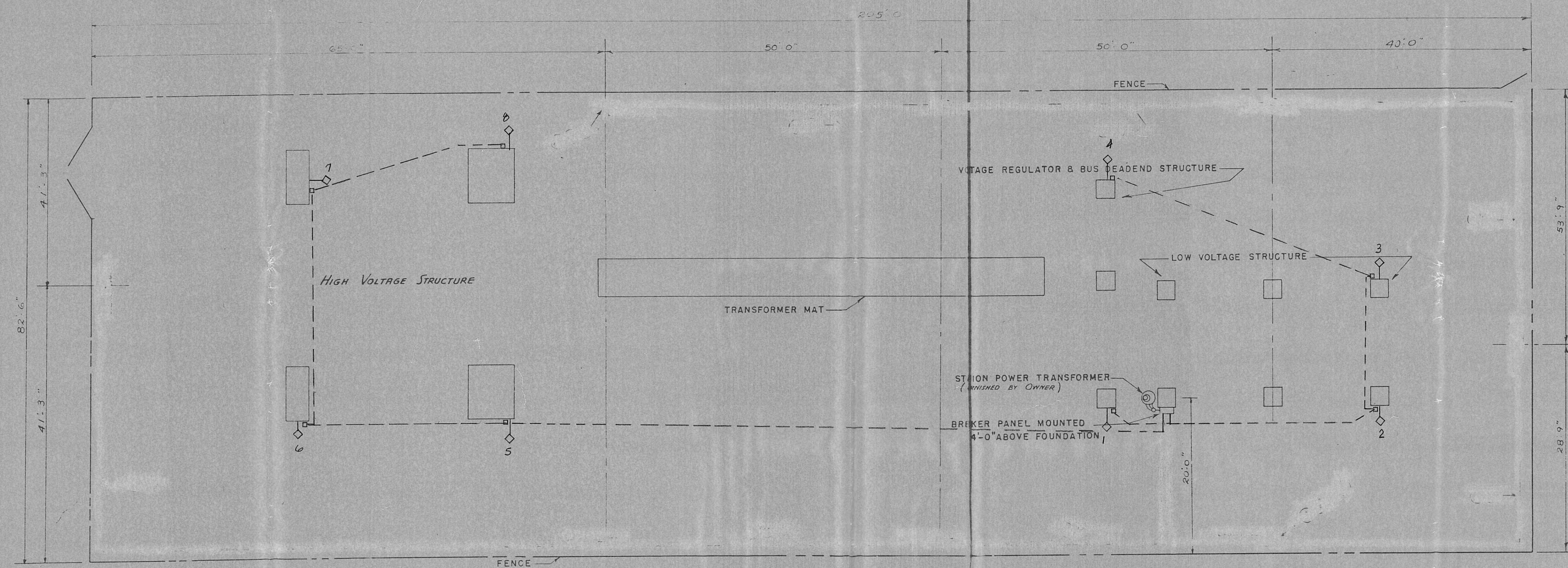
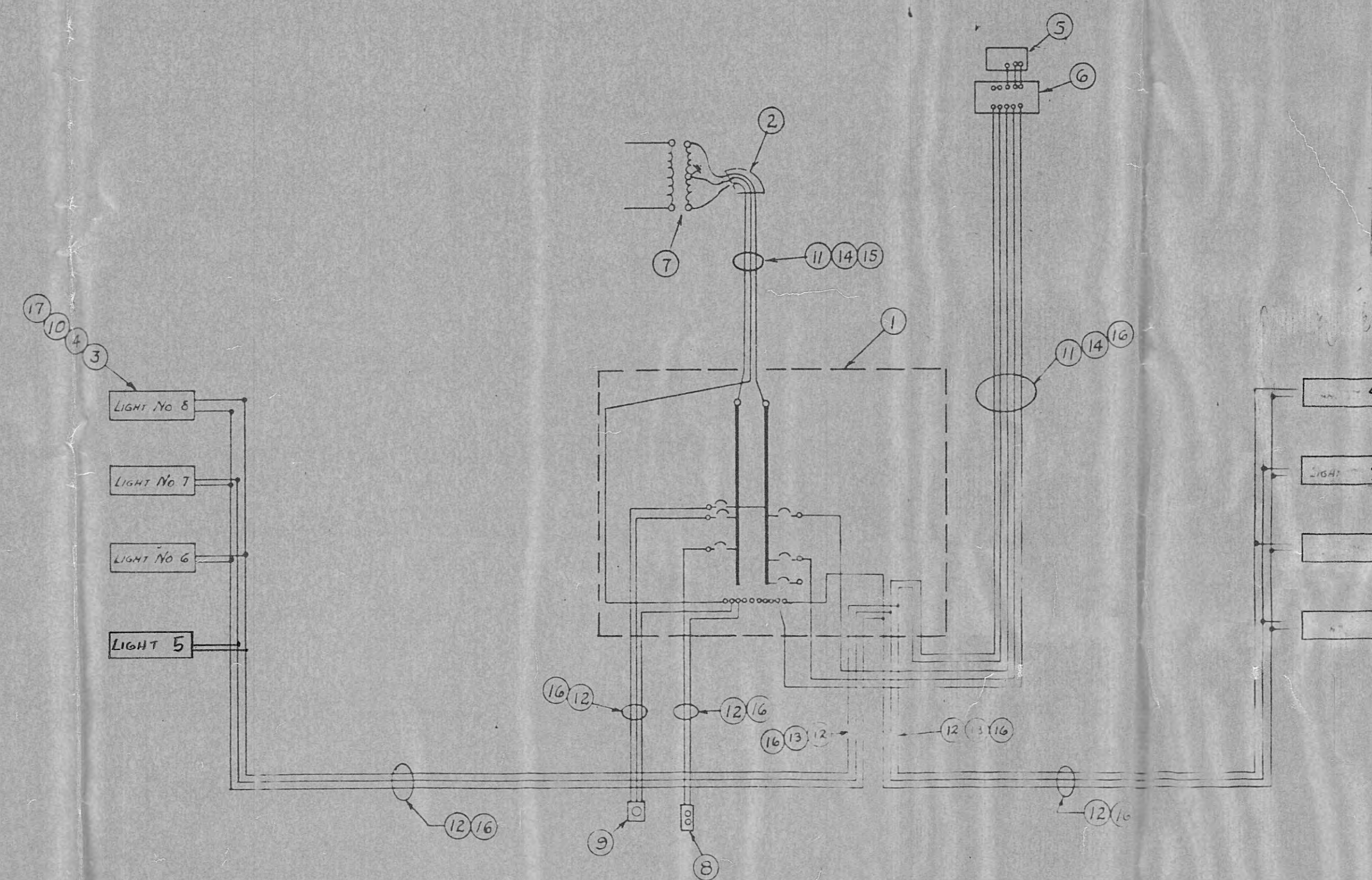
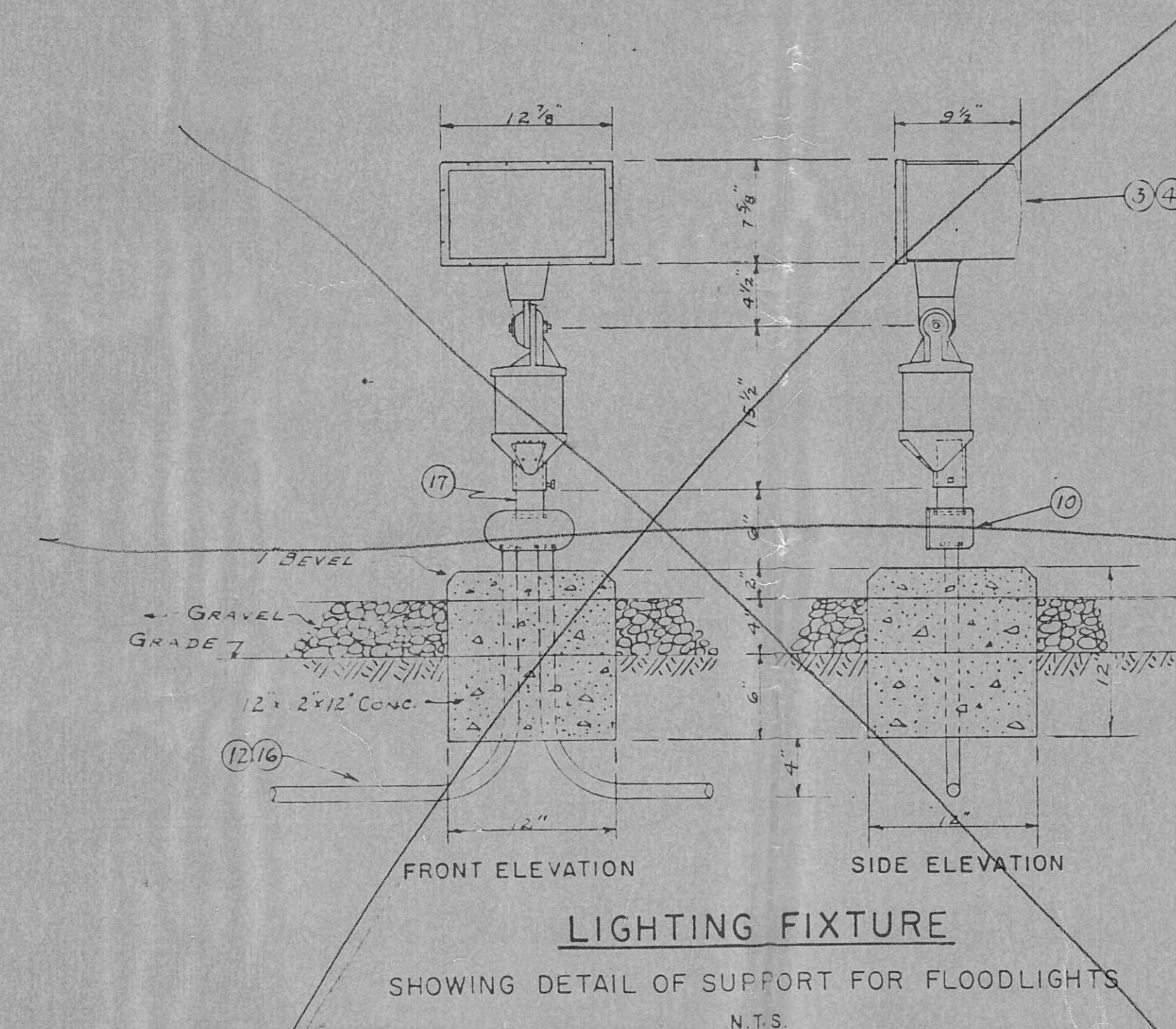




LIGHTING PLAN



SCHEMATIC WIRING DIAGRAM
FOR LIGHTING AND POWER
N.T.S.

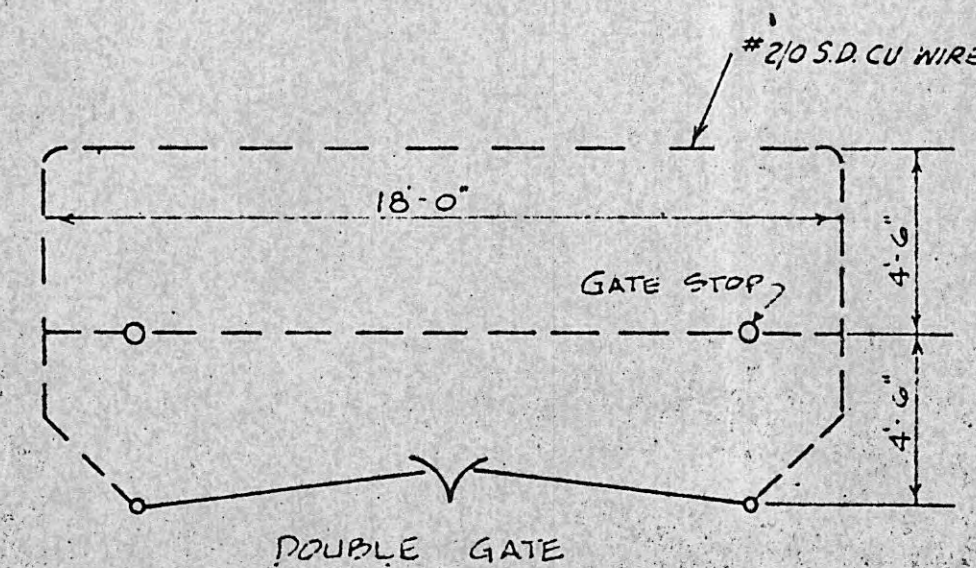
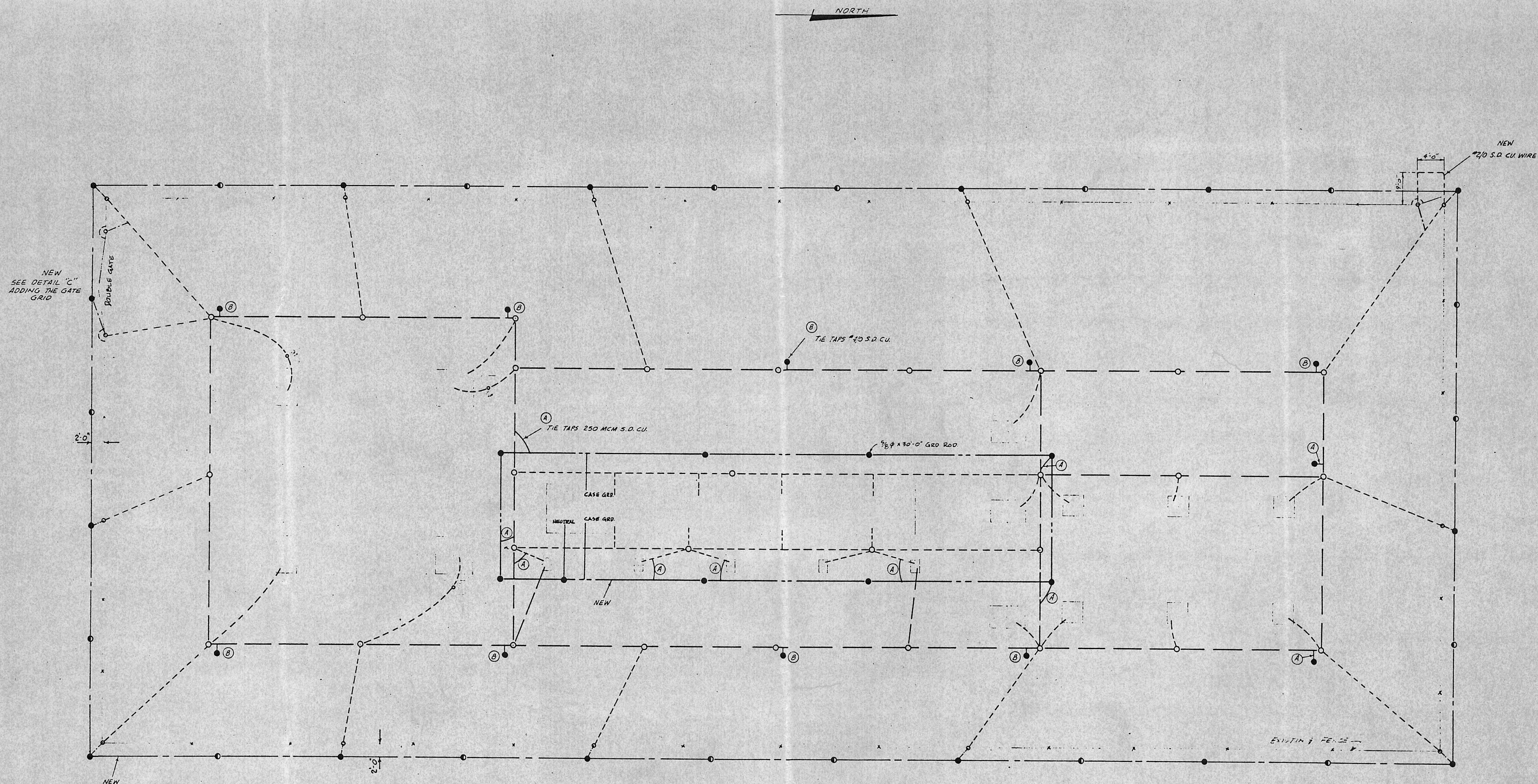


LIGHTING FIXTURE
SHOWING DETAIL OF SUPPORT FOR FLOODLIGHTS
N.T.S.

LIST OF MATERIAL		
ITEM NO.	NO. REQ'D	DESCRIPTION
1.	1	G.E. Type "NGB", or equal, breaker panel with main bus, 12, 3-wire, solid neutral, 100 Amp main bus, with the following: 1-1/4" top conduit hub, one 20 pole branch breaker, two 30 Amp single pole branch two 15 Amp single pole branch breakers. Space shall for five future 40 Amp, double pole breakers and two Amp single pole breakers.
2.	1	Service entrance cap (weatherhead) 1-1/4", C-H Type
3.	8	Light Fixture, Mercury Vapor, Crouse-Hinds Catalog or equal, complete with normal power factor ballast supply, and slip fitter base for 1-1/2" pipe.
4.	12	Lamp for above fixture, 250 watts, 10,500 lumens, C.G.E. Company, or equal.
5.	1	Photo-electric lighting Control, 120 V., General Electric Catalog No. C401G001, or equal.
6.	1	Multiple-control switch, for operation with above unit, 120 V., double pole, 30 Amp/pole, General Electric Catalog No. C420G003, or equal. For 1-1/4" conduit
7.	1	10 KVA, 7200/120-240 V. Transformer (furnished by Owner)
8.	1	C-H conduit FS-2 with Hubbell No. 5252 receptacle and DS70G cover and gasket. Receptacle 15 Amp, 125 V., 3-pole, polarized.
9.	1	C-H conduit FS-2, mounting C-H #DS356, 3-wire, 3-pole plug receptacle with housing and spring door. Receptacle 20 Amps at 250 V. Conduit shall have water-tight.
10.	8	C-H conduit, Type FD092-5-202000-500000 with two 3 bottom and one 1-1/2" hub in top. Conduit shall be with cover and gasket.
11.	60'	1-1/4" hot-dipped or electro-galvanized steel conduit couplings, elbows, bushings, and locknuts, as required.
12.	560'	3/4" hot-dipped or electro-galvanized steel conduit couplings, elbows, bushings, and locknuts, as required.
13.	7	Conduit straps for 3/4" conduit.
14.	8	Conduit straps for 1-1/4" conduit.
15.	90'	No. 2, Type TW copper wire. (30' each red, white, and green)
16.	2160'	No. 10, Type TW copper wire. (720' each red, white, and green)
17.	8	1-1/2" galvanized pipe sleeves, 4" in length and 1/2" wall thickness

AS CONSTRUCTED

DATE	REVISIONS
	HARRIMAN UTILITY B
	HARRIMAN, TN. 3774
	MOSSY GROVE SUB. 6
	LIGHTING PLAN
SCALE	N.T.S.
DATE	OK'D



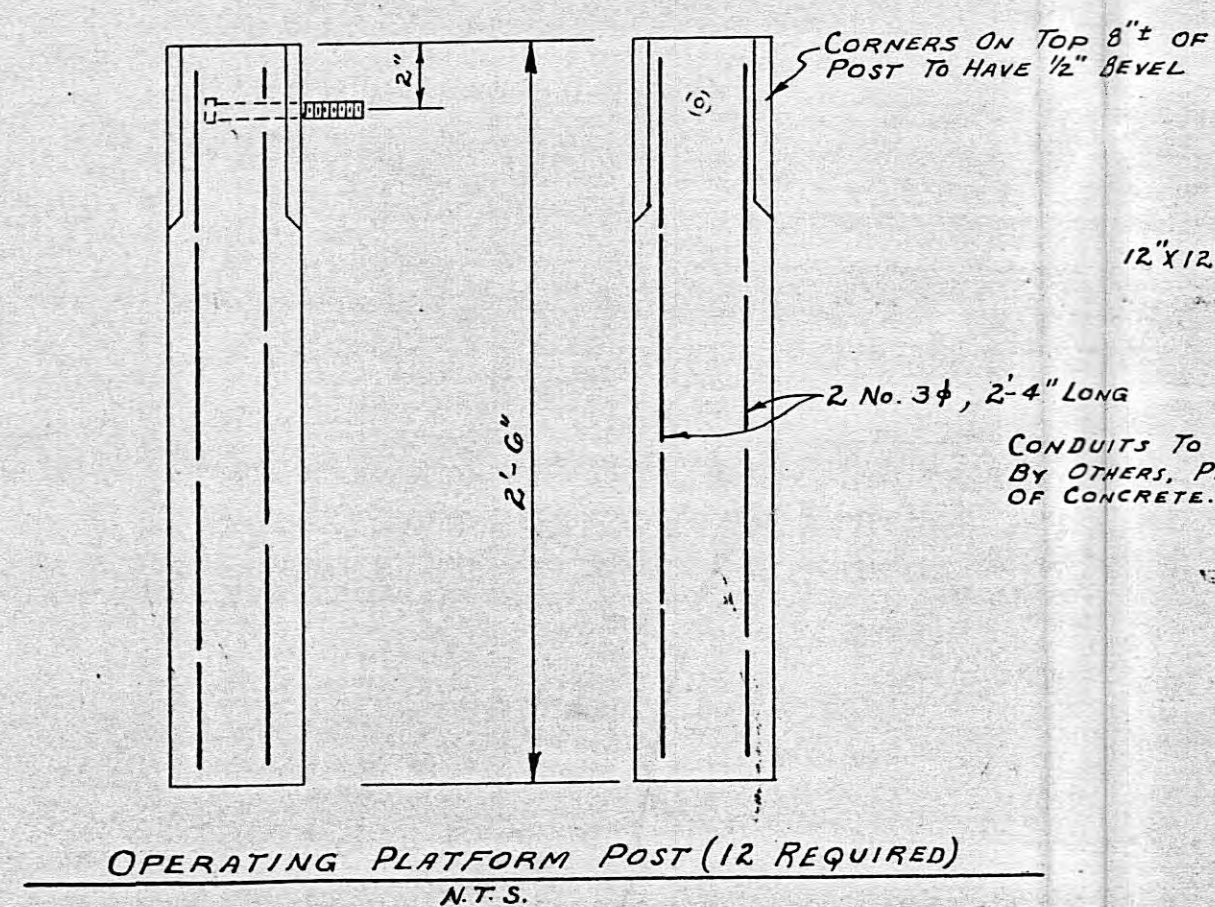
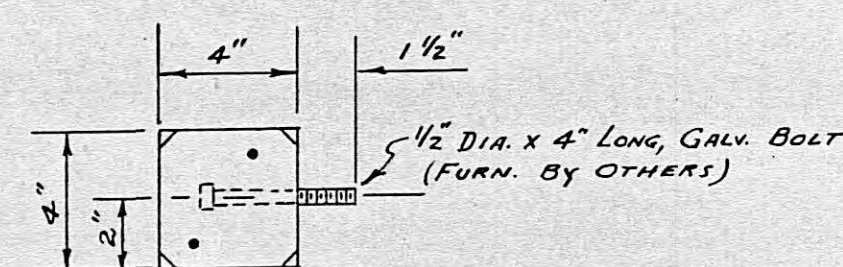
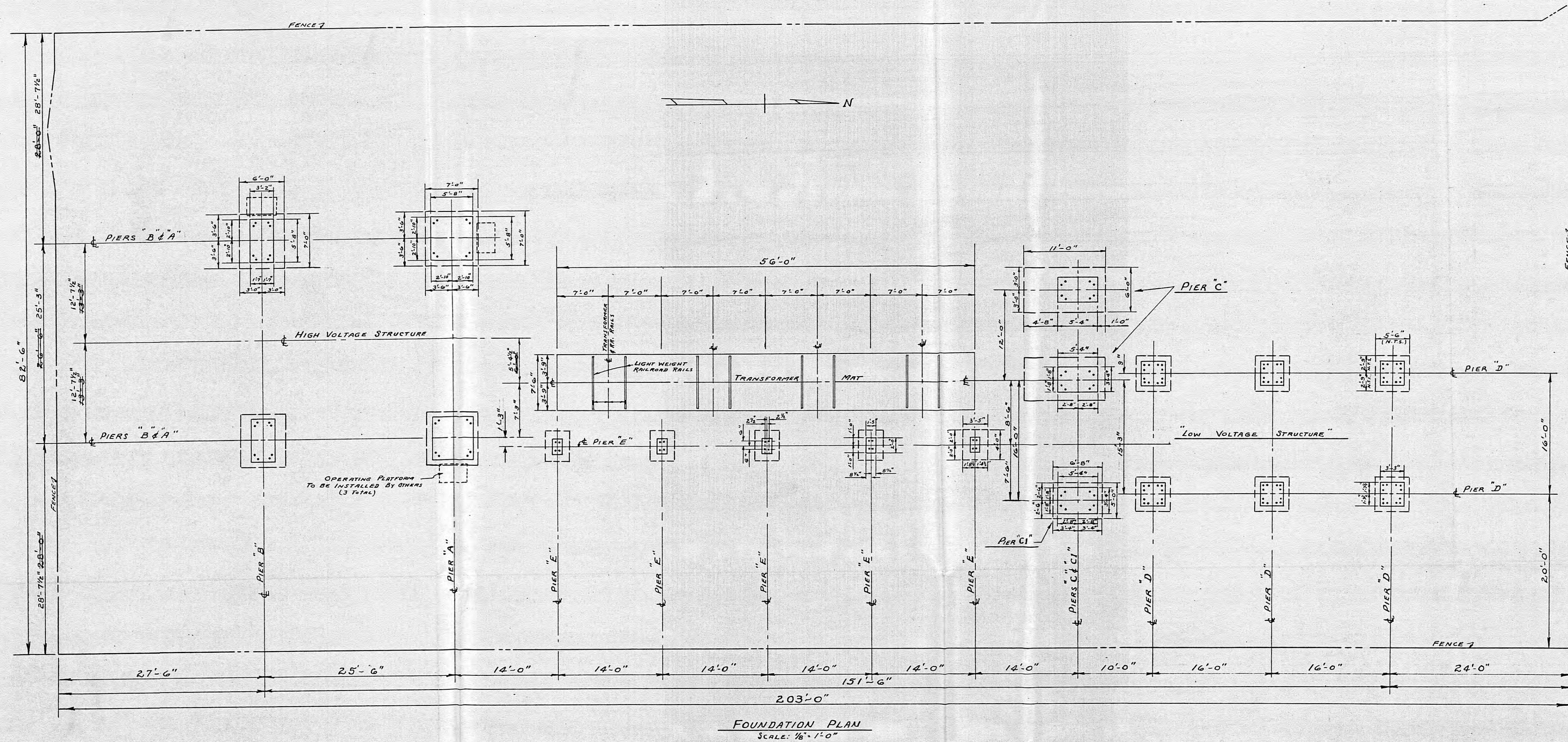
- MATERIAL LIST**
- 75' - #40 S.D. CU. WIRE
 - 325' - 250 MCM S.D. CU. WIRE
 - 725' - #20 S.D. CU. WIRE
 - 122 - $\frac{5}{8}$ " ϕ x 10'-0" CU. GROUND RODS
 - 10 - $\frac{1}{8}$ " ϕ GROUND ROD COUPLINGS
 - 12 - WRENCH LOK CONNECTORS CAT. NO. 910-045-01-UTM POWER PRODUCTS INC.
 - 105 - WRENCH LOK CONNECTORS CAT. NO. 910-045-03- " " " "
- INFORMATION**
- 4 - RODS INSIDE GRID - H.S.
 - 3 - RODS INSIDE GRID - L.S.
 - 13 - RODS INSIDE GRID - TRANSFER
 - 32 - RODS OUTSIDE GRID - FENCE
 - 52 - TOTAL ROD STATIONS

- LEGEND**
- No. 20 S.D. CU.
 - No. 10 S.D. CU.
 - No. 40 S.D. CU.
 - No. 250 MCM S.D. CU.
 - ROD STATIONS DRIVEN 30'
 - ROD STATIONS DRIVEN 10'

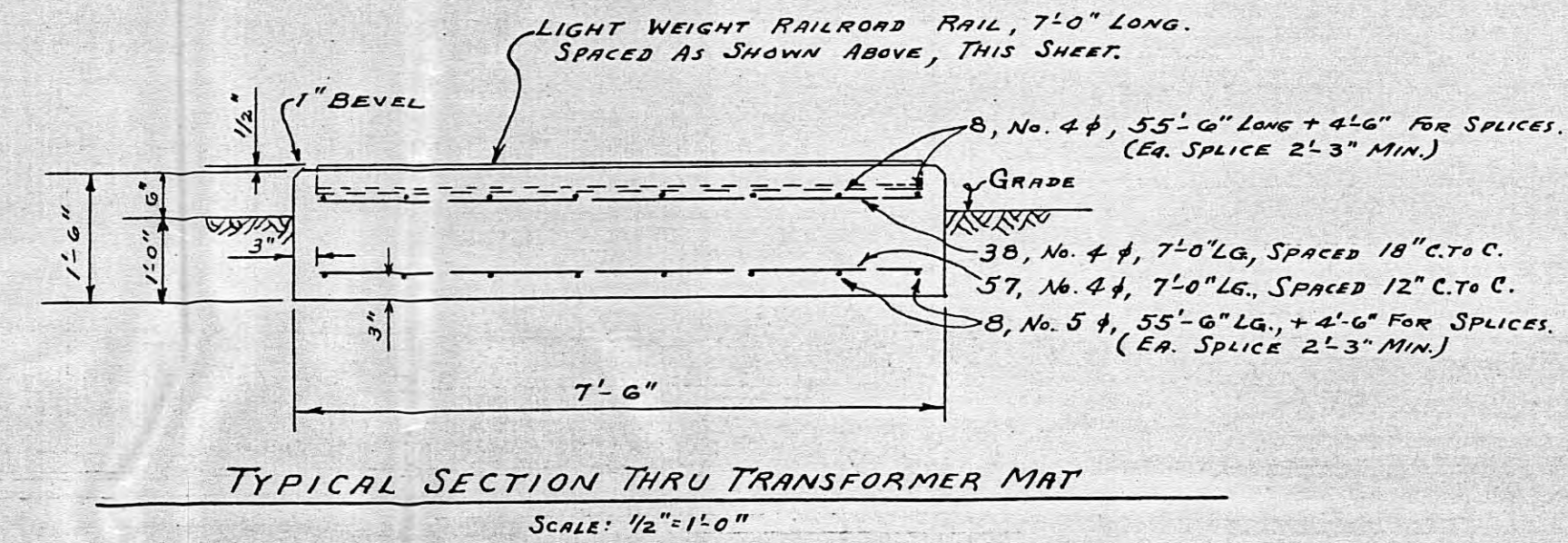
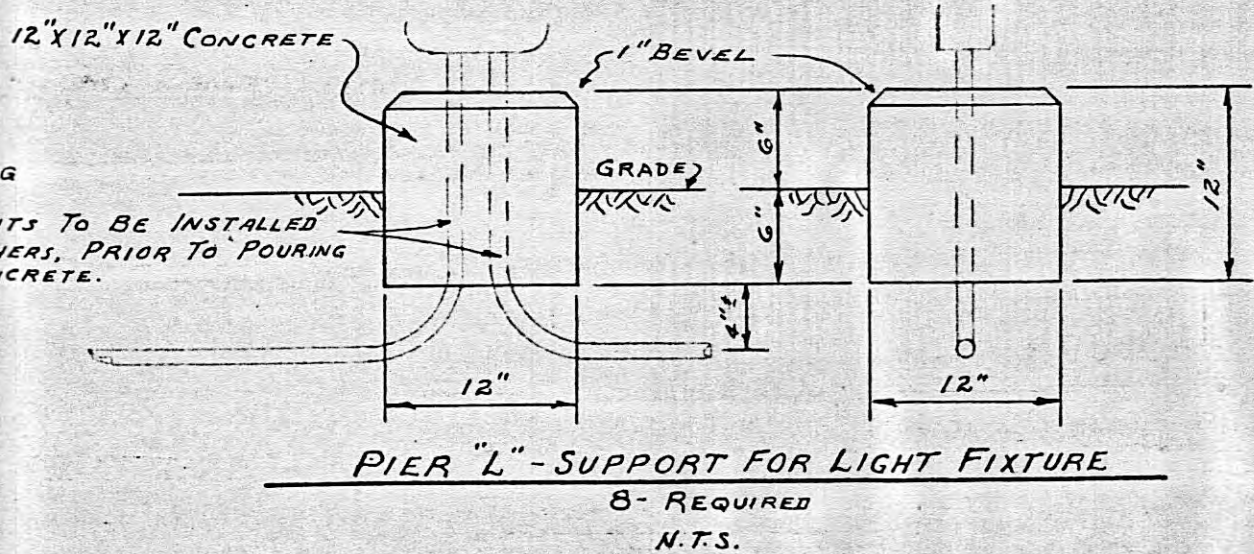
Improved Grounding Plan
Sheet 1

NO.	REVISIONS	DATE	BY	CHK	APPD	ENGINEERING RECORD		
						ENGINEER	BY	DATE
						DRAWN	J.T.	4-25-89
						CHECKED		
						APPROVED		
						TRACED		

SCALE $\frac{1}{8}" = 1'-0"$



NOTE:
OPERATING PLATFORM POSTS ARE TO BE CONSTRUCTED AND LEFT
AT SUBSTATION SITE. FINAL INSTALLATION WILL BE ACCOMPLISHED BY OTHERS.



CONCRETE & STEEL SCHEDULE					
STRUCTURE	No. REQ'D.	CU. YDS. CONC. PER STA.	LBS. STEEL PER STA.	TOTAL	
PIER "A"	2	5.380	263.470	10.76	526.94
PIER "B"	2	3.550	214.000	7.10	428.00
PIER "C"	2	6.270	441.110	12.54	882.22
PIER "C-1"	1	3.400	152.550	3.40	152.55
PIER "D"	6	2.300	124.100	13.80	744.60
PIER "E"	5	.721	51.000	3.61	255.00
PIER "L"	8	.037	1.000	.30	.00
OPERATING PLATFORM POST	12	.010	1.760	.12	21.12
TRANSFORMER MAT	1	23.350	*1265.500	23.35	*1265.50
TOTAL				74.98	*4,275.93

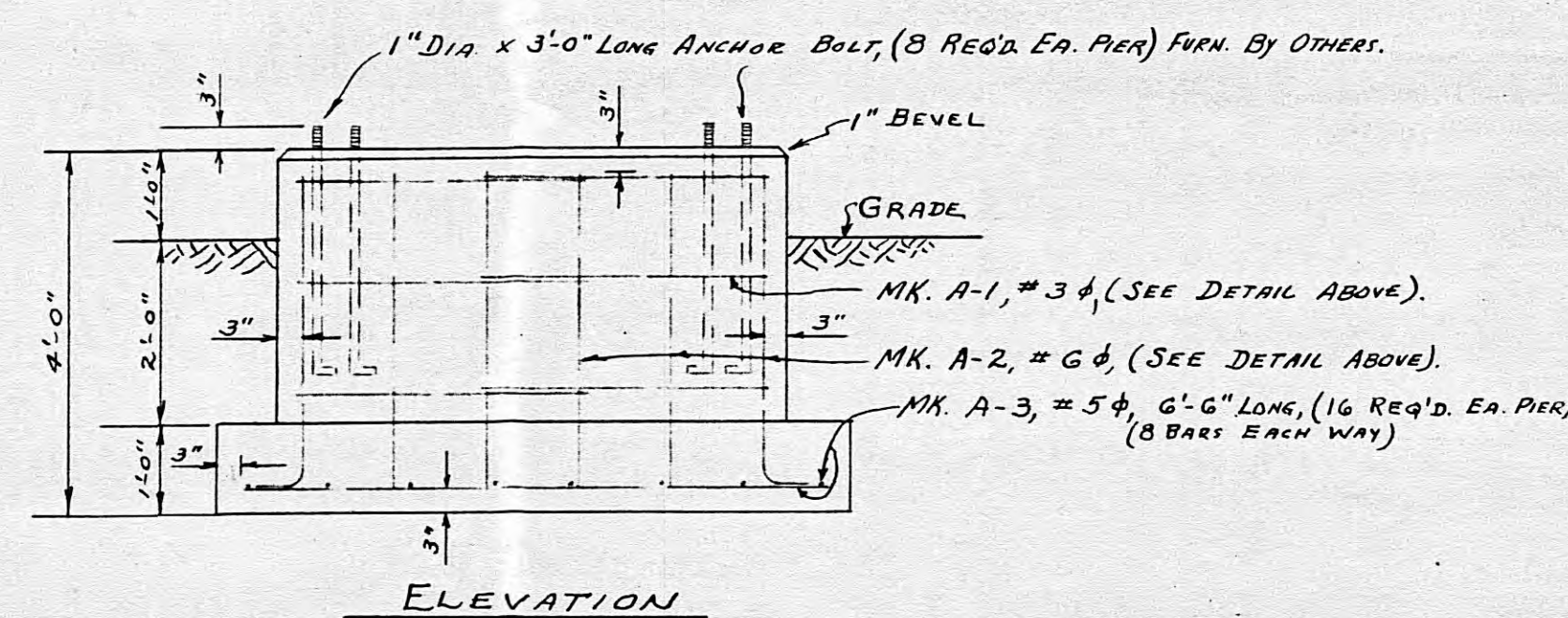
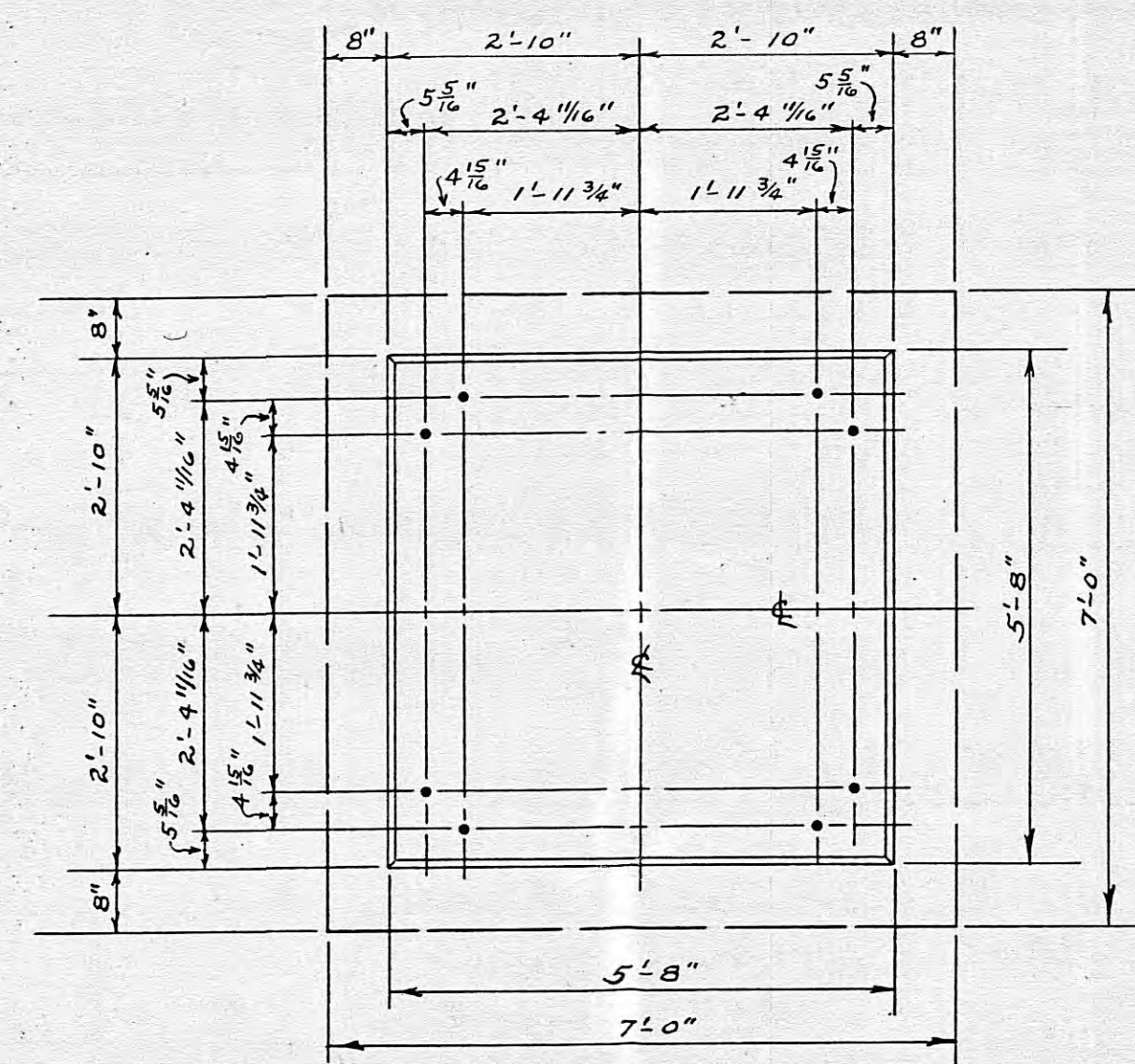
* DOES NOT INCLUDE WEIGHT OF RR. RAILS.

AS CONSTRUCTED

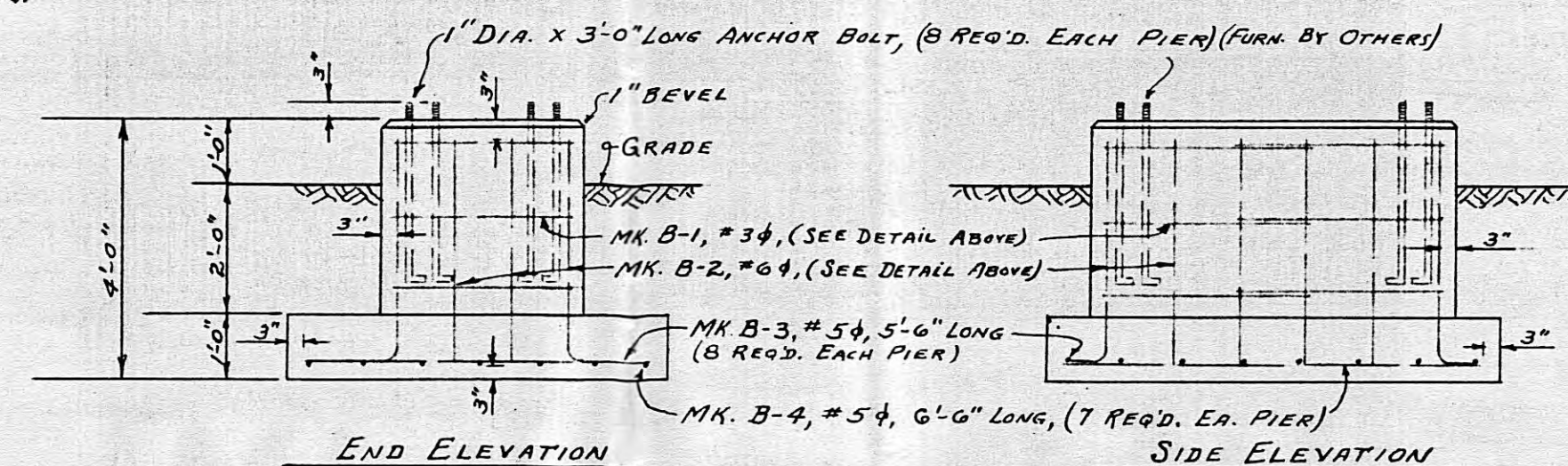
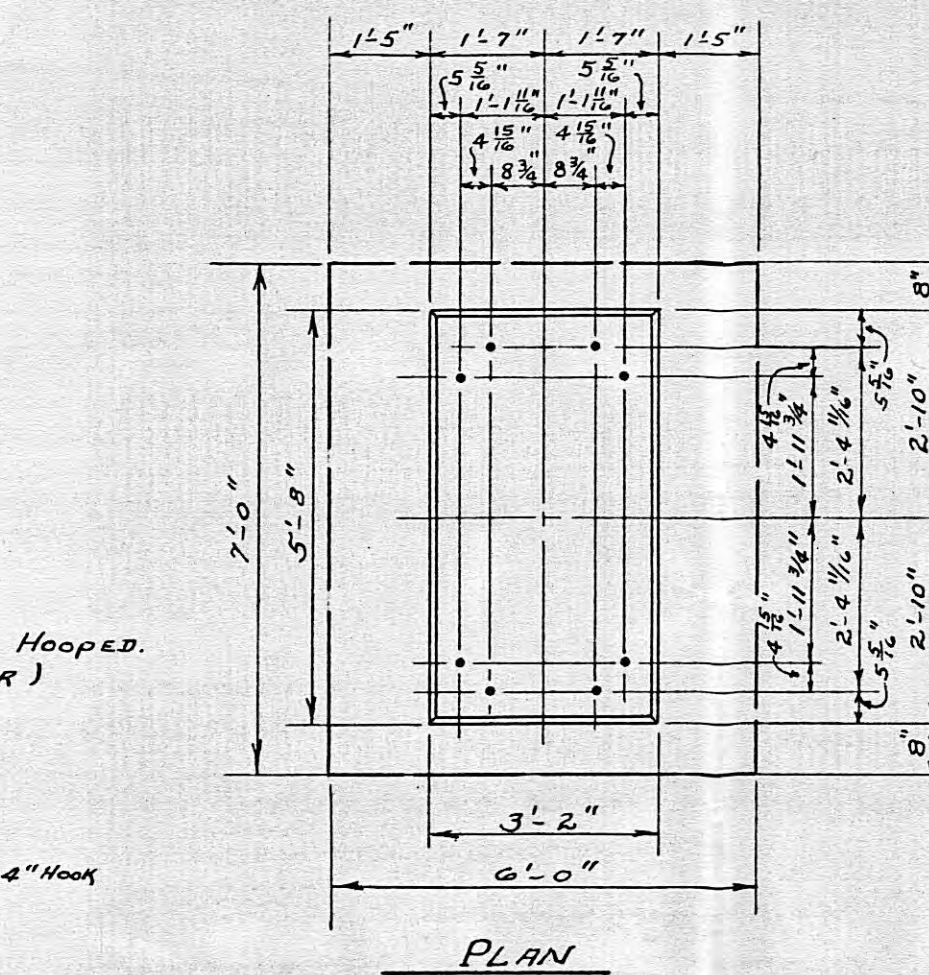
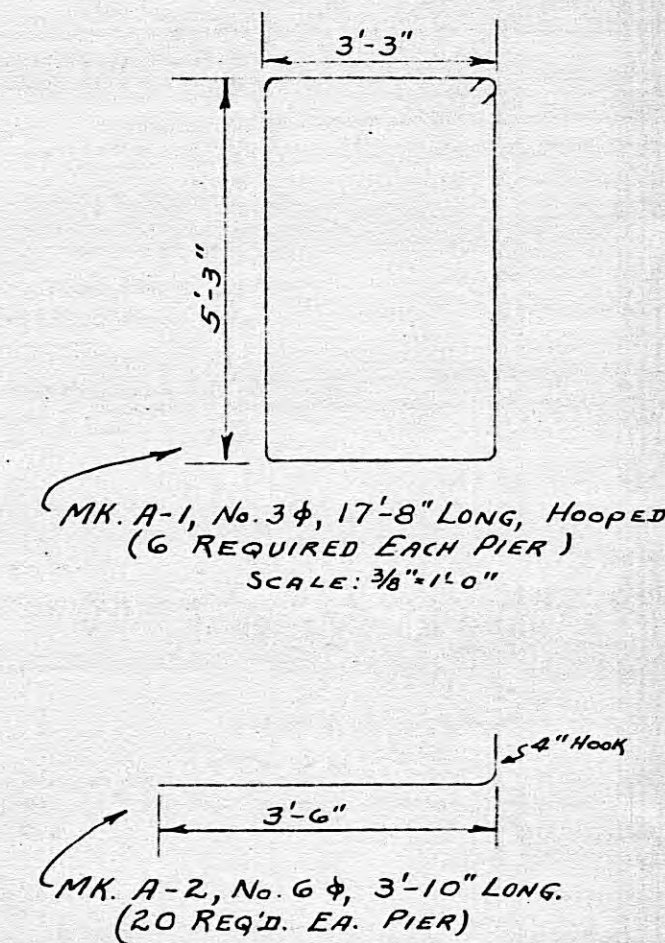
DATE	REVISIONS	NO.
CLAY ELECTRIC COOP, INC. KEYSTONE HTS, FLA.		
OUTDOOR SUBSTATION 69-12/12.5 KV		
FOUNDATION PLAN		
BROOKER SUBSTATION		
E. P. McLEAN ENGINEERING CO.	MOULTREE, GA.	
SCALE: AS SHOWN	DWG: R.A.A.	DRAWING NO.
DATE: JULY, 1965	OK'D: E.J.M.	F14-S29-1
		SHEET 1 OF 2

NOTES

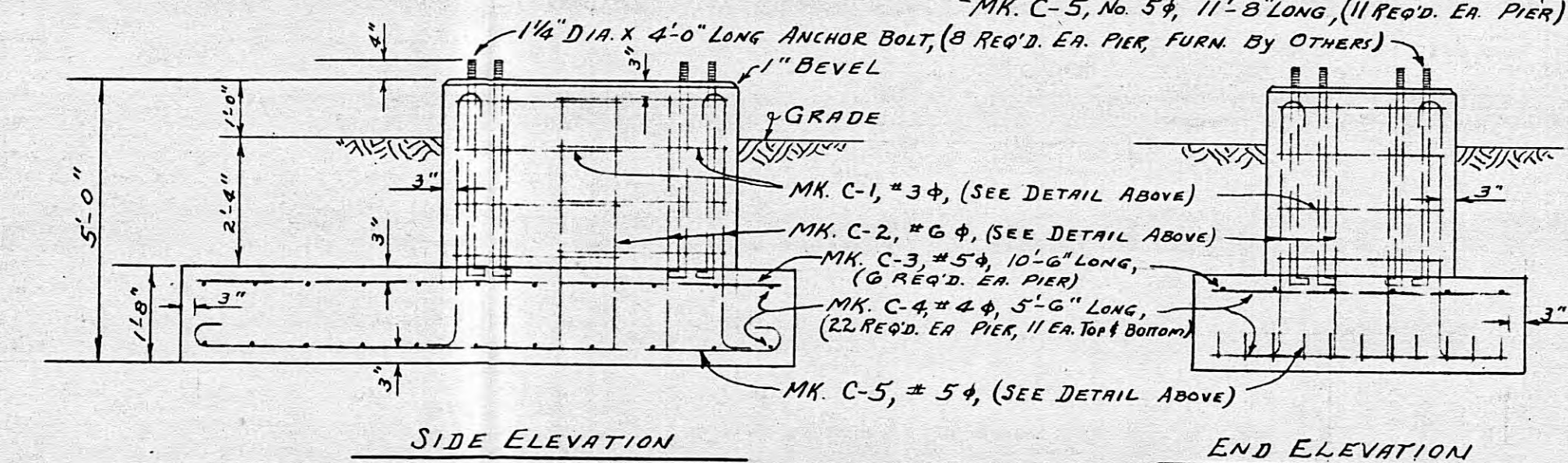
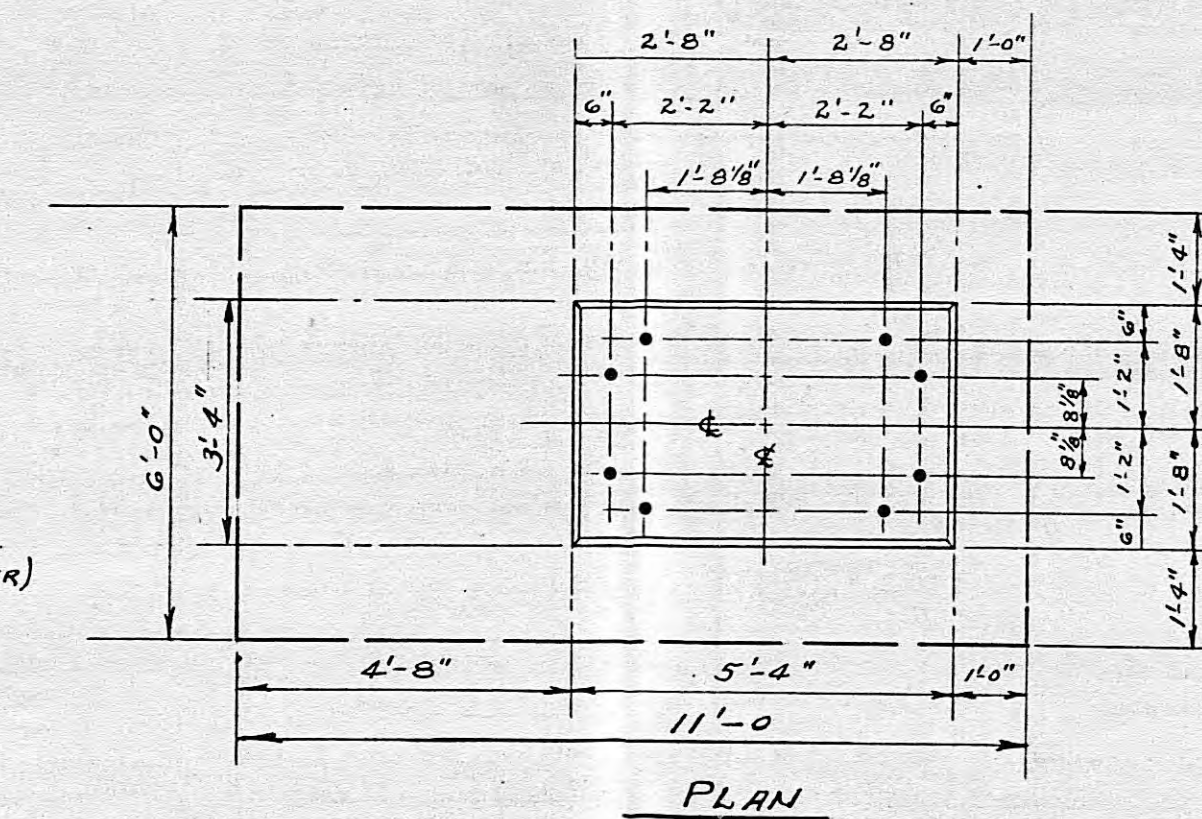
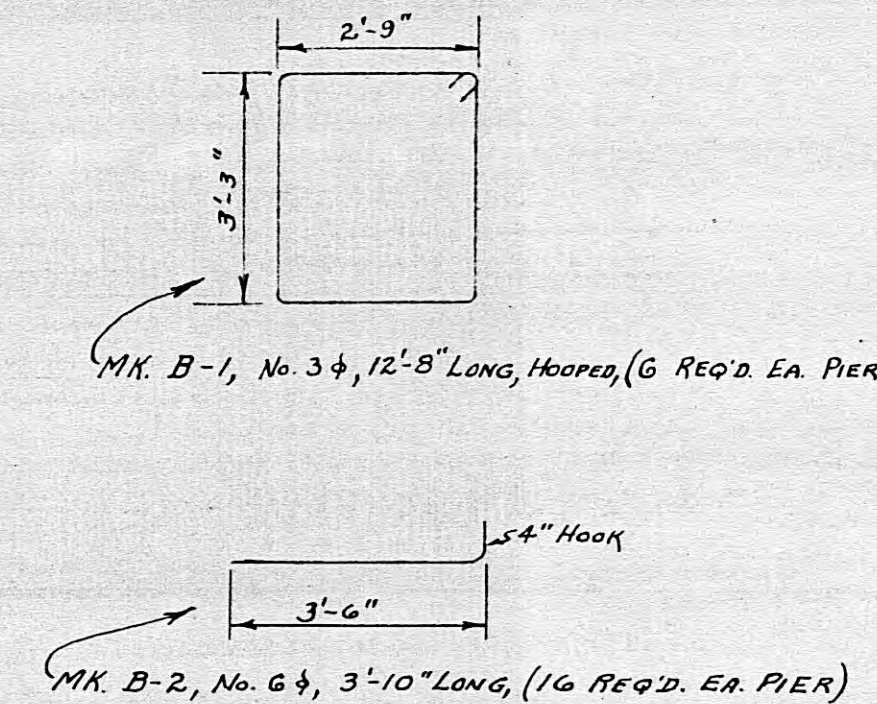
- Concrete shall be Class "A" of the mixture normally referred to as 1:2:4.
- The ingredients in the mixture must meet specifications for 3000# concrete.
- Each foundation to be poured monolithic and all exposed edges to have a one-inch bevel.
- Top surface of all piers and pads must be trowel finish, true and level at correct elevation. After removing forms, side surfaces above grade shall be rubbed with a fine-grained carborundum stone.
- The earth under all piers and mats is to be thoroughly prepared and shall be approved by the Engineer before pouring concrete. In cases where the earth under piers or mats is unsuitable for proper foundation, the Engineer may require excavation below grade and the unsuitable material replaced with select material or fine crushed rock or gravel thoroughly tamped to provide a suitable foundation for the piers and/or mats.
- The foundation Contractor shall clean up site after completion of foundation work and backfill and thoroughly tamp around all foundations; any excess excavated materials are to be disposed of as directed by the Engineer.



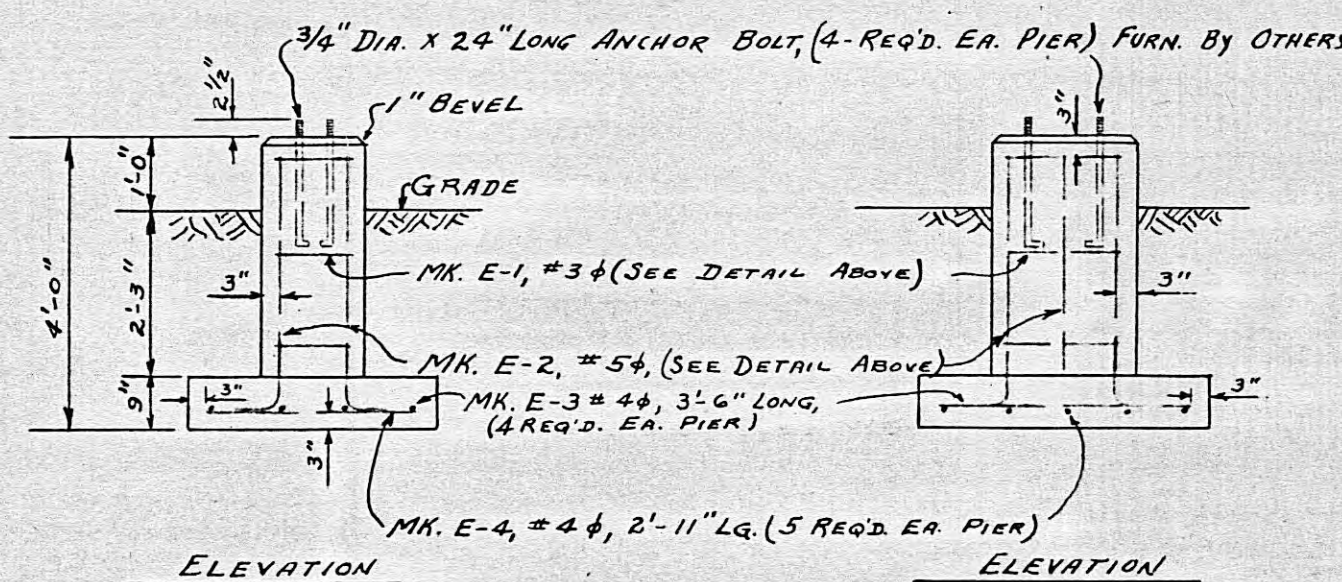
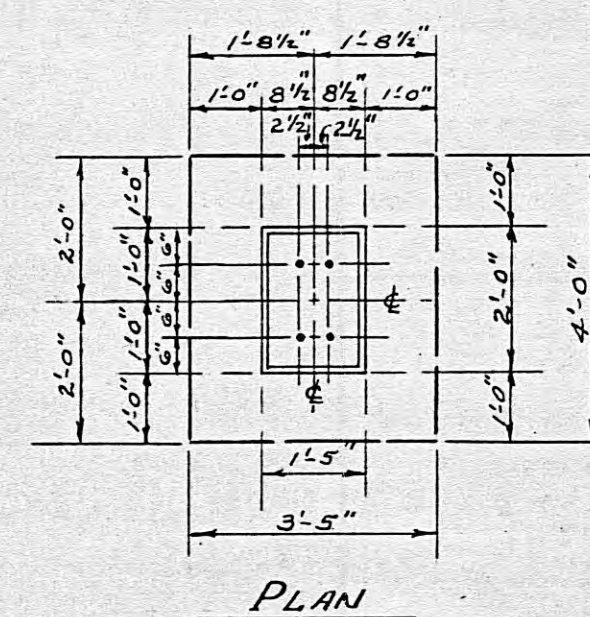
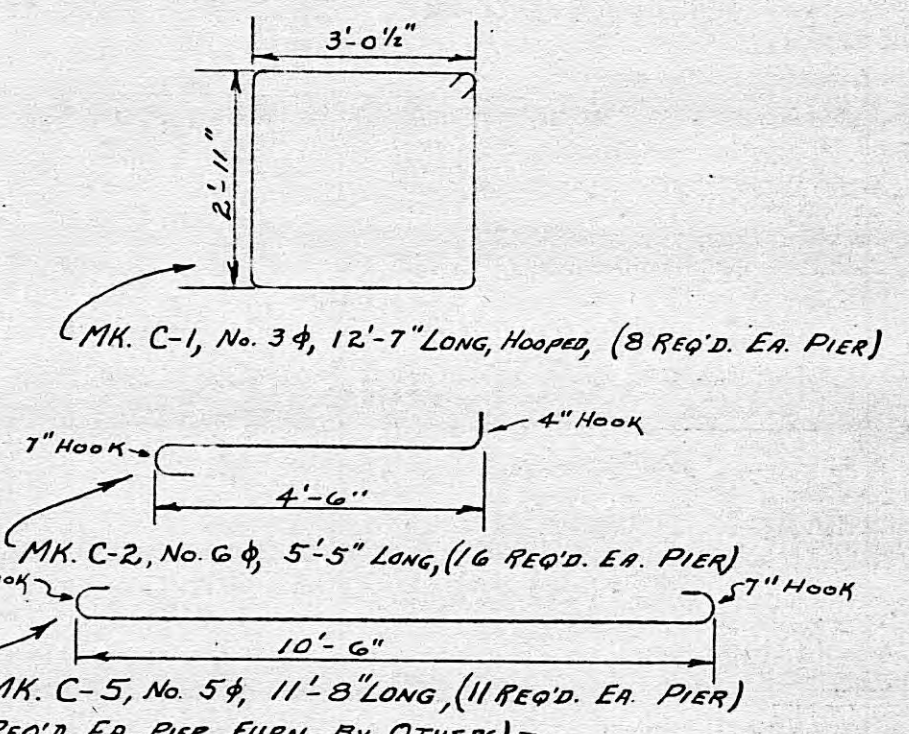
DETAIL OF PIER "A" (2-REQUIRED)
SCALE: 1/2" = 1'-0"



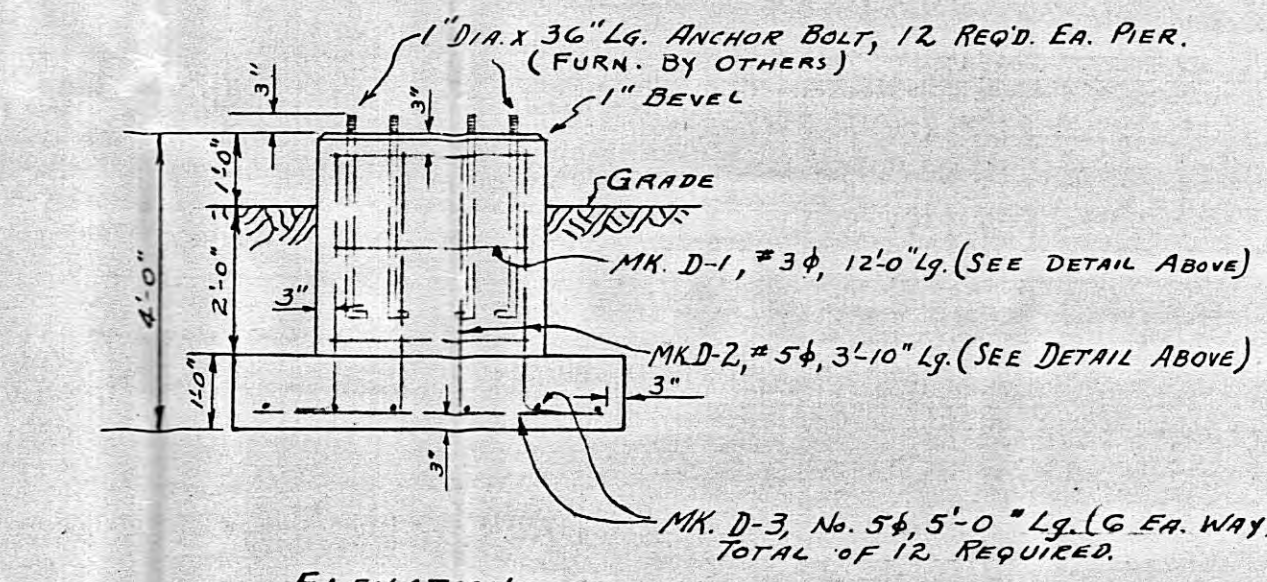
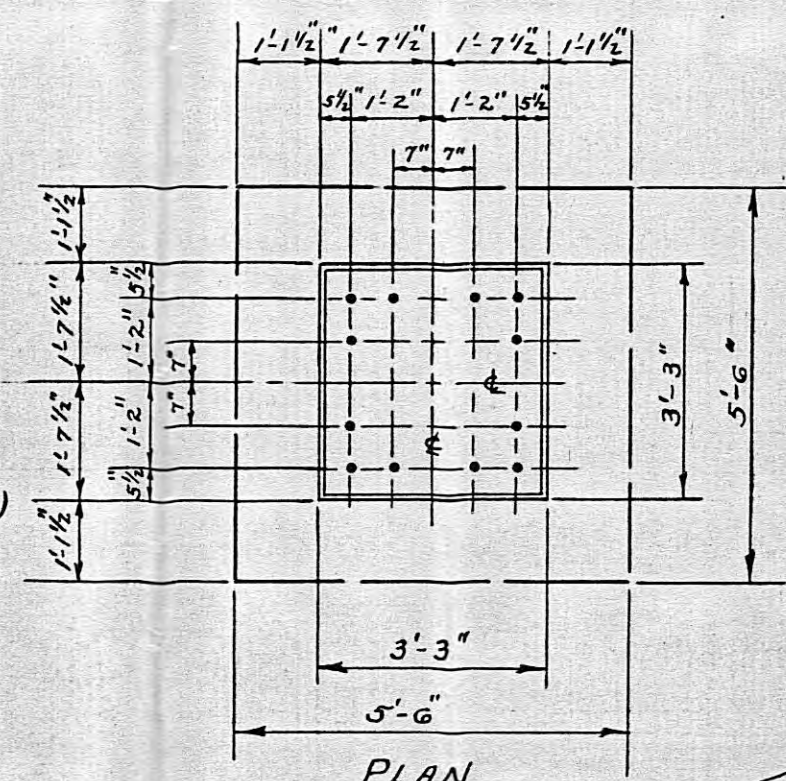
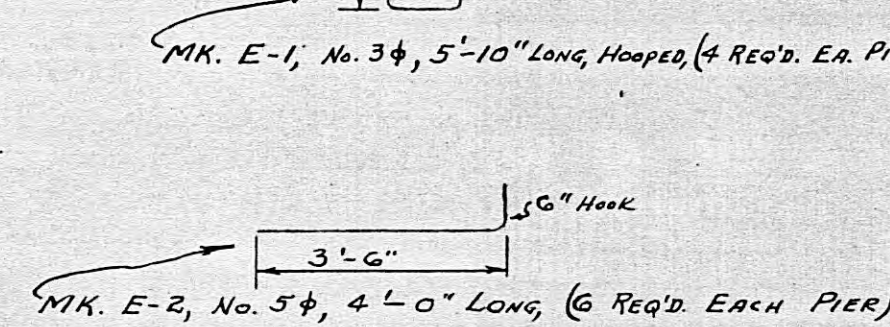
DETAIL OF PIER "B" (2-REQUIRED)
SCALE: 3/8" = 1'-0"



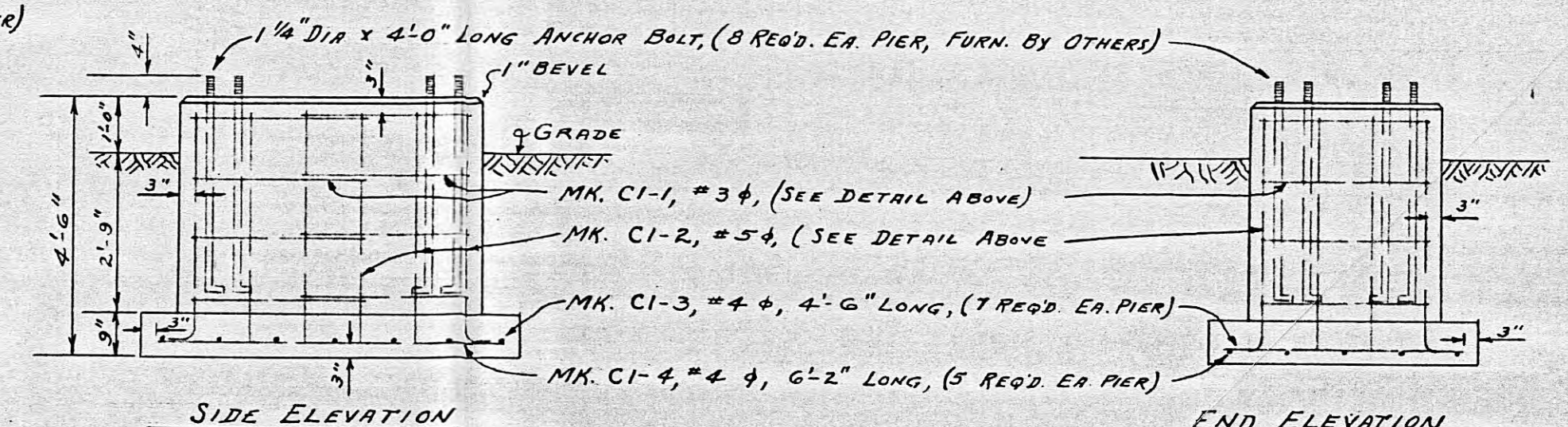
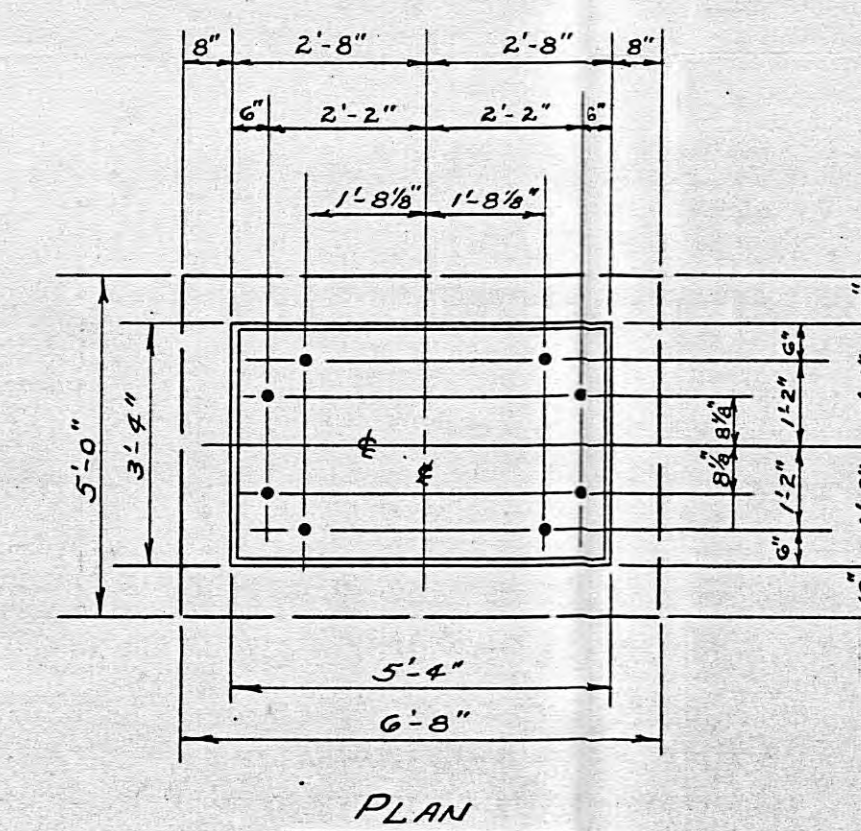
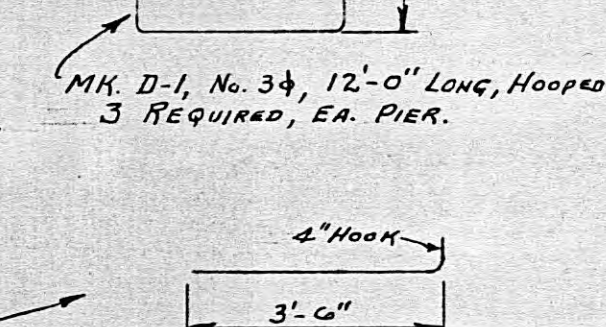
DETAIL OF PIER "C" (2-REQUIRED)
SCALE: 3/8" = 1'-0"



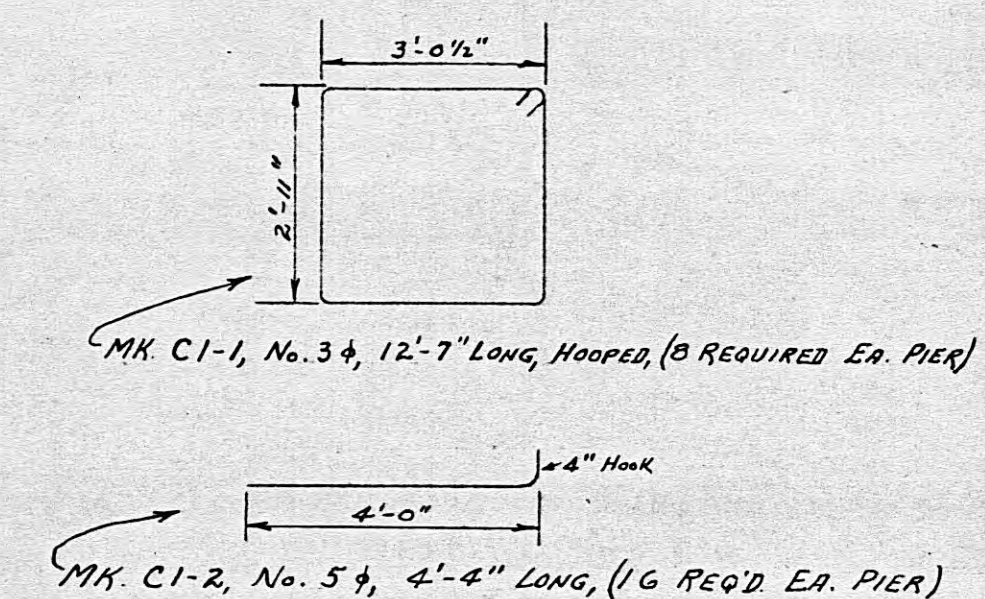
DETAIL OF PIER "E" (5-REQUIRED)
SCALE: 3/8" = 1'-0"



DETAIL OF PIER "D" (6-REQUIRED)
SCALE: 3/8" = 1'-0"

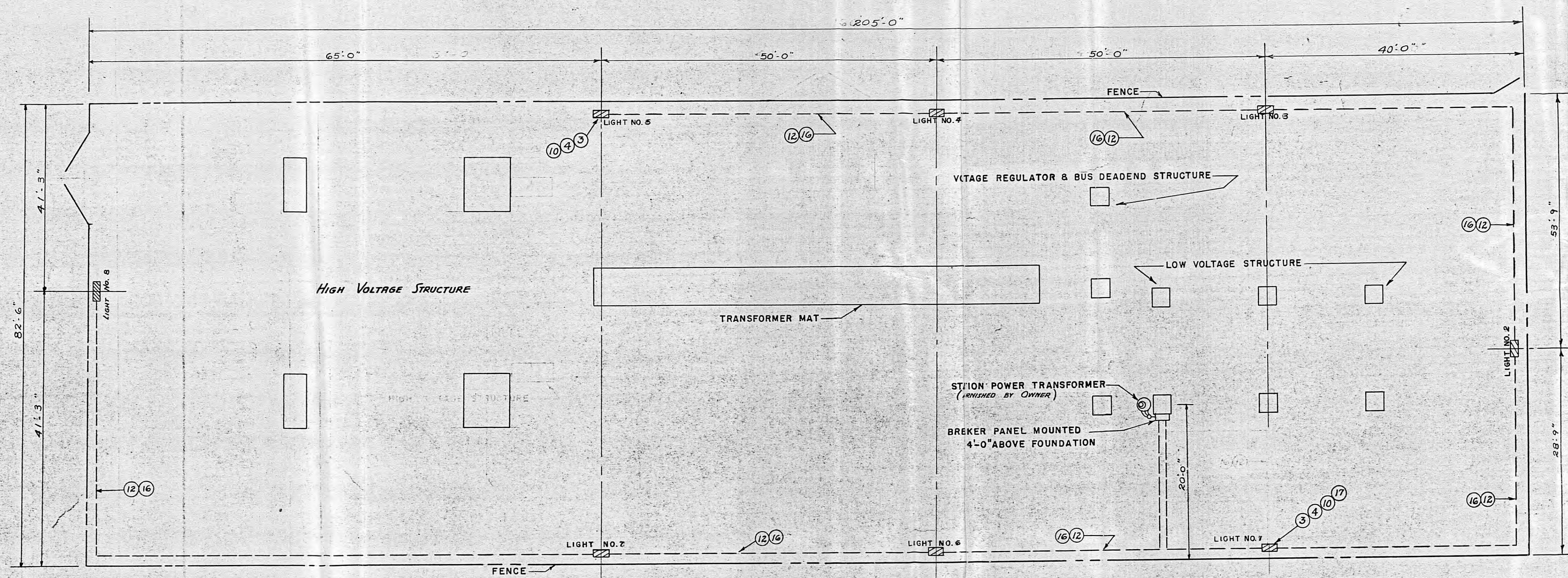


DETAIL OF PIER "C1" (1-REQUIRED)
SCALE: 3/8" = 1'-0"

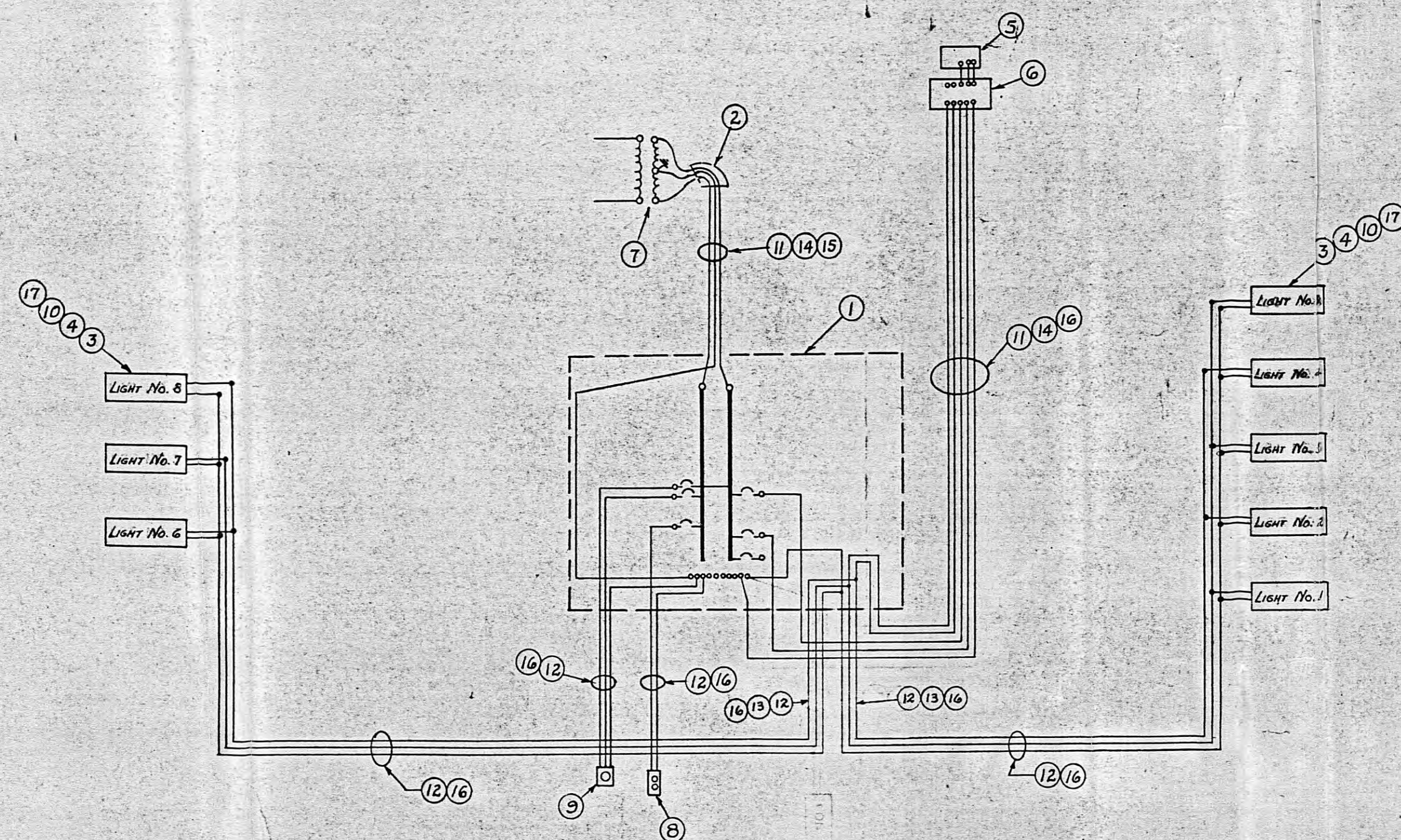


AS CONSTRUCTED

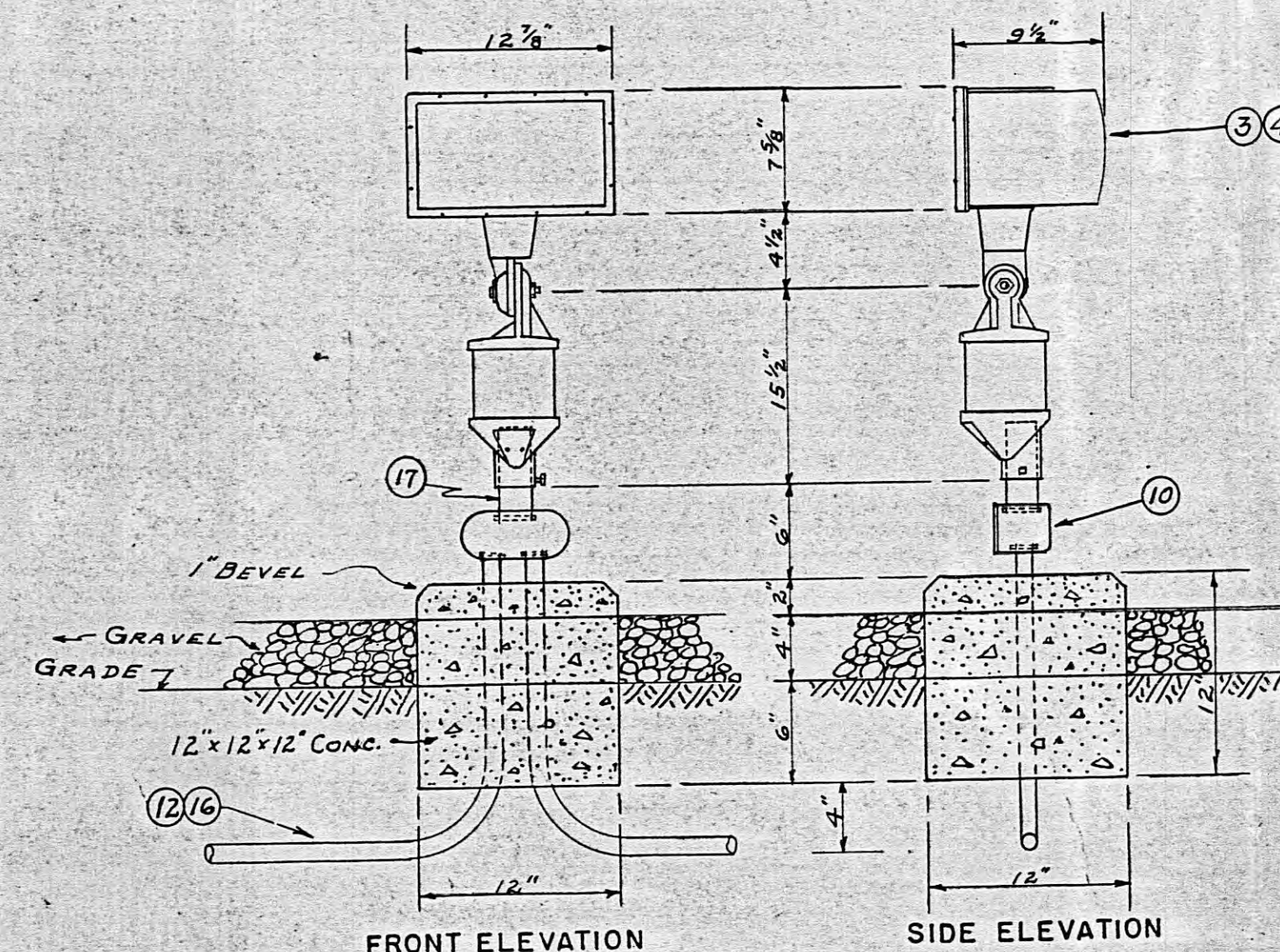
DATE	REVISIONS	NO.
CLAY ELECTRIC COOP, INC.	KEYSTONE HGTS. PLN	
OUTDOOR SUBSTATION 69-72/12.5KV		
FOUNDATION PLAN		
BROOKER SUBSTATION		
E.P. McLEAN ENGINEERING CO.	MOULTRIE, GA.	
SCALE: AS SHOWN	DWG: R.A.A.	DRAWING NO.
DATE: JULY, 1965	OK'D: E.J.M.	F14-S29-1



LIGHTING PLAN

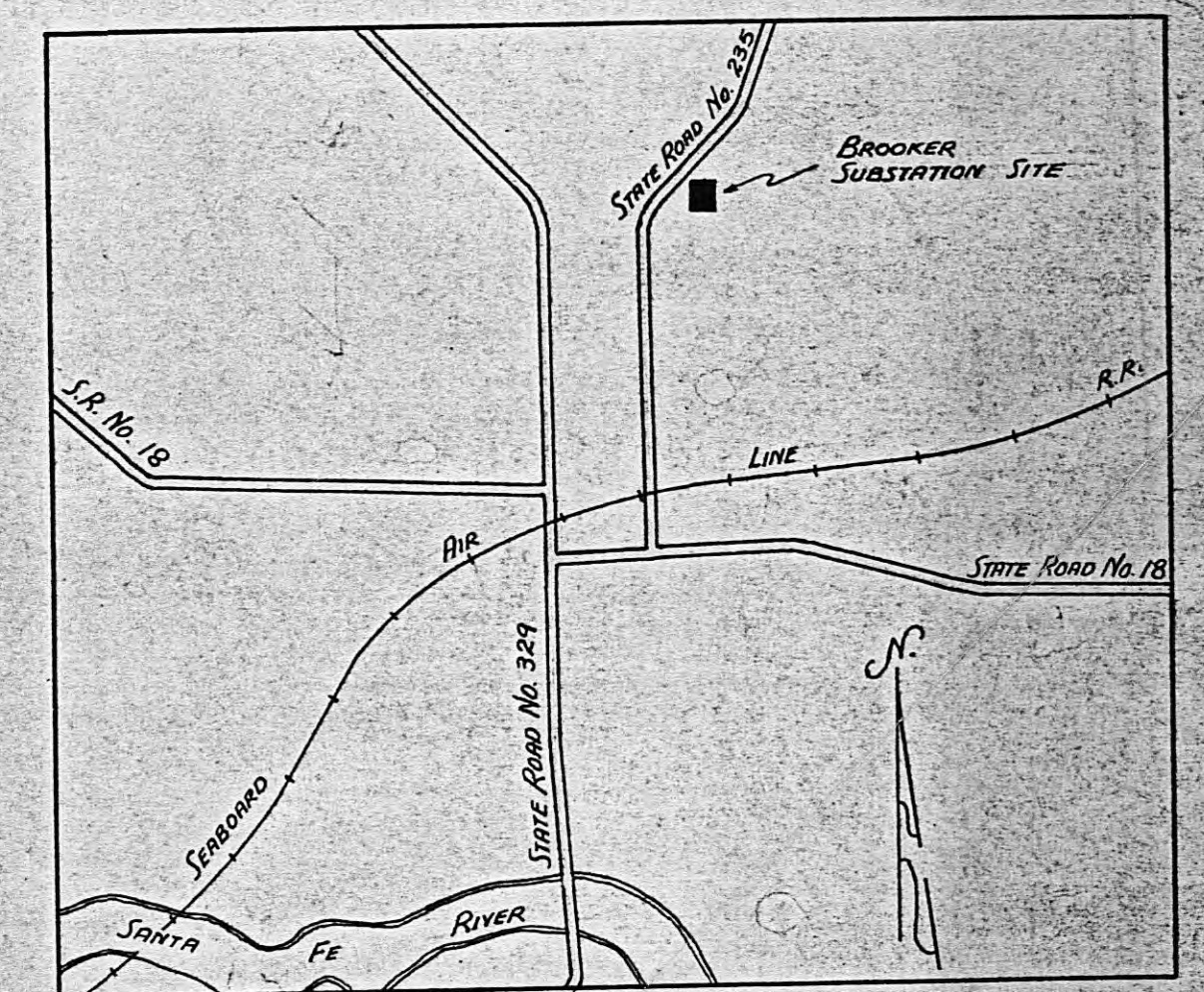


**SCHEMATIC WIRING DIAGRAM
FOR LIGHTING AND POWER
N.T.S.**



**LIGHTING FIXTURE
SHOWING DETAIL OF SUPPORT FOR FLOODLIGHTS
N.T.S.**

LIST OF MATERIAL		
ITEM NO.	NO. REQD.	DESCRIPTION
1.	1	G.E. Type "NCB"; or equal, breaker panel with rain-tight enclosure, 10, 3-wire, solid neutral, 100 Amp main bus, and complete with the following: 1-1/4" top conduit hub, one 20 Amp double pole branch breaker, two 30 Amp single pole branch breakers, and two 15 Amp single pole branch breakers. Space shall be provided for five future 40 Amp, double pole breakers and two future 30 Amp single pole breakers.
2.	1	Service entrance cap (weatherhead) 1-1/4", C-H Type "T", or equal.
3.	8	Light Fixture, Mercury Vapor, Crouse-Hinds Catalog No. 47756-55, or equal, complete with normal power factor ballast for 120 Volt supply, and slip fitter base for 1-1/2" pipe.
4.	12	Lamp for above fixture, 250 watts, 10,500 lumens, color improved, G.E. Company, or equal.
5.	1	Photo-electric lighting Control, 120 V., General Electric Company Catalog No. C4016001, or equal.
6.	1	Multiple-control switch, for operation with above photo-electric unit, 120 V., double pole, 30 Amp/pole, General Electric Company Catalog No. C4206003, or equal. For 1-1/4" conduit mounting.
7.	1	10 KVA, 7200/120-240 V. Transformer (furnished by Owner).
8.	1	C-H conduit FS-2 with Hubbell No. 5252 receptacle and C-H No. DS706 cover and gasket. Receptacle 15 Amp, 125 V., 2-wire, 3-pole, polarized.
9.	1	C-H conduit FS-2, mounting C-H #DS356, 3-wire, 3-pole, polarized plug receptacle with housing and spring door. Receptacle to be 20 Amps at 250 V. Conduit shall have water-tight gasket.
10.	8	C-H conduit, Type F092-5-202000-300000 with two 3/4" hubs in bottom and one 1-1/2" hub in top. Conduit shall be complete with cover and gasket.
11.	60'	1-1/4" hot-dipped or electro-galvanized steel conduit, with couplings, elbows, bushings, and locknuts, as required.
12.	560'	3/4" hot-dipped or electro-galvanized steel conduit, with couplings, elbows, bushings, and locknuts, as required.
13.	7	Conduit straps for 3/4" conduit.
14.	8	Conduit straps for 1-1/4" conduit.
15.	90'	No. 2, Type TW copper wire, (30' each red, white, and black)
16.	2160'	No. 10, Type TW copper wire, (720' each red, white, and black)
17.	8	1-1/2" galvanized pipe sleeves, 4" in length and threaded one end.



**VICINITY MAP - BROOKER, FLA.
1" = 2000'**

AS CONSTRUCTED

DATE	REVISIONS	NO.
CLAY ELECTRIC COOP, INC.	KEYSTONE HGRS, FLA.	
OUTDOOR SUBSTATION 69-72/12.5 KV		
LIGHTING PLAN		
BROOKER SUBSTATION		
E. P. McLEAN ENGINEERING CO.	MOULTRIE, GA.	
SCALE: NTS	DWG: J.L.P.	DRAWING NO.
DATE: DEC 1964	OK'D: E.J.M.	FA-529
		SHEET 5 OF 5