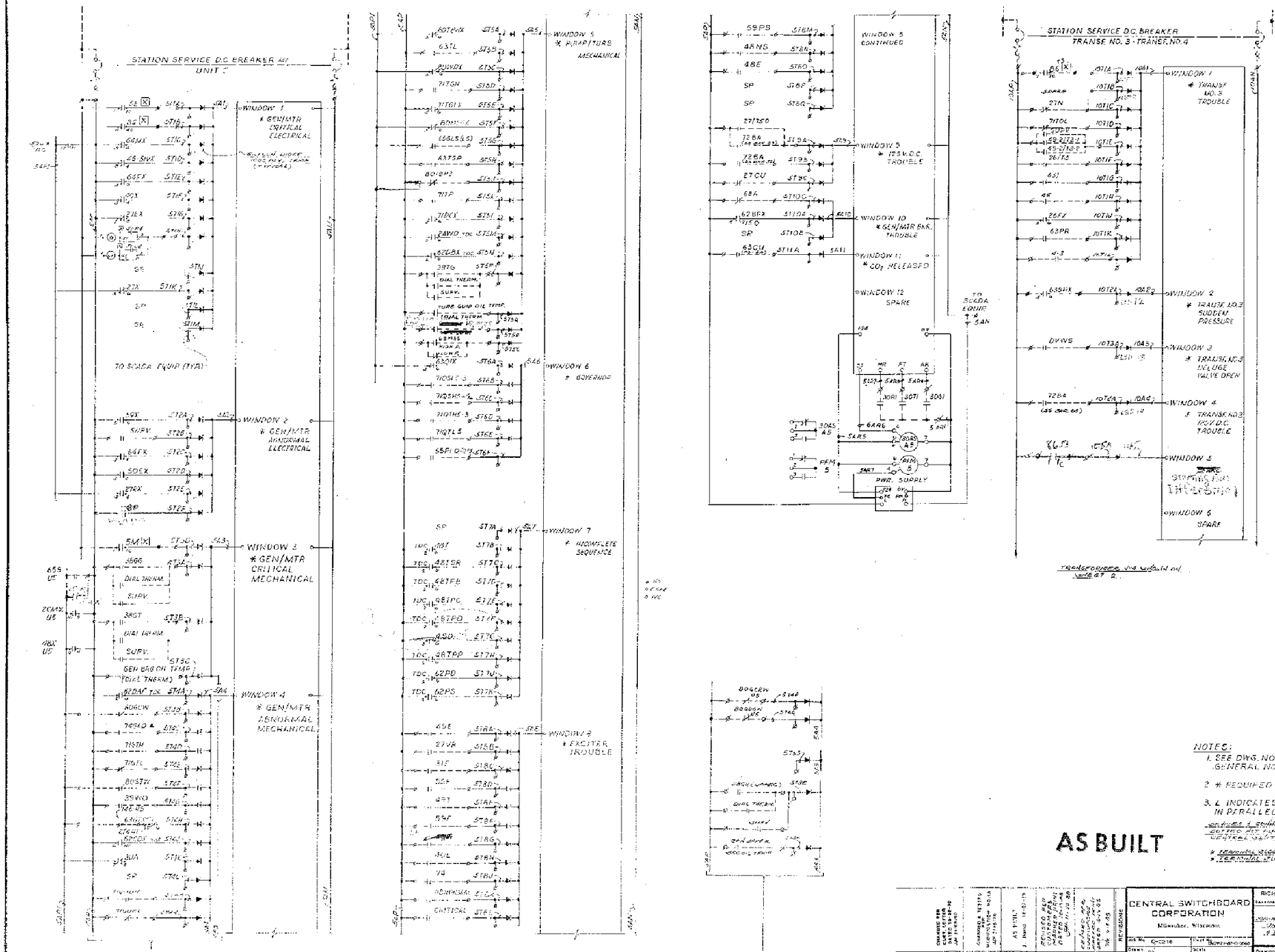
SCALE: NONE SHEET

101RRP_R091_CESAS_RR5E1305.DGN
101RRP_TBLK.DGN
CESAS_RR5E1305.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r091_cesas_rr5e1305.dgn
11/05/2003
k6enxndt

...\101rrp_r091_cesas_rr5e1305.dgn 11/05/2003 07:40:26 AM

CORPS OF ENGINEERS — U. S. ARMY



NOTES:
1. SEE DWG. NO. E-10035 FOR GENERAL NOTES.
2. * REQUIRED WINDOW ENGRAVING.
3. L INDICATES A GROUP OF CONTACTS IN PARALLEL.

AS BUILT

REVISIONS				
5	CHANGED PER CONTRACT MOD. DATED 28-8-90			
4	CHANGED PER CONTRACT MOD. DATED 19-9-90			
3	AS BUILT			
2	REVISED PER CONTRACT MOD. DATED 8-12-89			
1	CHANGED PER CONTRACT MOD. DATED 6-2-88			

CENTRAL SWITCHBOARD CORPORATION
Milwaukee, Wisconsin

RICHARD B. RUSSELL DAM and LAKE
Savannah River — Georgia and South Carolina

DATE 6-23-86 — Drawn F.D. — Checked — Scale — Approved

Drawing No. E-10060 SHT 1 OF 4 REV 5

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

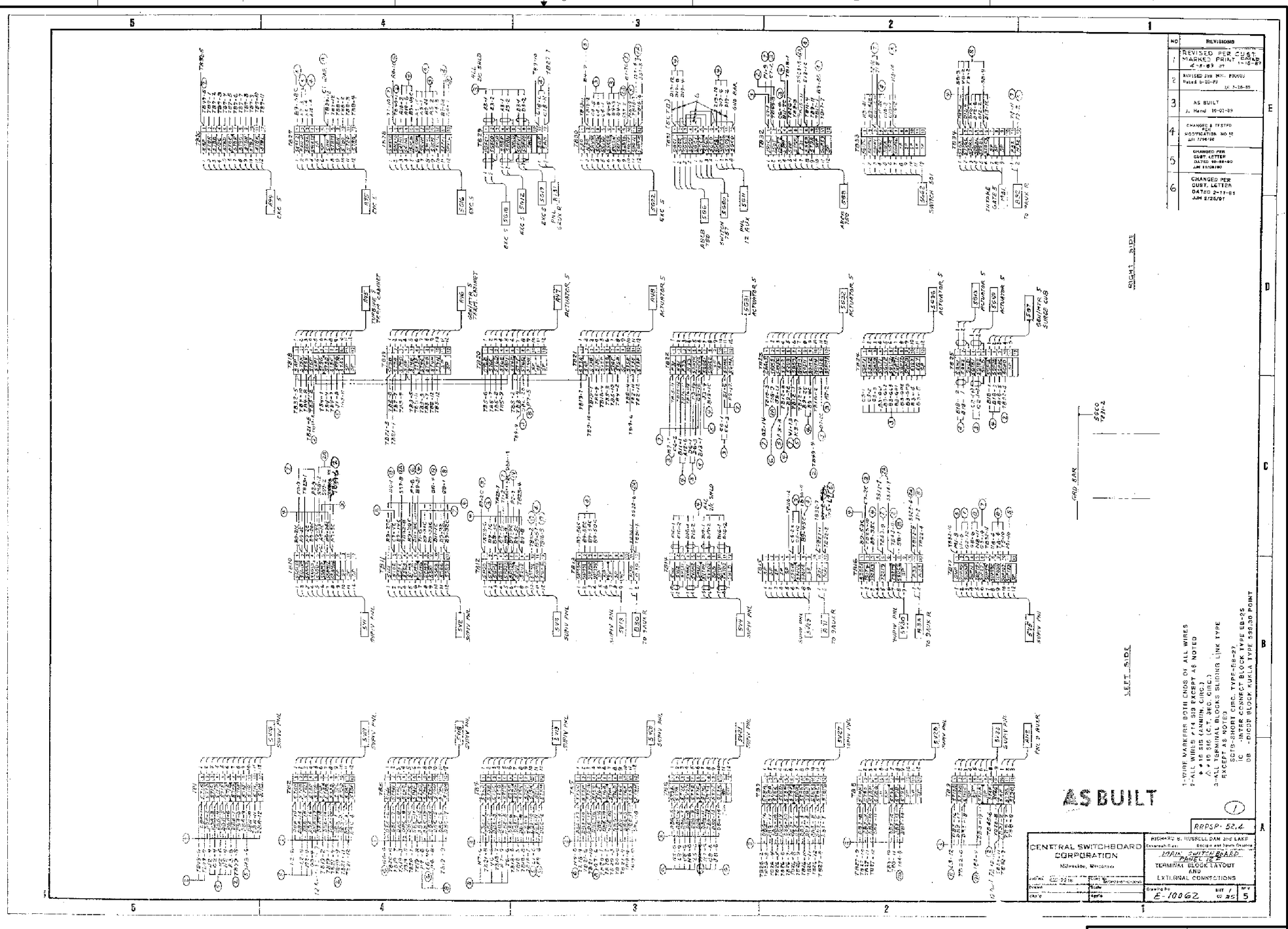
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-92

SCALE: NONE — SHEET

101RRP_R092_CS_E10060_01.DGN 101RRP_TBLK.DGN CS_E10060_01.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r092_cs_e10060_01.dgn 11/05/2003 k6enxndt

...\101rrp_r092_cs_e10060_01.dgn 11/05/2003 07:40:58 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

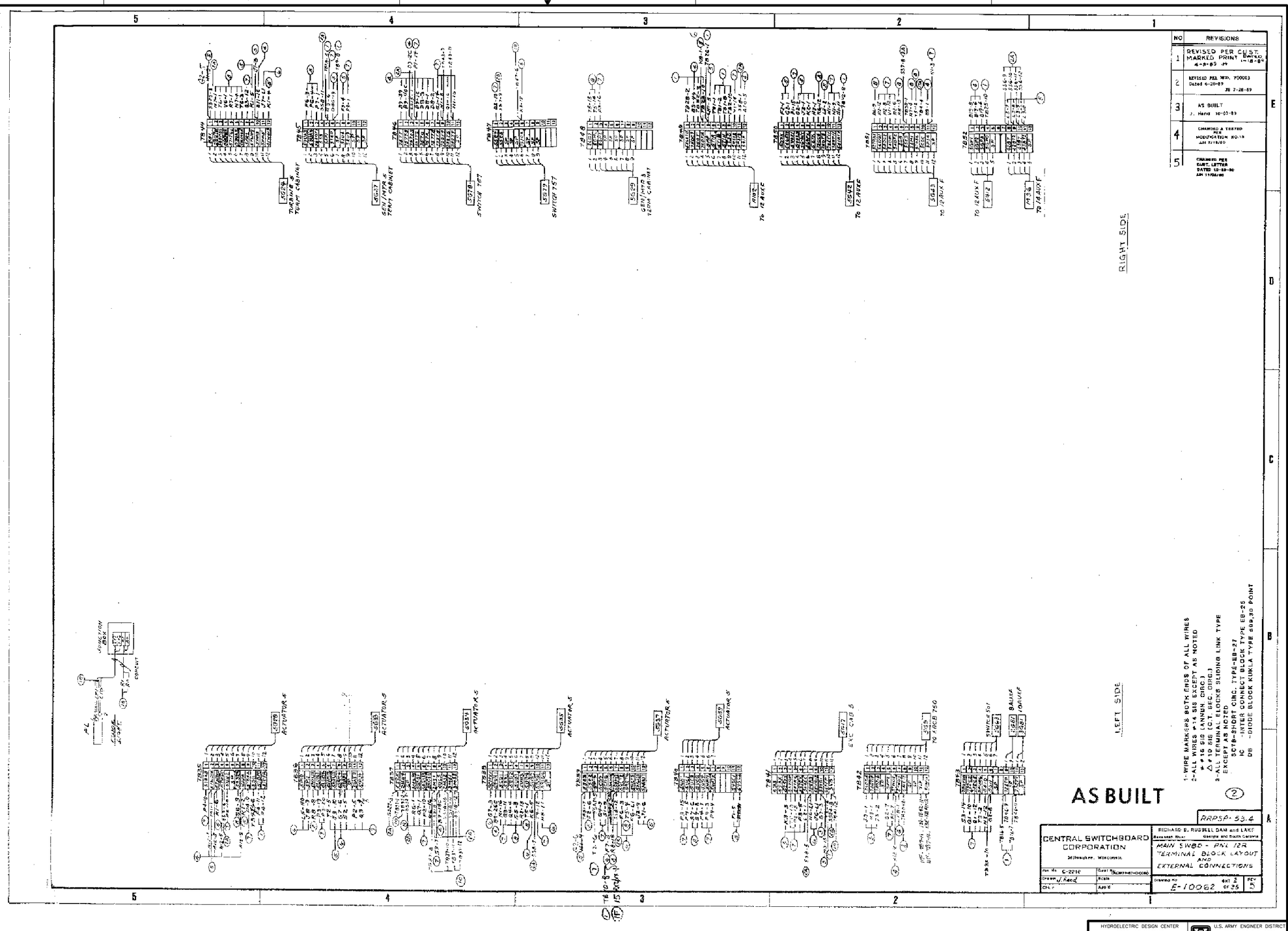
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-93

SCALE: NONE SHEET

101RRP_R093_CS_E10062_01.DGN
101RRP_TBLK.DGN
CS_E10062_01.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r093_cs_e10062_01.dgn
11/05/2003
k6enxndt

...\101rrp_r093_cs_e10062_01.dgn 11/05/2003 07:41:32 AM



HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

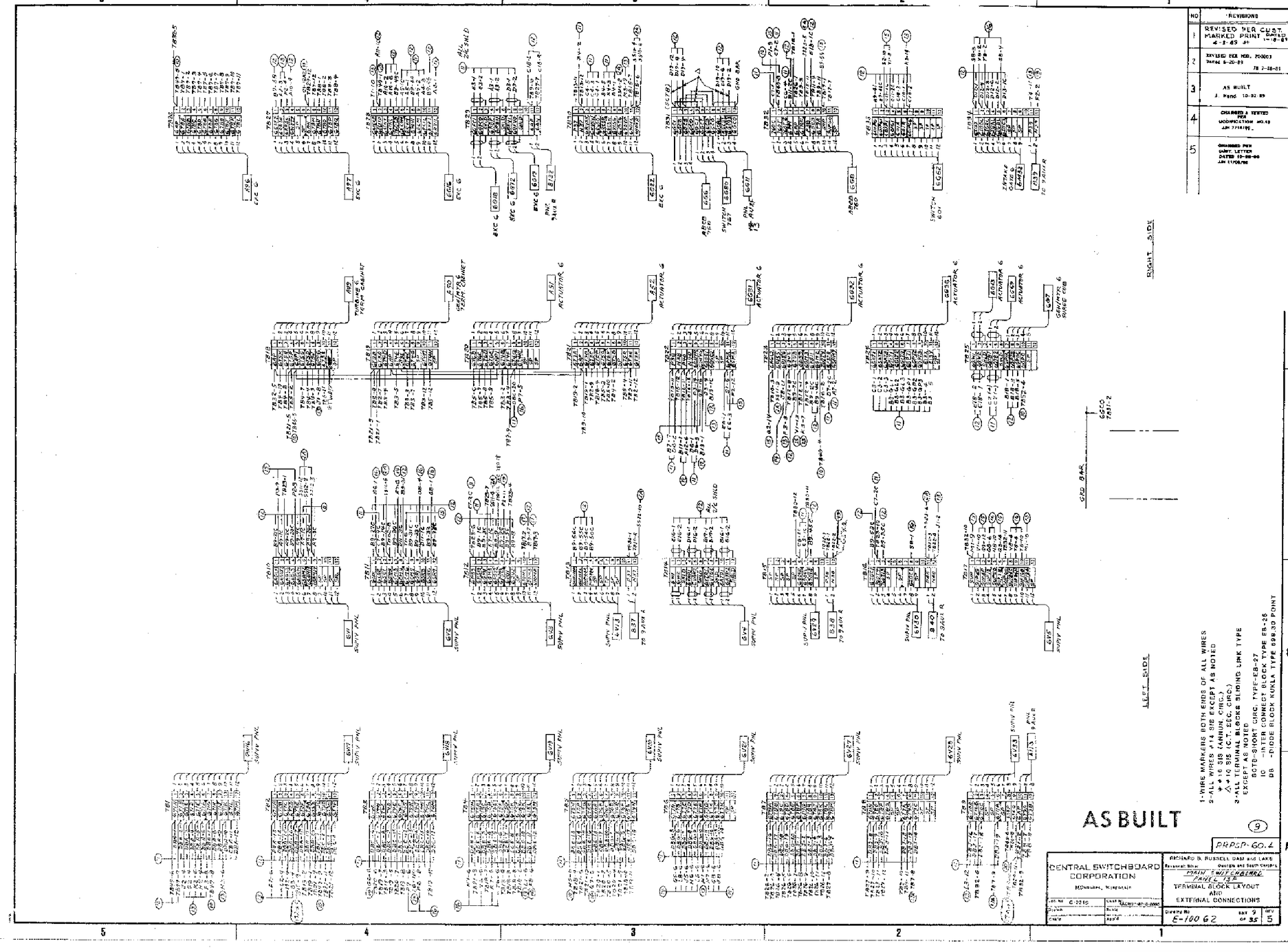
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-94

SCALE: NONE SHEET

101RRP_R094_CS_E10062_02.DGN
101RRP_TBLK.DGN
CS_E10062_02.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r094_cs_e10062_02.dgn
11/05/2003
keenxndt

...\101rrp_r094_cs_e10062_02.dgn 11/05/2003 07:42:07 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

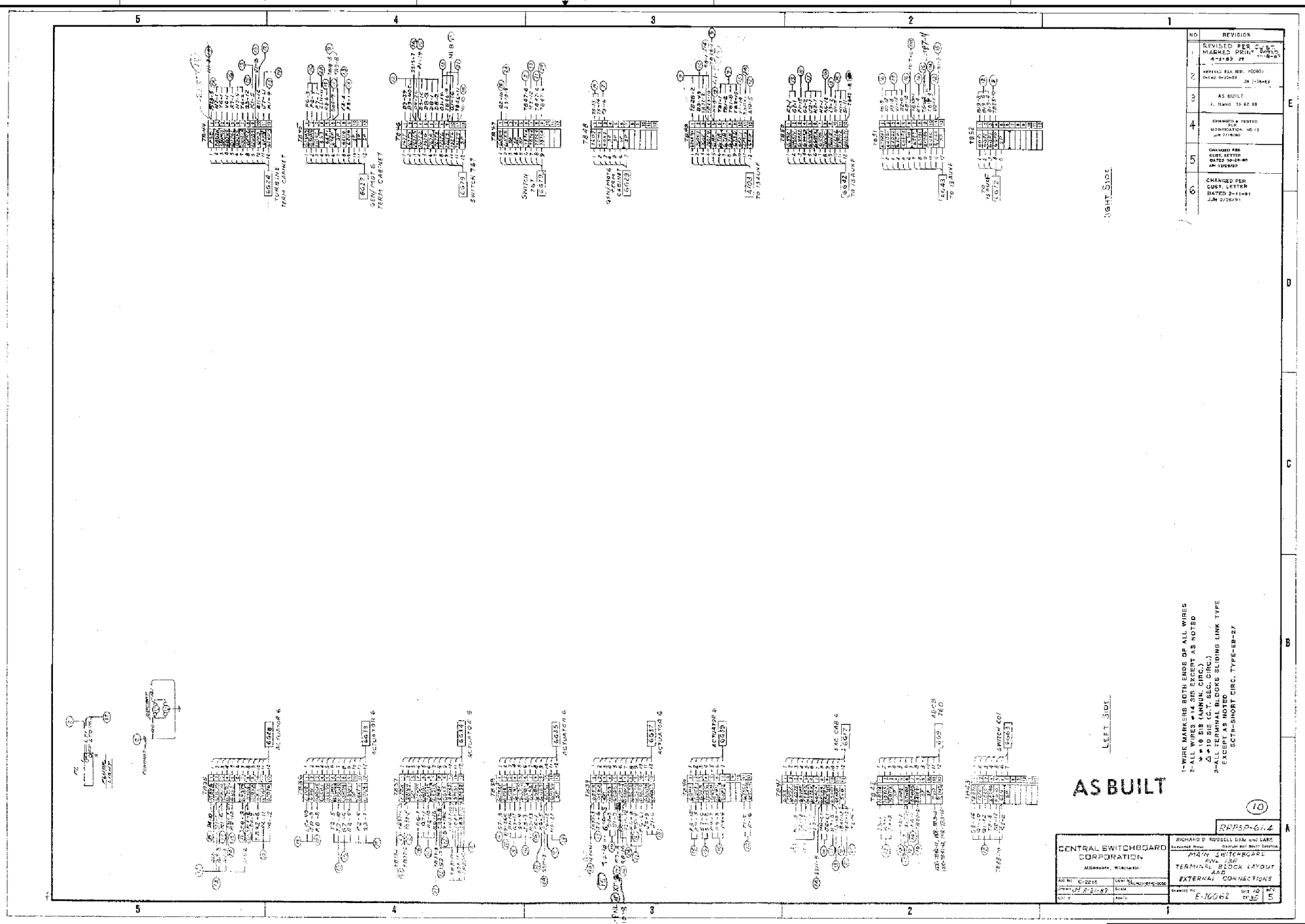
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-95

SCALE: NONE SHEET

101RRP_R095_CS_E10062_09.DGN
101RRP_TBLK.DGN
CS_E10062_09.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r095_cs_e10062_09.dgn
11/05/2003
k6enxndt

...\101rrp_r095_cs_e10062_09.dgn 11/05/2003 07:42:39 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

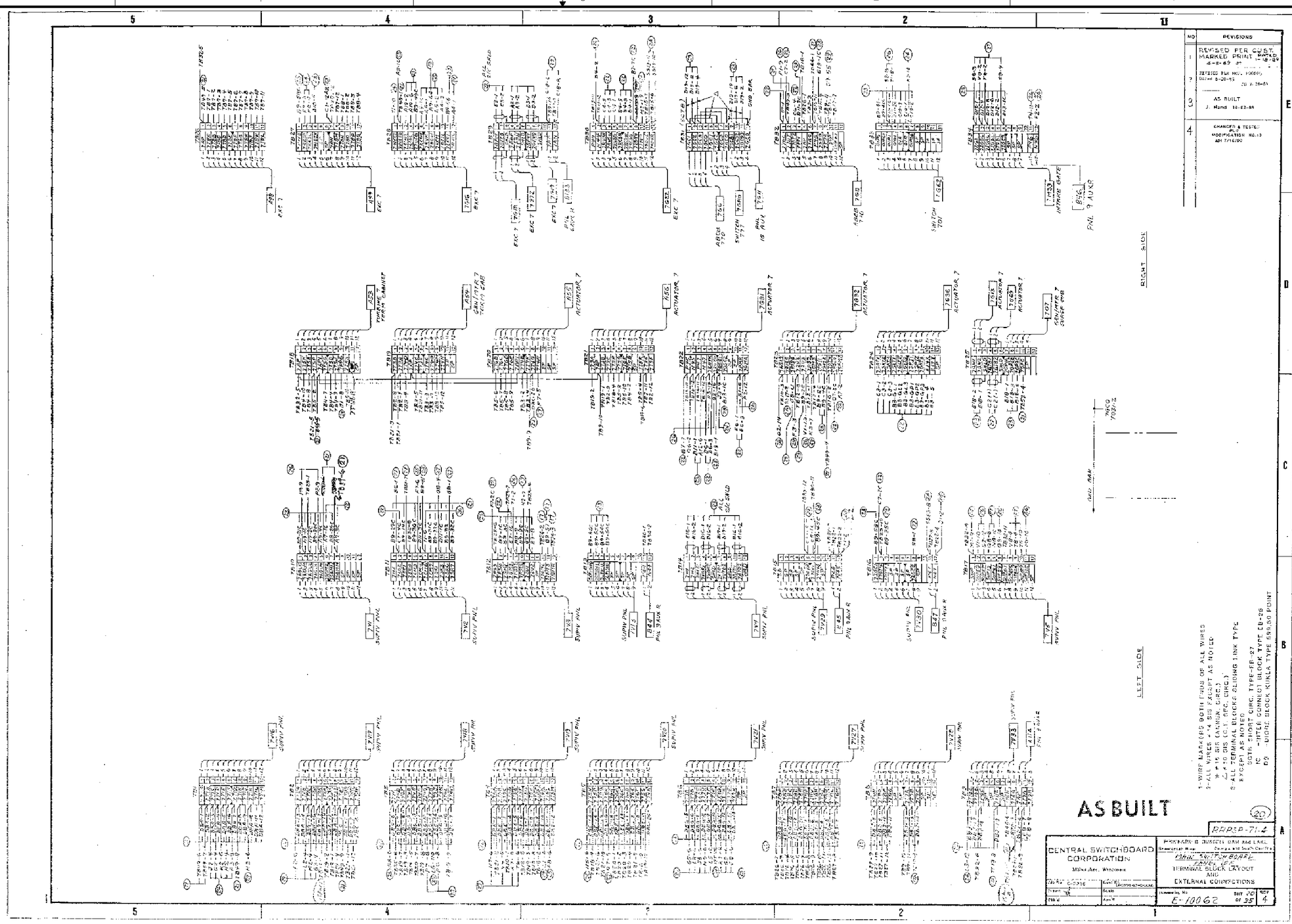
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-96

SCALE: NONE SHEET

101RRP_R096_CS_E10062_10.DGN
101RRP_TBLK.DGN
CS_E10062_10.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r096_cs_e10062_10.dgn
11/05/2003
k6enxndt

...\101rrp_r096_cs_e10062_10.dgn 11/05/2003 07:43:08 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

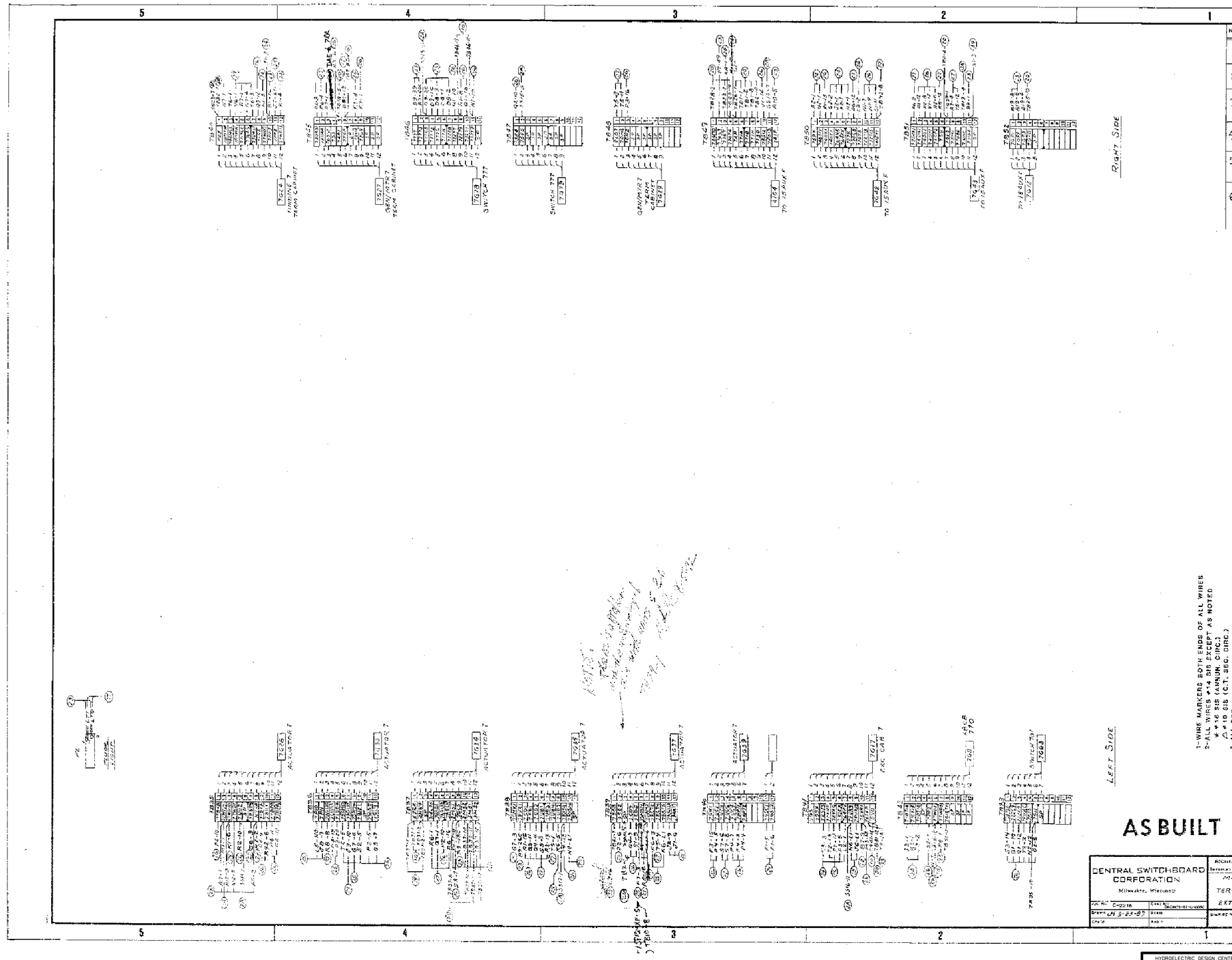
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-97

SCALE: NONE SHEET

101RRP_R097_CS_E10062_20.DGN
101RRP_TBLK.DGN
CS_E10062_20.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r097_cs_e10062_20.dgn
11/05/2003
k6enxrdt

...\101rrp_r097_cs_e10062_20.dgn 11/05/2003 07:43:45 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

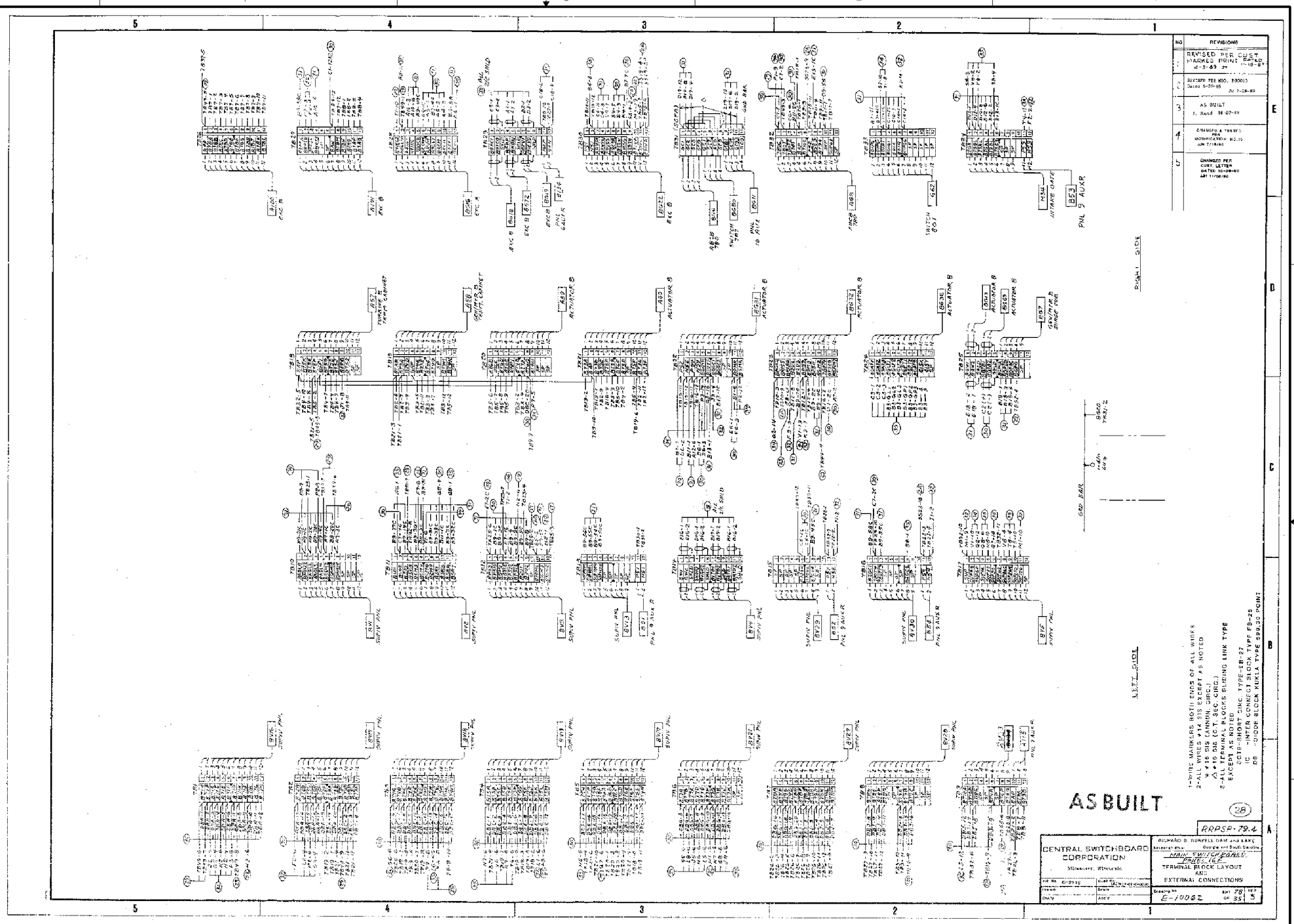
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-98

SCALE: NONE SHEET

101RRP_R098_CS_E10062_21.DGN
101RRP_TBLK.DGN
CS_E10062_21.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r098_cs_e10062_21.dgn
11/05/2003
k6enxndt

...\101rrp_r098_cs_e10062_21.dgn 11/05/2003 07:44:13 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

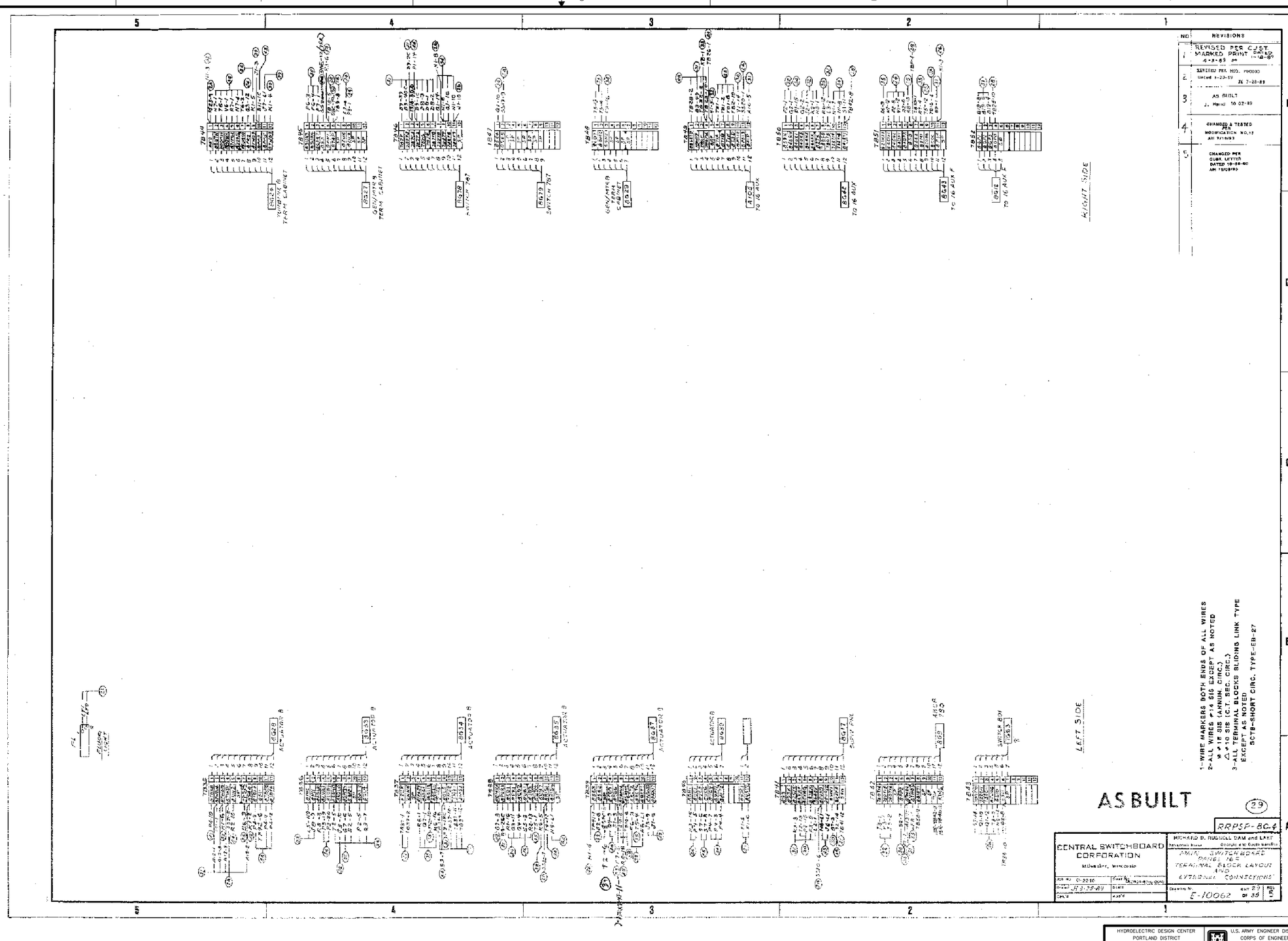
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-99

SCALE: NONE SHEET

101RRP_R099_CS_E10062_28.DGN
101RRP_TBLK.DGN
CS_E10062_28.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r099_cs_e10062_28.dgn
11/05/2003
k6enxrdt

...\101rrp_r099_cs_e10062_28.dgn 11/05/2003 07:44:45 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

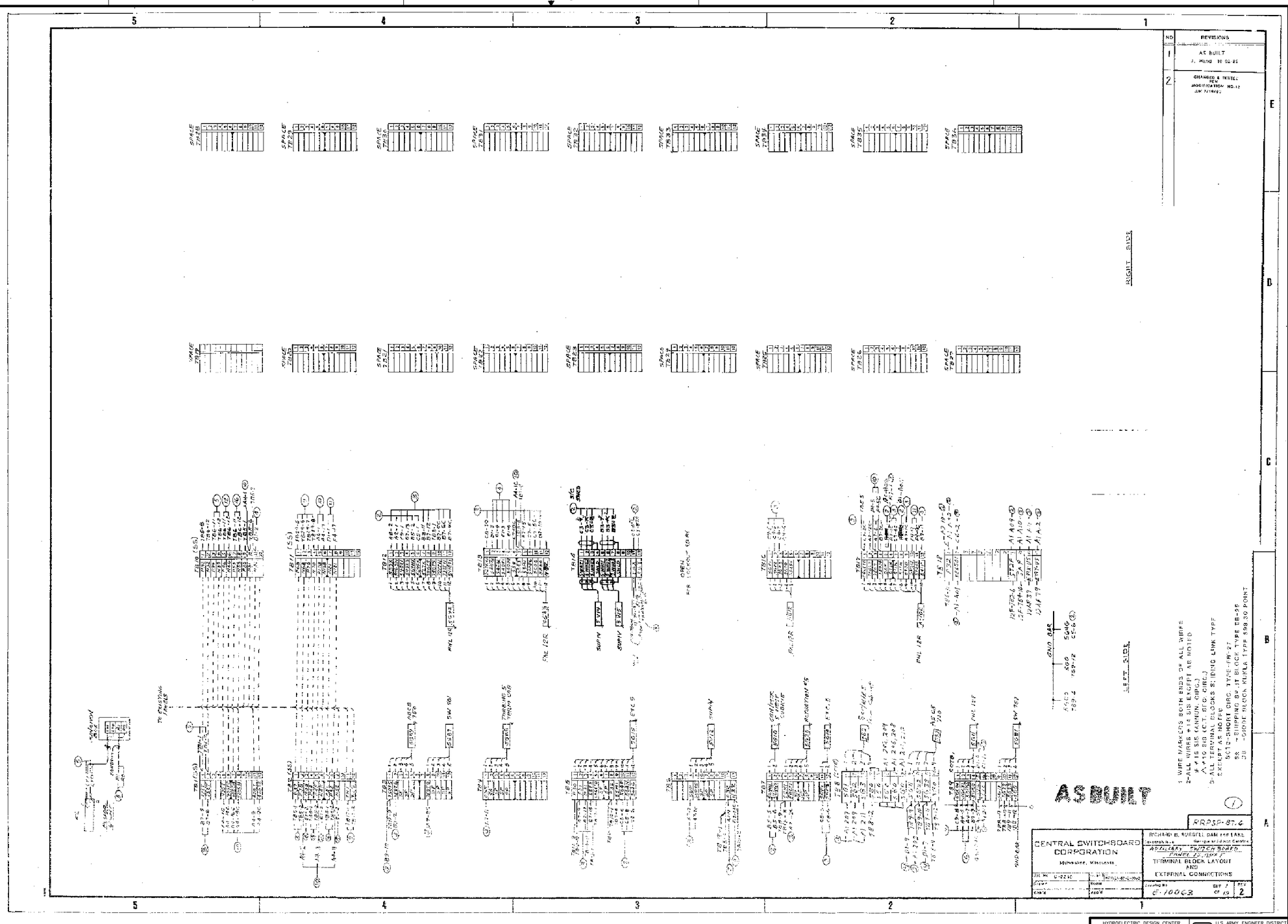
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-100

SCALE: NONE SHEET

101RRP_R100_CS_E10062_29.DGN
101RRP_TBLK.DGN
CS_E10062_29.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r100_cs_e10062_29.dgn
11/05/2003
k6enxnat

...\101rrp_r100_cs_e10062_29.dgn 11/05/2003 07:45:15 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

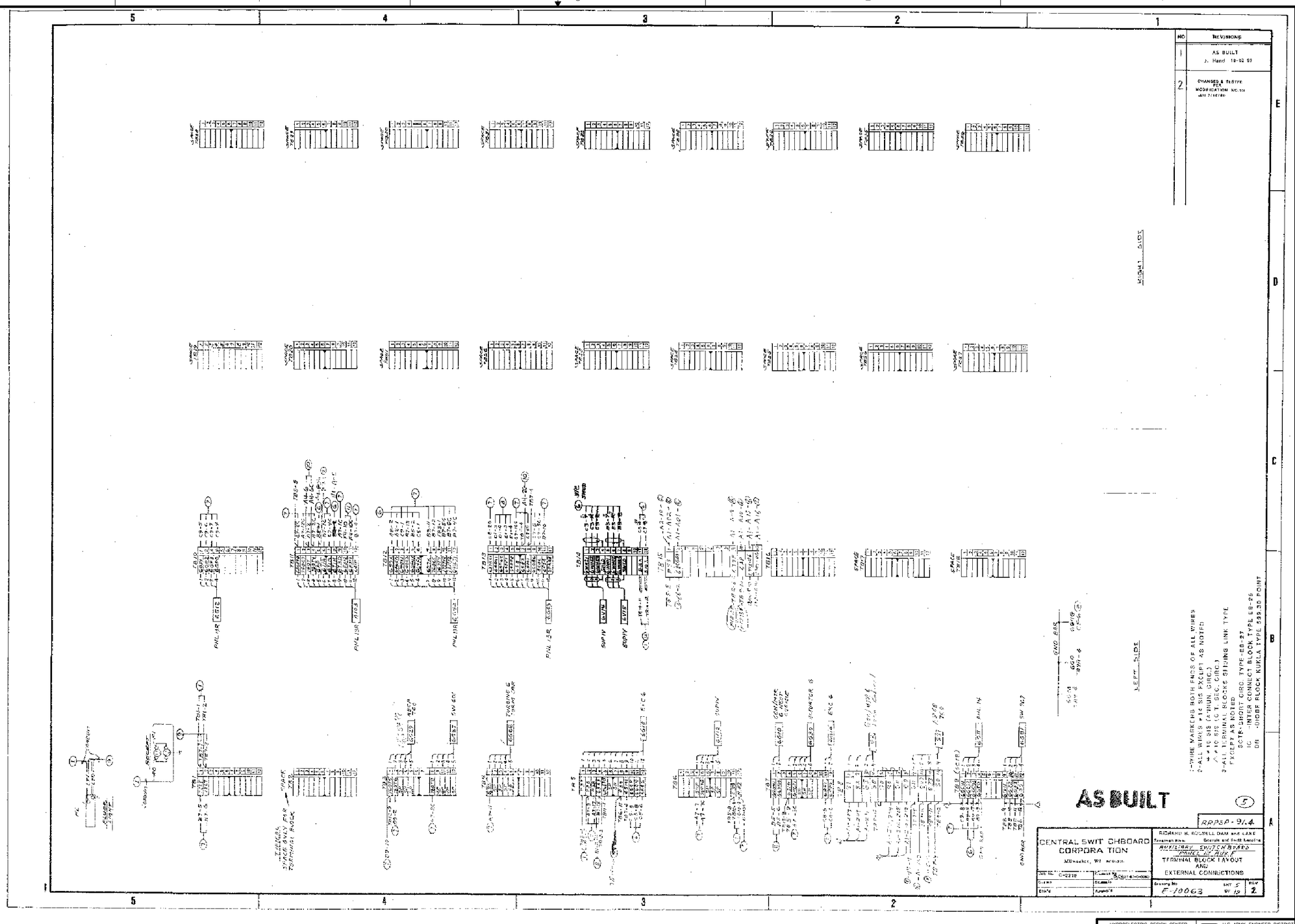
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-101

SCALE: NONE SHEET

101RRP_R101_CS_E10063_01.DGN
101RRP_TBLK.DGN
CS_E10063_01.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r101_cs_e10063_01.dgn
11/05/2003
k6enxrdt

...\101rrp_r101_cs_e10063_01.dgn 11/05/2003 07:45:50 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

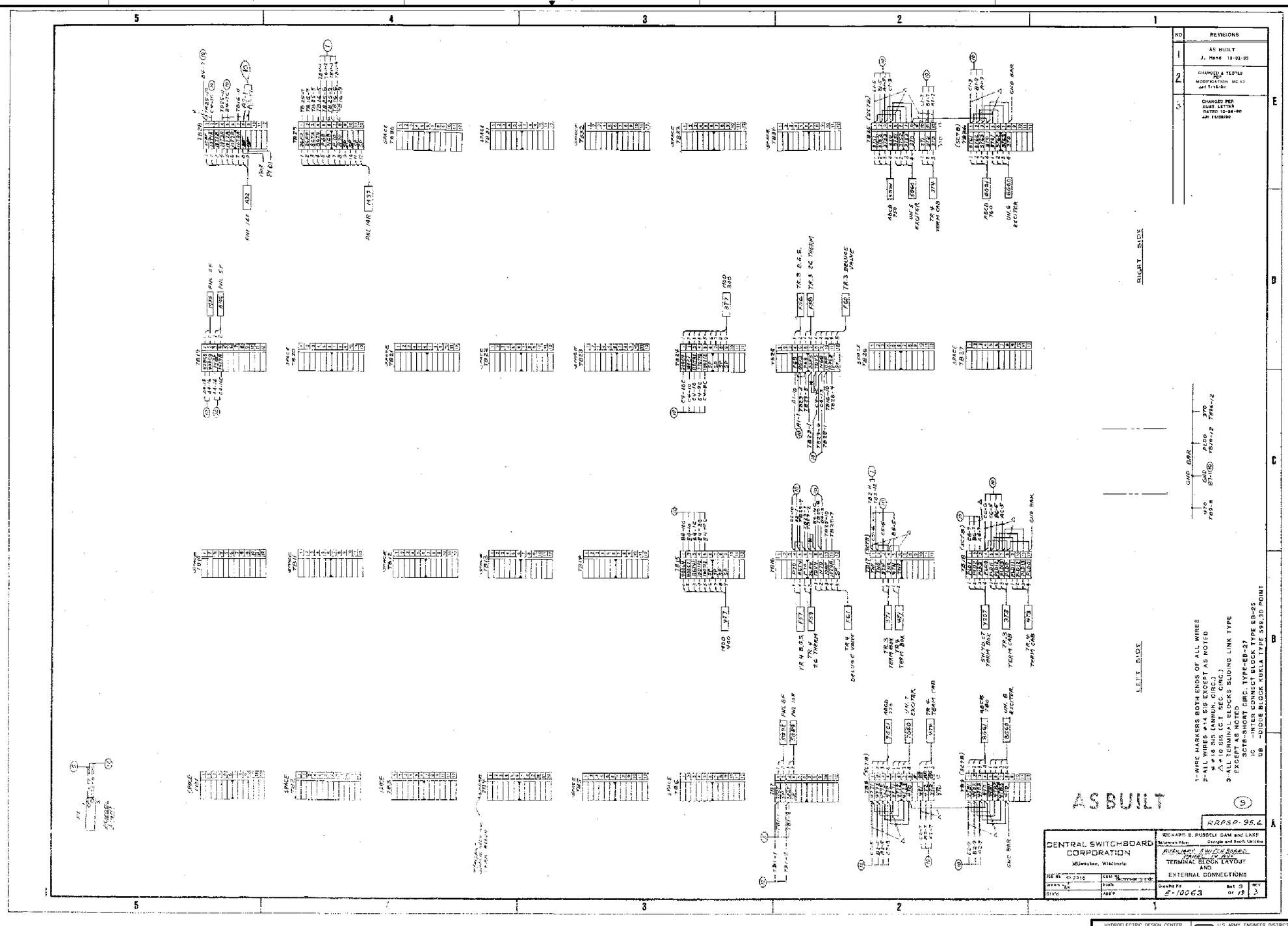
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-102

SCALE: NONE SHEET

101RRP_R102_CS_E10063_05.DGN
101RRP_TBLK.DGN
CS_E10063_05.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r102_cs_e10063_05.dgn
11/05/2003
k6enxndt

...\101rrp_r102_cs_e10063_05.dgn 11/05/2003 07:46:24 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-103

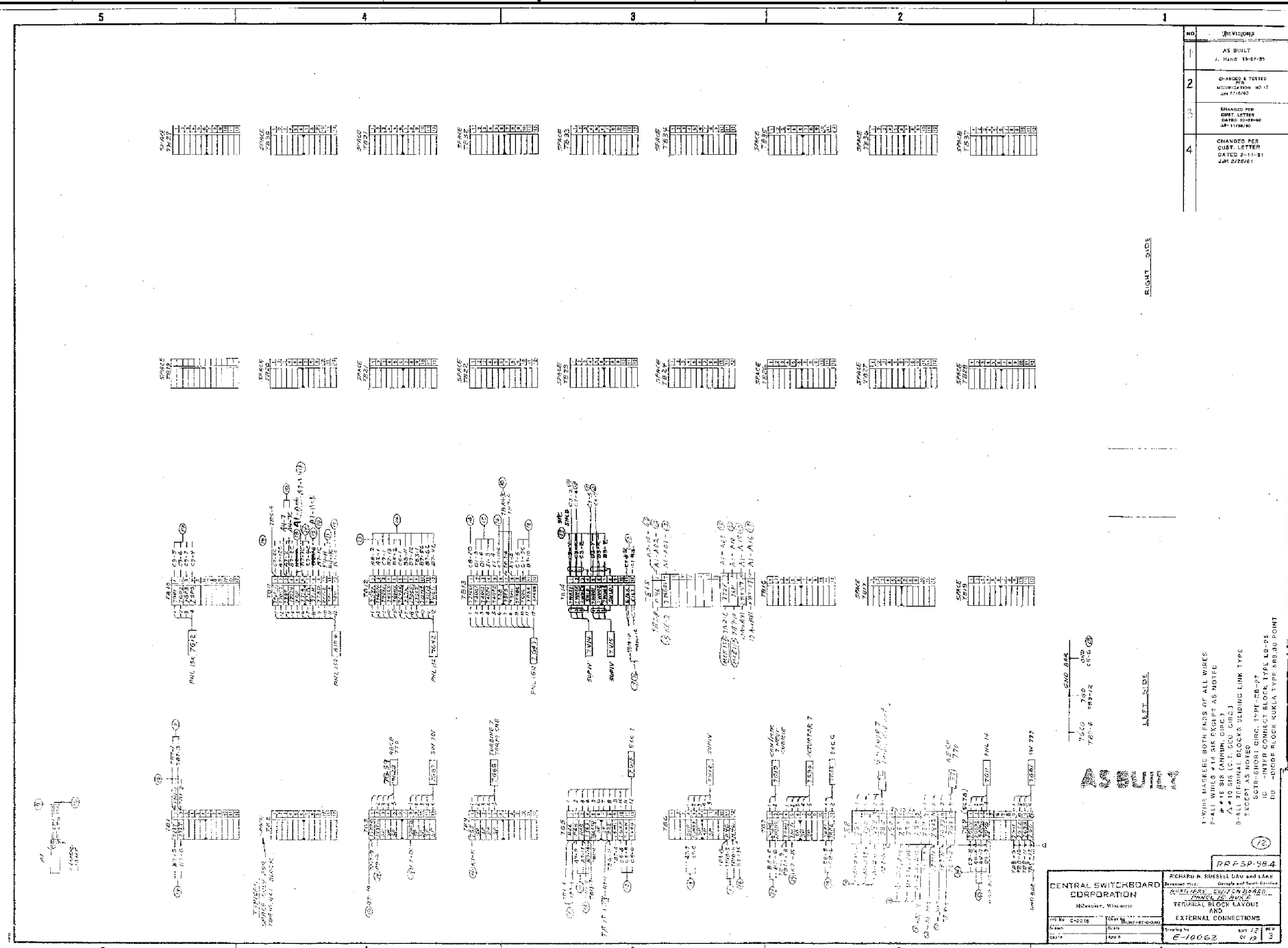
SCALE: NONE SHEET

101RRP_R103_CS_E10063_09.DGN
101RRP_TBLK.DGN
CS_E10063_09.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r103_cs_e10063_09.dgn
11/05/2003
k6enxrdt

...\101rrp_r103_cs_e10063_09.dgn 11/05/2003 07:46:57 AM

NO.	REVISIONS
1	AS BUILT J. Hand 10-07-89
2	CHANGED & TESTED PER MODIFICATION NO 12 JAN 27-1990
3	CHANGED PER CUST. LETTER DATED 10-29-90 JAN 11/08/90
4	CHANGED PER CUST. LETTER DATED 2-11-91 JAN 2/22/91



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

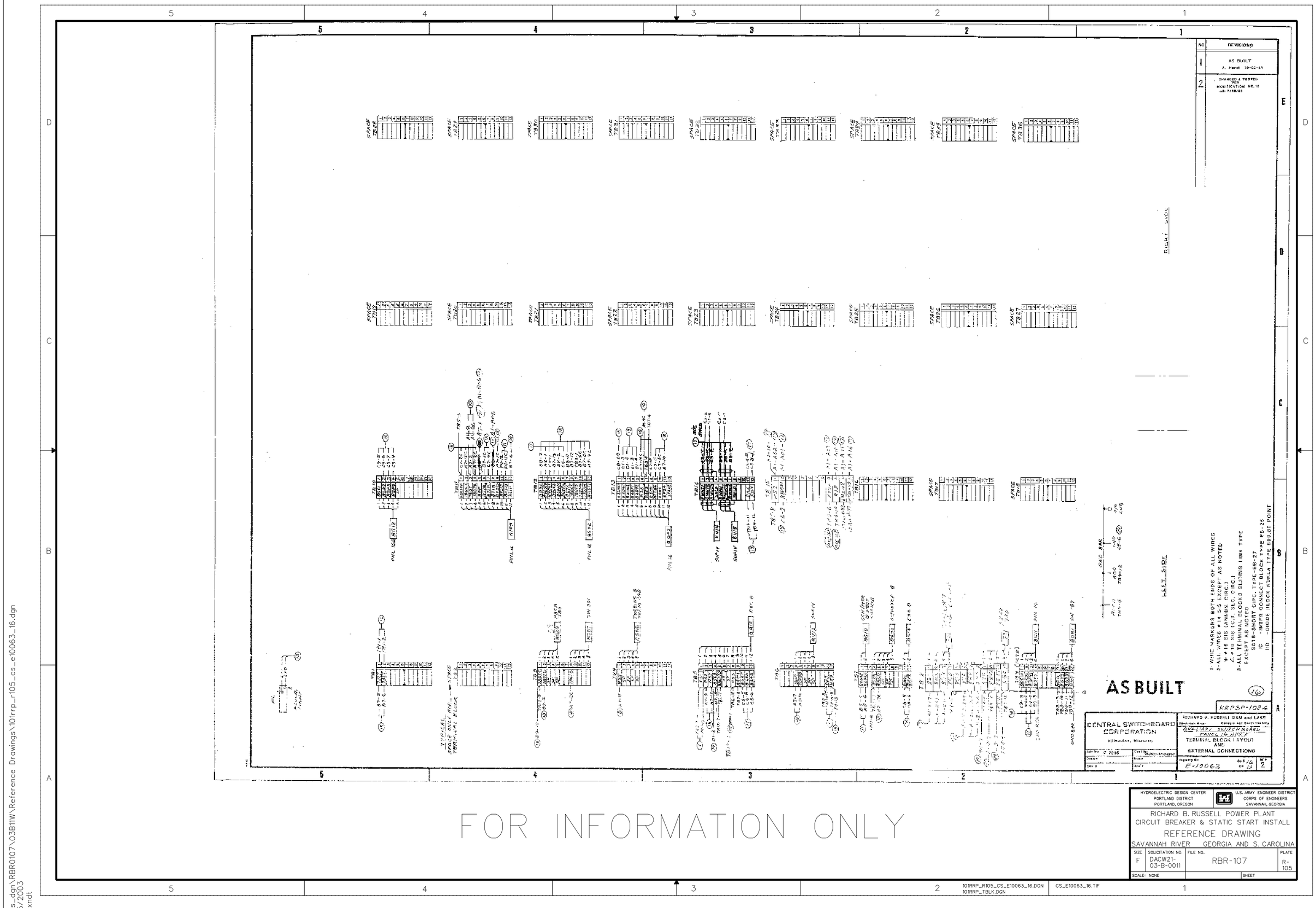
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-104

SCALE: NONE SHEET

101RRP_R104_CS_10063_12.DGN
101RRP_TBLK.DGN
CS_10063_12.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r104_cs_e10063_12.dgn
11/05/2003
k6enxndt

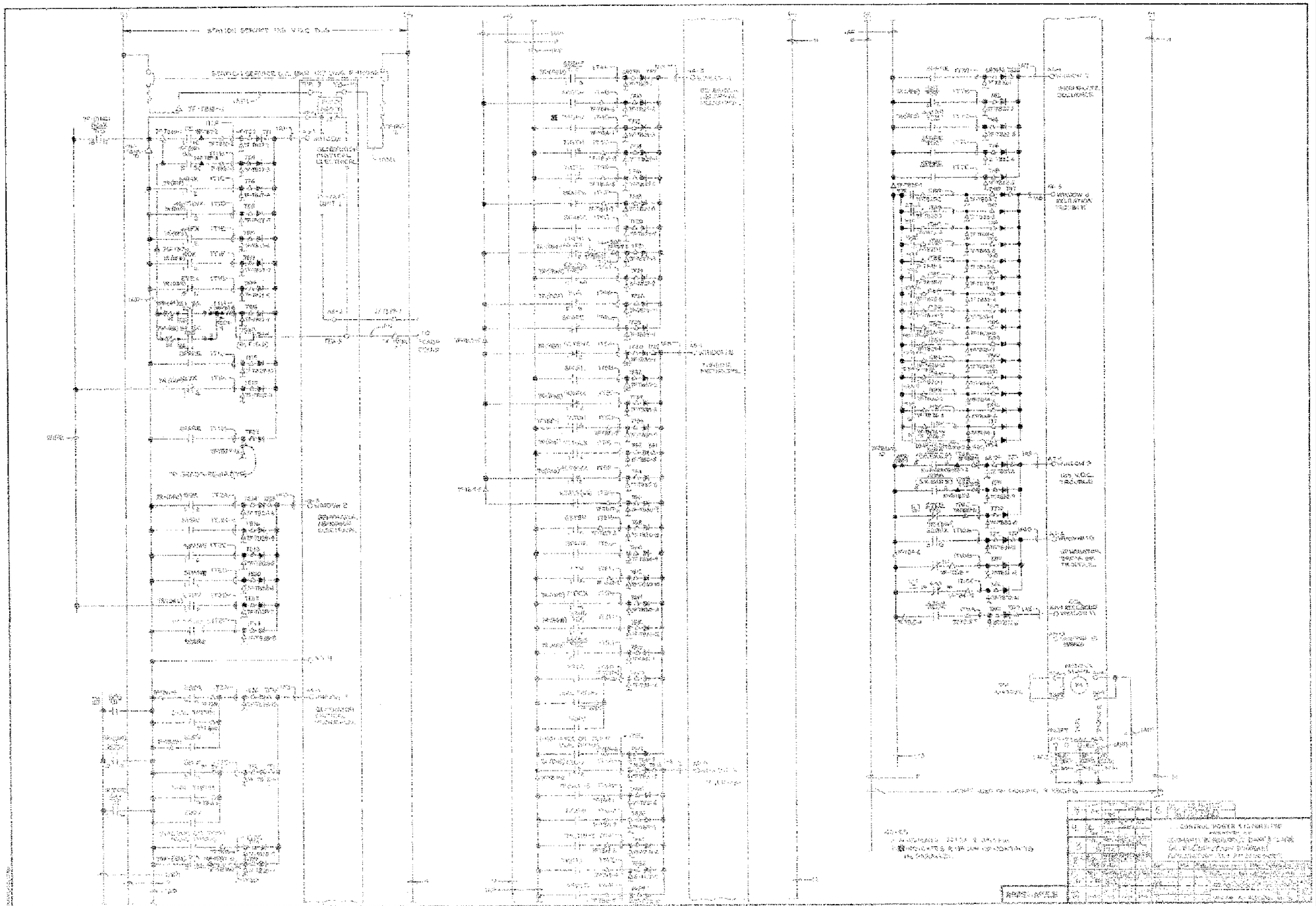
...\101rrp_r104_cs_e10063_12.dgn 11/05/2003 07:47:31 AM



FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r105_cs_e10063_16.dgn
11/05/2003
k6enxndt

...\101rrp_r105_cs_e10063_16.dgn 11/05/2003 07:48:04 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

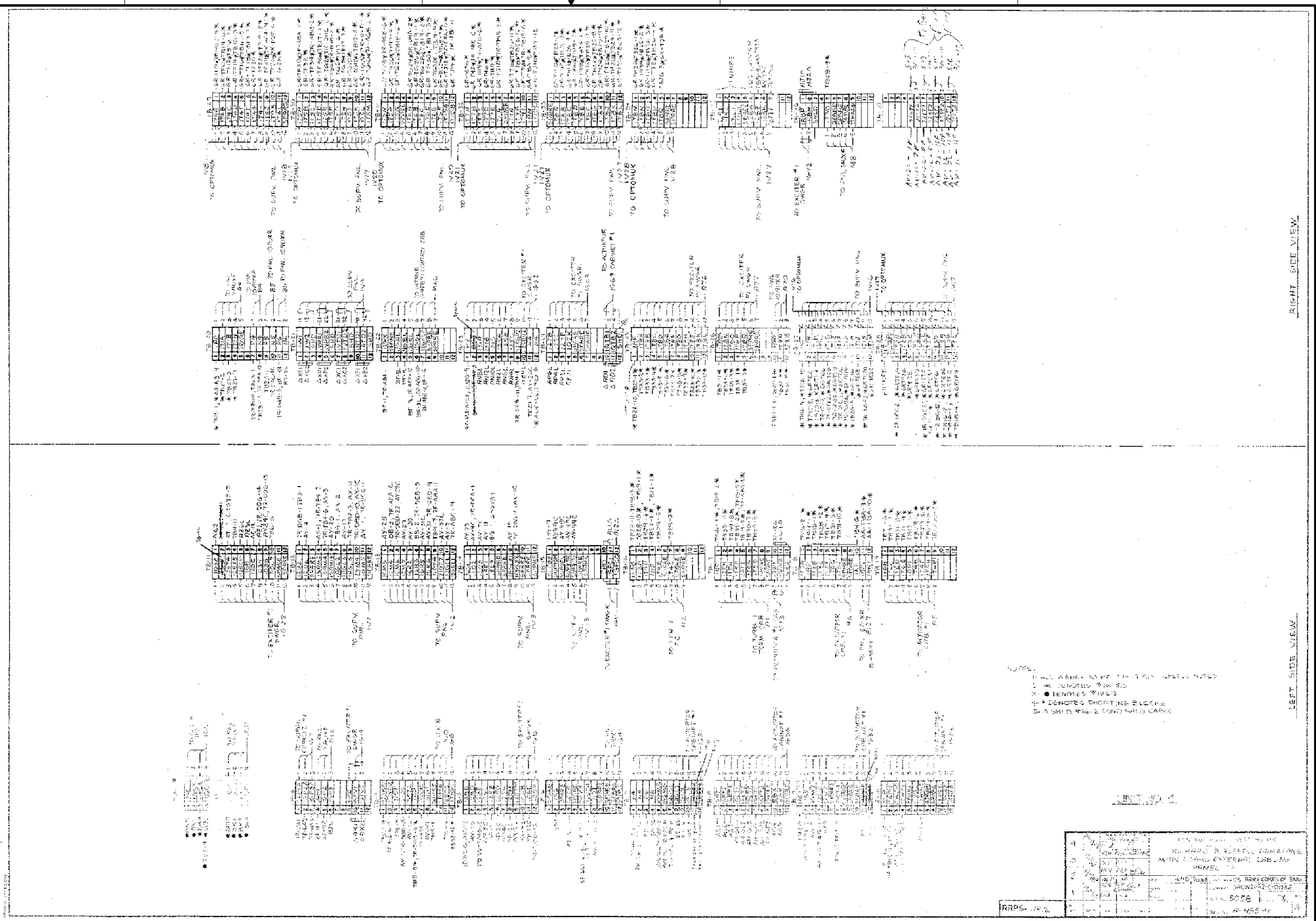
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-106

SCALE: NONE SHEET

101RRP_R106_CP_R43085_01.DGN
101RRP_TBLK.DGN
CP_R43085_01.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r106_cp_r43085_01.dgn
11/05/2003
k6enxrdt

...\101rrp_r106_cp_r43085_01.dgn 11/05/2003 07:48:40 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

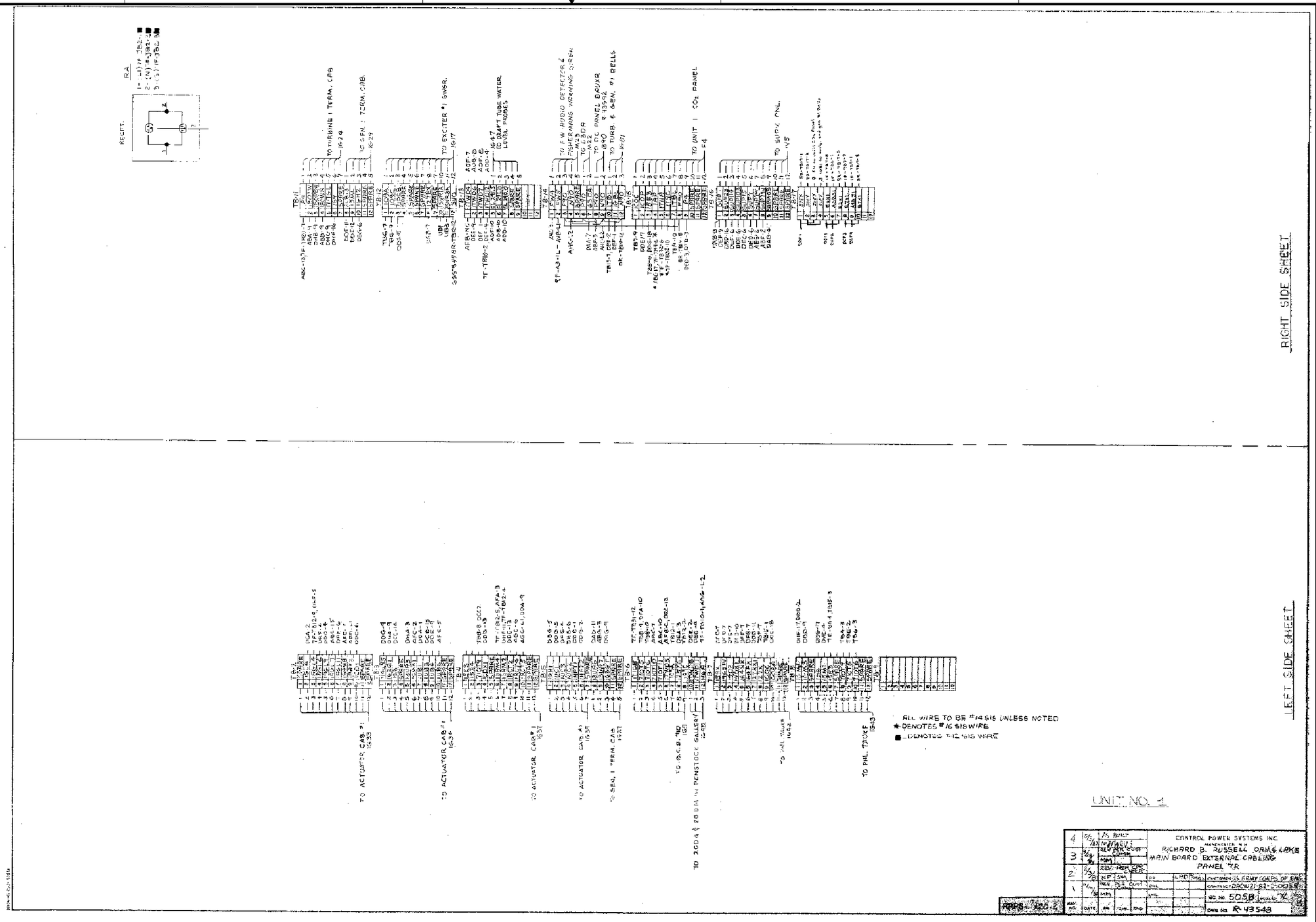
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-107

SCALE: NONE SHEET

101RRP_R107_CP_R43546.DGN
101RRP_TBLK.DGN
CP_R43546.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r107_cp_r43546.dgn
11/05/2003
k6enxndt

...\101rrp_r107_cp_r43546.dgn 11/05/2003 07:49:14 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

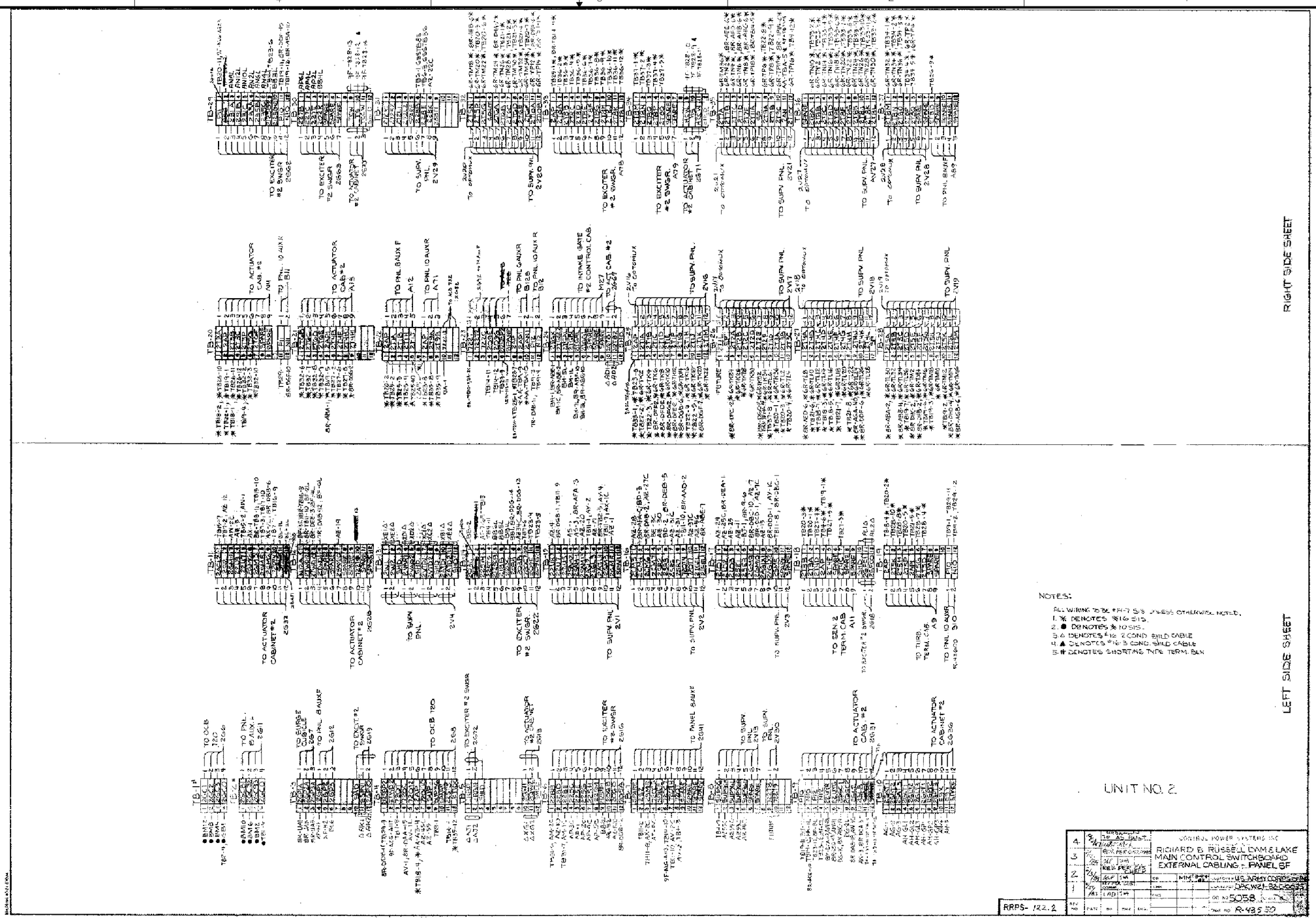
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-108

SCALE: NONE SHEET

101RRP_R108_CP_R43548.DGN
101RRP_TBLK.DGN
CP_R43548.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r108_cp_r43548.dgn
11/05/2003
k6enxndt

...\101rrp_r108_cp_r43548.dgn 11/05/2003 07:50:05 AM



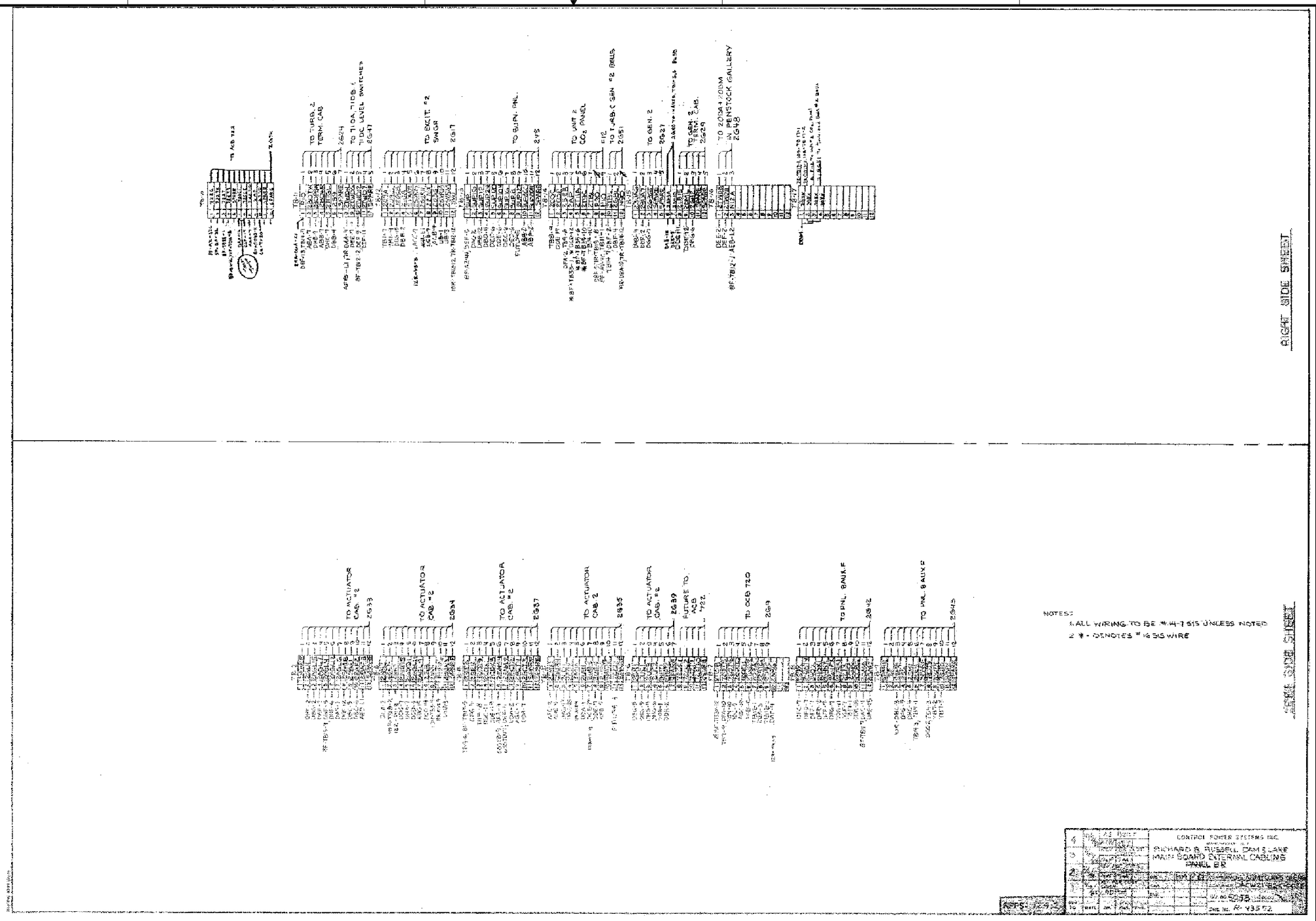
FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT CIRCUIT BREAKER & STATIC START INSTALL REFERENCE DRAWING SAVANNAH RIVER GEORGIA AND S. CAROLINA	
SIZE: F / SOLICITATION NO.: DACW21-03-B-0011	FILE NO.: RBR-107 / PLATE: R-109
SCALE: NONE	SHEET

101RRP_R109_CP_R43550.DGN
101RRP_TBLK.DGN
CP_R43550.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r109_cp_r43550.dgn
11/05/2003
k6enxrdt

...\101rrp_r109_cp_r43550.dgn 11/05/2003 07:50:40 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

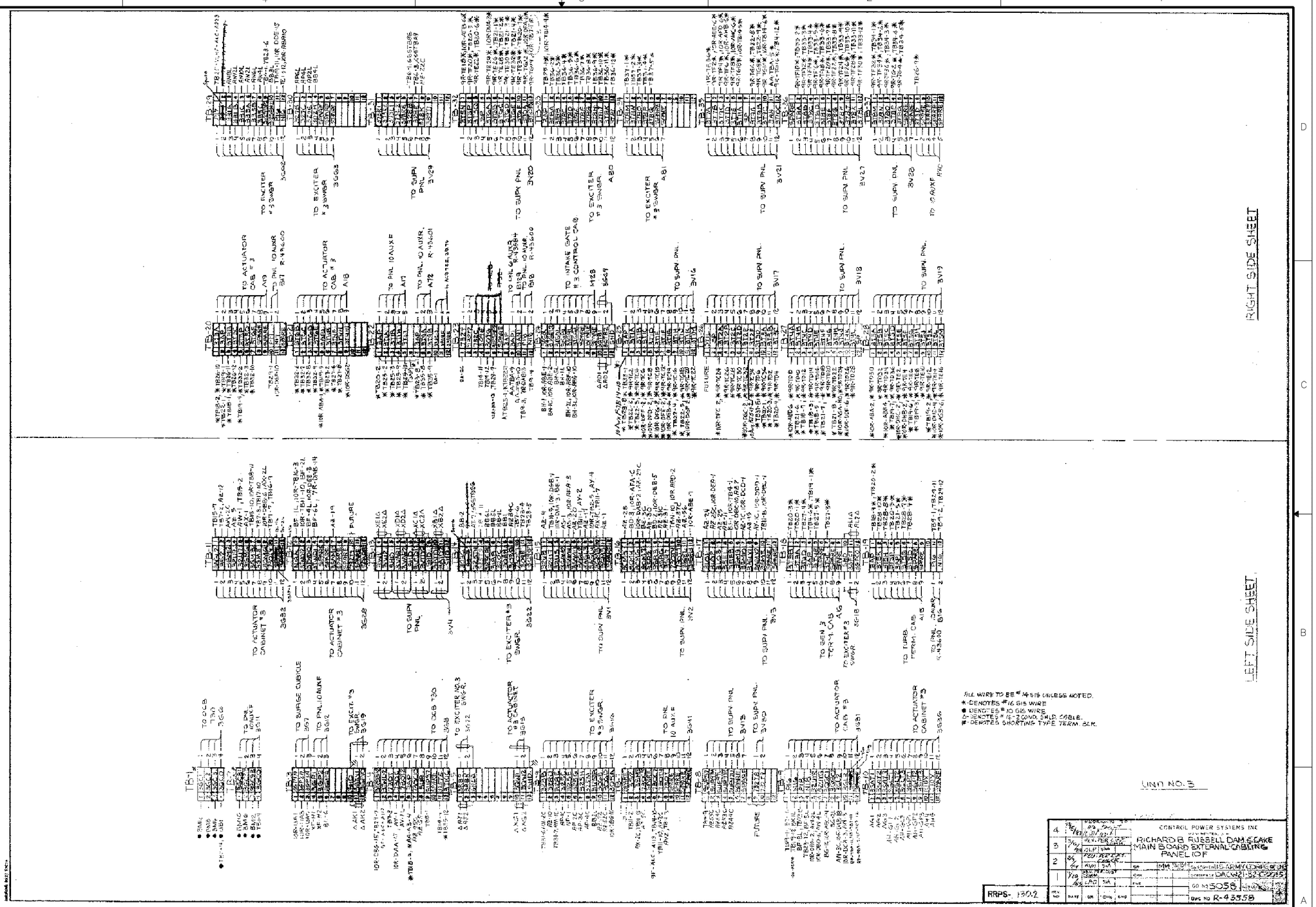
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-110

SCALE: NONE SHEET

101RRP_R110_CP_R43552.DGN
101RRP_TBLK.DGN
CP_R43552.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r110_cp_r43552.dgn
11/05/2003
k6enxndt

...\101rrp_r110_cp_r43552.dgn 11/05/2003 07:51:13 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

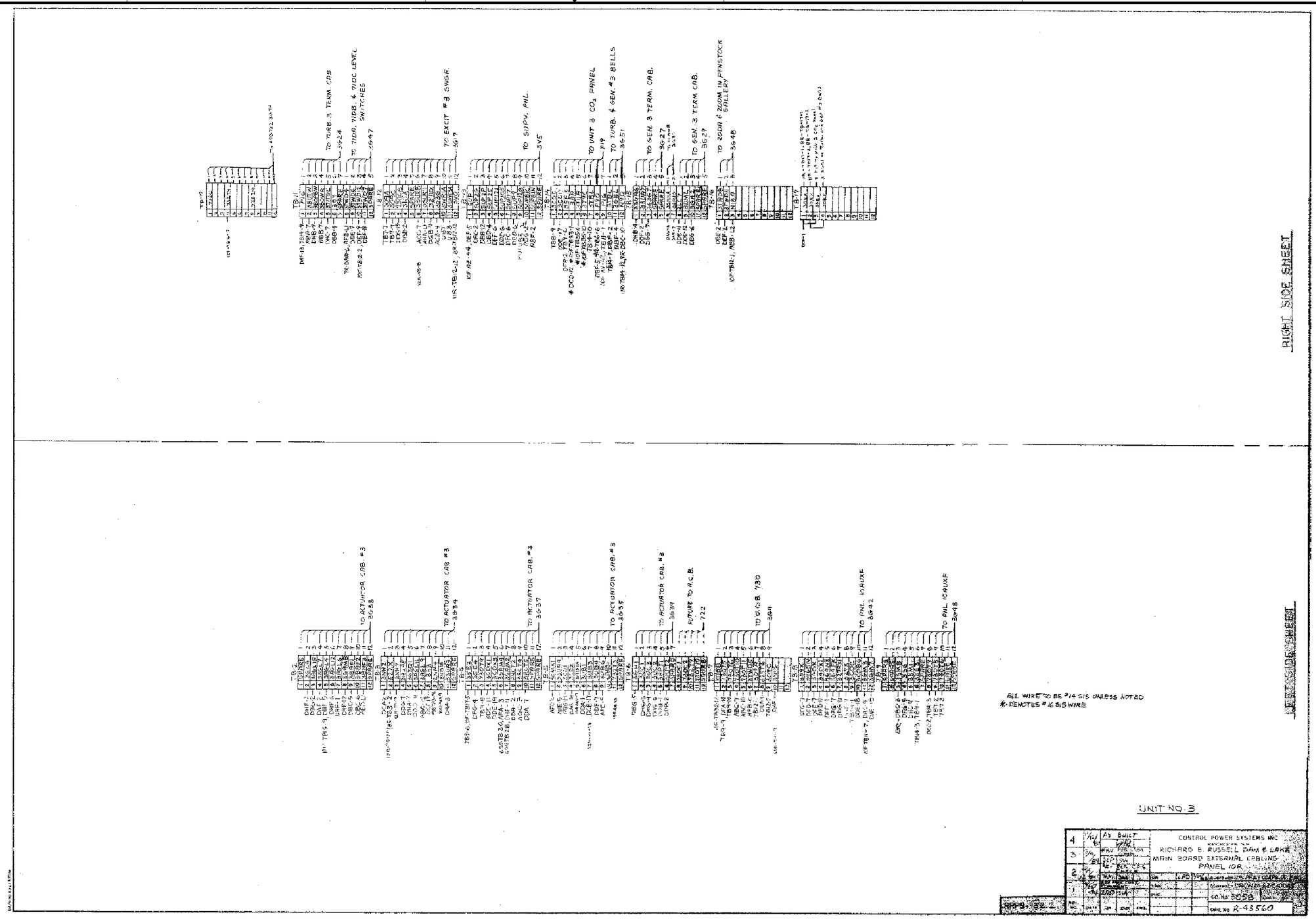
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-111

SCALE: NONE | SHEET

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r111_cp_r43558.dgn
11/05/2003
k6enxndt

101RRP_R111_CP_R43558.DGN
101RRP_TBLK.DGN
CP_R43558.TIF

...\101rrp_r111_cp_r43558.dgn 11/05/2003 07:52:00 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

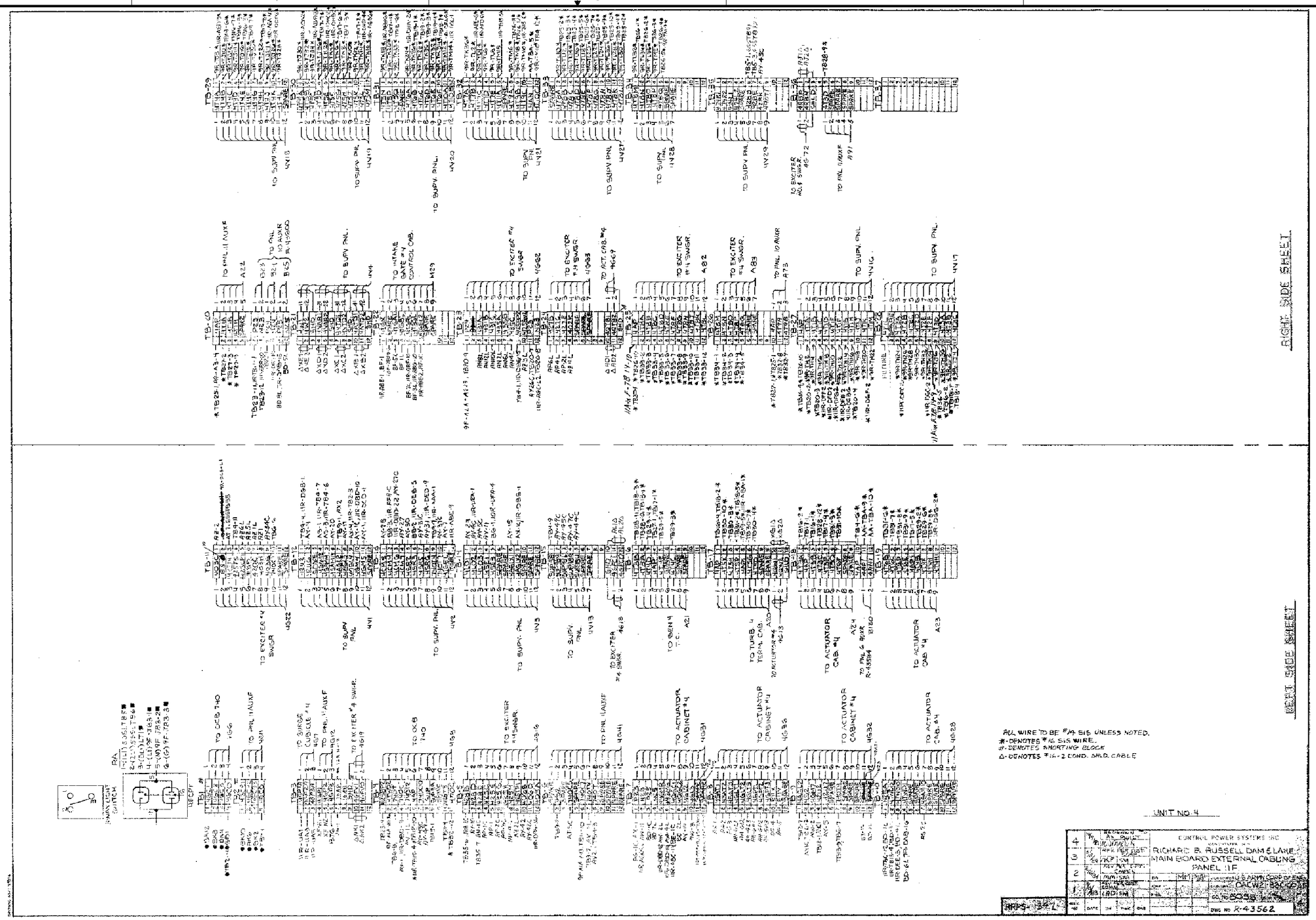
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-112

SCALE: NONE SHEET

101RRP_R112_CP_R43560.DGN
101RRP_TBLK.DGN
CP_R43560.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r112_cp_r43560.dgn
11/05/2003
k6enxndt

...\101rrp_r112_cp_r43560.dgn 11/05/2003 07:52:37 AM



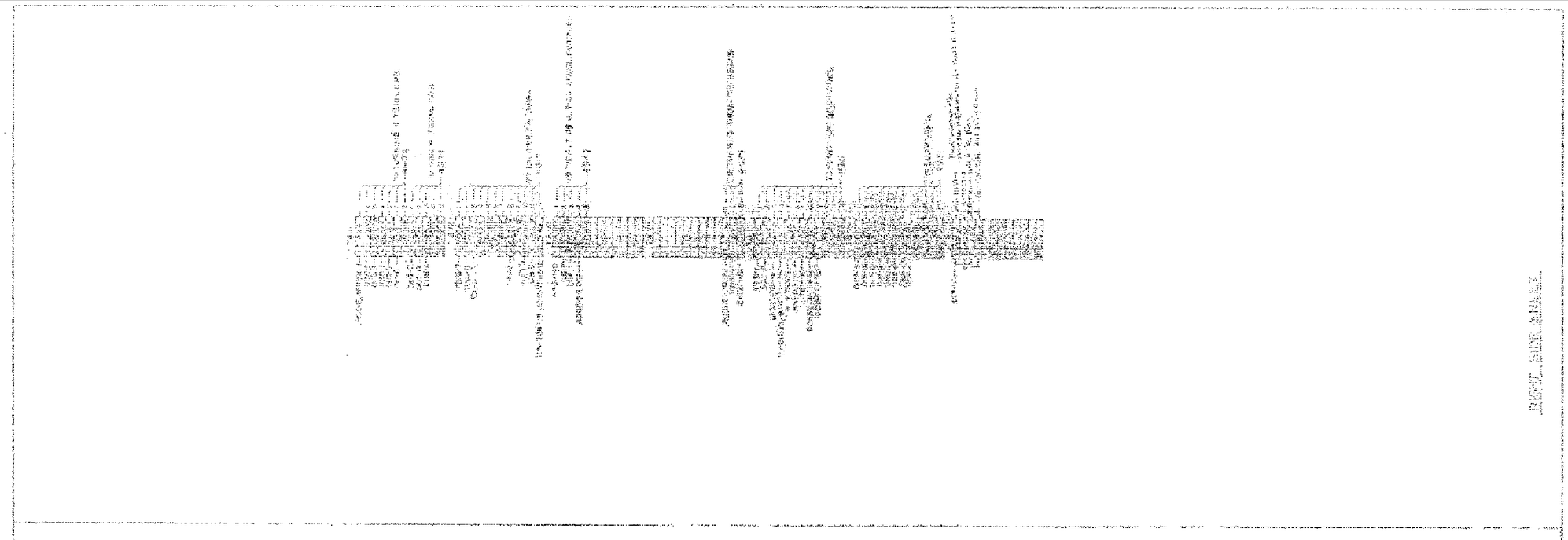
FOR INFORMATION ONLY

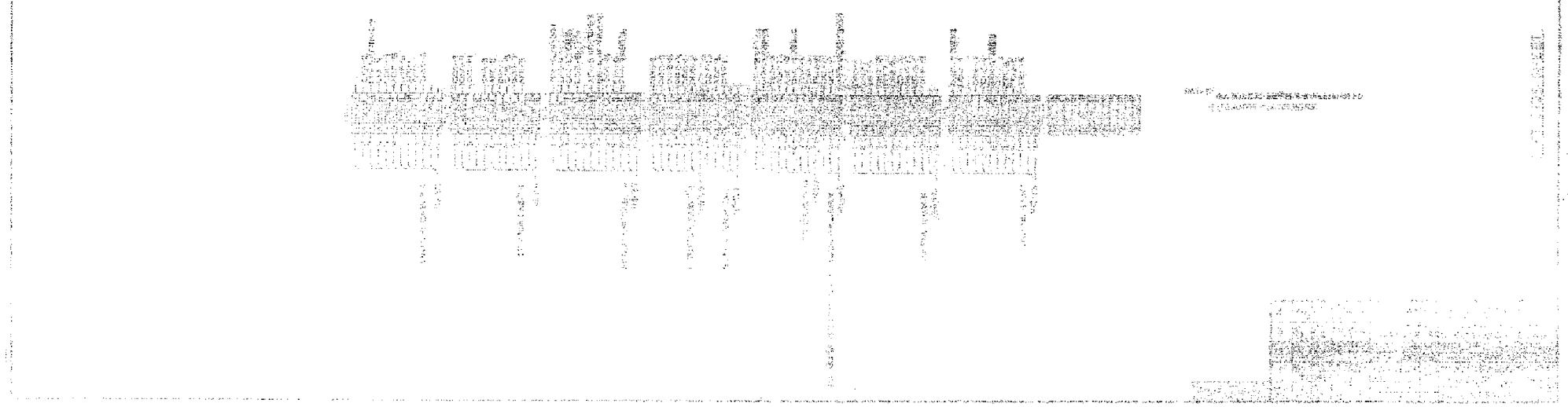
HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT CIRCUIT BREAKER & STATIC START INSTALL REFERENCE DRAWING SAVANNAH RIVER GEORGIA AND S. CAROLINA	
SIZE: F / SOLICITATION NO.: DACW21-03-B-0011	FILE NO.: RBR-107 / PLATE: R-113
SCALE: NONE	SHEET

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r113_cp_r43562.dgn
11/05/2003
k6enxndt

101RRP_R113_CP_R43562.DGN
101RRP_TBLK.DGN
CP_R43562.TIF

...\101rrp_r113_cp_r43562.dgn 11/05/2003 07:53:33 AM





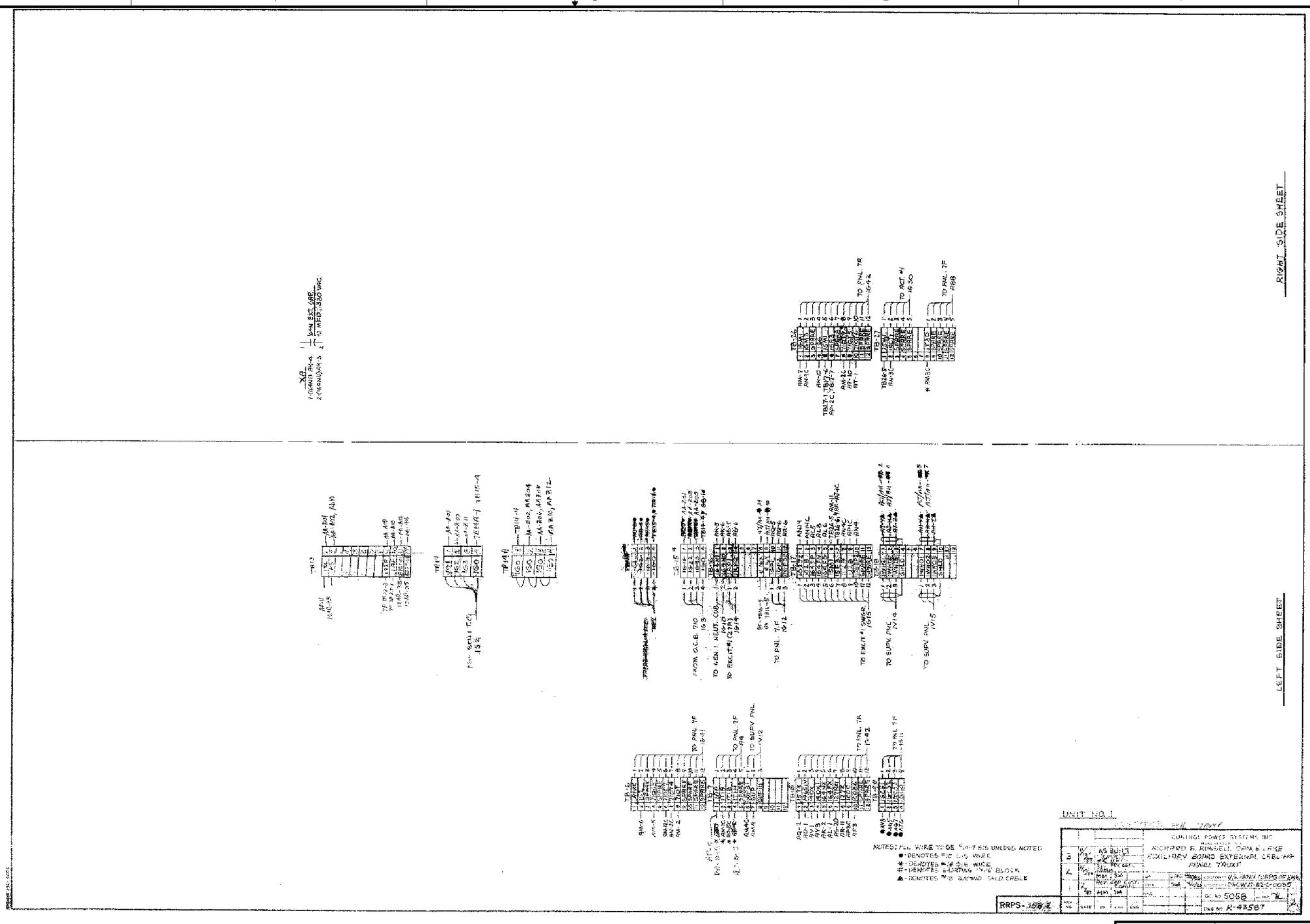
FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT CIRCUIT BREAKER & STATIC START INSTALL REFERENCE DRAWING SAVANNAH RIVER GEORGIA AND S. CAROLINA		
SIZE: F	SOLICITATION NO.: DACW21-03-B-0011	FILE NO.: RBR-107
PLATE: R-114	SCALE: NONE	SHEET

101RRP_R114_CP_R43564.DGN
101RRP_TBLK.DGN
CP_R43564.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r114_cp_r43564.dgn
11/05/2003
k6enxndt

...\101rrp_r114_cp_r43564.dgn 11/05/2003 07:54:26 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

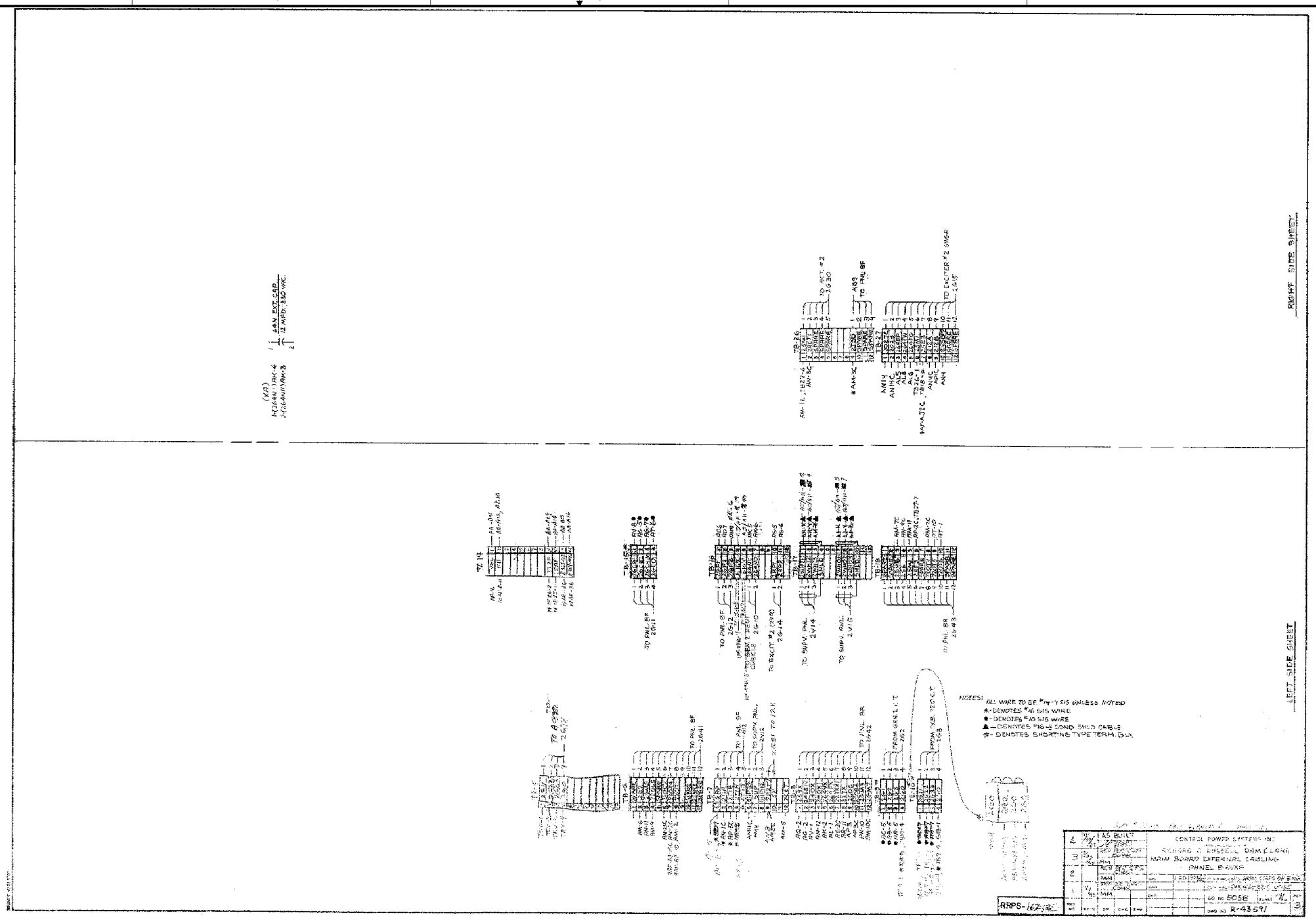
RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-115
SCALE: NONE		SHEET	

101RRP_R115_CP_R43587.DGN
101RRP_TBLK.DGN
CP_R43587.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r115_cp_r43587.dgn
11/05/2003
k6enxndt

...\101rrp_r115_cp_r43587.dgn 11/05/2003 07:54:59 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

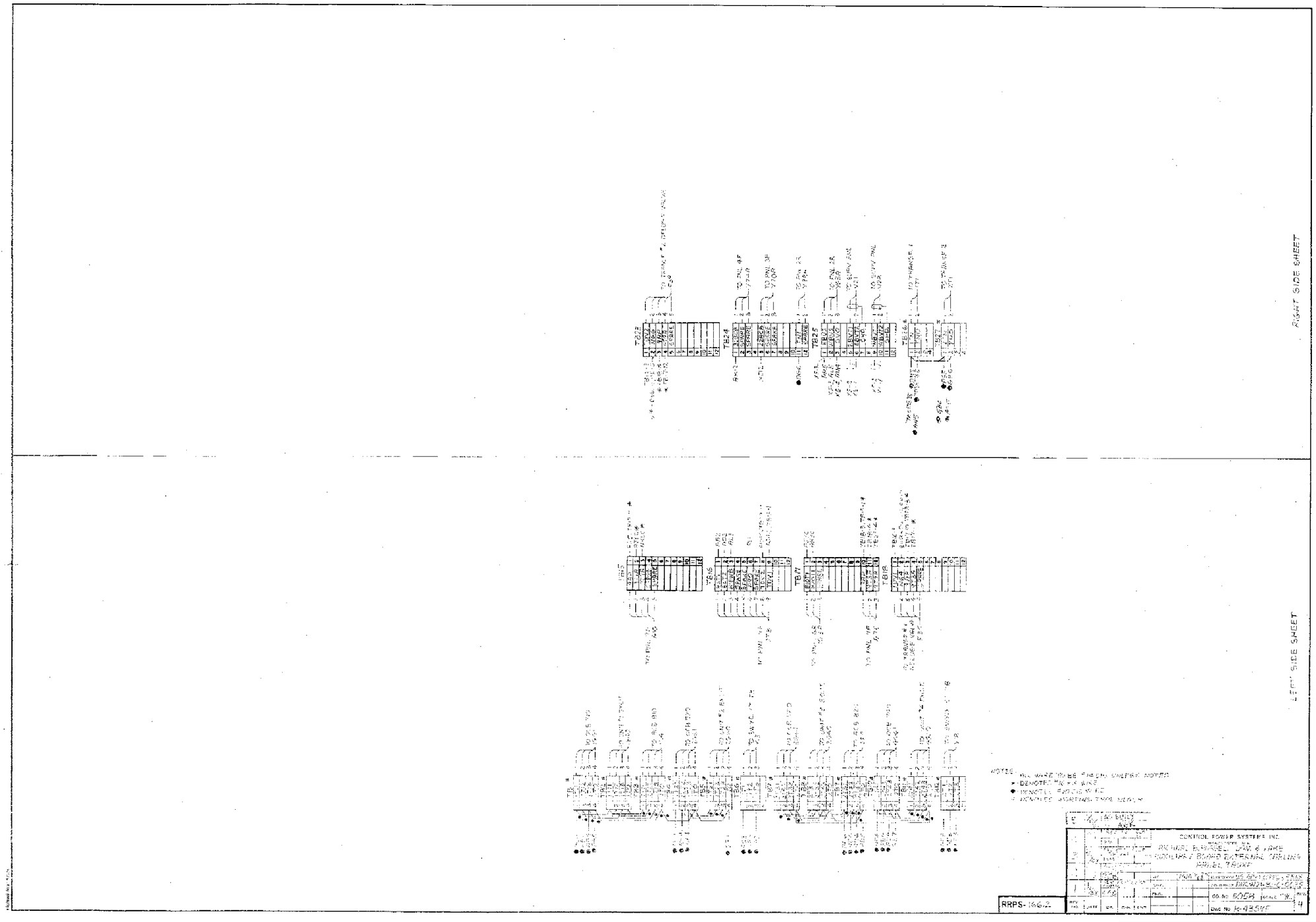
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-116

SCALE: NONE SHEET

101RRP_R116_CP_R43591.DGN
101RRP_TBLK.DGN
CP_R43591.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r116_cp_r43591.dgn
11/05/2003
koenxndt

...\101rrp_r116_cp_r43591.dgn 11/05/2003 07:55:36 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

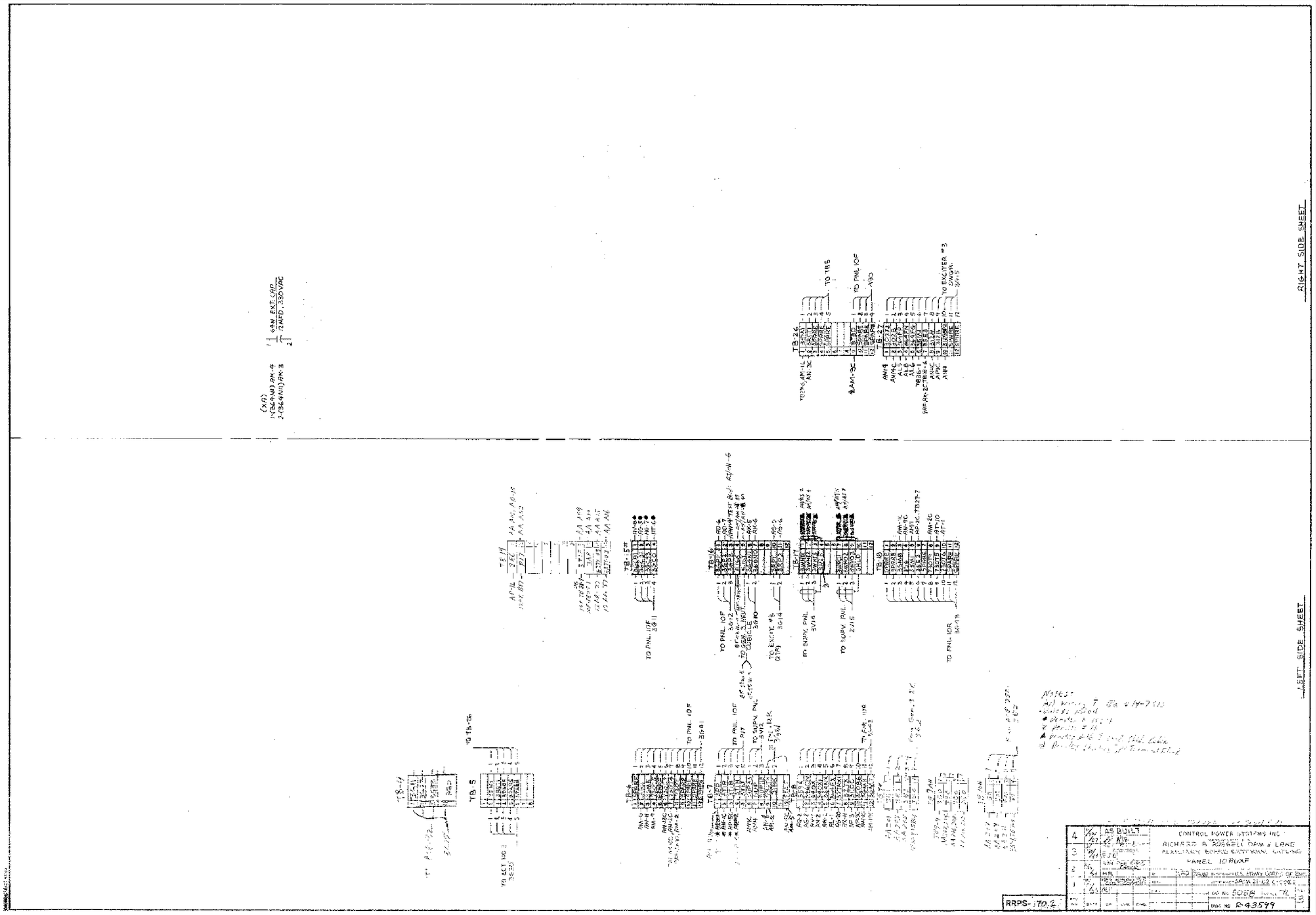
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-117

SCALE: NONE SHEET

101RRP_R117_CP_R43595.DGN
101RRP_TBLK.DGN
CP_R43595.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r117_cp_r43595.dgn
11/05/2003
k6enxndt

...\101rrp_r117_cp_r43595.dgn 11/05/2003 07:56:13 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

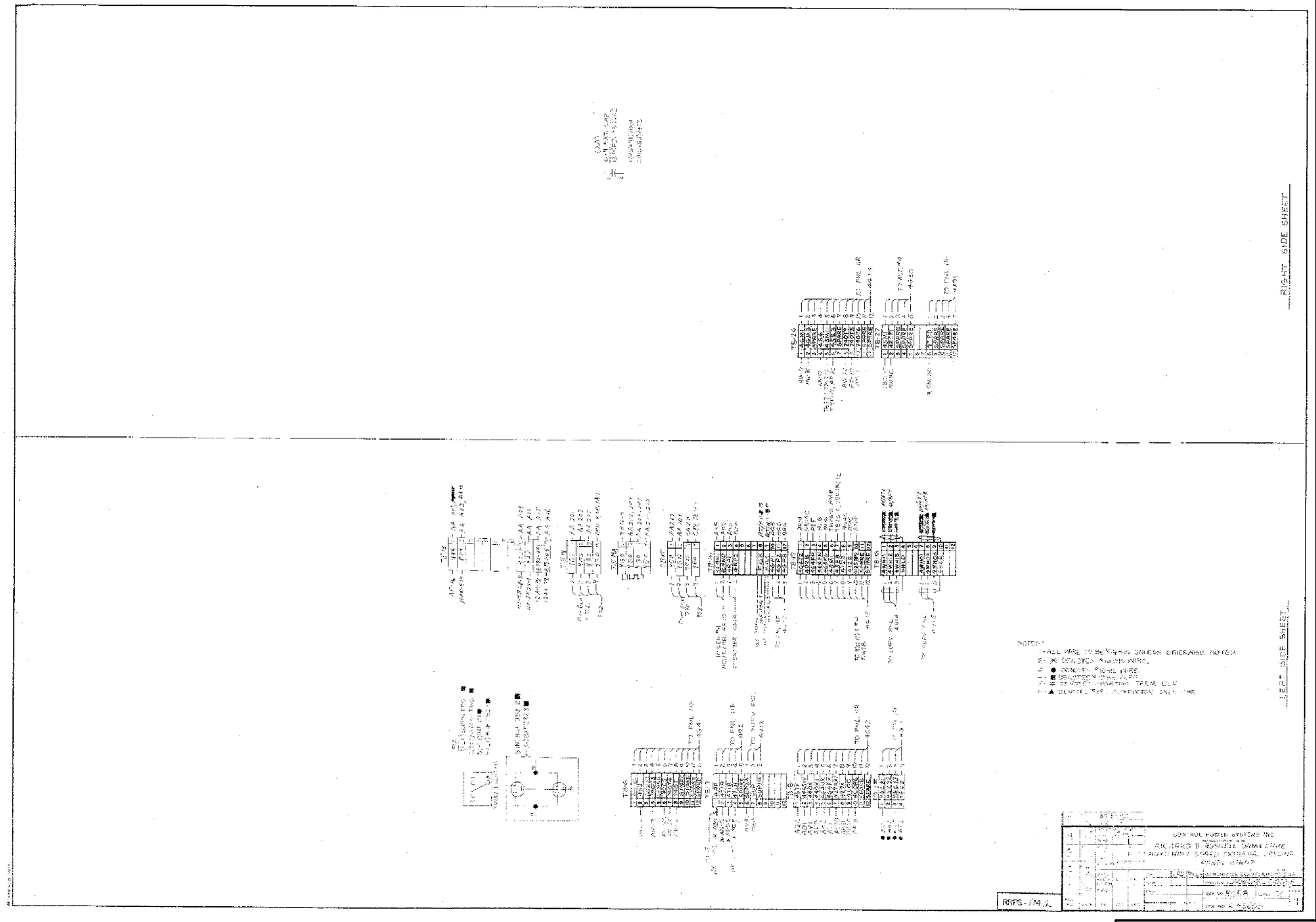
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-118

SCALE: NONE SHEET

101RRP_R118_CP_R43599.DGN
101RRP_TBLK.DGN
CP_R43599.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r118_cp_r43599.dgn
11/05/2003
k0enxndt

...\101rrp_r118_cp_r43599.dgn 11/05/2003 07:56:57 AM



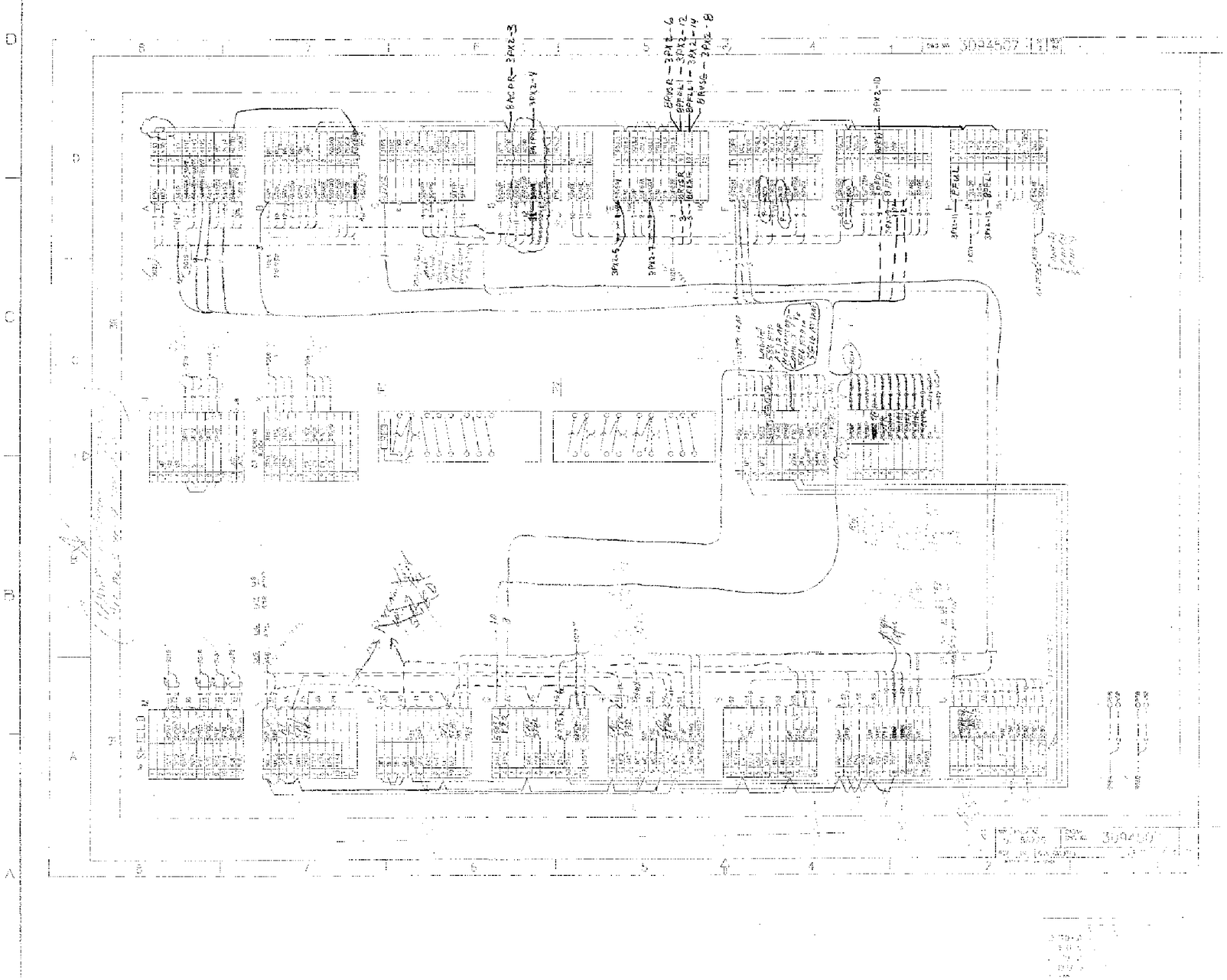
FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT CIRCUIT BREAKER & STATIC START INSTALL REFERENCE DRAWING SAVANNAH RIVER GEORGIA AND S. CAROLINA		
SIZE: F	SOLICITATION NO.: DACW21-03-B-0011	FILE NO.: RBR-107 — PLATE: R-119
SCALE: NONE		SHEET

101RRP_R119_CP_R43603.DGN
101RRP_TBLK.DGN
CP_R43603.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r119_cp_r43603.dgn
11/05/2003
k6enxndt

...\101rrp_r119_cp_r43603.dgn 11/05/2003 07:57:29 AM



DETAIL OF DRAWING NO.

DRAWINGS LISTED BELOW COMPLETE THIS DRAWING

MARK	DESCRIPTION	DRAWING NO.

APPROVED
EXCEPT AS NOTED
FABRICATION MAY PROCEED
SUBJECT TO CORRECTIONS
BY: DATE: 9/4/01
SAVANNAH ENGINEER DISTRICT
CONSTRUCTION DIVISION

NOTE: ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

REVISIONS | REVISIONS | REVISIONS

CUSTOMER CONTRACT NO: DACW21-87-C-0008

MARINE INDUSTRIE LTEE
TRACY P.Q.
CANADA

HYDRO-ELECTRIC MATERIAL DIVISION

RICHARD B. RUSSELL DAM AND LAKE
SAVANNAH RIVER, GEORGIA AND SOUTH CAROLINA
4 GENERATORS 137,000 H.P.

STATIC EXCITATION WTA-300
CUST. CKT. IDENT. AND TERM. LIST

DWG: DESIGN:

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

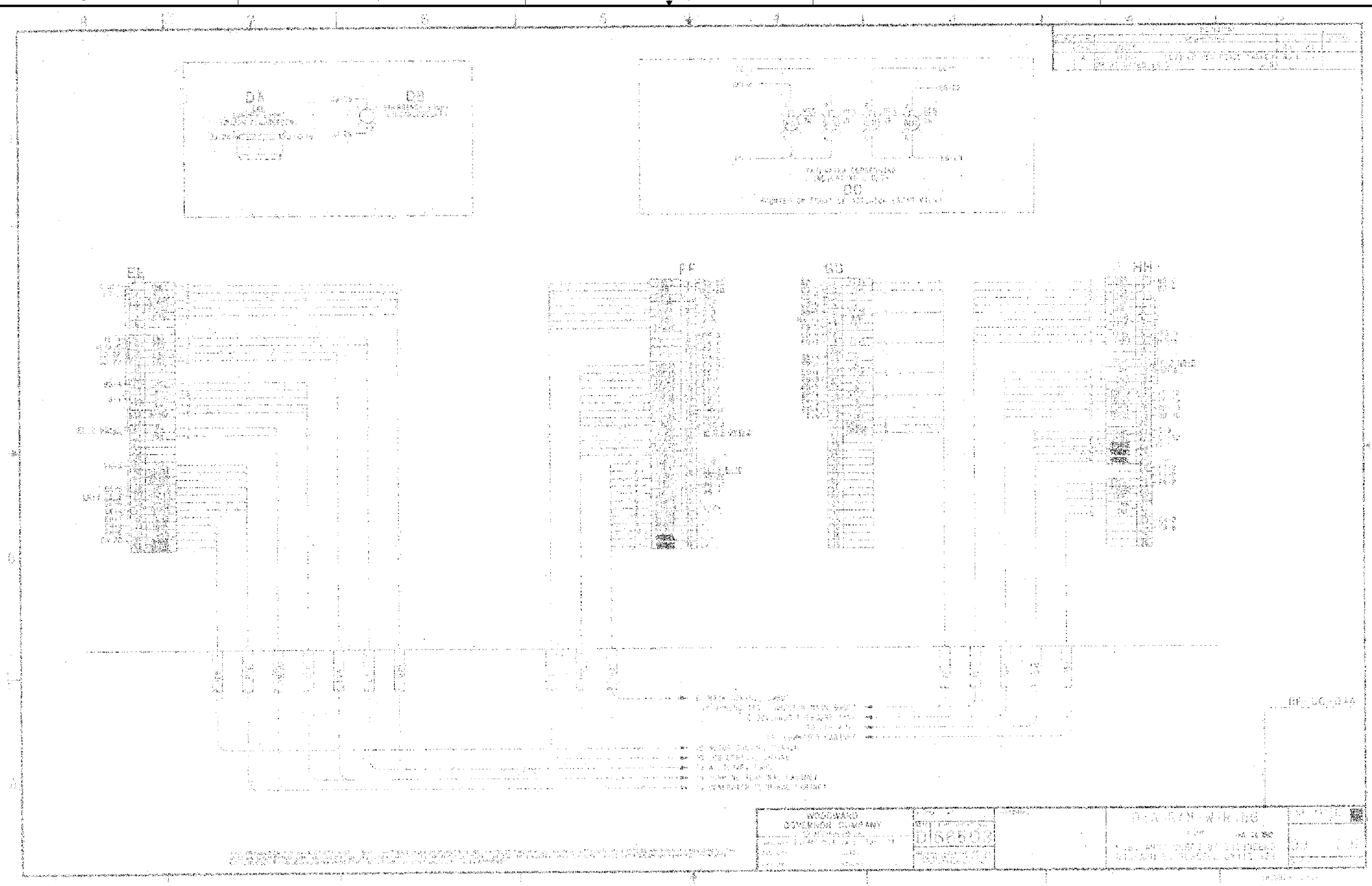
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-120

SCALE: NONE SHEET

101RRP_R120_MI_170_583_01_122.DGN
101RRP_TBLK.DGN
MI_170_583_01_122.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r120_mi_170_583_01_122.dgn
11/05/2003
k6enxndt

...\101rrp_r120_mi_170_583_01_122. 11/05/2003 07:58:08 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

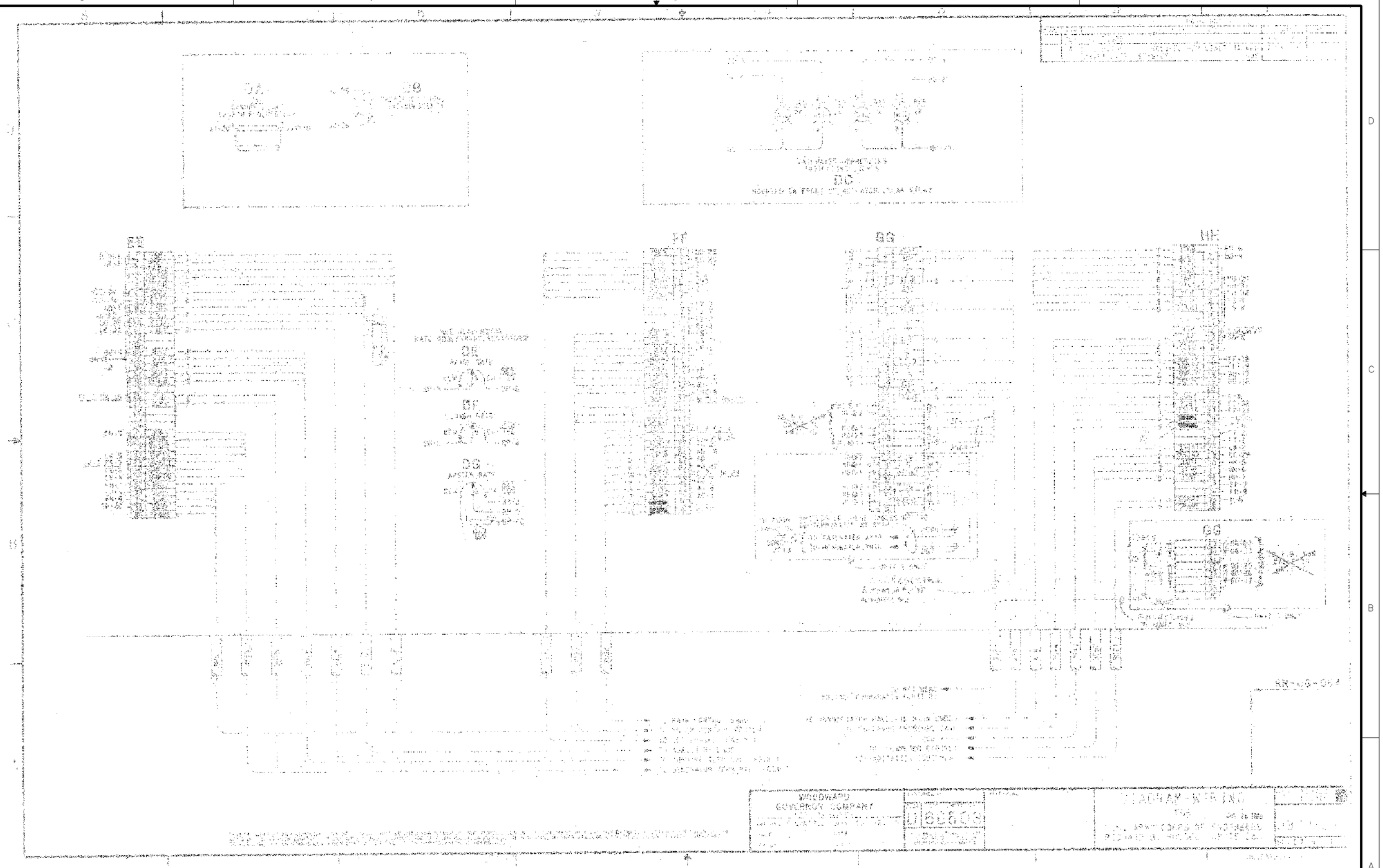
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-121

SCALE: NONE SHEET

101RRP_R121_WW_9973_208_4.DGN
101RRP_TBLK.DGN
WW_9973_208_4.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r121_ww_9973_208_4.dgn
11/05/2003
kbenxndt

...\101rrp_r121_ww_9973_208_4.dgn 11/05/2003 07:58:40 AM



FOR INFORMATION ONLY

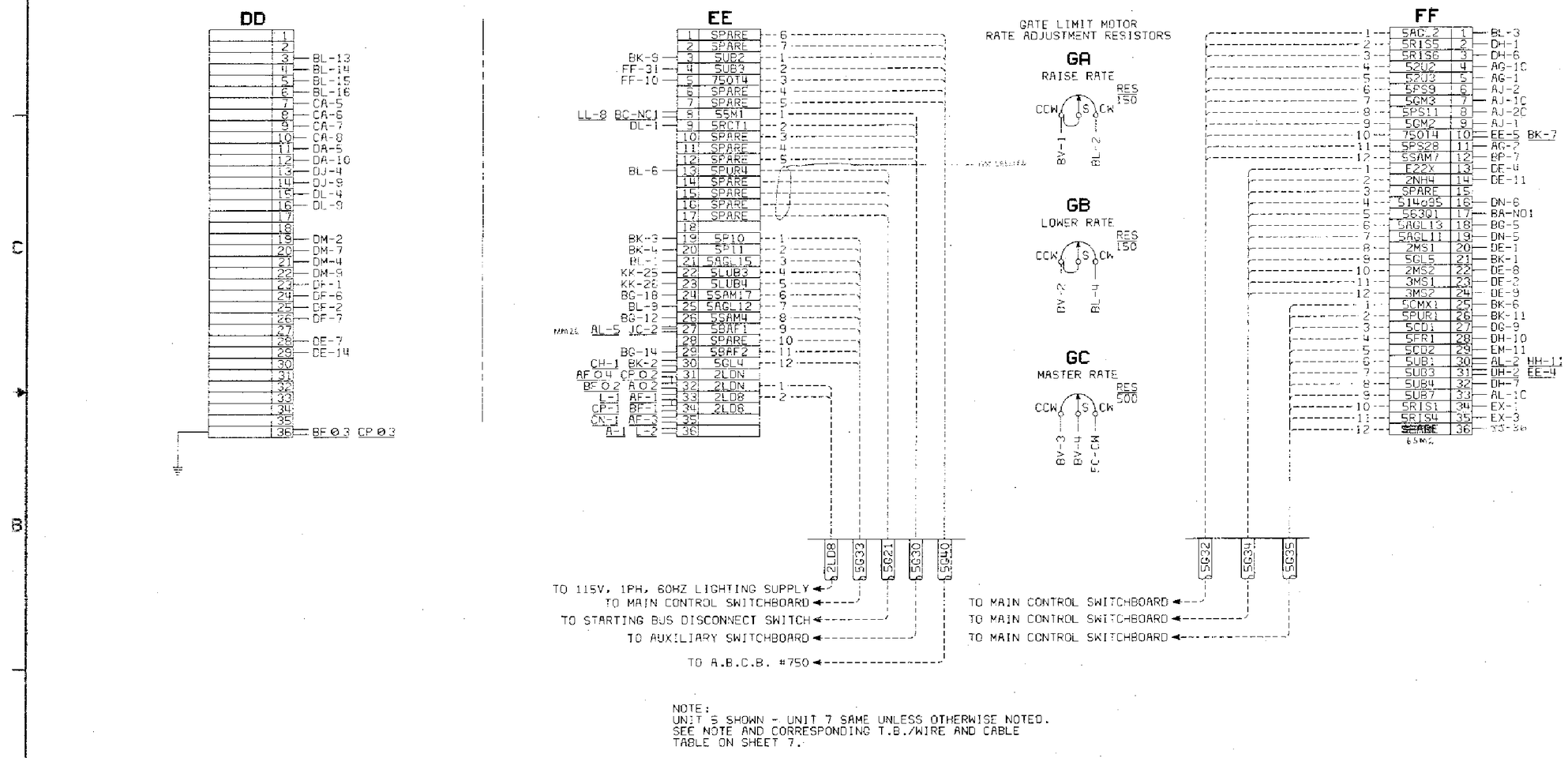
HYDROELECTRIC DESIGN CENTER PORTLAND DISTRICT PORTLAND, OREGON		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS SAVANNAH, GEORGIA
RICHARD B. RUSSELL POWER PLANT CIRCUIT BREAKER & STATIC START INSTALL REFERENCE DRAWING SAVANNAH RIVER GEORGIA AND S. CAROLINA		
SIZE: F	SOLICITATION NO.: DACW21-03-B-0011	FILE NO.: RBR-107
PLATE: R-122		
SCALE: NONE		SHEET

101RRP_R122_WW_9973_210_4.DGN
101RRP_TBLK.DGN
WW_9973_210_4.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r122_ww_9973_210_4.dgn
11/05/2003
k6enxrdt

...\101rrp_r122_ww_9973_210_4.dgn 11/05/2003 07:59:09 AM

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
NEW	E/C 200464	88-11-3	EDC
A	E/C 200803 REV.PER CUST 89-4-26 DRB 89-5-2 & AS BUILT 89-6-29 MARKED PRINTS. ERF	89-6-26	
B	E/C 200954 REVISIED PER USACE MARKED PRINTS DATED 89-11-1 EDC	89-11-15	



NOTE:
UNIT 5 SHOWN - UNIT 7 SAME UNLESS OTHERWISE NOTED.
SEE NOTE AND CORRESPONDING T.B./WIRE AND CABLE
TABLE ON SHEET 7.

AS BUILT

ITEMS MOUNTED IN BASE OF ACTUATOR (RIGHT SIDE)

THIS DRAWING OR ANY REPRODUCTION OF IT SHALL NOT BE USED FOR MANUFACTURE, PRODUCTION OR PROCUREMENT WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE WOODWARD GOVERNOR COMPANY OR ONE OF ITS SUBSIDIARIES. USE OR REPRODUCTION FOR USE, IN A NORMAL MANNER ASSOCIATED WITH GOODS OR SERVICE FURNISHED OR TENDERED BY WOODWARD GOVERNOR COMPANY OR ONE OF ITS SUBSIDIARIES, IS APPROVED

NEXT ASSY	USED ON
APPLICATION	

WOODWARD GOVERNOR COMPANY
STEVENS POINT, WISCONSIN

DWG. BY: D. LUKES DATE: 88-11-3
CKD. BY: DATE:
APP. BY: SCALE:

FINISHED WT. | SIZE D | CODE IDENT. NO. 66503 | GENERAL TOLERANCES ARE TO BE AS SPECIFIED IN SHOP STANDARD 55-112

MATERIAL

DIAGRAM - WIRING
FOR
U.S. ARMY CORPS OF ENGINEERS
RICHARD B. RUSSELL UNITS 5 & 7

REF. HC-783
9973-688
SHEET 8 OF 13

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-123

SCALE: NONE SHEET

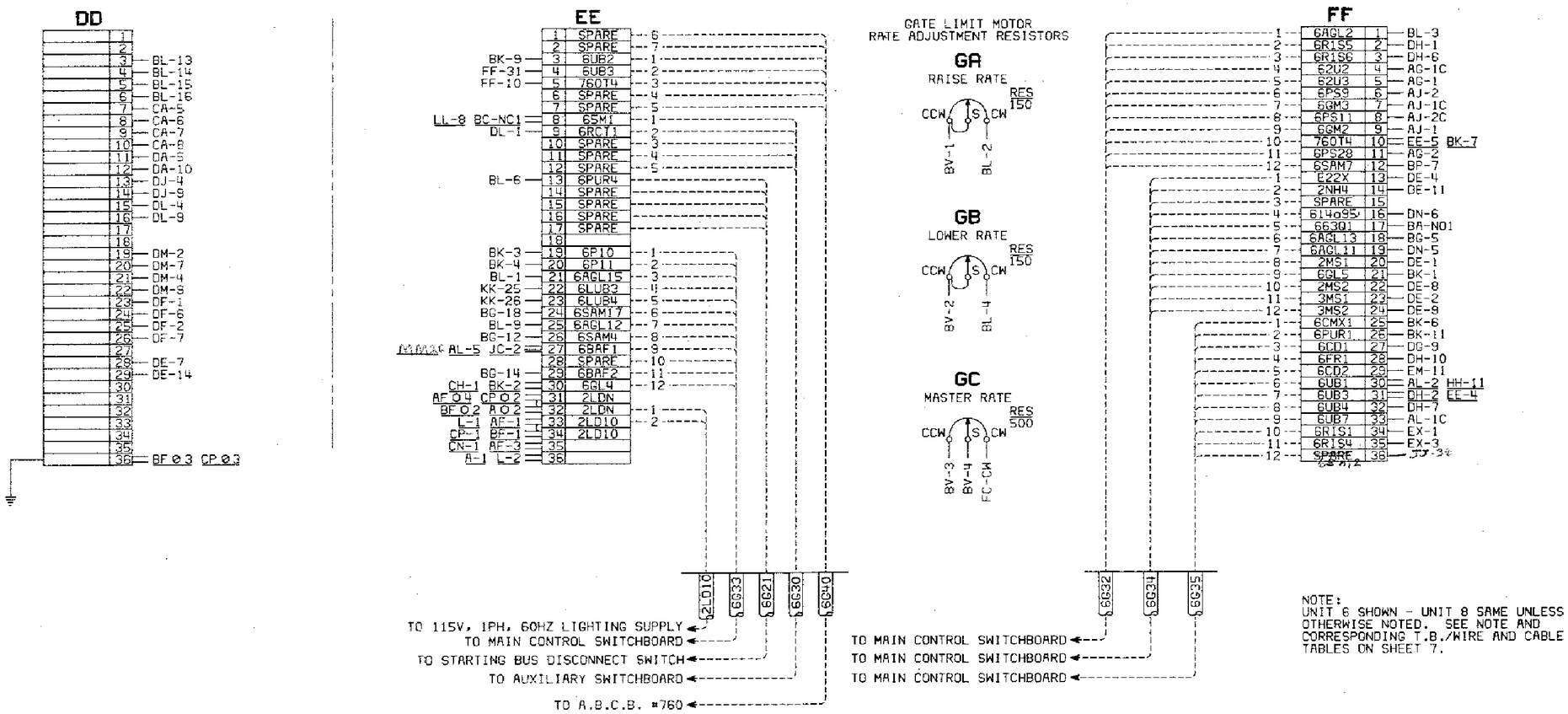
101RRP_R123_WW_9973_688_8.DGN
101RRP_TBLK.DGN
WW_9973_688_8.TIF

FOR INFORMATION ONLY

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r123_ww_9973_688_8.dgn
11/05/2003
k6enxrdt

...\101rrp_r123_ww_9973_688_8.dgn 11/05/2003 07:59:45 AM

REVISIONS			
LTR	DESCRIPTION	DATE	APPROVED
NEW	E/C 200803	89-6-26	RCK
A	E/C 201137 PER CUST MARKED PRINTS 89-11-1. JLW	90-3-12	



NOTE:
UNIT 6 SHOWN - UNIT 8 SAME UNLESS OTHERWISE NOTED. SEE NOTE AND CORRESPONDING T.B./WIRE AND CABLE TABLES ON SHEET 7.

ITEMS MOUNTED IN BASE OF ACTUATOR (LEFT SIDE)

THIS DRAWING OR ANY REPRODUCTION OF IT SHALL NOT BE USED FOR MANUFACTURE, PRODUCTION OR PROCUREMENT WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE WOODWARD GOVERNOR COMPANY OR ONE OF ITS SUBSIDIARIES. USE OR REPRODUCTION FOR USE, IN A NORMAL MANNER ASSOCIATED WITH GOODS OR SERVICE FURNISHED OR TENDERED BY WOODWARD GOVERNOR COMPANY OR ONE OF ITS SUBSIDIARIES, IS APPROVED!

NEXT ASSY	USED ON
APPLICATION	

WOODWARD GOVERNOR COMPANY
STEVENS POINT, WISCONSIN

DWG. BY: E. PALMER DATE: 89-6-26
CKD. BY: DATE: 90-3-22
APP. BY: SCALE:

FINISHED MT. SIZE D CODE IDENT. NO. 66503
GENERAL TOLERANCES ARE TO BE AS SPECIFIED IN SHOP STANDARD 68-112
MATERIAL

DIAGRAM - WIRING
FOR
U.S. ARMY CORPS OF ENGINEERS
RICHARD B. RUSSELL UNITS 6 & 8

REF. HC-784
9973-728
SHEET 8 OF 13
HW_9973_728_8

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

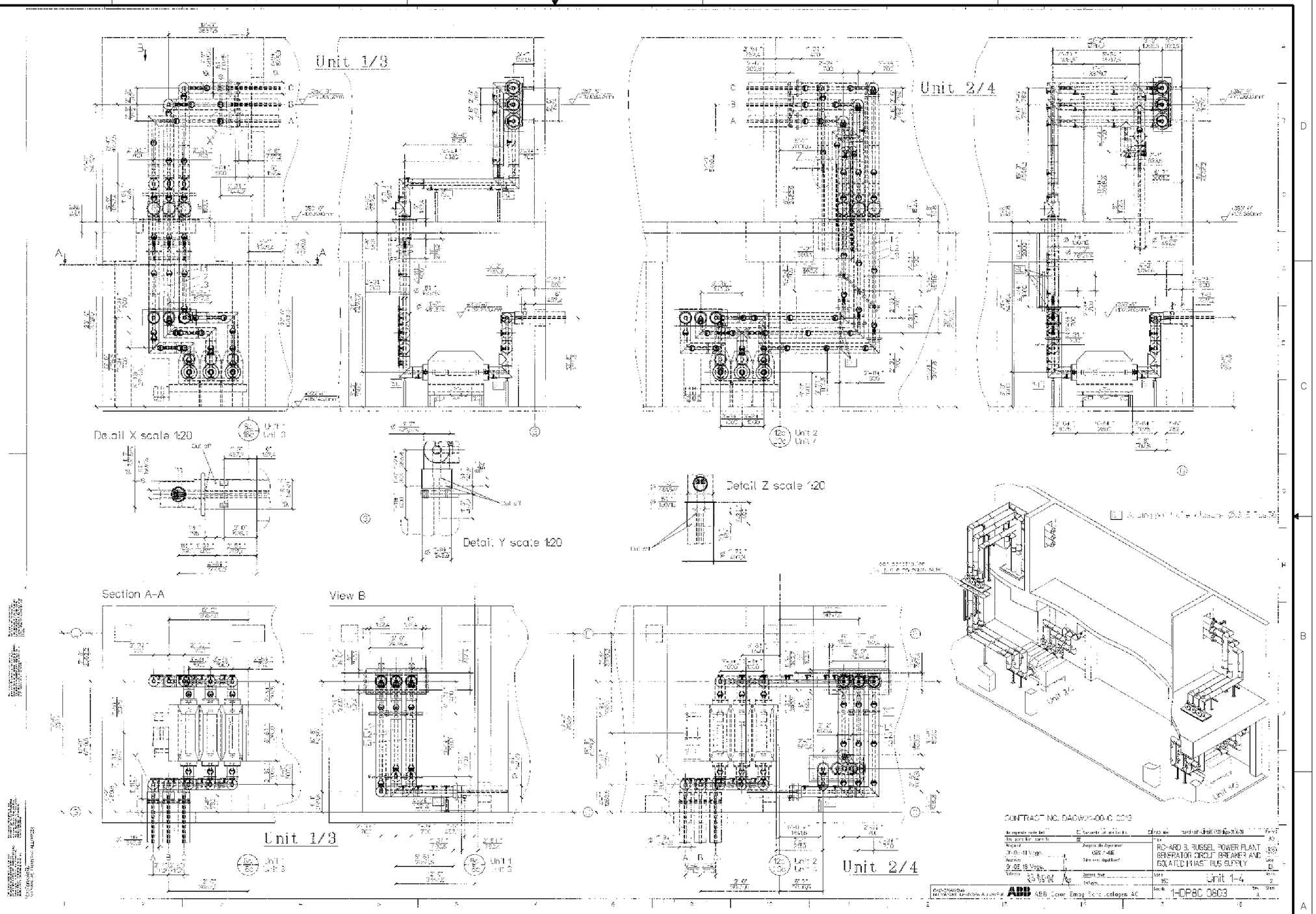
U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-124

SCALE: NONE SHEET

101RRP_R124_WW_9973_728_8.DGN
101RRP_TBLK.DGN
WW_9973_728_8.TIF



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

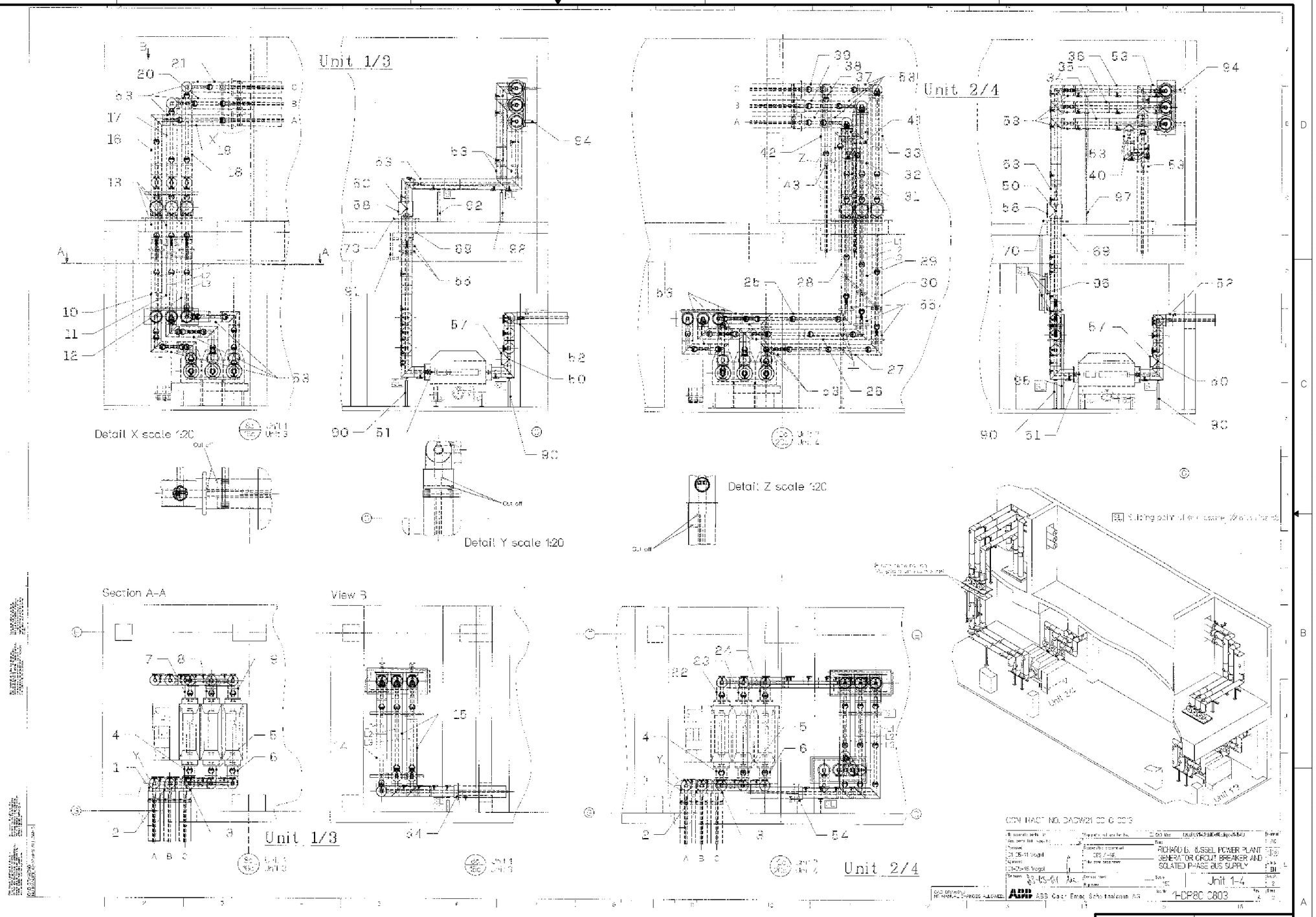
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-125

SCALE: NONE SHEET

101RRP_R125_ABB_1HDP800803_1.DGN
101RRP_TBLK.DGN
ABB_1HDP800803_1.TIF

i:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r125_abb_1hdp800803_1.dgn
11/05/2003
k6enxndt

...\101rrp_r125_abb_1hdp800803_1.d 11/05/2003 08:00:43 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

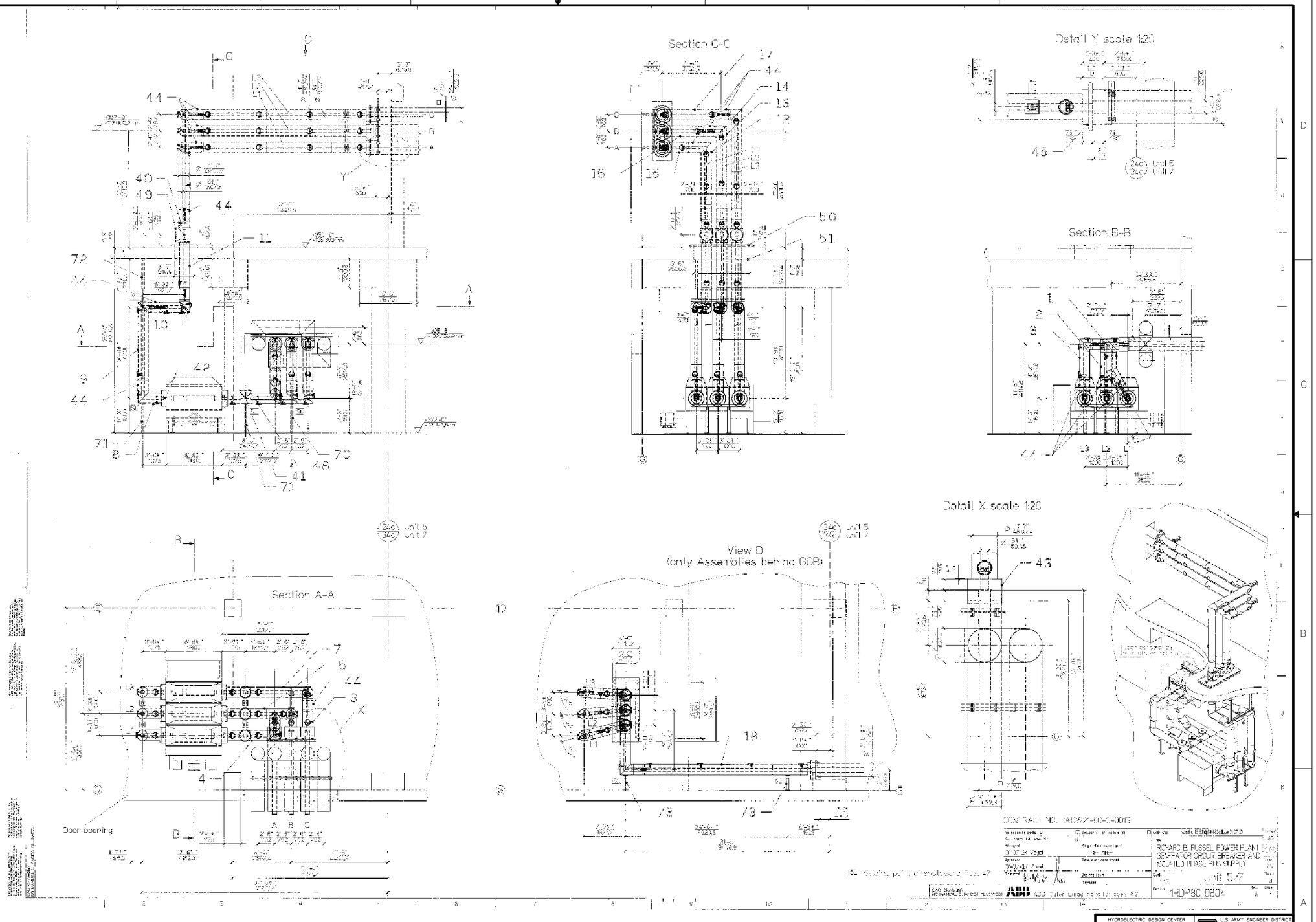
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-126

SCALE: NONE SHEET

101RRP_R125_ABB_1HDP800803_2.DGN
101RRP_TBLK.DGN
ABB_1HDP800803_2.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r126_abb_1hdp800803_2.dgn
11/05/2003
k0enxndt

...\101rrp_r126_abb_1hdp800803_2.d 11/05/2003 08:01:17 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

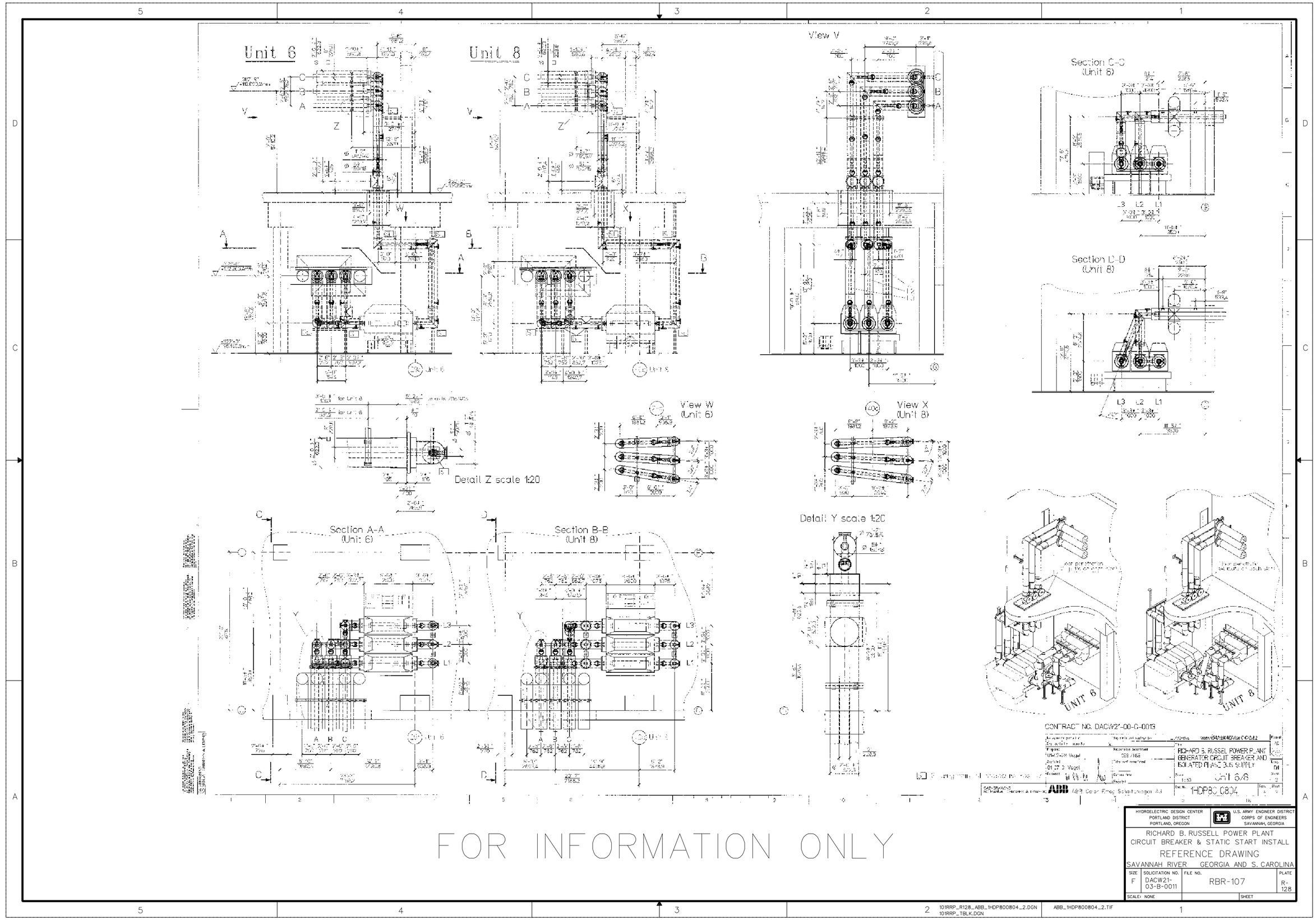
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-127

SCALE: NONE SHEET

101RRP_R127_ABB_1HDP800804_1.DGN
101RRP_TBLK.DGN
ABB_1HDP800804_1.TIF

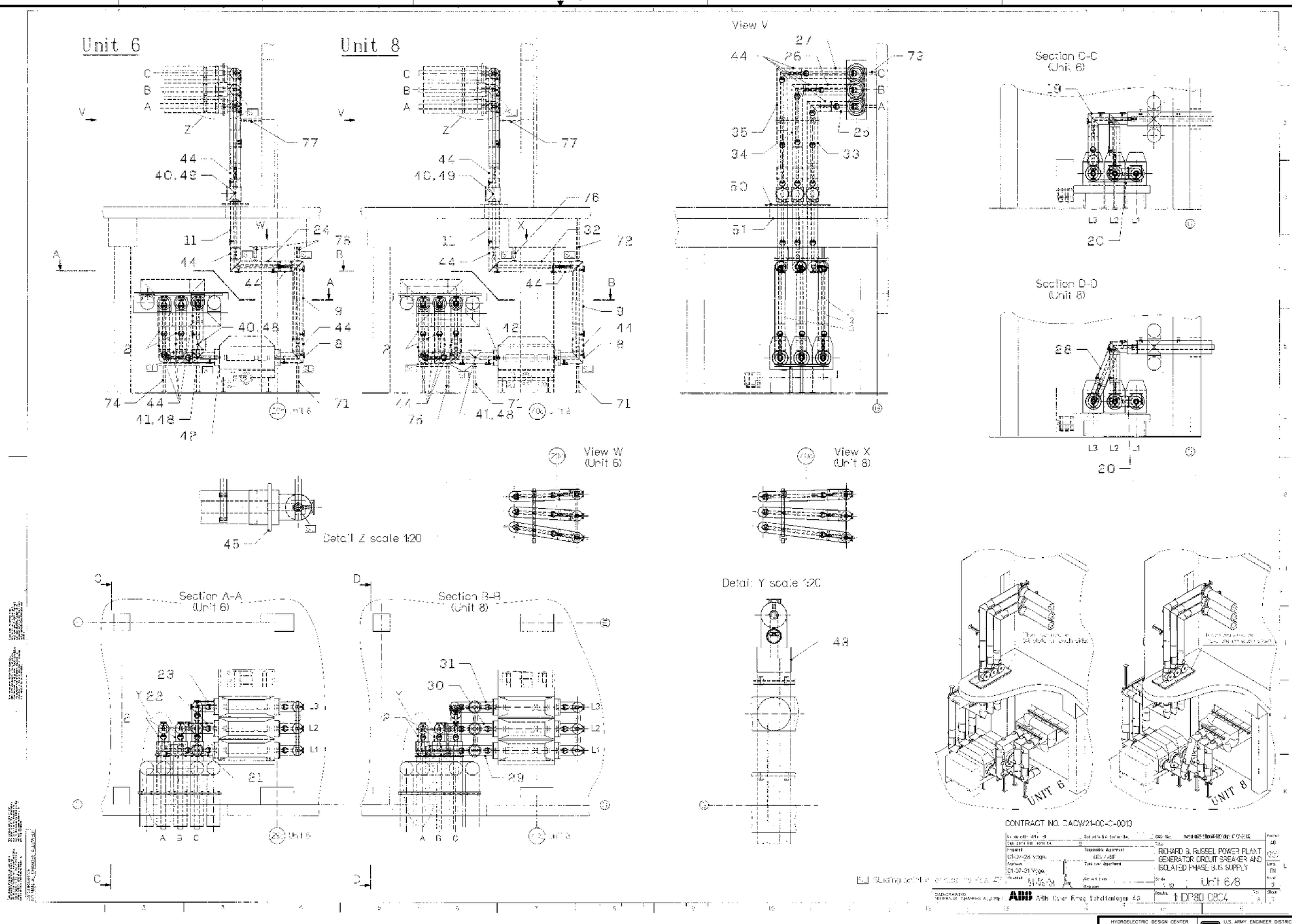
I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r127_abb_1hdp800804_1.dgn
11/05/2003
k6enxndt

...\101rrp_r127_abb_1hdp800804_1.d 11/05/2003 08:01:49 AM



I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r128_abb_1hdp800804_2.dgn
11/05/2003
k6enxndt

...\101rrp_r128_abb_1hdp800804_2.d 11/05/2003 08:02:36 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

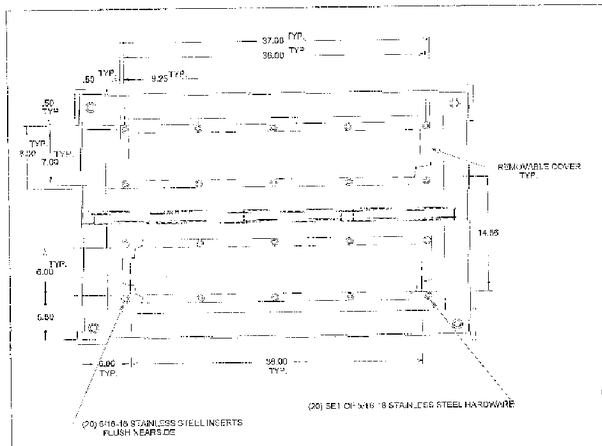
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-129

SCALE: NONE SHEET

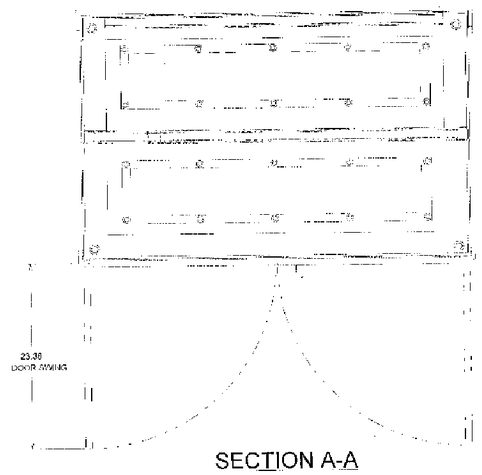
101RRP_R129_ABB_1HDP800804_3.DGN
101RRP_TBLK.DGN
ABB_1HDP800804_3.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r129_abb_1hdp800804_3.dgn
11/05/2003
k6enxndt

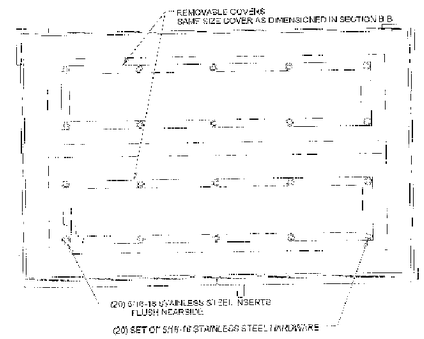
...\101rrp_r129_abb_1hdp800804_3.d 11/05/2003 08:03:07 AM



SECTION B-B

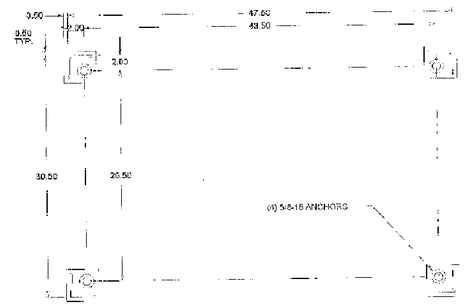


SECTION A-A

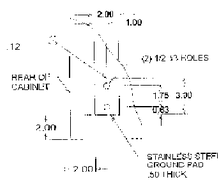


PLAN VIEW
(SPLIT COVERS ON RECT)

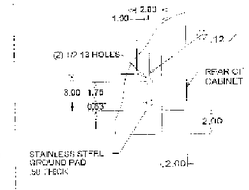
ITEM	DESCRIPTION	MANUFACTURING REF
1	ENCLOSURE, HR. STEEL	PEC 73-451-296-001
2	CABINET STAND	PEC 73-451-295-001



SECTION D-D

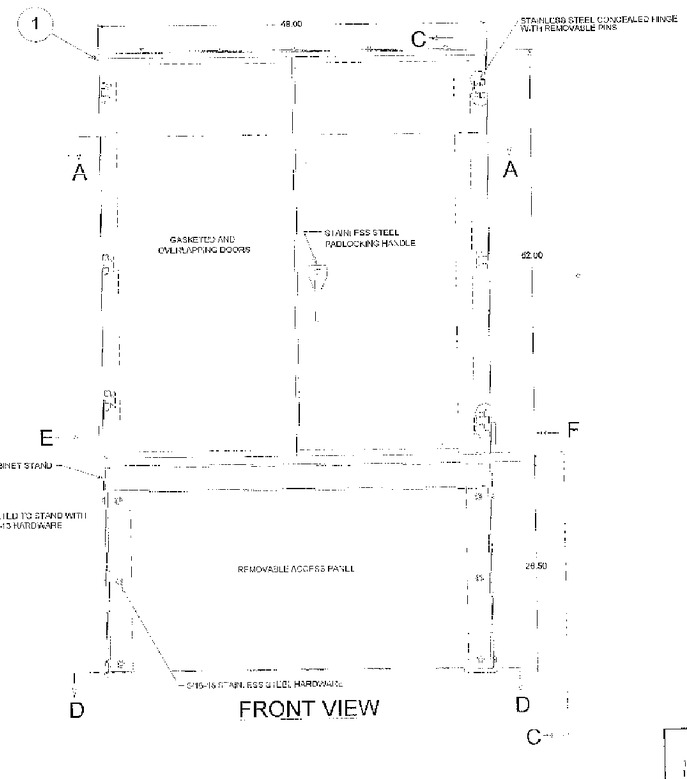


VIEW E

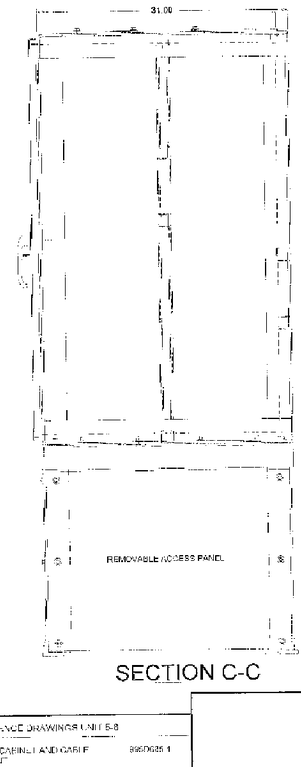


VIEW F

FRONT VIEW
(DOORS REMOVED)



FRONT VIEW



SECTION C-C

NOTES:

1. ENCLOSURE EXTERIOR IS MADE OF #11GA.(.1196) HOT ROLLED STEEL WITH AN INTERIOR STRUCTURAL ANGLE FRAME 3 X 3 X .25 (1/4) H. STEEL.
2. REMOVABLE ACCESS PANEL MADE OF #11GA.(.1196) H.R. STEEL SHEET
3. CABINET STAND IS MADE OF HOT ROLLED STRUCTURAL ANGLE 3 X 3 X .25
4. FINISH: EXTERIOR AND INTERIOR ANSI 70 GRAY.

REV.	DATE	REVISION
B	9-10-97	REVISED PER CUSTOMER COMMENT
A	9-5-96	ORIGINAL ISSUE

REFERENCE DRAWINGS UNIT 5-8

TERMINATION CABINET AND CABLE TROUGH LAYOUT	995D625.1

RICHARD B. RUSSELL DAM
GENERATOR CIRCUIT BREAKER TYPE HGC-3
15KV, UNITS 5-8

SAVANNAH RIVER — GEORGIA AND S. CAROLINA

ABB ASEA BROWN BOVERI

TERMINATION CABINET WITH STAND OUTLINE

DRAWING NO.	REV.	SHEET	OF	SCALE	
995D676	B	1	1	N.S.	PEC #3908

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

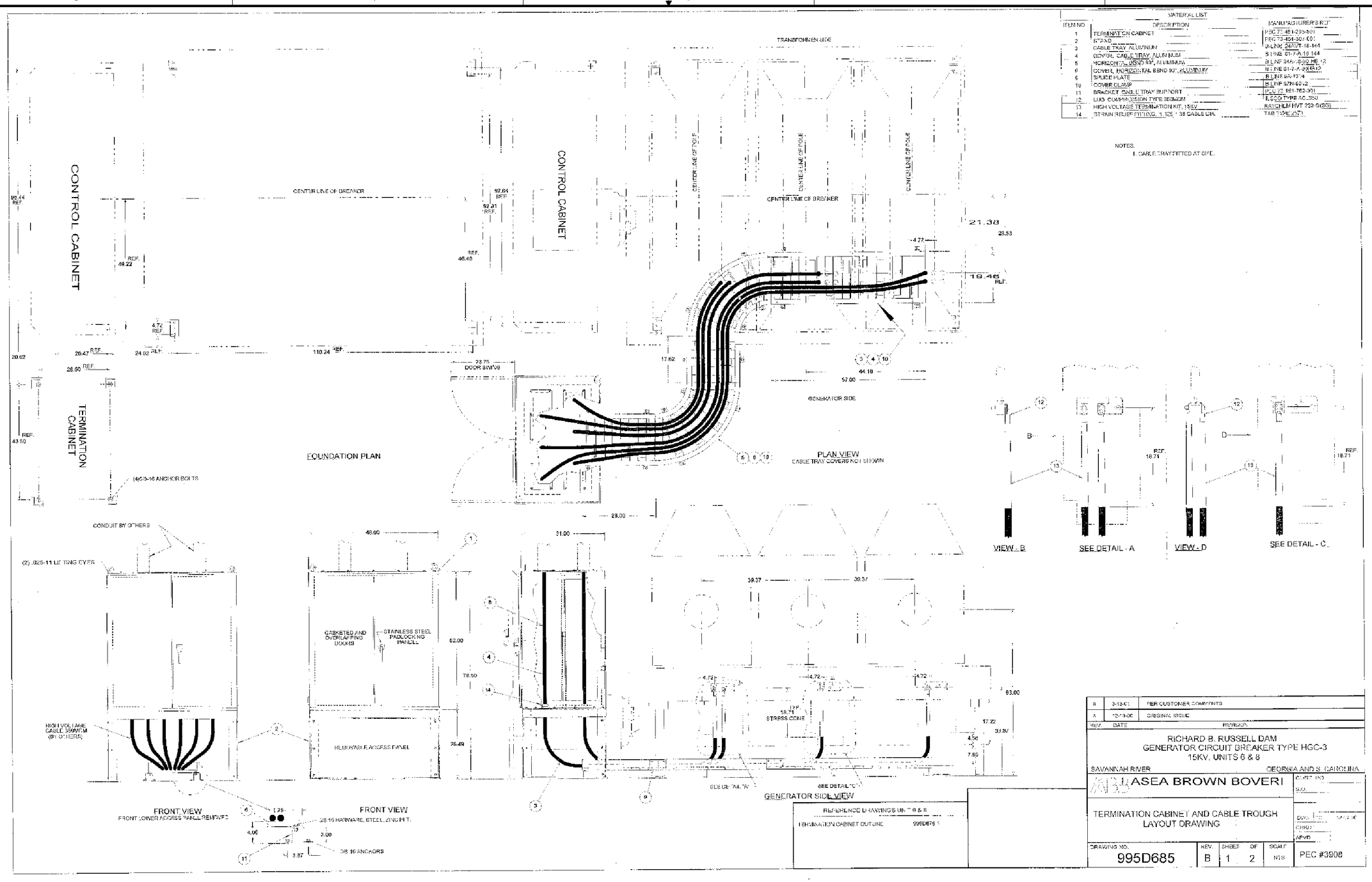
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-130

SCALE: NONE — SHEET

101RRP_R130_ABB_995D676_1.DGN
101RRP_TBLK.DGN
ABB_995D676_1.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r130_abb_995d676_1.dgn
11/05/2003
k6enxndt

...\101rrp_r130_abb_995d676_1.dgn 11/05/2003 08:03:48 AM



ITEM NO	DESCRIPTION	MANUFACTURER'S REF
1	TERMINATION CABINET	PEC 73-451-295-501
2	STAND	PEC 73-451-307-001
3	CABLE TRAY, ALUMINUM	B-LINE 24AVT-18-144
4	COVER, CABLE TRAY, ALUMINUM	B LINE 01-7-A-18-144
5	HORIZONTAL BEND 90°, ALUMINUM	B LINE 24A-A-90-HS-12
6	COVER, HORIZONTAL BEND 90°, ALUMINUM	B LINE 01-7-A-90H512
8	SPLICE PLATE	B LINE 9A-1014
10	COVER CLAMP	B LINE 97N-9012
11	BRACKET, CABLE TRAY SUPPORT	PEC 73-161-762-001
12	LUG, COMPRESSION TYPE 350MCM	ILSCO TYPE AC-350
13	HIGH VOLTAGE TERMINATION KIT, 15KV	RAYCHEM HVT 252-G(SG)
14	STRAIN RELIEF FITTING, 1.125 - 1.38 CABLE DIA.	TAB TYPE 2573

NOTES:
1. CABLE TRAY FITTED AT SITE.

REV.	DATE	REVISION
B	3-13-01	PER CUSTOMER COMMENTS
A	12-19-00	ORIGINAL ISSUE

RICHARD B. RUSSELL DAM
GENERATOR CIRCUIT BREAKER TYPE HGC-3
15KV, UNITS 6 & 8

SAVANNAH RIVER — GEORGIA AND S. CAROLINA

ASEA BROWN BOVERI

TERMINATION CABINET AND CABLE TROUGH LAYOUT DRAWING

DRAWING NO.	REV.	SHEET	OF	SCALE	
995D685	B	1	2	NTS	PEC #3908

REFERENCE DRAWINGS UNIT 6 & 8
TERMINATION CABINET OUTLINE 995D676-1

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER — GEORGIA AND S. CAROLINA

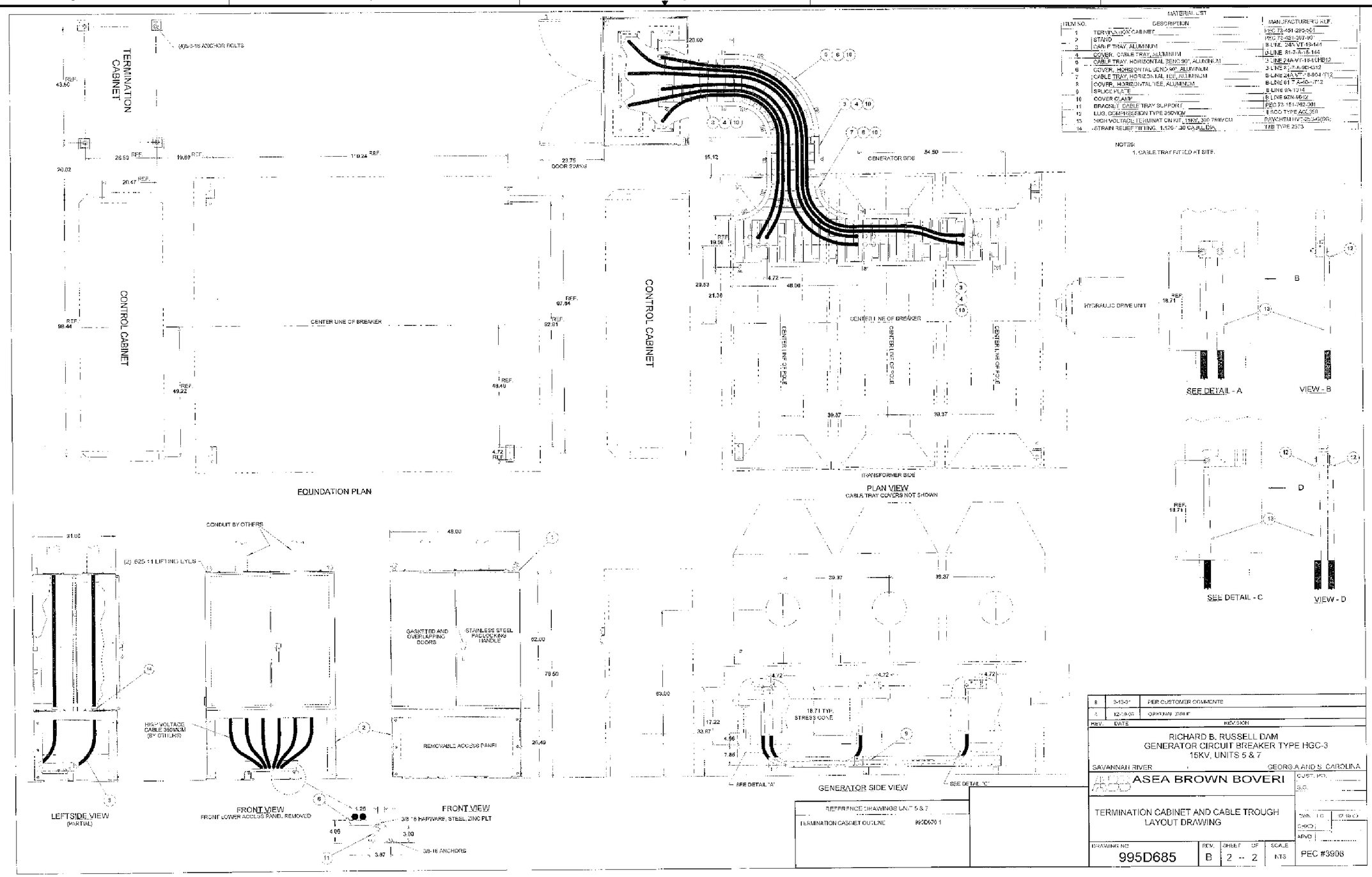
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-131

SCALE: NONE — SHEET

101RRP_R131_ABB_995D685_1.DGN
101RRP_TBLK.DGN
ABB_995D685_1.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r131_abb_995d685_1.dgn
11/05/2003
k6enxndt

...\101rrp_r131_abb_995d685_1.dgn 11/05/2003 08:04:18 AM



MATERIAL LIST

ITEM NO.	DESCRIPTION	MANUFACTURER'S REF.
1	TERMINATION CABINET	PEC 73-451-295-001
2	STAND	PEC 73-451-297-001
3	CABLE TRAY, ALUMINUM	B-LINE 24A-VT-18-144
4	COVER, CABLE TRAY, ALUMINUM	B-LINE 81-7-A-18-144
5	CABLE TRAY, HORIZONTAL BEND 90°, ALUMINUM	B-LINE 24A-VT-18-90HB12
6	COVER, HORIZONTAL BEND 90°, ALUMINUM	B-LINE 81-7-A-90H-312
7	CABLE TRAY, HORIZONTAL TEE, ALUMINUM	B-LINE 24A-VT-18-90HT12
8	COVER, HORIZONTAL TEE, ALUMINUM	B-LINE 81-7-A-90-HT12
9	SPLICE PLATE	B-LINE 9A-1014
10	COVER CLAMP	B-LINE 9ZN-9612
11	BRACKET, CABLE TRAY SUPPORT	PEC 73-151-262-001
12	LUG, COMPRESSION TYPE 350MCM	ILSCO TYPE AGL350
13	HIGH VOLTAGE TERMINATION KIT, 15KV, 300-750MCM	RAYCHEM HVT-253-G(SG)
14	STRAIN RELIEF FITTING, 1.125-1.30 CABLE DIA.	T&B TYPE 2373

NOTES:
1. CABLE TRAY FITTED AT SITE.

REV.	DATE	REVISION
B	3-13-01	PER CUSTOMER COMMENTS
A	12-19-00	ORIGINAL ISSUE

REFERENCE DRAWINGS UNIT 5 & 7

TERMINATION CABINET OUTLINE	995D676 1

RICHARD B. RUSSELL DAM
GENERATOR CIRCUIT BREAKER TYPE HGC-3
15KV, UNITS 5 & 7

SAVANNAH RIVER — GEORGIA AND S. CAROLINA

ASEA BROWN BOVERI

TERMINATION CABINET AND CABLE TROUGH LAYOUT DRAWING

DRAWING NO. 995D685 | REV. B | SHEET 2 OF 2 | SCALE NTS | PEC #3908

FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER — GEORGIA AND S. CAROLINA

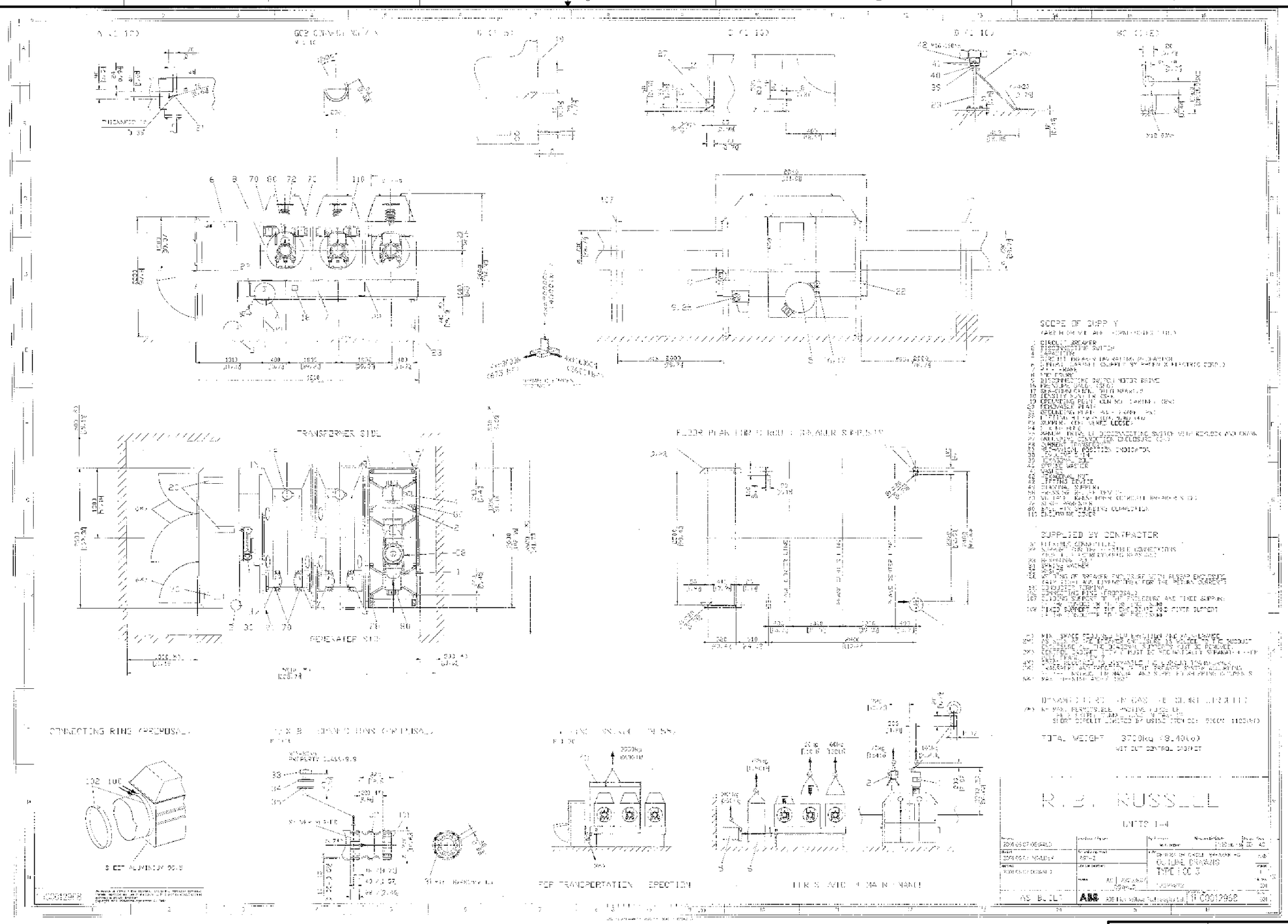
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-132

SCALE: NONE — SHEET

101RRP_R132_ABB_995D685_2.DGN
101RRP_TBLK.DGN
ABB_995D685_2.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r132_abb_995d685_2.dgn
11/05/2003
k6enxndt

...\101rrp_r132_abb_995d685_2.dgn 11/05/2003 08:05:00 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

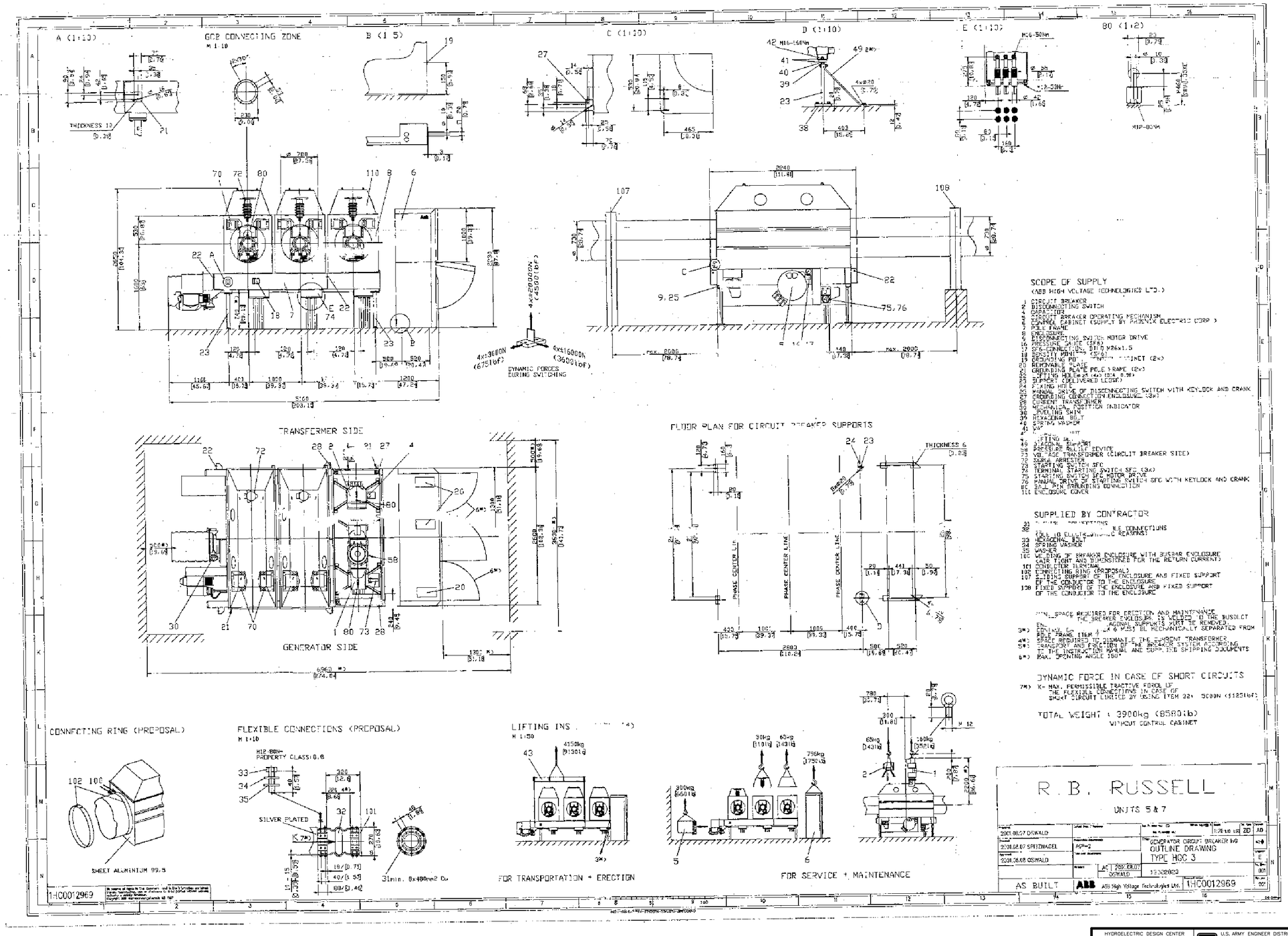
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-133

SCALE: NONE SHEET

101RRP_R133_ABB_1HC0012968.DGN
101RRP_TBLK.DGN
ABB_1HC0012968.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r133_abb_1hc0012968.dgn
11/05/2003
koenxndt

...\101rrp_r133_abb_1hc0012968.dgn 11/05/2003 08:05:32 AM



FOR INFORMATION ONLY

HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

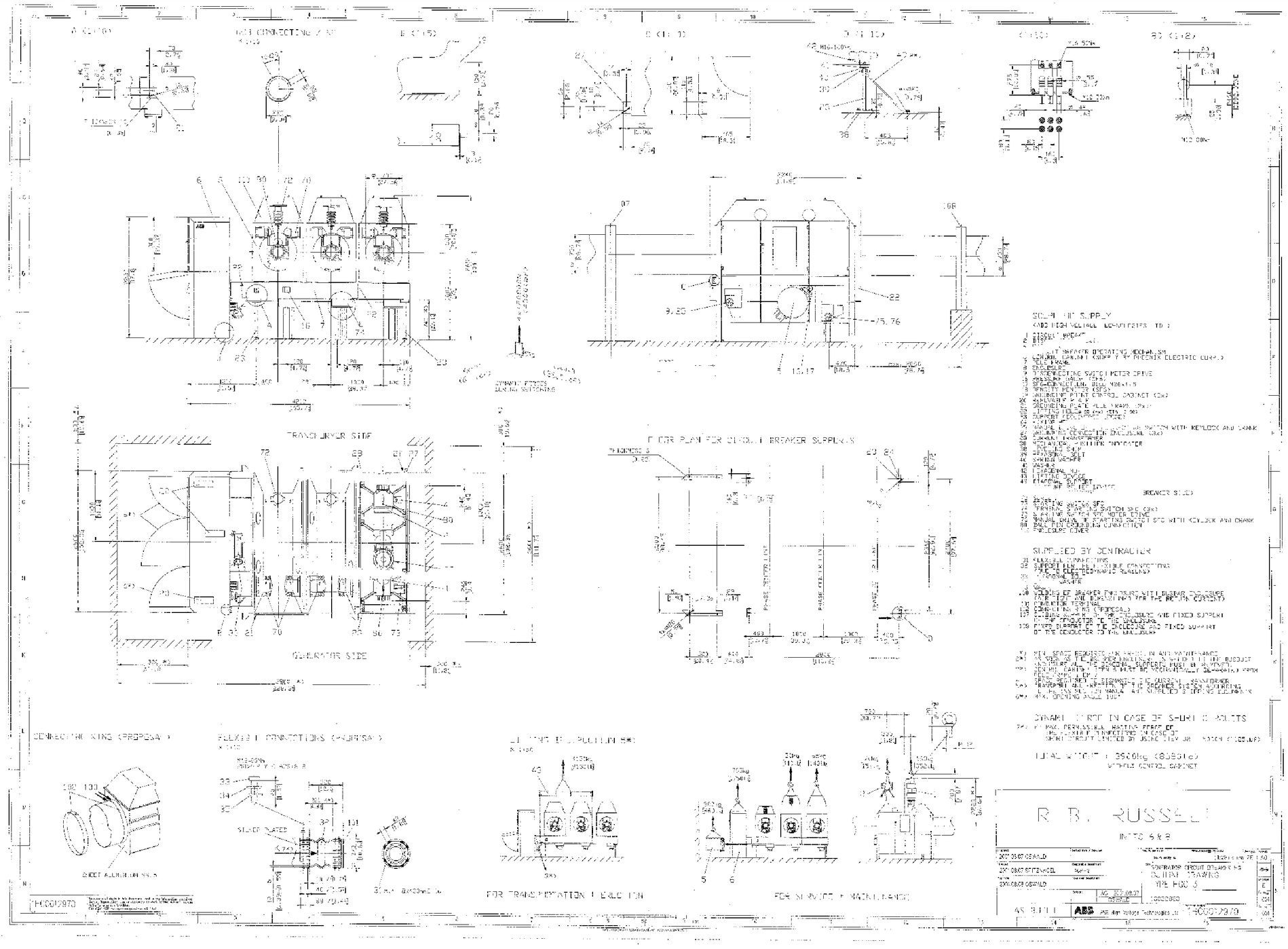
SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-134

SCALE: NONE SHEET

101RRP_R133_ABB_1HC0012969.DGN
101RRP_TBLK.DGN
ABB_1HC0012969.TIF

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r134_abb_1hc0012969.dgn
11/05/2003
k6enxndt

...\101rrp_r134_abb_1hc0012969.dgn 11/05/2003 08:06:00 AM



HYDROELECTRIC DESIGN CENTER
PORTLAND DISTRICT
PORTLAND, OREGON

U.S. ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
SAVANNAH, GEORGIA

RICHARD B. RUSSELL POWER PLANT
CIRCUIT BREAKER & STATIC START INSTALL
REFERENCE DRAWING
SAVANNAH RIVER GEORGIA AND S. CAROLINA

SIZE	SOLICITATION NO.	FILE NO.	PLATE
F	DACW21-03-B-0011	RBR-107	R-135

SCALE: NONE SHEET

I:\ebs_dgn\RBR0107\03B11W\Reference Drawings\101rrp_r135_abb_1hc0012970.dgn
11/05/2003
k6enxndt

101RRP_R135_ABB_1HC0012970.DGN
101RRP_TBLK.DGN
ABB_1HC0012970.TIF

...\101rrp_r135_abb_1hc0012970.dgn 11/05/2003 08:06:31 AM