

THE DETROIT EDISON COMPANY

2000 SECOND AVENUE

DETROIT, MICHIGAN 48226

June 30, 1972

Michigan Public Service Commission
Lansing, Michigan 48913

Gentlemen:

The Detroit Edison Company, Detroit, Michigan, hereby makes application for authority to string the following wires over the tracks of the **Grand Trunk Western Railroad Company in the City of Walled Lake, Oakland County, Michigan.**

One six wire 120,000-volt transmission circuit with two ground wires located in private property 399 feet East of Decker Road and approximately 600 feet North of West Maple Road.

NOTE: This Crossing was created by a new spur built under an existing line adjacent to Railroad property.

R.R. Mile Post 46.88

The proposed wire crossing will be constructed in accordance with specifications of the Michigan Public Service Commission and the construction standards of The Detroit Edison Company, approved by the Michigan Public Service Commission on July 19, 1939, File ED 2-9.01.

- Enclosed is a waiver of hearing granted by the Railroad Company. Dated 6-27-72
- Waiver of hearing by the Railroad Company is covered by blanket waiver. File No. 204
- This application covers reconstruction of existing crossing and will cancel and supersede wire crossing permit No. dated
- This is a new crossing.

Reference number of construction drawing is RX- 4192

HLB
Encl.Permit No. ED2-8-7103Date July 11, 1972By MPSC

Yours very truly,


I. W. Gamble

Assistant to Director

Real Estate & Rights of Way Dept.

RECORDED RIGHT OF WAY NO.

34636
p250

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

Railroad Wire-Crossing Permit No. ED2-8-7103

The Detroit Edison Company (Applicant) has filed an application pursuant to Act 171, P.A. 1893, as amended, for permission to string wires across the tracks of the Grand Trunk Western Railroad Company (Railroad).

Applicant has conformed with the filing procedures of Commission Order No. 1868 and the Railroad has waived the right of notice and hearing provided for in Act 171.

THEREFORE, IT IS ORDERED that Applicant be permitted to string wires across the tracks of the Railroad as indicated on the attached plans and described as follows:

City of
Walled Lake

County of
Oakland

State of
Michigan

Crossing of two (2) 120 KV, 60 Hz, 3 phase, 3 wire, transmission circuits, operated in parallel as the Hancock-Wixom Line, on one (1) double circuit steel tower line, with two (2) ground wires, located in private property at a point approximately 399' east of Decker Road and approximately 600' north of West Maple Road, Section 26, Commerce Township, T2N, R8E
6 - 1431 MCM 45/7 ACSR phase conductors
2 - 7/16" Bath "C" steel ground wires

Per Drawing RK-4192

RECORDED RIGHT OF WAY NO. 34636
P258

At the point of crossing, the wires shall be installed in full accordance Commission Order No. 2334.

MICHIGAN PUBLIC SERVICE COMMISSION

(S E A L)

Willis F. Ward
Chairman

Lenton G. Sculthorp
Commissioner

William R. Ralls
Commissioner

DATED: July 11, 1972

Earl B. Klomparens

Its Secretary

STATE OF MICHIGAN
Office of the Michigan Public Service Commission

SS.

I, Earl B. Klomparens, Secretary of the Michigan Public Service Commission Do Hereby Certify,
That I have compared the annexed copy of Railroad Wire Crossing Permit No. ED2-8-7103

with the original, and that it is a true and correct transcript therefrom, and of the whole of such original.

In Testimony Whereof, I have hereunto set my hand and affixed
the seal of the Commission, at Lansing, this eleventh
day of July in the year of our Lord
one thousand nine hundred seventy-two

RECORDED RIGHT OF WAY NO. 34636
250

Earl B. Klomparens
Secretary

GT

204

RK-4192

Grand Trunk Western Railroad Co

W. P. Collins
Manager of Real Estate & Tax

131 West Lafayette Boulevard
Detroit, Michigan 48226

June 27, 1972

I. W. GAMBLE

IS
JUN 29 1972

JSP
R/E & R/W DEPT.

Mr. I. W. Gamble
Assistant to Director
Real Estate and Rights of Way Dept.
The Detroit Edison Company
2000 Second Avenue
Detroit, Michigan 48226

Dear Mr. Gamble:

This will acknowledge receipt of your letter under date of June 13, 1972, addressed to our Engineer of Surveys and Construction, Mr. F. E. Rosenkranz, wherein you requested a waiver of hearing before the Michigan Public Service Commission for construction of a wire crossing over Grand Trunk right-of-way at its Mile Post 46.88 at location you have described as in private property 399 feet East of Decker Road and approximately 600 feet North of West Maple Road, Commerce Township, Section 26, City of Walled Lake, State of Michigan, as shown on Plan RK-4192, consisting of the following wires:

One - six wire 120,000-volt transmission circuit with two ground wires

Inasmuch as you have stated that this construction will be accomplished in accordance with rules and regulations of the Michigan Public Service Commission and as this Railroad Company has no objections to the crossing, The Detroit Edison Company is hereby granted a waiver of hearing. No facility markers or permit will be required inasmuch as this facility is in private property.

Yours very truly,

F. J. [Signature]
For: W. P. Collins
Manager of Real Estate and Tax

RECORDED RIGHT OF WAY NO.

NOT RR
PROPERTY
34636
P250

THE DETROIT EDISON COMPANY

2000 SECOND AVENUE
DETROIT, MICHIGAN 48226

TO:

June 13, 1972

Mr. F. E. Rosenkrans
Engineer of Surveys and Construction
Grand Trunk Western Railroad Company
Brush Street Depot
Corner of Brush St. and Atwater St.
Detroit, Michigan 48226

Proposed Overhead Wire Crossing:

One six wire 120,000-volt transmission circuit with two ground wires.

NOTE: This Crossing was created by a new spur built under an existing line adjacent to Railroad property.

Specific Location

In private property 399 feet East of Decker Road and approximately 600 feet North of West Maple Road.

RECORDED RIGHTS OF WAY N.

R. R. Valuation Station _____ R. R. Mile Post 46.88

City/Village ~~XXXXXX~~ Walled Lake Township Commerce, Sec. 26

County Oakland Detroit Edison Plan Attached RX-4192

This is a New Crossing This is a Reconstruction of Existing Crossing _____

Previous Agreement Information (if any) Date _____ (R. R. Plan) _____

34636
P250

Blanket Waiver of Hearing Covers _____ Waiver of Hearing Requested in duplicate
(Waiver of Hearing to be mailed to applicant listed below)

All construction will be done in accordance with the rules and regulations of the Michigan Public Service Commission.

I. W. Gamble
I. W. Gamble, Assistant to Director
Real Estate and Rights of Way Department

DATA SHEET TO ACCOMPANY DRAWING RX-4192

Name of Company

The Detroit Edison Company

Name and Location of Crossing

Hancock-Wixom 120 kV transmission circuit crossing of the Grand Trunk Western Railroad spur 399' east of Decker Road and approximately 600' north of W. Maple Road in the City of Walled Lake, Oakland County, Michigan.

Circuits

One six wire 120,000 volt, 60 HZ, 3-phase transmission circuit with two groundwires.

Towers and Crossarms

See attached drawing B-1.
230 kV construction, 120 kV operation.

Conductors

Six 1431 Mcm 45/7 ACSR conductors and 2 - 7/16" Beth. "C" steel groundwires.

Insulators

12 - 5-3/4" x 10" O.B. #48008 or equivalent. 2 - Lapp #L 59068.

Suspension and Deadend Details

See drawings ED1-7008 and ED2-6981.

RECORDED RIGHT OF WAY NO.

34636
pas

CONSTRUCTION PROCEDURE

INVESTIGATION

1. Install...
2. Remove...
3. Install...
4. Install...
5. Install...
6. Remove...
7. Install...
8. String and install...
9. Remove...
10. Remove...
11. Install...
12. Install...

This tower has been investigated to support 2 circuits at 230KV in accordance with Grade B requirements of the NESC latest edition. Each existing 120KV circuit consists of 3 conductors of 3/0 copper and 1 ground wire of 7/16 S.M. steel for both circuits. Each 230KV circuit consists of 3 conductors of 1431 MCM, 45/7 ACGR (10,000 lbs. MTHL) and 1 ground wire of 3/8" ϕ steel (4000 lbs. MTHL)

Span length = (See notes below)
Line angle = (See notes below)

Loading Conditions Investigated:

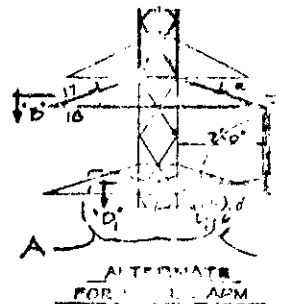
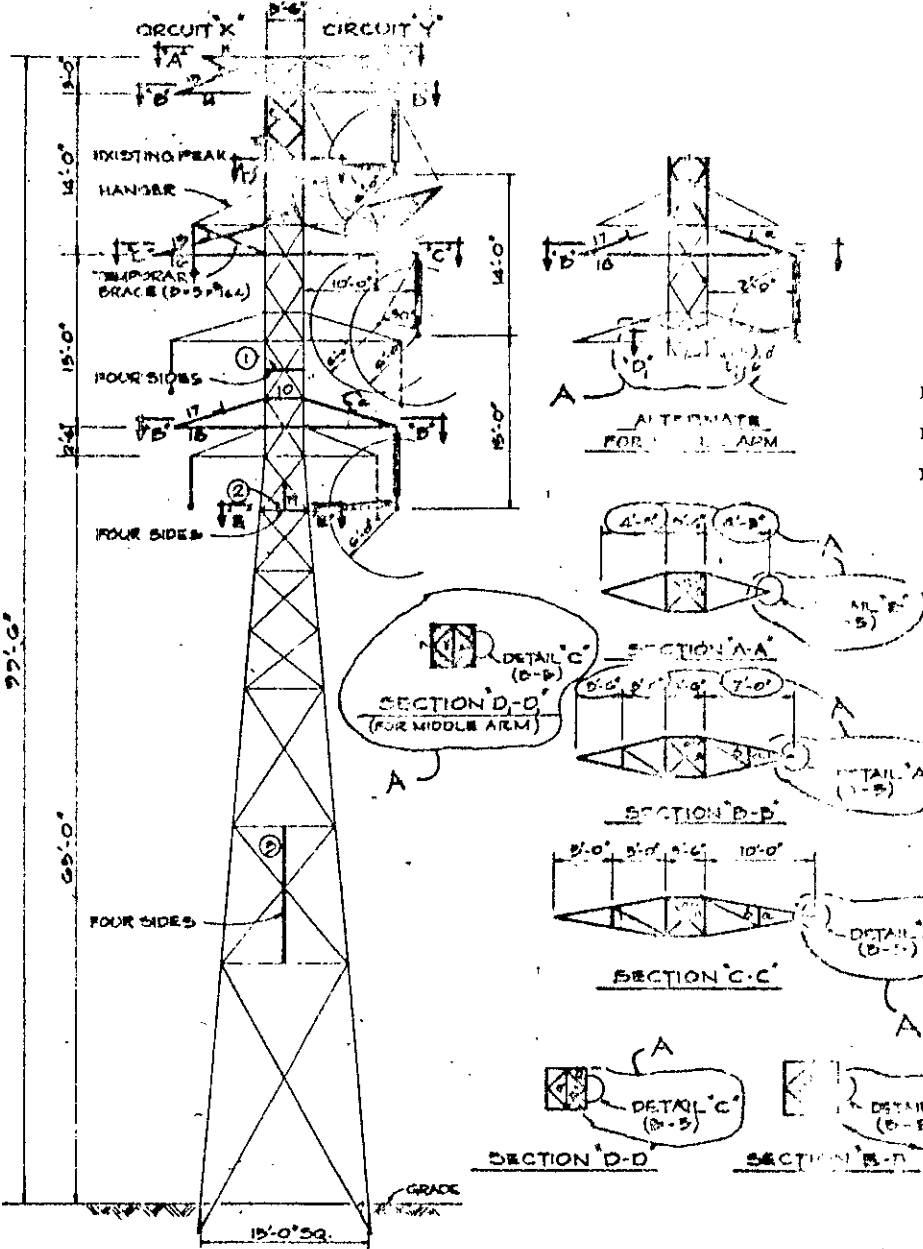
All intact (1/2" ice, 4# wind, NESC)

1. One existing 120KV circuit and one 230KV circuit in place.
2. One 230KV circuit in place.
3. Two 230KV circuits in place and a longitudinal load of 3,000 lbs. at any one conductor support, with span length = 850' and 0° line angle.
4. Two 230KV circuits in place and a longitudinal load of 2500# @ any one conductor with span length = 930' and 0° line angle.
5. Two 230KV circuits in place and longitudinal load of 2000# @ any one conductor support with span length = 750' and 3° line angle.

NOTE

FOR NOTES SEE D-2.

NO.	SIZE	QUANTITY	REMARKS
1	12" x 12" x 1/2" PL	2	
2	12" x 12" x 1/2" PL	2	
3	12" x 12" x 1/2" PL	1	
4	12" x 12" x 1/2" PL	6	
5	12" x 12" x 1/2" PL	2	
6	12" x 12" x 1/2" PL	2	
7	2 1/2" x 2 1/2" x 1/2" PL	2	
8	12" x 12" x 1/2" PL	2	
9	12" x 12" x 1/2" PL	2	
10	12" x 12" x 1/2" PL	2	
11	2 1/2" x 2 1/2" x 1/2" PL	4	
12	2 1/2" x 2 1/2" x 1/2" PL	2	
13	12" x 12" x 1/2" PL	2	
14	12" x 12" x 1/2" PL	4	
15	12" x 12" x 1/2" PL	2	
16	12" x 12" x 1/2" PL	4	
17	12" x 12" x 1/2" PL	2	
18	12" x 12" x 1/2" PL	4	
19	12" x 12" x 1/2" PL	1	
a	12" x 12" x 1/2" PL	1	
b	12" x 12" x 1/2" PL	1	



RECORDED RIGHT OF WAY NO. 34636
252

120KV SUBSTENSION TOWER 'A'
230KV CONVERSION
BROWNSTOWN-MADISON LINE
DETROIT EDISON CO.

DC 48
DRAWN BY
CHECKED BY
ENGINEER

DATE
JOB NO. 4055

DRAWING NO. D-1

THE CALCULATIONS FOR THIS TRIAL ARE FOR
STRESS-STRAIN CURVES USED REPRESENT

HANCOCK-WIXOM 488A-521 RECONDUCTOR
1,192,500 CM ACSR 45/7

STARTING INDEX	COMPUTED RULING SPAN	STARTING SAG OR TENSION	AREA OF CONDUCTOR	INITIAL LIMIT MAX TENSION
1	756.5	12000.00	1.20200	14000.00

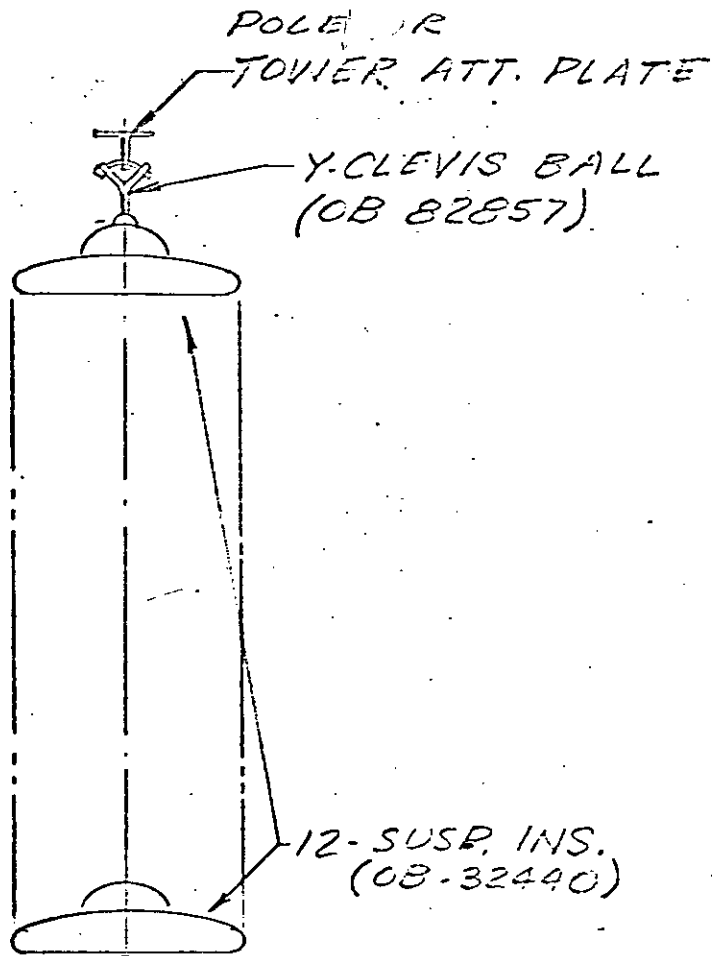
*****CREEP IS A FACTOR

INDEX	TEMP.	INITIAL		FINAL		SAG IN
		SAG	TENSION	SAG	TENSION	
1	0.	19.36	-12000.	20.58	11293.	----MINUS SAG
2	0.	15.78	7333.	18.15	6378.	
3	0.	18.55	10883.	20.02	10087.	
4	10.	16.33	7085.	18.73	6183.	
5	20.	16.89	6854.	19.29	6003.	
6	30.	17.43	6639.	19.85	5835.	
7	40.	17.98	6439.	20.40	5681.	
8	50.	18.52	6253.	20.93	5536.	
9	60.	19.05	6080.	21.46	5401.	
10	70.	19.58	5917.	21.98	5274.	
11	80.	20.10	5764.	22.49	5155.	
12	90.	20.61	5622.	23.00	5044.	
13	100.	21.12	5488.	23.49	4939.	
14	110.	21.62	5362.	23.98	4839.	
15	120.	22.11	5243.	24.46	4746.	

RECORDED RIGHT OF WAY NO.

54636
9250

SUSP. ASS'Y.
DETAILS



SUSPENSION
CLAMP & SOCKET EYE
(ANDERSON-CFS-252-S)

1431 MCM 4517 ACSR
CONDUCTOR

Y-CLEVIS BALL
(OB-82857)

1431 MCM 4517 ACSR
CONDUCTOR

DEADEND
CLAMP WITH SOCKET
EYE
(ANDERSON-SD-155-S)

13-SUSP. INSULATORS
(OB-47410)

DEADEND PLATE

DEADEND ASS'Y.

DETAILS

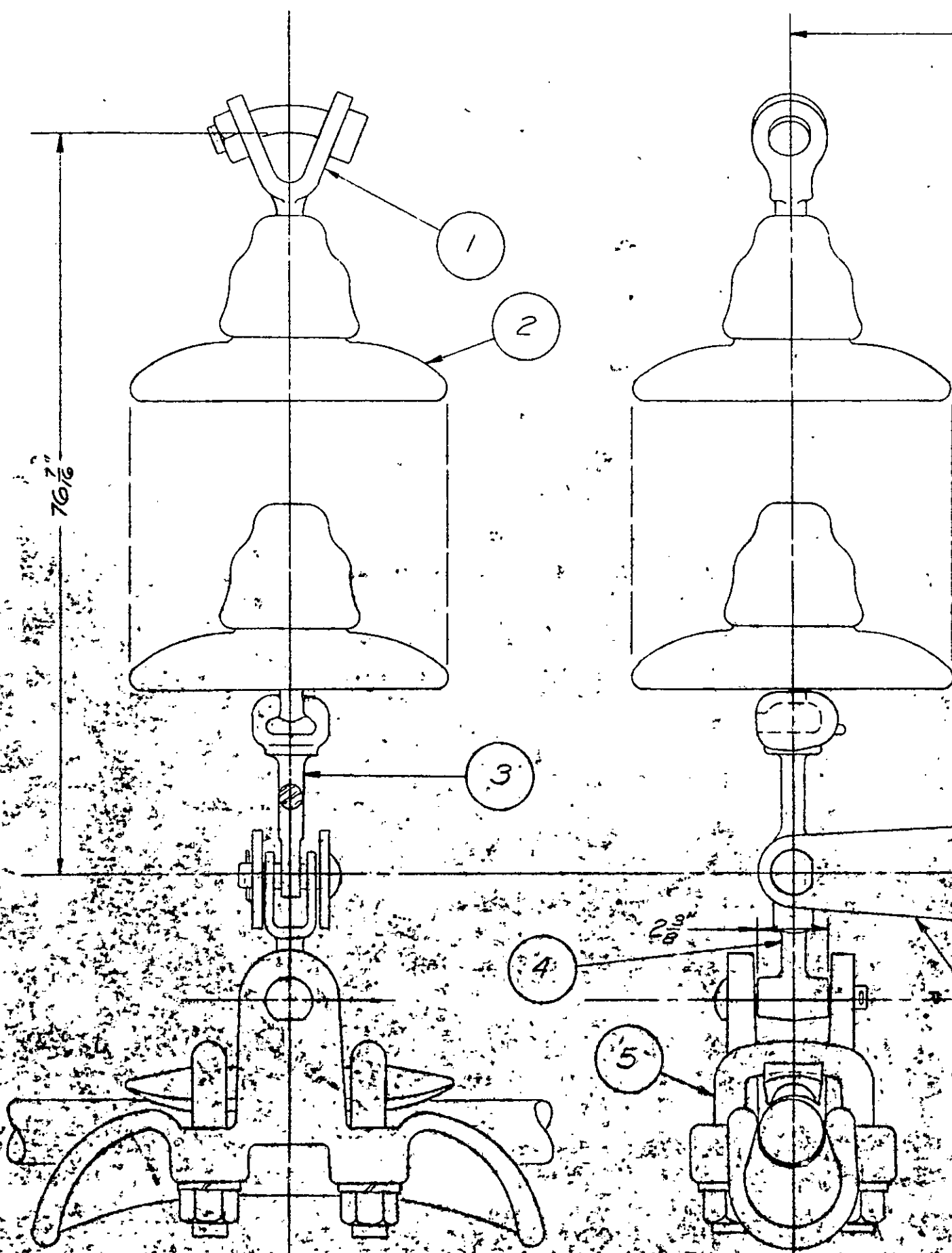
RECORDED RIGHT OF WAY NO.

34636
p250

REV. 1/30/70

230KV SUSPENSION &
DEADEND ASS'Y DETAILS

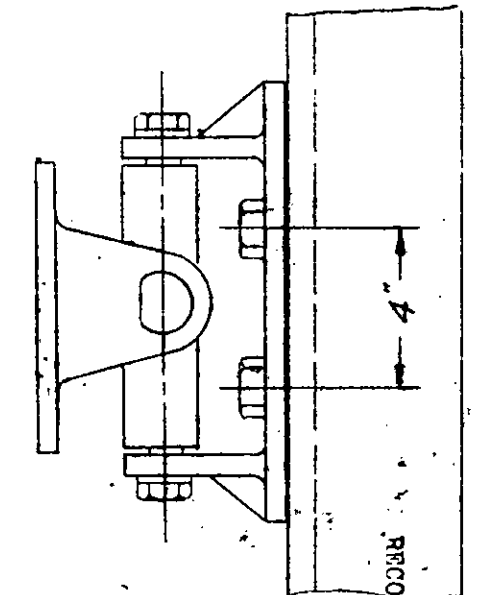
APPROVED 	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
LAYOUT BY RGS	DRAWN BY RGS	
DATE 12/15/69	DRAWING NUMBER ED-1-7008	
SCALE		



ITEM	DESCRIPTION	PART NO.	REQ'D.
1	Y-CLEVIS-BALL	#240-0421	1
2	15,000*INS.	#761-0091	12
3	SOCKET EYE	BREWER-TICHENER # 3092	1
4	CLEVIS EYE	BREWER-TICHENER # 3059	1
5	SUSP. CLAMP	ANDERSON #HAS-252-N	1
6	CLEVIS ADAPT.	LAPP #L78869-B	1
7	STRUT INS.	LAPP #L59068	2
8	TWR.MTG.ASSY.	LAPP #L91113	1
9	1/2*13-1/2 HEX HEAD CAP SCREW, L W, # NUT - GALV.		12

84 1/8"

#761-0475



RECORDED RIGHT OF WAY NO.

34636
1958

230 KV STRUT-INSULATOR SUSPENSION DETAILS

APPROVED: *[Signature]*

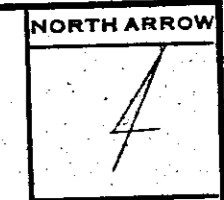
THE DETROIT EDISON COMPANY
GENERAL ENGINEERING DEPARTMENT

LAYOUT BY: ROSTURDY DRAWN BY: ROSTURDY

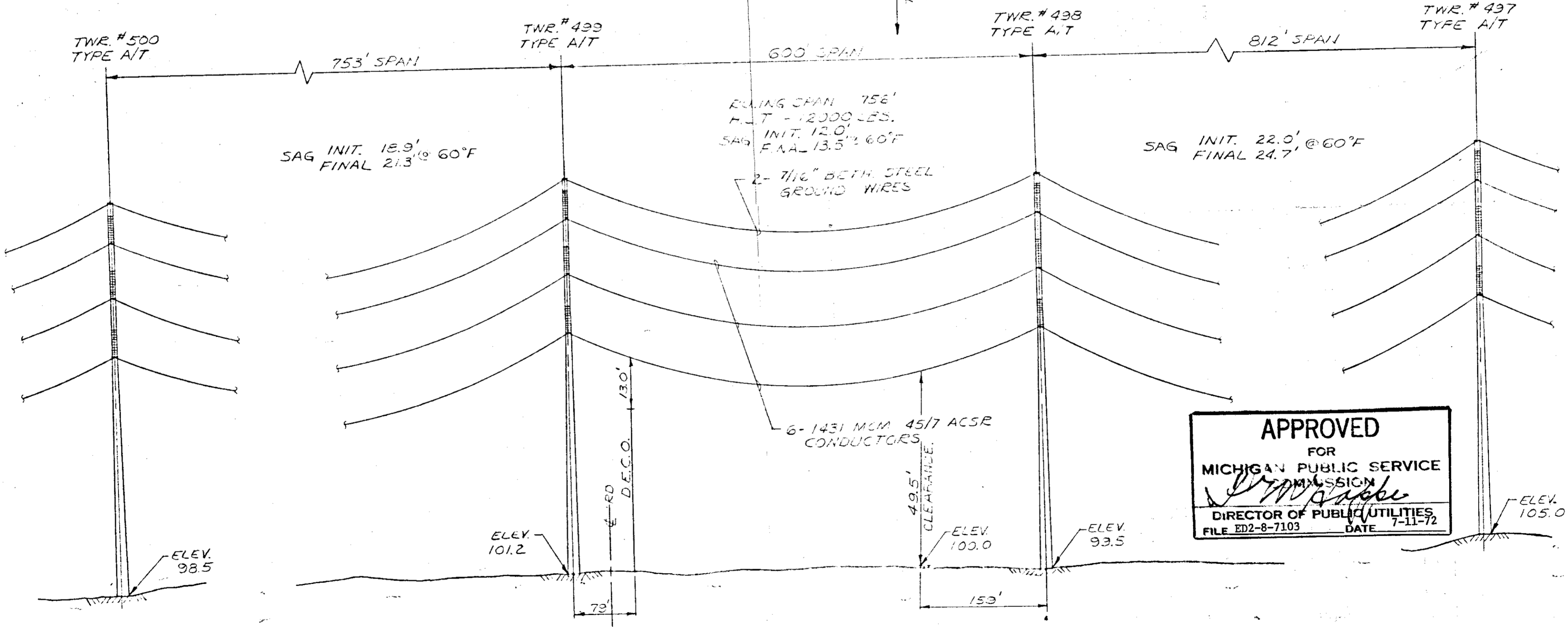
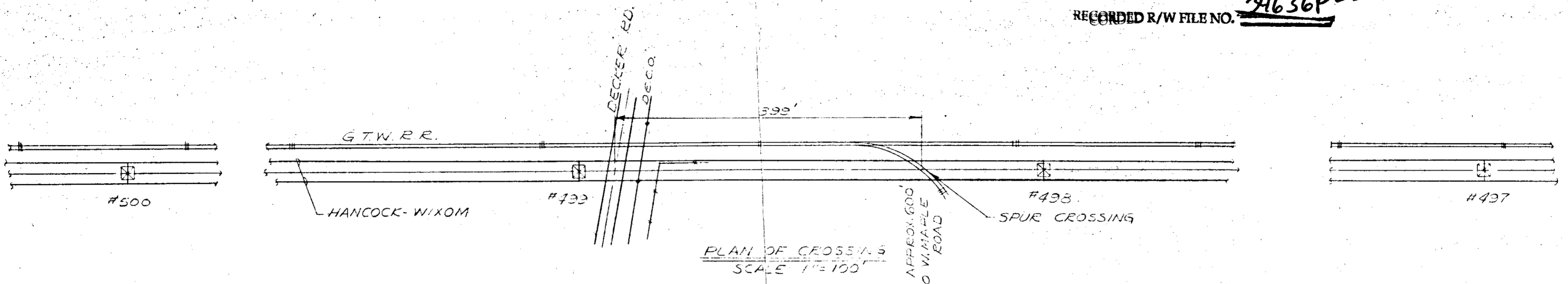
DATE: 1/18/69 DRAWING NUMBER: ED-2-6981

SCALE: NONE

HANCOCK-WIXOM 120 K.V. LINE



RECORDED R/W FILE NO. 41636P250



APPROVED
 FOR
 MICHIGAN PUBLIC SERVICE
 COMMISSION
[Signature]
 DIRECTOR OF PUBLIC UTILITIES
 FILE ED2-8-7103 DATE 7-11-72

ELEVATION OF CROSSING
 SCALE: HORIZ. 1"=100'
 VERT. 1"=20'

FOR SUSPENSION DETAILS
 SEE DRAWINGS ED 1-7008
 ED 2-6381

CITY WALLED LAKE
 COUNTY OAKLAND
 TOWNSHIP COMMERCE
T.2 N.-R.8 E
 SECTION NO. 26

THE DETROIT EDISON COMPANY
 PLAN SUBMITTED TO
 MICHIGAN PUBLIC SERVICE COMMISSION
 FOR 120,000 VOLT CROSSING
 OVER GRAND TRUCK WESTERN R.R.
 DRAWN BY W.E.Z. DATE 5-23-72
 APPROVED BY [Signature] DATE 5-24-72
 PERMIT NO. ED DRAWING NO. RX-4192

RECORDED RIGHT OF WAY NO. 34636
P250