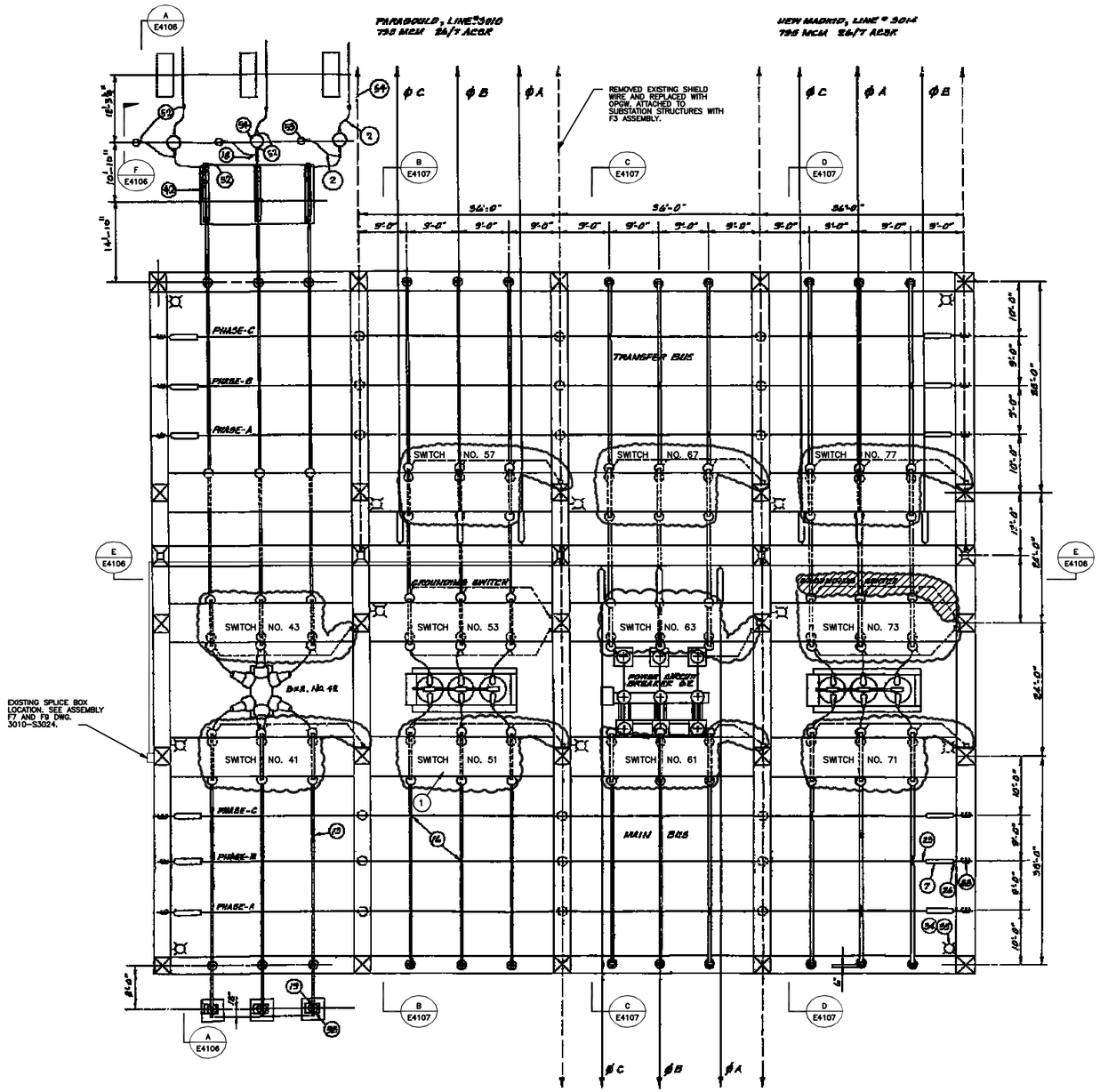

PLAN
SCALE: 3/32"=1'-0"

161 KV STRUCTURE BILL OF MATERIALS

ITEM NO.	QTY.	DESCRIPTION
#1	600'	CABLE CONDUCTOR, 795 MCM 26/7 ACSR CODE DRAKE
2	1300'	CABLE CONDUCTOR, 715.5 MCM, AAL CODE VIOLET
3	40'	CABLE CONDUCTOR, 4/0, 6/1, ACSR CODE PENGUIN
#4	350'	STATIC WIRE 7/16" H.S. GALVANIZED STEEL CABLE
5	1335'	TUBULAR BUS CONDUCTOR, 3" I.P.S. ALUMINUM TUBING, 6063-T6 ALLOY, 10 LENGTHS @ 40' AND 2 LENGTHS @ 35' A.A.S. [illegible]
6	80'	TUBULAR BUS CONDUCTOR, 2" I.P.S. ALUMINUM TUBING, 6063-T6 ALLOY, [illegible]
7	648	SUSPENSION INSULATOR, 5 3/4" x 10", 25,000 LB. M.E.C. STRENGTH (28 PER STACK) OR EQUAL
8	144	STATION INSULATOR 5" B.C. (4 PER STACK) OR 3H52, OR EQUAL
9	69	CORONA END BELL FOR 3" I.P.S. ALUMINUM TUBING ANDERSON ACR2-3H OR EQUAL
10	24	GUY RUNOFF SLIDE OR MOH-SLIDE, 3" B.C. FOR 3" I.P.S. ALUMINUM TUBING, ANDERSON ADE-3-S OR EQUAL
11	6	GUY RUNOFF GLIDE, 3" B.C., FOR 3" I.P.S. ALUMINUM TUBING, ANDERSON ATR-3-S OR EQUAL
12	6	GUY STANDOFF 3" B.C. FOR 2" I.P.S. ALUMINUM TUBING, ANDERSON AUDE-24-S OR EQUAL
13	9	STRAIGHT CONNECTOR FOR 3" I.P.S. ALUMINUM TUBING TO 3" I.P.S. ALUMINUM TUBING ANDERSON ACSC-3030 OR EQUAL
14	6	T-CONNECTOR, 3" I.P.S. ALUMINUM TUBING RUN TO 2" I.P.S. ALUMINUM TUBING TAP ANDERSON ATCT-3020 OR EQUAL
15	3	T-CONNECTOR 3" I.P.S. ALUMINUM TUBING RUN TO 795 MCM 26/7 ACSR TAP ANDERSON ATCG-3013 OR EQUAL
16	24	T-CONNECTOR 3" I.P.S. ALUMINUM TUBING RUN TO 715.5 MCM, AAL TAP ANDERSON ATC-3611 OR EQUAL
17	6	T-CONNECTOR 2" I.P.S. ALUMINUM TUBING RUN TO 795 MCM 26/7 ACSR TAP ANDERSON ATCT-3013 OR EQUAL
18	24	T-CONNECTOR, 715.5 MCM, AAL RUN & TAP ANDERSON VCT-150-1, OR EQUAL
19	3	T-CONNECTOR 3" I.P.S. ALUMINUM TUBING RUN TO 4/0, 6/1, ACSR TAP ANDERSON ATCT-3013 OR EQUAL
20	4	H.S. CLAMP, 795 MCM, 26/7, ACSR, TO 4/0, 6/1, ACSR ANDERSON LCU-13 OR EQUAL
21	22	STRAIN CLAMP, FOR 795 MCM, 26/7 ACSR ANDERSON DB-112-S OR EQUAL
22	2	STRAIN CLAMP, STRATELINE TYPE, FOR 795 MCM, 26/7, ACSR ANDERSON ADE-150-N OR EQUAL
23	12	STRAIN CLAMP, STRATELINE TYPE FOR 715.5 MCM, AAL ANDERSON ADE-35-S OR EQUAL
24	14	STRAIN CLAMP FOR 7/16" H.S. GALVANIZED STEEL CABLE OR 65834, OR EQUAL
25	18	SUSPENSION CLAMP FOR 715.5 MCM, AAL, ANDERSON HAS-104-S OR EQUAL
26	45	BALL-CLEVIS OR 70488, OR EQUAL
27	3	BALL-Y-CLEVIS OR 82857, OR EQUAL
28	8	CLEVIS-EYE OR 83832, OR EQUAL
29	6	Y-CLEVIS-EYE OR 82451, OR EQUAL
30	6	SOCKET-CLEVIS OR 87603, OR EQUAL
31	12	EXTENSION STRAP, 1/2" x 1 1/2" x 24" OR 76244, OR EQUAL
32	8	CLEVIS-CLEVIS OR 79656, OR EQUAL
33	18	SPRING BOLT, 0 TO 5000 lbs. OR 82090, OR EQUAL
34	12	LIGHTING FIXTURE HOLOPHANE 04250, OR EQUAL
35	12	LIGHTING FIXTURE, MOUNTING BRACKET, HOLOPHANE 0876, OR EQUAL
36	2	WAVE TRAP
37	2	COUPLING CAPACITOR- POTENTIAL DEVICE, 161 KV
38	8	161 KV POTENTIAL TRANSFORMERS
39	8	DISCONNECTING SWITCH, 161 KV, 3 POLE, MANUALLY GROUP OPERATED
40	3	DISCONNECTING SWITCH, 161 KV, 3 POLE, MANUALLY GROUP OPERATED WITH GROUNDING BLADE
41	2	T-CONNECTION 2" I.P.S. ALUMINUM TUBING RUN TO 715.5 AAL TAP ANDERSON ATC-3011 OR EQUAL
	6	CONNECTOR 3" I.P.S. ALUMINUM TUBING TO NEMA TERMINAL PAD, SOCKET TYPE, [illegible] OR EQUAL
43	3	WELDED TERMINAL FOR 3" I.P.S. ALUMINUM BUS
44	120'	CABLE CONDUCTOR 1590 MCM AAL CODE "CORMORANT"
45	6	COMPRESSION TERMINATION FOR 1590 MCM AAL CONDUCTOR TO 4 HOLE PAD, ALUMINUM WITH COPPER PAD AND [illegible] OR EQUAL.
53A	1	DISC SWITCH, 161 KV, 1600A, 3 POLE, MANUALLY GROUP OPERATED
46	12	COMPRESSION TERMINAL CONNECTOR 1590 MCM AAL TO 4 HOLE PAD, ALUMINUM WITH COPPER PAD [illegible] OR EQUAL
47	3	TINNED COPPER FLEXIBLE BRAID SHUNT, 1600 AMP RATING WITH 4 HOLE PAD EACH END [illegible] OR EQUAL.
		* INCLUDES CONDUCTOR TO TRANSFORMER STRUCTURE
49	6	CONNECTOR 715.5 MCM AAL TO NEMA TERMINAL PAD, 90° ANDERSON NO. ACF-11-L-90, OR EQUAL.
51	3	CONNECTOR 3" I.P.S. ALUMINUM TUBING TO NEMA TERMINAL PAD MUSHROOM TYPE, [illegible] OR EQUAL.
52	15	TERMINAL CONNECTOR 7/16" H.S. GALV. TO 4-HOLE PAD, ANDERSON [illegible]
53	3	LIGHTNING ARRESTER, 144 KV
54	3	[illegible]
		[illegible]
56	12	GROUND CONNECTOR, 4/0 COPPER TO FLAT, ANDERSON GL-191A-02

NOTES:

1. ROUTED OPGW TO EXISTING SPLICE BOX. ATTACHED OPGW TO STEEL STRUCTURE USING F4 ASSEMBLY. USED EXISTING F4 ASSEMBLY WHERE POSSIBLE.

WORK THIS CONTRACT

12' 8' 4' 0 10' 20'
3/32"=1'-0"

Reference Old drawing number: EE-M-1029-0035

REV	DESCRIPTION	DRAWN	CHKD	APPROVED
12	SWITCH REPLACEMENT	OBJ 10-05	KSH 10-05	
11	OPGW AS-BUILT	DIK 12-97	JEF 12-97	
10	AS-BUILT, SCANNED AND RENUMBERED	JRB 04-92	CEV 08-92	
9	ADDED 161KV AND 69KV LA'S AND REACTORS, REMOVE AND REPLACE BKR 42	DB 09-90		
8	AS-BUILT	CAH 07-90	GGP 07-90	
7	ADDED DWG	IEB 01-90	JB 02-90	

UNITED STATES DEPARTMENT OF ENERGY
SOUTHWESTERN POWER ADMINISTRATION
TULSA, OKLAHOMA

KENNETT SUBSTATION

161KV STRUCTURE
ELECTRICAL PLAN

SCALE: NOTED
DRAWN: RLD
CHECKED:
SUBMITTED:
DRAWING NUMBER: 1029-E4005
FILE NAME: E4005
SHEET NUMBER: 1 OF 1

Border name: A1ASL201 Size: 36 x 24
Last Edited: 10/06/05 10:24:12 Last File Name: \\Pegasus\Drawings\Electrical_Stations\Kennett\A27060_-_Disconnect_Switch_Replacement_-_Scott_Holland\E4005_KEN.dwg
brian.johnson