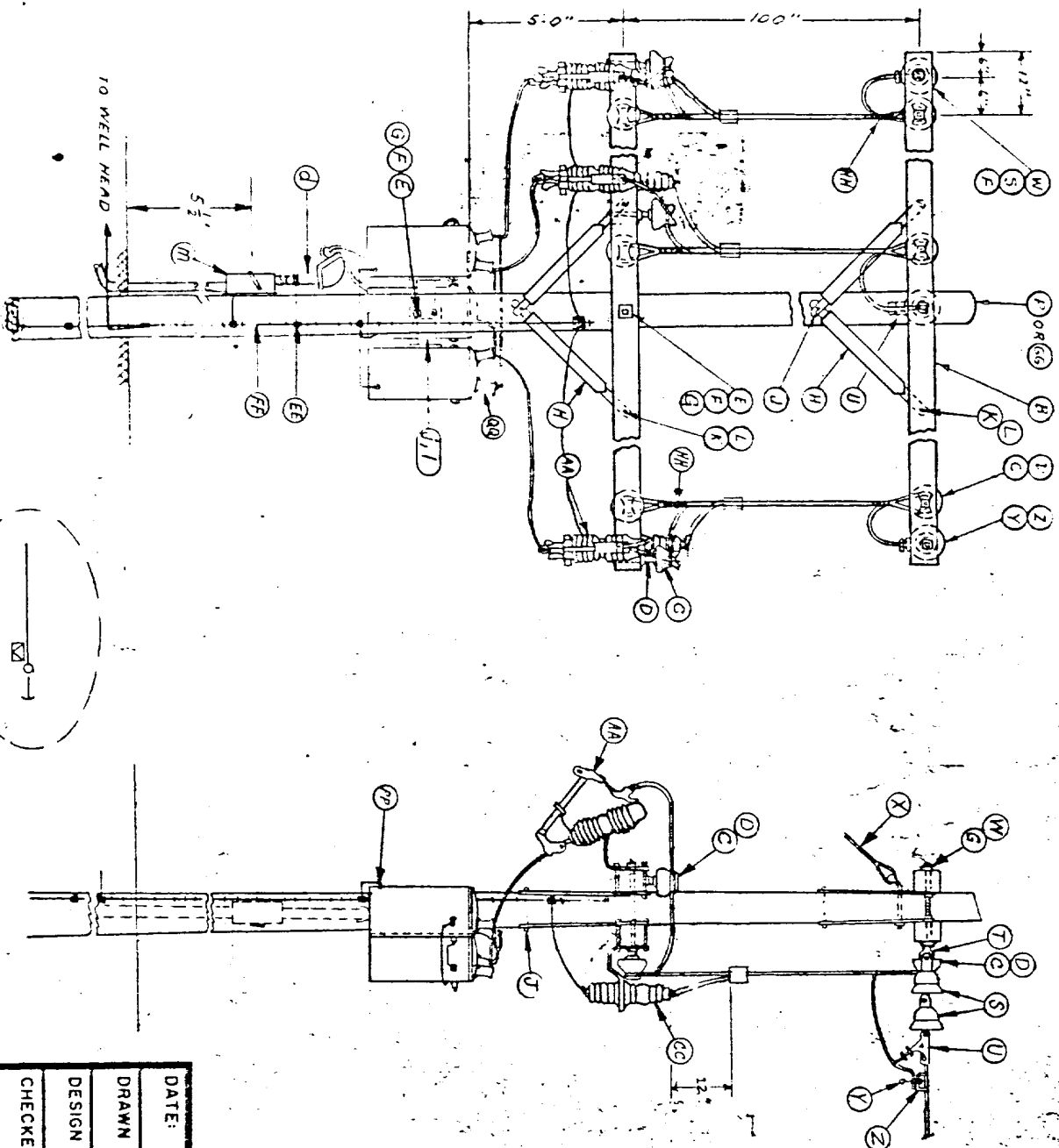




ITEM	QTY	REF
B	4	
C	9	
D	9	
E	3	
F	24	
G	12	
H	8	
J	4	
K	8	
L	8	
Por66	1	ES-1A, NOTE 5
S	6	
T	3	
U	3	
W	5	
X	1	
Y	3	
Z	3	
AA	3	
CC	3	
EE	8	
FF	1	
HH	6	
J	1	ES-1A, NOTE 2
M	1	
PP	3	
QA	6	

NOTE:
 1. CENTER PHASE ON PANK WILL HAVE EPOXY INSULATOR. KEARNEY # 523015-24 INK. (REF - REFER TO DRAW. ES-2B)
 2. ALL WIRE FROM POINT "U" WILL BE INSULATED TYPE WIRE ON TRANSFORMER PANK.

DATE:	12-13-71	TITLE:	SINGLE POLE SUBSTA.
DRAWN BY:	AKD	1PH. TRANS. CLUSTER MOUNT	
DESIGN BY:	AKD	PRIM. DEAD-END. 18500/480V AGSR	
CHECKED BY:		PRODUCTION DEPT.	CONOCO
APPROVED BY:		JOB:	HOBBS DIVISION
SCALE:	NONE	ELEC SPECS	DRAWING NO:
			ES-9

ITEM	DESCRIPTION	A. B. CHANCE NO.	JOSLYN NO.	OTHER MFRS. NO.	NO. SUB.
A	35' class 6 creosoted pine pole				
B	3 1/2" x 4 1/2" x 8' treated crossarm				
C	high density wet process porcelain pin insulator		463		
D	5/8" x 5" Forged steel pin w/sq. washer, nut, & locknut	881			
F	5/8" x 12" machine bolt w/ nut (or length req'd)	881/2			
F	2 1/4" x 2 1/4" x 3/16" x 11/16" hole sq. washer	681/3			
G	5/8" MF locknut	351/2			
H	1/4" x 1 1/4" x 28" flat Crossarm Brace	7128			
J	1/2" x 4" EZ Felter Drive Log Screw	508754			
K	3/8" x 4 1/2" Carriage Bolt w/ Nut	8634 1/2			
L	3/8" MF locknut	3510			
M	Preformed Aluminum Alloy Armot Rods, size req'd				
N	tie wire #6 strong alum. alloy			KEARNEY #22102560	X
O	Epoxy Insulator (Extension Link)				
P	35' class 5 creosoted pine pole			KEARNEY SERIES "81"	X
R	Aluminum double tab Squeeze on Connector for ACSR, Aluminum, or Copper-size req'd				
S	6" Suspension Insulator	66100			
T	5/8" Standard Oval Eye Nut	6502			
U	Primary Dead End Clamp		44050		
W	5/8" x 18" (or length req'd) Double Arming Bolt w/4 sq. nuts	8868			
X	Guying detail - see dwg No. ES-10 for specs.				
Y	Hot Line Clamp	51520AGP		KEARNEY	
Z	Squeeze on basket, size required				X

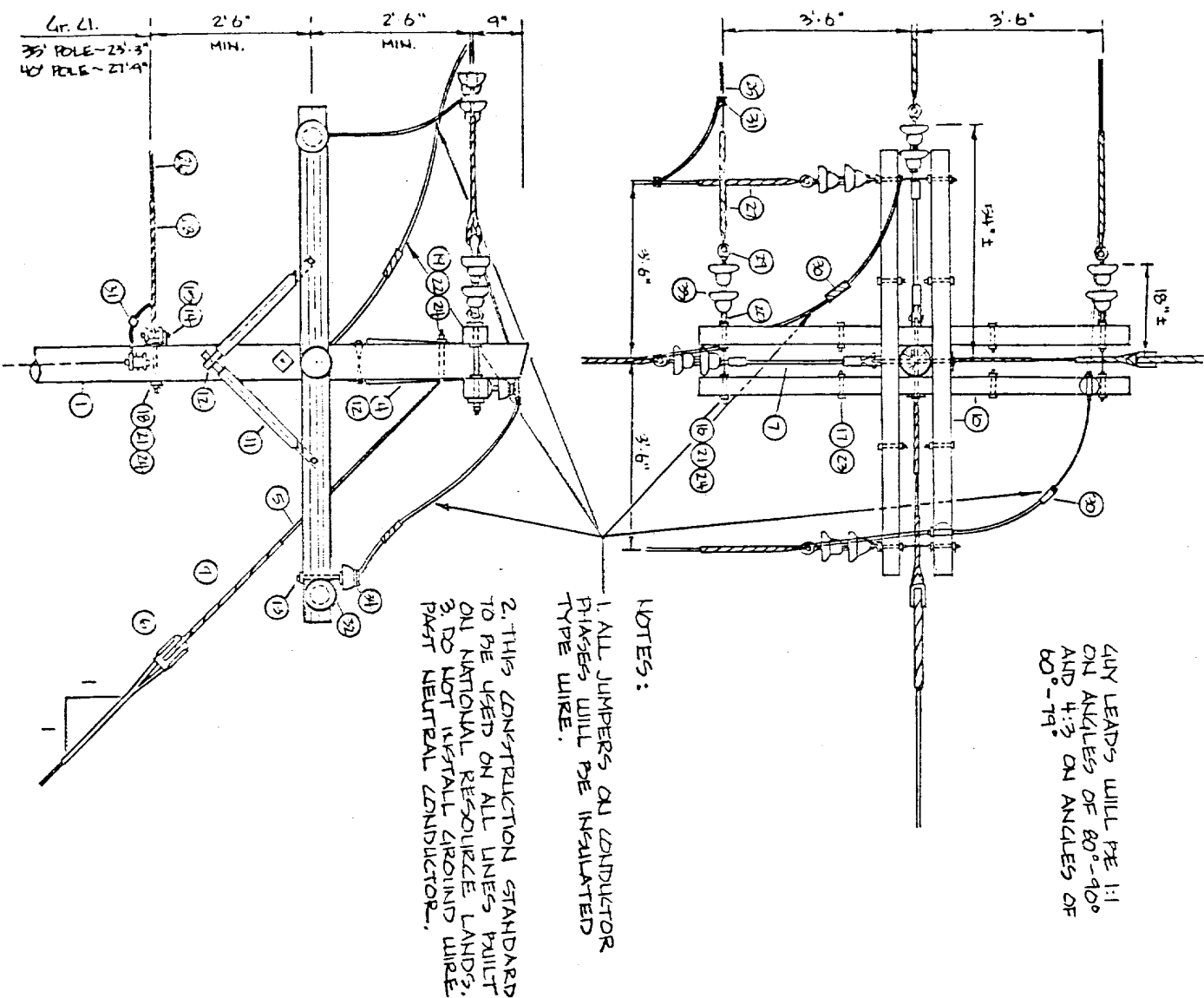
DATE:	12-27-71	TITLE:	DESCRIPTION
DRAWN BY:	E. WINTER		
DESIGN BY:			
CHECKED BY:			
APPROVED BY:			
SCALE:	NONE	JOB:	PROD. DEPT.
			CON
			ELEC SPECS

ITEM	DESCRIPTION	A. B. CHANGE NO.	JOSLYN NO.	OTHER MFRS. NO.	NO SUB.
AA	Primary Cutout - 100 amp, 15 KV, 16000 amp Int. cap.	F2XX1015G			X
BB	General Purpose "U" bolt Clamp	UC510AGP			
CC	Lightening arrester, 10 KV			McGraw-Edison KMC-2	
DD	Single phase oil switch, 14.4 KV			BLACKBURN "F" SERIES	
EE	Split bolt connector, size req'd				
FF	Grounding specs. see dwg No. FS-11 & ES-1A, Note 3				
GG	35' class 4 creosoted pine pole				
HH	Aluminum deadend preforms for ACSR, size req'd				
JJ	30' class 6 creosoted pine pole				
KK	OVERHEAD GRND, #4 ACSR - If Req'd - Ref. Dwg ES-11, FS-1A - Note 3			BUKNDY KC-2Z	X
LL	Ground connector, motor				
NN	600 V. secondary lightening arrester single phase				
NN	Greenfield Type EF liquid-tight flexible steel conduit, size req'd, w/ necessary liquid-tight connectors.				
OO	req'd size LB fitting & cover & gasket				
PP	transformer tank grounding terminal	GW3-15			
QQ	Bird Guards (insulating boots on transformer bushings)			UNESCO H-2000-2	

DATE: 12-27-71		TITLE: DESCRIPTION MATERIAL	
DRAWN BY: E. WINTER		CONOCO HOBBS DIVISION	
DESIGN BY:			
CHECKED BY:			
APPROVED BY:			
SCALE: NONE		JOB: REC. SPECS	DRAWING NO: ES-1
		SHEET 2 OF 3	

ITEM	DESCRIPTION	A. B. CHANCE NO.	JOSLYN NO.	OTHER MFRS. NO.	NO. SUB.
a	double upset bolt s/sq. nut, round washer, and cotter key on short end, sq. nut and MF locknut on long end, 15 1/8" long (or length required.)	7828			
b	wet process porcelain secondary spool insulator, 3" brown glaze		2101		
d	required size conduit w/ servicehead(s) & req'd size & rated insulated conductors. Ref. Dwg ES-1B Note: provide clamp and ground conduit parallel groove clamp, size req'd			BURRBY SERIES "UC"	
e	parallel groove clamp, size req'd				
f	secondary insulator clevis for 4" insulator	6510			
g	3/8" thimbleye nut				
h	3/8" x 12" (or length req'd) straight thimbleye bolt w/sq. nut	5512		ALUMA-10KM 6M3-6	X
j	transformer cluster mount bracket (small)			ALUMAFORM 15M3-6	X
l	transformer cluster mount bracket (large)				
m	req'd size raintight disconnect & fuses, 3-phase, 600 V. Ref. Dwg No. ES-1B				
n	16" cross plate anchor (or size req'd)	X-16			
q	8-way expanding anchor (size req'd)	88125			
t	4" brown glaze wet process porcelain secondary spool insulator		10101		
u	5/8" x 7" thimbleye anchor rod w/nut (use twineye if req'd - Chance No. 5367)	5317 (NUT 55006P)			
aa	3/8" high strength guy strand (10,800 lb.)				
bb	preformed guy grip for 3/8" guy strand	5010			
dd	5/8" x 10" angle thimbleye bolt w/nut	6823 1/2			X
ee	3"x3"x1/4"x11/16" hole curved washer				
ff	6" - guy clamp w/3-1/2" bolts				
gg	medium size strain insulator	6454			
hh	serving sleeve for 3/8" guy strand				X
jj	3/16" x 2-1/2" x 7" lift plate	7887			
nn	pole bottom ground plate (may use butt-wrapp if desired)				
qq	Ground Connection (See Dwg. ES-12)				
rr	wet process porcelain secondary spool insulator, 3" - white glaze				
tt	wet process porcelain secondary spool insulator, 4" - white glaze				

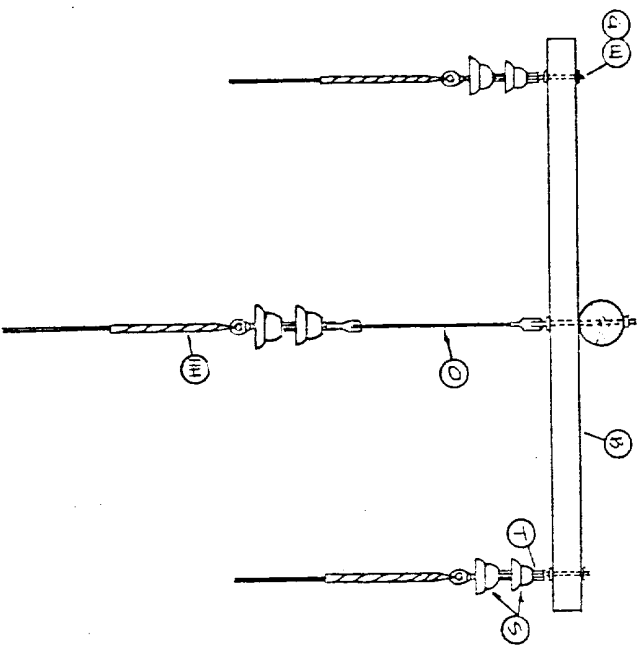
DATE: 12-27-71	TITLE: DESCRIPTION MATERIALS	
DRAWN BY: E. WINTER		
DESIGN BY:		
CHECKED BY:		
APPROVED BY:		
SCALE: NONE		
JOB: ELAC SPECS	HOBBS DIVISION	
	DRAWING NO: ES-1	
	SHEET 5 OF 5	



GUY LEADS WILL BE 1:1 ON ANGLES OF 80°-90° AND 4:3 ON ANGLES OF 60°-79°

MATERIALS		
ITEM	DESCRIPTION	QTY
1	POLE, 8" LENGTH, CLASS 3	1
2	ANCHOR, 8"	2
3	ANCHOR ROD, 5/8" x 7'	2
4	GUY ATTACHMENT, P133A	2
5	GUY CABLE, 3/8" U.L.	24*
6	GUY INSULATOR, 500	2
7	EPoxy INSULATOR, LEARNER # 323015-24	2
8	CLAMP, 3-POL	2
9	GUY GRIP, 3/8"	4
10	ROD ARM, 8'	4
11	BRACE, 3/8" SPA	8
12	LAD SCREW, 1/2"	8
13	STEEL PIN 5/8" x 5"	2
14	BACK, 1-POINT	2
15	SPRINT INSULATOR, 3"	2
16	BOLT, D.A., 5/8" x 10"	8
17	BOLT, WASH., 3/8" x 4 1/2"	8
18	BOLT, WASH., 3/8" x 10"	2
19	BOLT, WASH., 3/8" x 12"	2
20	EYE NUT, 5/8"	8
21	WASHER, 2 1/4" FLAT	22
22	LOCK NUT, 3/8" CURVED	2
23	LOCK NUT, 3/8"	8
24	LOCK NUT, 3/8"	8
25	PHASE CONDUCTOR, NO.	1
26	NEUTRAL CONDUCTOR, NO.	1
27	REF. DE. NO.	2
28	REF. DE. NO.	2
29	REF. DE. NO.	2
30	JUMPER SLEEVE, NO.	2
31	CONDUCTOR, 5.0. 5/8" AL.	2
32	INSULATOR, 9KV PIN	12
33	INSULATOR, 6" DISC	12
34	TIE WIRE, NO. 6 AL.	1/2*

DATE: 7-15-77		TITLE: PRIMARY ANGLE STRUCTURE	
DRAWN BY: J. TRAYNILL		60°-90° 12,000 VOLT ACGR	
DESIGN BY:			
CHECKED BY: SP		CONOCO	
APPROVED BY: SP		HOBBES DIVISION	
SCALE: 1/2"=1'		DRAWING NO. 1	
E.L.I.C. SPECS.		ES-27	



ITEM	QTY REQ'D
P	1
E	3
H	3
D	1
S	6
T	2
W	3

NOTE:
FOR MATERIALS, SEE
DRUGS. ES-1

DATE: 7-15-71		TITLE:	
DRAWN BY: J. MORTILL		EPOXY INSULATOR (EXTENSION LINK)	
DESIGN BY:		CONOCO HOBBS DIVISION	
CHECKED BY: SP			
APPROVED BY: SP			
SCALE: 1/4" = 1"			
JOB:		DRAWING NO.:	
ELEC. SPECS.		ES-28	