

DATA SHEET TO ACCOMPANY
DRAWING #RX-225Name of Company

The Detroit Edison Company

Name and Location of Crossing

Over the Pennsylvania R.R., 87' Southwest of the North and South one-quarter line of Section 33, T - 3 South, R - 10 East, Taylor Township, Wayne County, Michigan.

CircuitsProposed two 120,000 volt, 60 cycle, 3 wire, 3 phase, transmission circuits.
No existing circuits.Poles

Steel towers as per attached sheets T-2057 and T-2195

Guys and Guy Attachments

None.

Guy Clamps

None.

Guy Insulators

None.

Guy Anchors

None.

Anchor Rods

None.

Cross Arms

Three steel cross arms as per attached sheets T-2057, T-2195

Cross Arm Attachments

As per attached sheets T-2057, T-2195

Pins

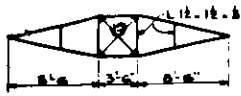
No pins.

Insulators

Double string of nine Ohio brass, #25620 suspension units per wire per crossing tower as per detail on Dwg. RX 225

ConductorsSix #000 hard drawn, seven strand, bare copper wires.
One 7/16" diameter, Siemens-Martin stranded steel ground wireTies

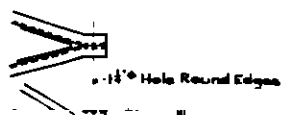
Two O.B. #70731 Suspension wire clamps per wire per crossing tower



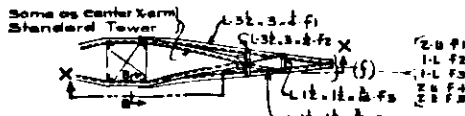
SECTION B-B



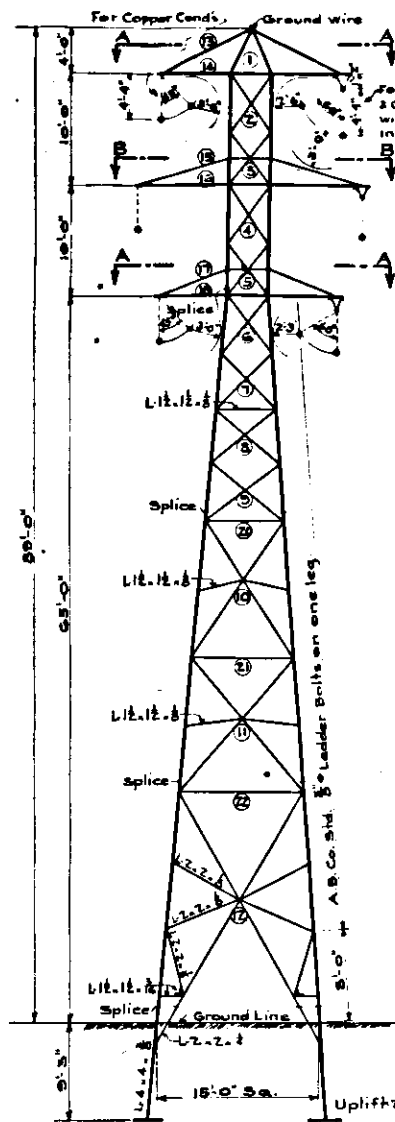
SECTION A-A



DETAIL AT END OF CROSS-ARM FOR COPPER CONDUCTORS

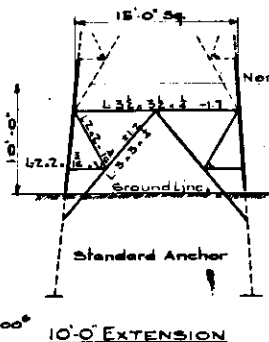


DETAIL AT END OF CROSS-ARM FOR ALUMINUM CONDUCTORS AND FOR COPPER CONDUCTORS WITH SMALL B IN LINE

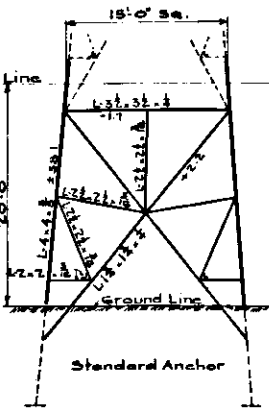


SUSPENSION TOWER A

Anchor 1264
Tower 5304
Total 7568

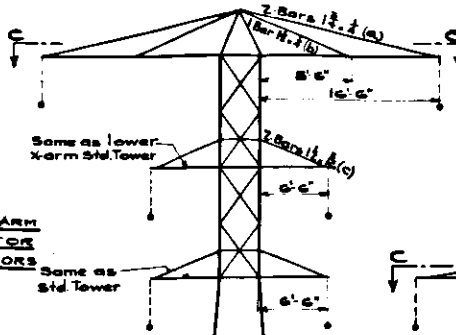


Standard Anchor



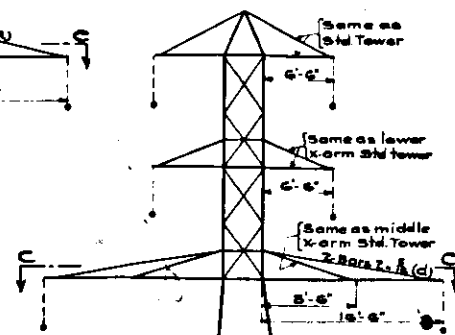
Standard Anchor

20'-0" EXTENSION



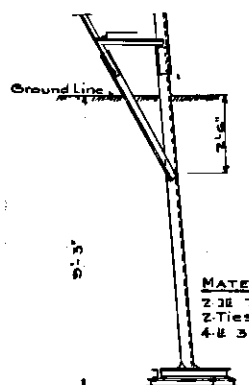
TRANSPOSITION CROSS-ARMS ARRANGEMENT T1

Special X-arm members Req'd { 2-Ends (f) with bracing
4-Bars (a)
2- " (b)
4- " (c)



TRANSPOSITION CROSS-ARMS ARRANGEMENT T2

Special X-arm { 2-Ends (f) with bracing
material Req'd { 4-Bars (d)



A.B. Co. STD. EARTH ANCHOR PATENTED

MATERIAL FOR GRILLAGE
2 3E 7" x 5 8" x 3' 3"
2 Ties 3" x 9 8" x 3' 3"
4 B 3/4" x 3/4" x 1'-0"

LOADS

- (1) A vertical load at each cable support of 1300⁰ total 5100⁰
- (2) A horizontal load transverse to line of load at each cable support, total 7000⁰
- (3) A horizontal load in the direction of the line of 3800⁰ at one end conductor support.
- (4) Wind on tower of 30⁰ per lin. foot of height of tower.
- (5) Dead load of tower.

UNIT STRESSES

Tension on net section 20000⁰ per sq
Compression on gross 20000-85⁰
Shear on bolts 13500⁰ per sq
Bearing on bolts 27000⁰

MATERIAL - C.M. Steel for Bldgs. A.S.T.M. Std. Specification.

COATING - Material including bolts to be galvanized.

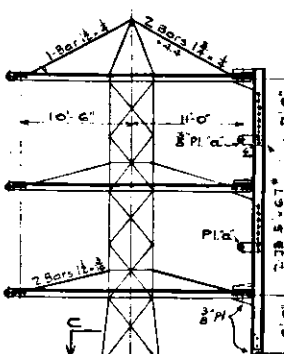
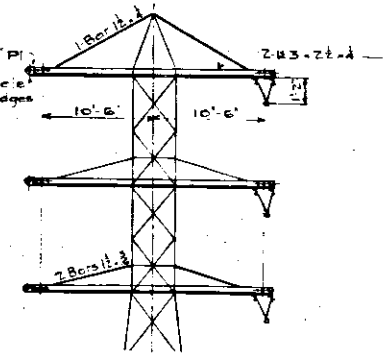
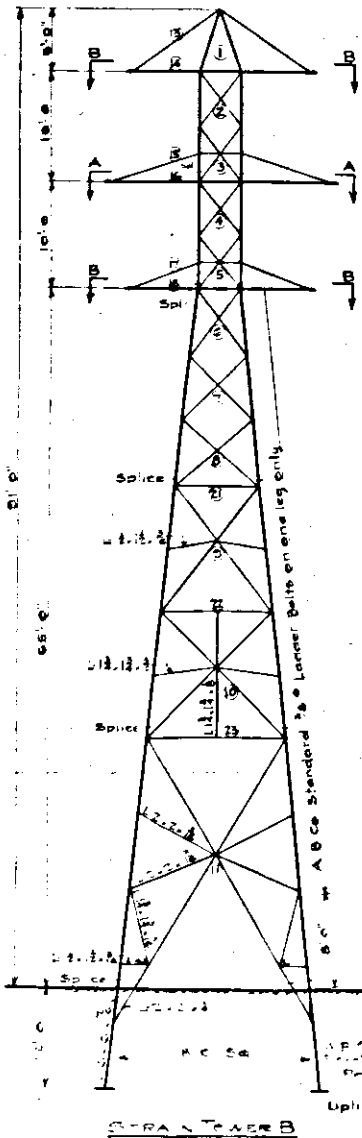
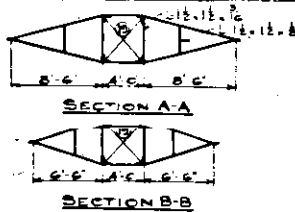
NOTE - The above loads are based on 3/8 Hard drawn Copper Cable 580' span 100000 C.M. Aluminum Steel Core 680' span 3/8 C.M.

Member	Stress	Material
5	± 21.8	L-3 1/2 x 3 1/2 x 3/8
6	± 30.2	L-4 x 4 x 3/8
11	± 34.4	L-4 x 4 x 3/8
12	± 36.0	L do
1	± 0.6	L-2 x 2 x 1/4
2	± 4.9	L-1 1/2 x 1 1/2 x 3/8
3	± 4.9	do
4	± 6.6	L-1 1/2 x 1 1/2 x 3/8
5	± 6.6	do
6	± 5.0	do
7	± 3.7	do
8	± 3.0	do
9	± 2.4	do
10	± 5.8	L-1 1/2 x 1 1/2 x 3/8
11	± 4.3	do
12	± 3.8	do
13	± 3.0	Bar 1 1/2 x 1/2
14	± 8.7	L-3 x 2 1/2 x 3/8
15	± 2.1	2 Bars 1 1/2 x 1/2
16	± 11.3	L-3 x 2 1/2 x 3/8
17	± 1.6	2 Bars 1 1/2 x 1/2
18	± 6.7	L-3 x 2 1/2 x 3/8
19	± 4.8	Bar 1 1/2 x 1/2
20	- 2.0	L-2 1/2 x 2 1/2 x 3/8
21	- 3.0	L-2 1/2 x 2 1/2 x 3/8
22	- 2.7	L-3 x 3 x 3/8

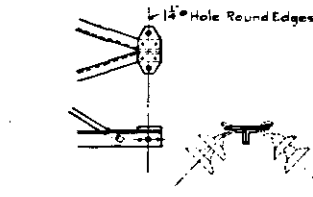
TRANSMISSION TOWERS
DETROIT EDISON Co.

SUSPENSION TOWER A

330'	NORMAL SPAN	AMERICAN BRIDGE CO. PITTSBURGH, PA.
11000	VOLTS	
2	CIRCUITS	INQUIRY No. ORDER No. DRAWING T-2056
1/8	CONDUCTORS	
1/8	STEEL	REVISONS



TYPICAL DETAIL AT END OF CROSS-ARM
FOR COPPER CONDUCTORS

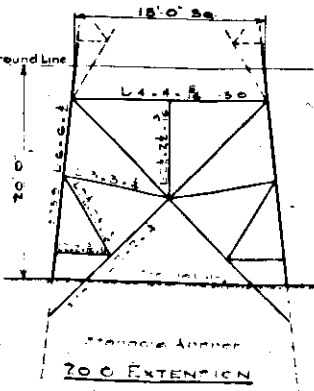
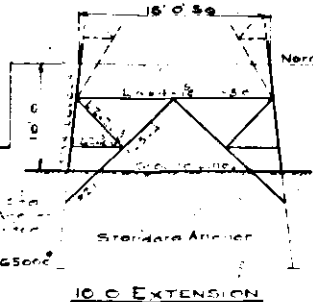
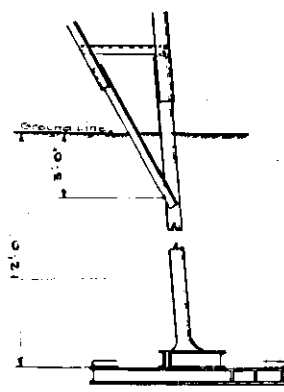
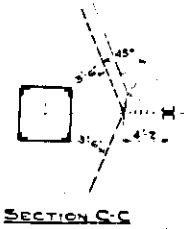


TYPICAL DETAIL AT END OF CROSS ARM
FOR ALUMINUM CONDUCTORS

Punch holes in 25 so that Pl'd can be moved to suit each condition of angle in line

- LOADS**
- (1) A vertical load at cable support of 1300^{lb}, total 5100^{lb}
 - (2) A horizontal load normal to line at each cable support of 600^{lb}, total 4200^{lb}
 - (3) A horizontal load in the direction of the line of 3500^{lb} at each cable support, total 24500^{lb} or 4700^{lb} at any one conductor support.
 - (4) Wind on tower of 30^{lb} per lin foot of height of tower
 - (5) Dead load of tower.

NOTE:
For unit stresses and specifications
For Conductors and span lengths
See Drawing T-2056



MATERIAL FOR GRILLAGE
2-B 8" x 14" x 1/2" C
3-Ties 5/8" x 20' x 6"
5-12" x 12" x 1/2" C

Member	Stress	Material
3	+16.7	L 3 x 3 x 3/8
5	+41.0	L 4 x 4 x 3/8
8	+60.0	L 5 x 5 x 3/8
10	+68.8	L 6 x 6 x 3/8
11	+73.1	L 6 x 6 x 3/8
1	+3.4	L 2 x 2 x 3/8
2	+5.9	L 2 x 2 x 3/8
3	+5.9	do
4	+9.5	L 2 x 2 x 3/8
5	+9.5	do
6	+9.7	do
7	+6.9	do
8	+5.3	do
9	+10.5	L 2 x 2 x 3/8
10	+7.0	L 2 x 2 x 3/8
11	+7.3	do
12		
13	+2.3	1 Bar 1 1/2 x 1/4
14	+9.3	3 - 2 1/2 x 1/4
15	+2.1	2 Bars 1 1/2 x 1/4
16	+12.7	1 - 5 x 2 1/2 x 1/4
17	+7.6	2 Bars 1 1/2 x 1/4
18	+9.9	L 3 x 2 1/2 x 1/4
19	+5.4	Bar 1 1/2 x 1/4
21	-4.0	L 2 x 2 x 3/8
22	-6.0	L 3 x 3 x 3/8
23	-3.0	do

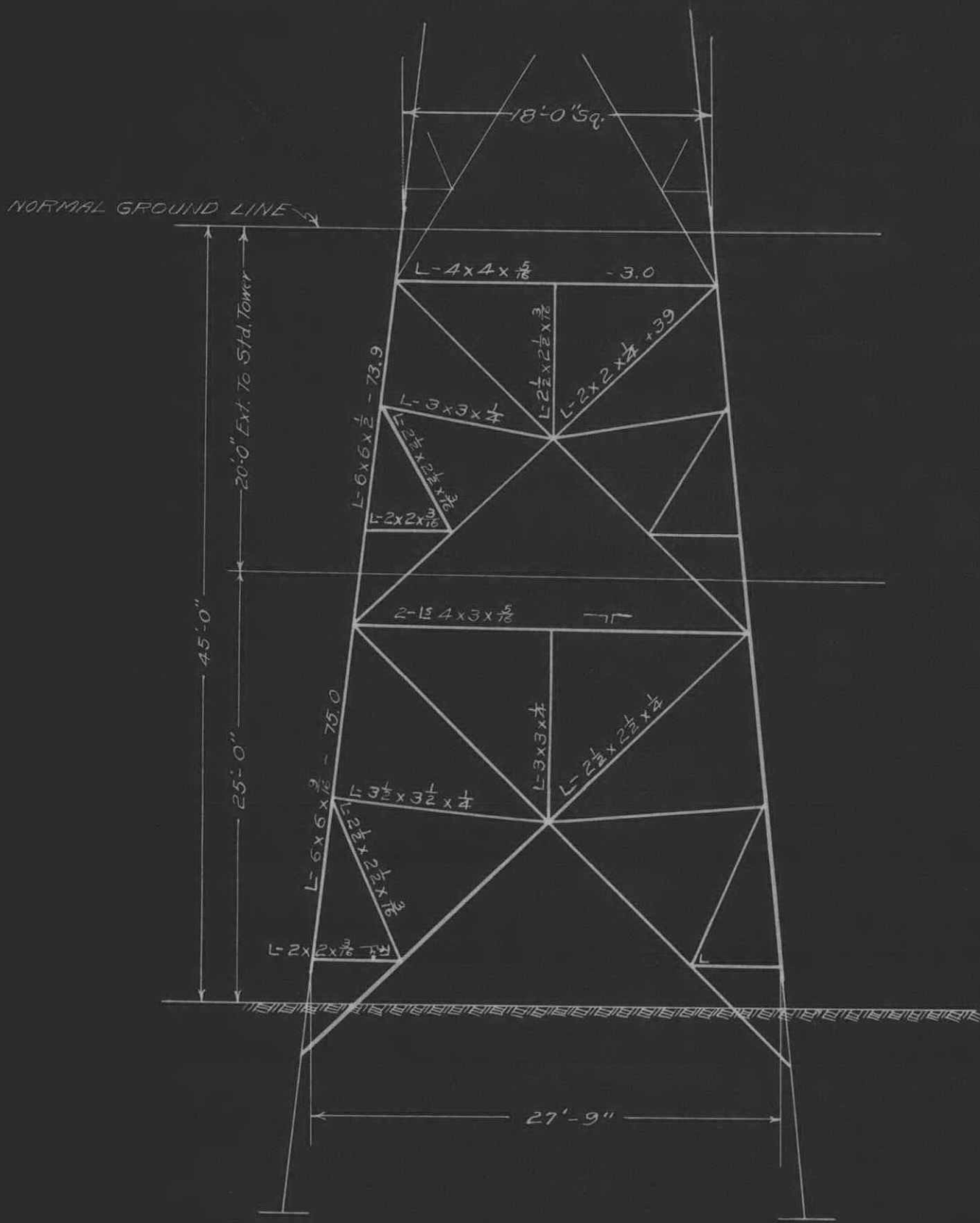
TRANSMISSION TOWERS
DETROIT EDISON Co
STRAIN TOWER B

VOL 100000	NORMAL OPEN VOLTS	AMERICAN BRIDGE CO. PITTSBURGH, PA.
CONDUCTORS	INQUIRY NO.	
TO 5 H. STEEL BRIDGE CO.	ORDER No.	
REVISIONS	DRAWING T-2057	
	DATE 10 22 1914	

Anchor bolts
Power
Total

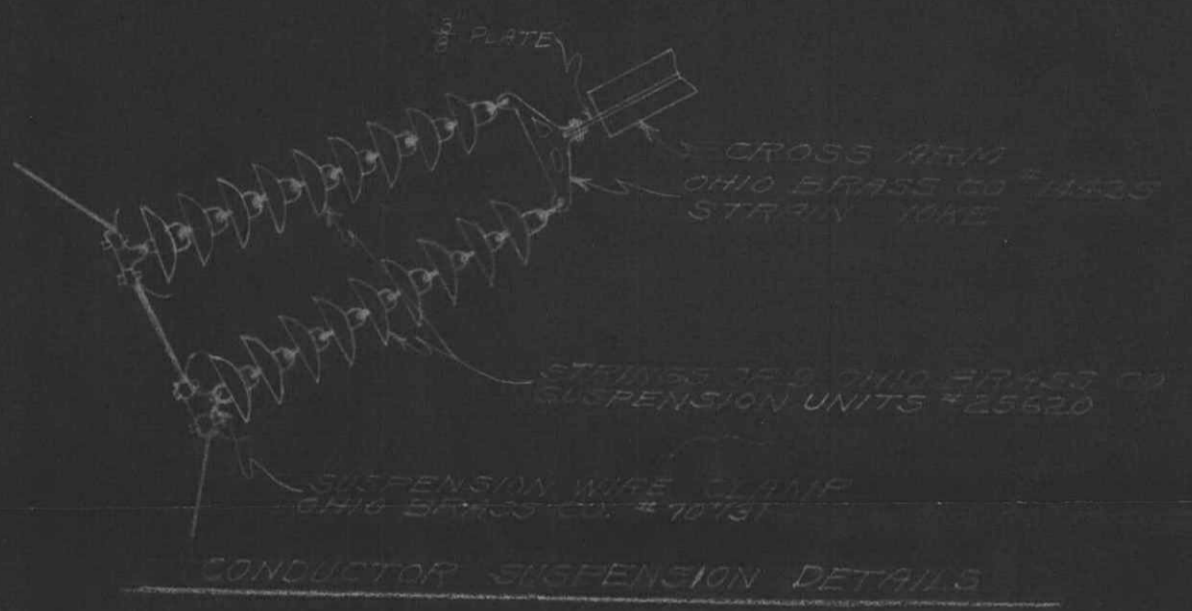
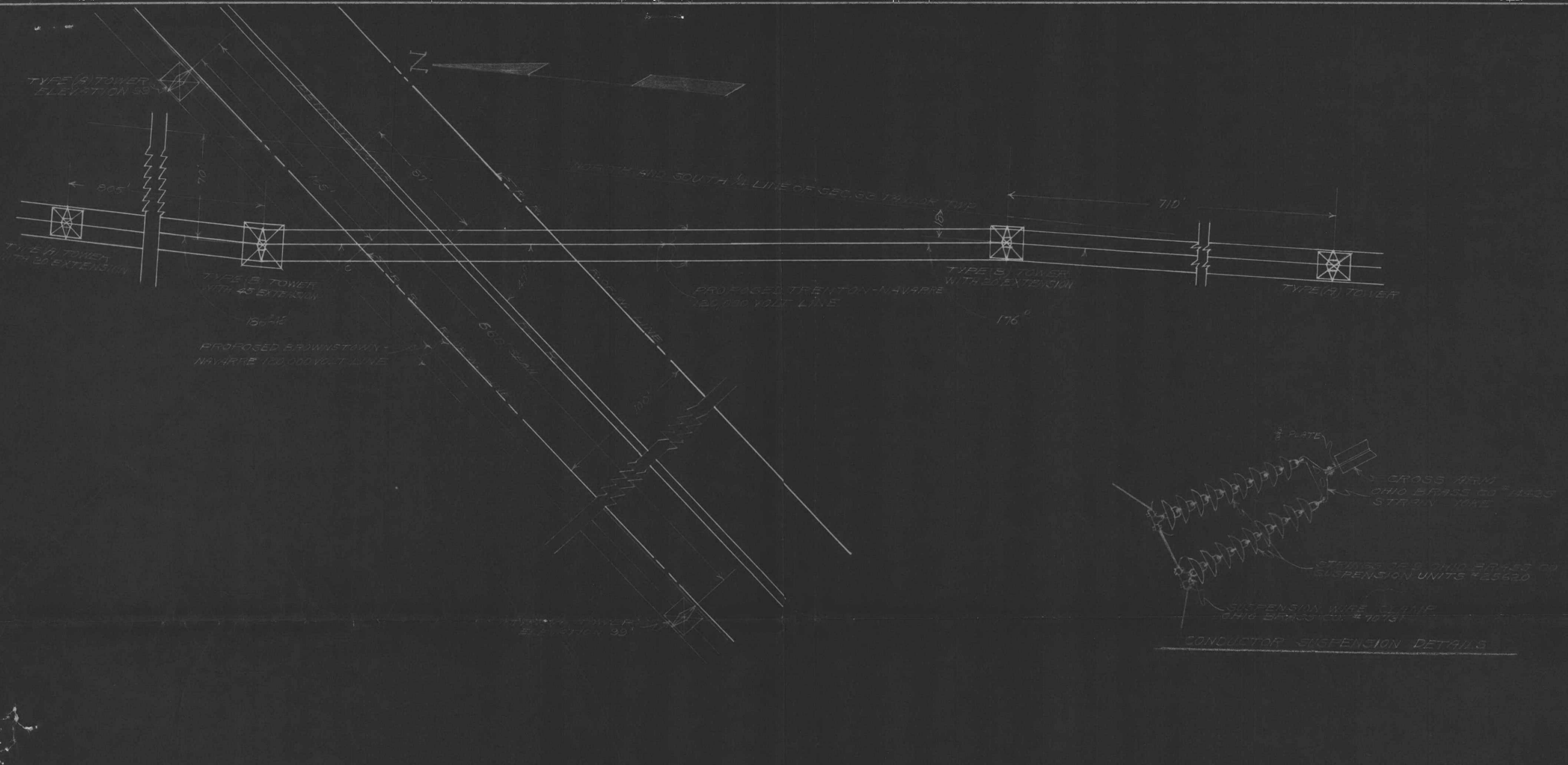
This drawing is taken from and supersedes Drawings T174 and T181. Arrangement for Cross-arms is revised

THE DETROIT EDISON CO.



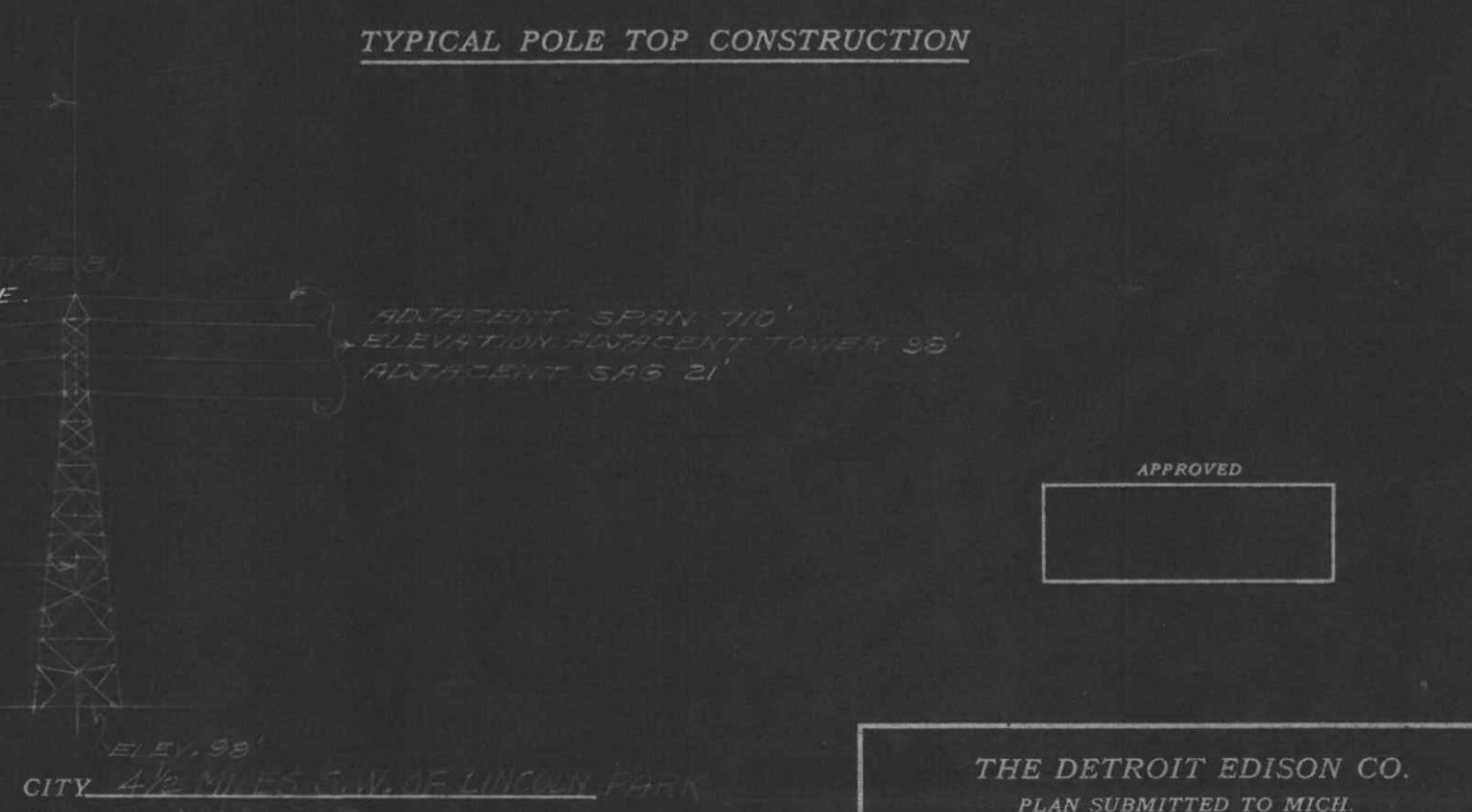
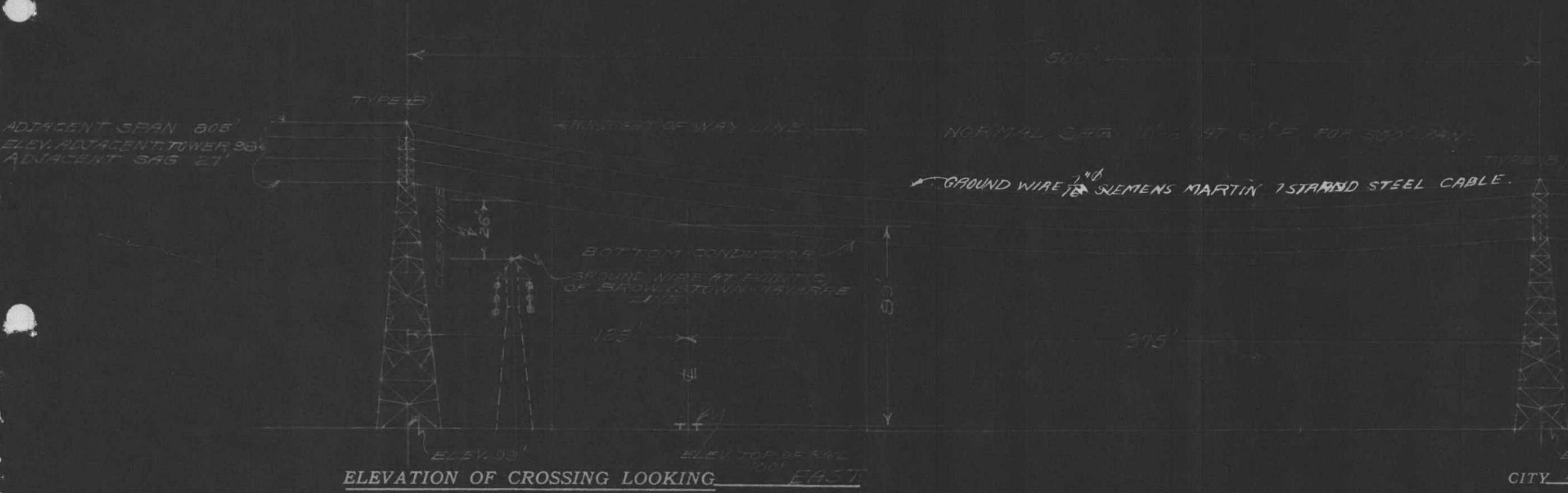
45'-0" EXTENSION TO "B" TOWER
Reference Drawing T-2057

TO ACCOMPANY DWG. R. X. # ~~225~~ 225



PLAN OF CROSSING
1" = 50'

TYPICAL POLE TOP CONSTRUCTION



CITY 4 1/2 MILES S.W. OF LINCOLN PARK
 COUNTY WAYNE
 TOWNSHIP TAYLOR
 SURVEY NO. OF TWP. T-3-SOUTH
 RANGE NO. 4-N-EAST
 SECTION NO. W. 1/4 OF SEC. 33

THE DETROIT EDISON CO.
 PLAN SUBMITTED TO MICH.
 PUBLIC UTILITIES COMMISSION
 FOR 120,000 VOLT CROSSING
 OVER THE PENNSYLVANIA P.R.
 DRAWN BY E.M. DATE 6-2-23
 CHECKED BY D.B. DATE 6-10-23

U-2328

RECEIVED
MICHIGAN PUBLIC UTILITIES
COMMISSION
JUL 7 1925
ANS'D

RECORDED RIGHT OF WAY NO. 23910
P3

APPROVED
FOR
MICHIGAN PUBLIC UTILITIES
COMMISSION
ASST CHIEF ENGINEER
DATE 7-13-1925
FILE U-2328

U-2328