

# **RAILROAD RIGHT OF WAY**

**DOCUMENT(S) WILL BE SCANNED  
AT A LATER TIME**

**RECORDED RIGHT OF WAY NO. R 3 3813B**

August 15, 1986

To: Records Center

From: Sharon Selonke *SS*  
 Real Estate and Rights of Way Department

Subject: Transmission Crossing Located at Approximately 1,400 Feet South of 17 Mile Road and Approximately 2,400 Feet West of Van Dyke Avenue, NW $\frac{1}{4}$  of Section 21, City of Sterling Heights, Macomb County, Michigan - Chestnut-Sterling 120-kV Line

The attached papers are for records center storage. Information about the completed transaction is shown in the following summary.

R.R. 1	R.R. INVOICE NO. M.P.S.C. NO. OR R.E. & RAW NO. 9	Update 10 Type	D.E.C.O. RECORDS CENTER FILE NO. 15	R.X. NO. OR MAP NO. 20	Facility 21	Agreement 22 Date 27
09	00DE398	1	33813	4339	2	0172986

*Council*

Payment Frequency 28	Rental 29 33	OH-UG 34 Code	Division 35	County 36	City or Township 38 44	Section 45
X	XXXXX	1	3	06	STERLING H	21

Location																
47													50			
W	V	A	N	D	Y	K	E	S	O	F	1	7	M	I	L	E

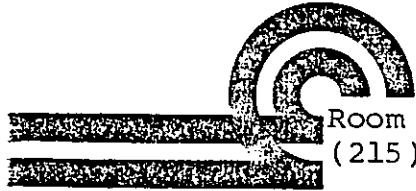
Update Type Codes  
 1 = New Agreement  
 2 = Revised Agreement  
 3 = Terminated Agreement

~~The Accounts Payable Department is requested to start or change the rental payment effective~~

Approved B. M. Fulton

- cc:  Accounts Payable  
 Service Planning  
 System Engineering Van Paris  
 Transmission & Distribution

RECORDED RIGHT OF WAY NO. 338136



Room 801  
(215) 893-6396

Date: July 18, 1986  
File: DE-398

The Detroit Edison Company  
2000 Second Avenue  
Detroit, MI 48226

**ACCEPTED**

Attn: Barbara A. Mention-Fulton  
Supervisor-Real Estate Services  
448 G.O.

By [Signature]  
Title \_\_\_\_\_ Date 7-29-86

Gentlemen:

Reference is made to your letter dated March 21, 1986 attaching copies of your Drawing #RX-4339 indicating your proposed installation of an aerial crossing of one (1) circuit, 120,000 volts, consisting of three (3) conductors and one (1) ground wire, crossing over tracks of the Sterling Secondary Track of Railroad (L/C 5233), at Valuation Station 975+70+, located 1,877 feet south of Mile Post D21 and 0.06 of a mile south of the Station of Sterling Heights, Macomb County, Michigan., within Detroit Edison Company's easement area.

We have no objections to the installation as mentioned above with the understanding that the abovementioned facilities will be installed in a safe and satisfactory manner and in accordance with the "General Conditions" hereto attached and made a part hereof, and that you will pay the sum of Two Hundred Fifty Dollars (\$250.00) upon execution hereof representing reimbursement incidental to cost involved in preparation of the agreement. You will be required to notify: Mr. K. E. Parish, our Area Engineer, located in Detroit, Michigan, Telephone: (313)496-4150 at least fourteen (14) working days prior to start of work.

It is to be understood that this installation must be made in accordance with the approved plans and will conform with current Consolidated Rail Corporation construction requirements, and that no work can be started until permission is received from Mr.

To confirm your acceptance of these conditions, please have an authorized official of your Company indicate acceptance in the space provided on the duplicate of this agreement and return it to this office.

CONSOLIDATED RAIL CORPORATION

/s/ C. E. Wogan/RMM

C. E. Wogan  
General Manager-Contracts

RECORDED RIGHT OF WAY NO.

338139

# CONSOLIDATED RAIL CORPORATION

1528 Walnut Street  
Philadelphia, Pennsylvania 19102-3693

## GENERAL CONDITIONS

1. Facilities must conform with all Federal, State and local laws, rules and regulations and will not be attached to any Railroad structure or appurtenance and will not otherwise be located on any private property of the Railroad.
2. In the event of any revision, renewal, addition or alteration of said facilities, prior approval of the Railroad must be secured.
3. Facilities will be installed, maintained, repaired and renewed by and at the sole risk, cost and expense of the LICENSEE.
4. If the Railroad deems it advisable during the progress of any work of construction, maintenance, repairs and renewals, alterations, adjustments or removal of the facilities and appurtenances of the LICENSEE, or in the event of emergency, to place watchmen, flagmen, inspectors or any other employees deemed necessary by Railroad for the protection of the property owned or in possession or control of the Railroad, or its employees, patrons, or licensees, the Railroad shall have the right to do so and LICENSEE agrees to bear full cost and expense thereof and to promptly reimburse the Railroad upon demand. The LICENSEE also agrees to pay to Railroad the actual cost of material plus the current applicable overhead percentages for storage, handling, transportation, purchasing and other related material management expenses and the actual cost of labor plus the current applicable overhead percentages as developed and published by the Accounting Department of Railroad for fringe benefits, payroll taxes, administration, supervision, use of tools, machinery and other equipment, supplies, employers' liability insurance, public liability insurance, and other insurance, taxes and all other indirect expenses. It is to be understood that the aforementioned material and labor overhead charges are to be applied at the rates which are effective at the time of the performance of any work by employees of the Railroad on the said facilities. The LICENSEE agrees to pay such bills within thirty (30) days of the presentation thereof by Railroad. Failure of the Railroad to provide such watchmen, flagmen, inspectors or any other employees of Railroad, shall in no event be construed as in any manner or degree affecting any obligations of the LICENSEE as provided for elsewhere in these conditions.
5. All cost or expense resulting from any and all loss of life or property, or injury or damage to the person or property of any person, firm or corporation (including the parties hereto and their respective officers, agents and employees) and any and all claims, demands or actions for such loss, injury or damage, caused by or growing out of the presence or use, or the construction, maintenance, renewal, change or relocation and subsequent removal of said facilities and appurtenances herein referred to, caused by or from the joint or concurring negligence of both parties hereto shall be borne by them equally; if, however, any such loss, injury or damage shall be attributed to the negligence of one of the parties hereto, where solely or combined with the negligence of any other person or corporation not a party hereto, and without the concurring fault or negligence of the other party hereto, then such party hereto which by its fault, or negligence contributed thereto shall indemnify, protect and save harmless the other party hereto therefrom.

RECORDED RIGHT OF WAY NO. 338136

(OVER)

6. Upon abandonment of the facilities, the same shall be removed and the property of the Railroad shall be restored to good condition and this instrument shall become null and void, save and except only as to any liability accrued prior thereto.

7. All rights and obligations conferred hereby shall extend to the successors and assigns of the parties hereto, provided that the LICENSEE shall in no event transfer or assign its rights hereunder without the written consent of the Railroad.

8. In the event of underground installations, the Area Engineer must approve the method of installation and related matters of this project, as well as inspection coordination.

9. In the event the facilities consist of an underground occupation, Licensee will be responsible for any settlement caused to the roadbed, right of way and/or tracks, facilities, and appurtenances of the Railroad arising from or as a result of the installation of the said facilities for a period of one (1) year subsequent to the date of completion of the installation, and Licensee agrees to pay to Railroad on demand the full cost and expense therefor.

10. In the event the facilities consist of electrical power or communication wires and appurtenances, LICENSEE shall promptly remedy any inductive interference growing out of, or resulting from the presence of the facilities, and if LICENSEE fails to do so, then the Railroad may do so, and LICENSEE agrees to pay to the Railroad on demand the full cost and expense thereof.

ack  
0  
7/23/86

07.29 8714 51350 250.00 .00 .00 250.00

FOR CHECK DELIVERY

SEND CHECK TO S. Selonke

ADDRESS \_\_\_\_\_

CALL EXTENSION 78316.

HOLD FOR VENDOR PICK-UP \_\_\_\_\_ TIME \_\_\_\_\_

RECORDED RIGHT OF WAY NO. 33813.6

\*\* TOTAL \*\* REMITTANCE FROM THE DETROIT EDISON CO. PLEASE DETACH CHECK BEFORE DEPOSITING 250.00

**Detroit Edison**  
2000 Second Avenue  
Detroit, Michigan 48226

719811 <sup>74-13256</sup>  
724

MANUFACTURERS BANK OF NOVI  
NOVI, MICHIGAN 48050

General Account

\*\*\*\*\*250\*DOLLARS\*00\*CENTS\*\*\* DATE 08/05/86

CHECK NUMBER 452305

Pay to the order of

CONSOLIDATED RAIL CORP  
1528 WALNUT STREET  
ROOM 801  
PHILADELPHIA, PA 19102

\$250.00

*[Signature]*  
AUTHORIZED SIGNATURE  
1 SIGNATURE REQUIRED UNDER \$250,000.00

AUTHORIZED COUNTER SIGNATURE

⑈ 719811 ⑆ ⑆ 072413256 ⑆ 100 900059 ⑆



**Detroit  
Edison**

---

Date: June 13, 1980  
To: R.R. Tewsbury  
From: J.S. Wenger *J.S. Wenger*  
Subject: Conrail Marshalling Yard, Sterling Heights

The 120-kV tower line now identified as the Northeast-Sterling and Chestnut-Sterling was installed in 1926. Rights of a general nature by modern standards, but common at the time, had been obtained from land owners in late 1925 and duly recorded. Copies of the applicable documents are enclosed. In all of them, the Detroit Edison Company was granted permission to "construct, operate and maintain" the tower line "along, west of and adjacent to the Michigan Central Railroad". The same towers stand today, although the original copper conductors have been replaced with ACSR.

About 15 years ago Penn Central purchased all of the land shown shaded on attached sketch A. Containing nine of the towers. A marshalling yard containing 20 tracks at its widest point has since been built west of the tower line. The records of this office contain no evidence of any contact or notification from the Railroad of their intention to install the yard. Track has been laid, crossing under the line in three places without our knowledge, and therefore without State approval.

All of this came to our attention upon receipt of a print of a Conrail layout drawing showing the yard as well as additional facilities to be built to serve Volkswagen. Sketch B, also attached, shows the limiting effect of a proposed new track, in the original railroad right-of-way, on base size of any new tower which may be required in the area. The twelve-foot clearance between the tower leg and the rail is taken from the National Electrical Safety Code.

The Conrail drawing, incidentally, shows a 30-foot easement for the tower line, which is something we would not have approved had we been asked.

The limitation on tower dimension described above has already been felt in our effort to provide conductor clearance over the 17 Mile Road bridge to be built by the City of Sterling Heights. The proximity of existing and proposed tracks required the use of a steel pole at a cost of 30% more than the lattice tower which would otherwise have been used.

RECORDED RIGHT OF WAY NO. 538136



The tower line is slated for conversion to 230-kV in the foreseeable future, according to our Transmission Planning Section. The existing towers can be converted in place. Any new structures required for other reasons, such as a tap to serve the Volkswagen facility, should be of 230-kV design. Our smallest 230-kV strain tower is over 22 feet square at its base.

A study is presently being made of means to serve added load at Van Dyke Substation resulting from the take-over by Volkswagen. A likely result of this study is a decision to install a tap from the tower line in the Conrail yard. The estimated cost of this installation is \$60,000 more than what could be done were it not for the congestion of tracks.

The Construction Department was requested to review the effect of the railroad facilities on access and hence their ability to maintain the line. A copy of this report from D.C. Seeger is attached.

Recognizing that our ability to deal effectively with the congestion now surrounding this line segment was hampered by records over 50 years old, we commissioned a new profile survey. The results have just now been put in our hands. We are able to plot the railroad crossings referred to earlier in this memo. Permit applications will be submitted as soon as they are completed.

The foregoing situation leads us to the following questions:

1. Are the infringements on our prior rights and the financial penalties resulting from them sufficient to attempt to prevent the installation of the additional track just east of the towers?
2. If the answer to question 1 is no, is there justification for seeking to recover the added expense of our construction work in the area? This would be after the fact in the case of the 17 Mile Road relocation work.
3. Why is the burden of filing crossing permit applications solely on the power company?
4. Is there no governmental requirement that railroads notify utilities of pending track installations beneath overhead lines? This question is based not only on this situation, but on many experiences with other railroads as well as Conrail over many years. Some of these incidents have caused problems when hasty tower relocations were necessary to provide sufficient rail clearance.

JH/bf

cc: T.P. Beagen  
R.W. Burk  
E. Williams

RECORDED RIGHT OF WAY NO.

33813  
6

DATA SHEET TO ACCOMPANY DRAWING RX-4339

Name of Company

The Detroit Edison Company

Name and Location of Crossing

Crossing of the Chestnut-Sterling 120-kV line over the Conrail Railroad. Located at approximately 1,400 feet south of 17 Mile Road and approximately 2,400 feet west of Van Dyke Avenue. City of Sterling Heights, Macomb County, Northwest 1/4 of Section 21, Michigan.

Circuits

One 120,000 volt, 60 cycle, 3 wire, 3 phase transmission circuit with one ground wire.

Towers and Crossarms

See attached drawing station frame ED1-9550, D Tower, drawing No. T-9035.

Conductors

Three 795 MCM 26/7 ACSR and one 3/8" steel ground wire.

Insulators

Deadend - Nine 5 3/4"x10" insulators.  
Suspension - Eight 5 3/4"x10" insulators.

Guy and Guy Attachments

None

Suspension and Deadend Details

See attached drawing ED1-7572.

RECORDED RIGHT OF WAY NO. 33813  
6

System Engineering Department  
CVP/pjp 2-19-86

THE CALCULATIONS FOR THIS TRIAL ARE FOR SAG VALUES FOR SHORT SPANS L  
 STRESS-STRAIN CURVES USED REPRESENT 795,000 CM ACSR 26/7

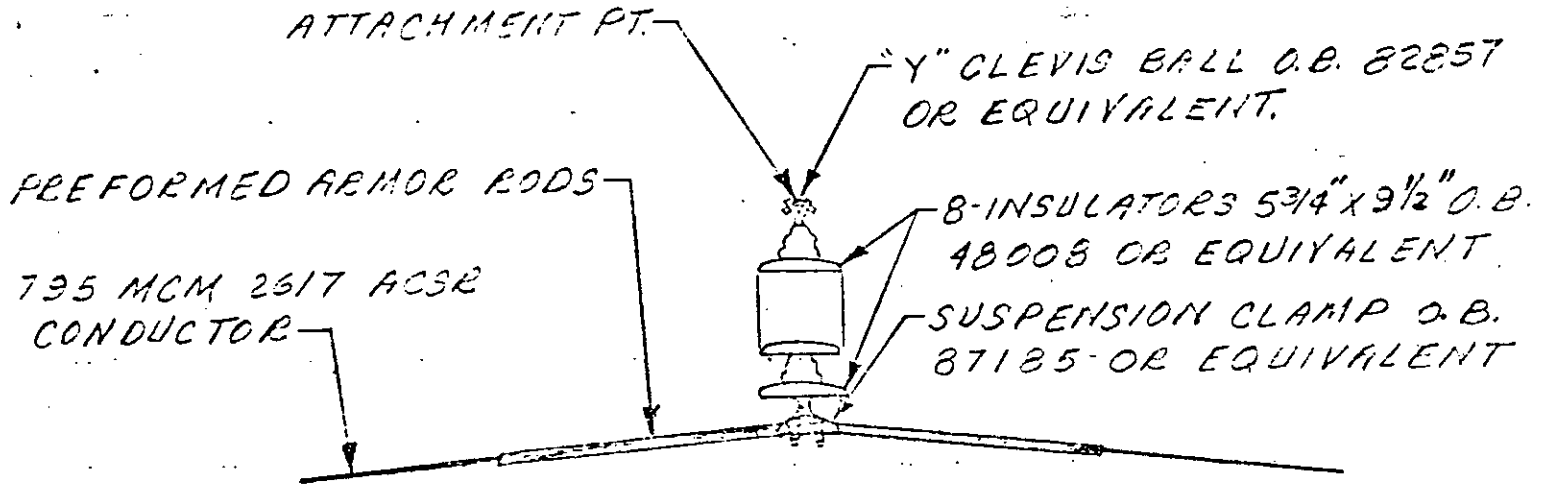
STARTING INDEX	RULING SPAN	STARTING SAG OR TENSION	AREA OF CONDUCTOR	INITIAL L MAX TENS
1	250.0	1500.00	0.72610	1500

INDEX	TEMP.	INITIAL		FINAL		
		SAG	TENSION	SAG	TENSION	
1	0.	13.38	-1500.	13.38	1500.	-----MI
2	0.	13.25	658.	13.28	657.	
3	0.	13.34	1250.	13.35	1250.	
4	30.	13.51	646.	13.55	644.	
5	60.	13.77	634.	13.79	633.	
6	90.	13.95	626.	13.95	626.	
7	120.	14.11	619.	14.11	619.	

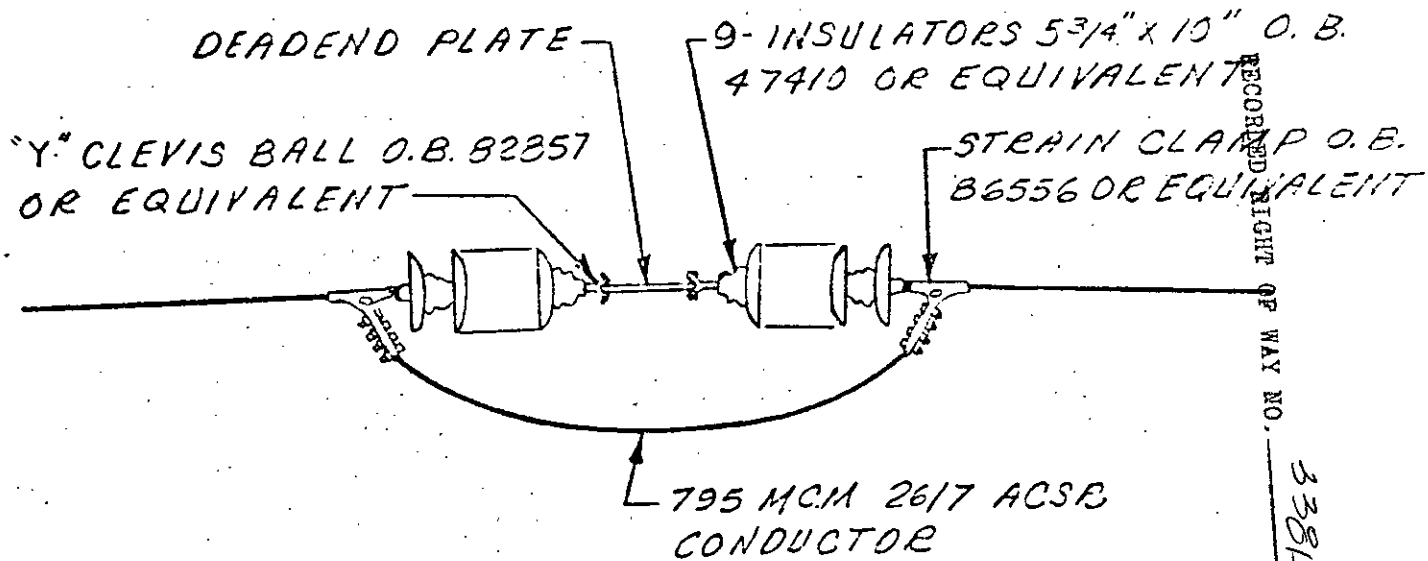
\*\*\*\*\*

RECORDED RIGHT OF WAY NO. 338136

DETAILS



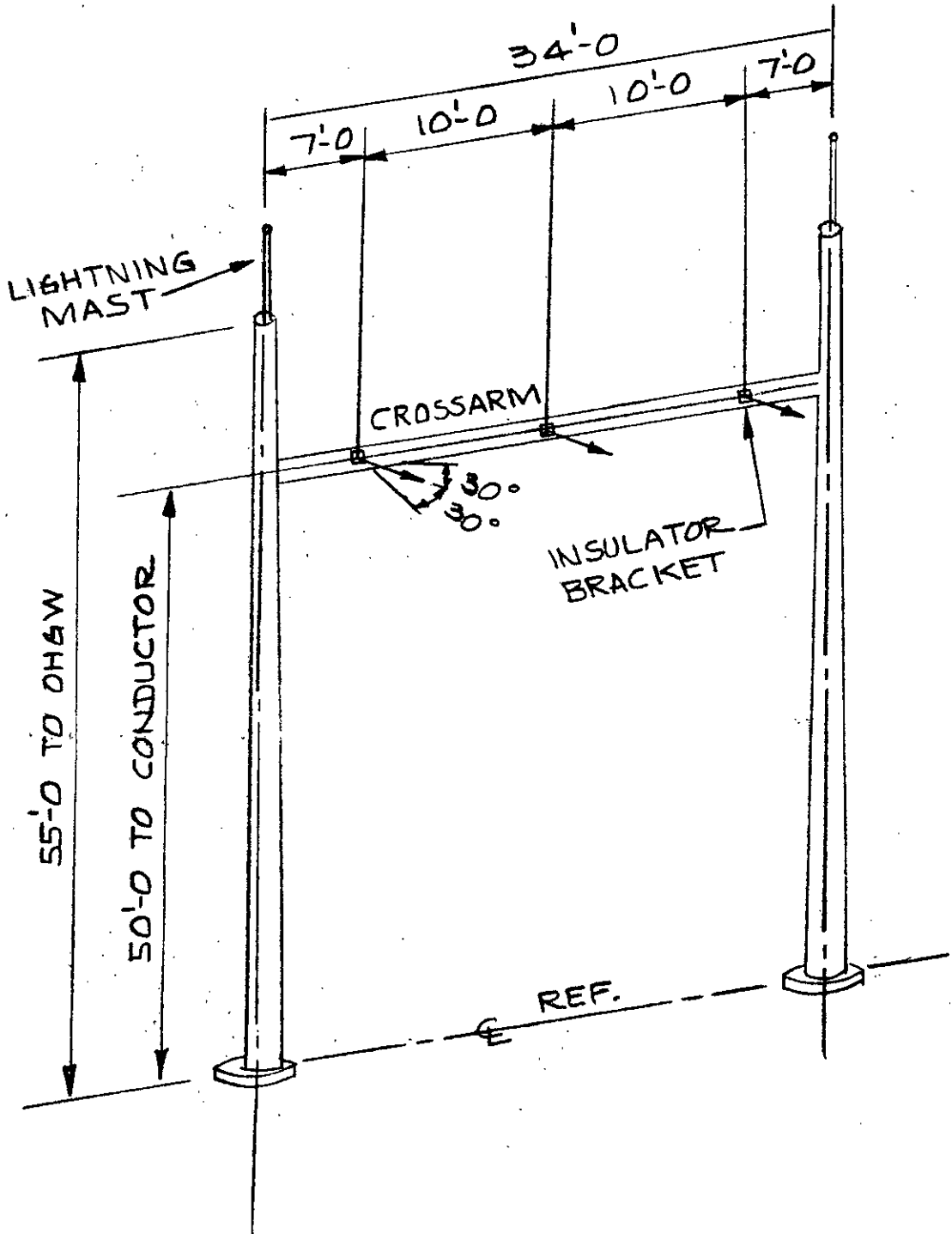
DEADEND ASS'Y  
DETAILS



REV. A 4-29-77 WES

120 KV SUSPENSION &  
DEADEND ASS'Y DETAILS

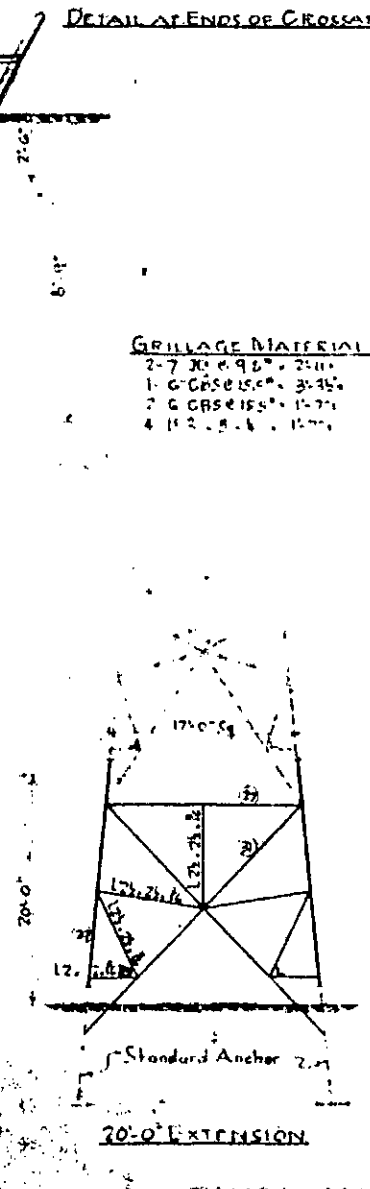
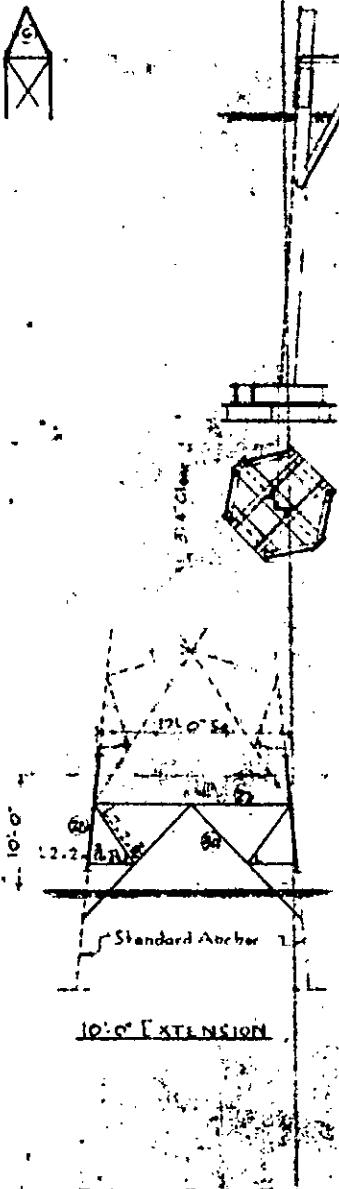
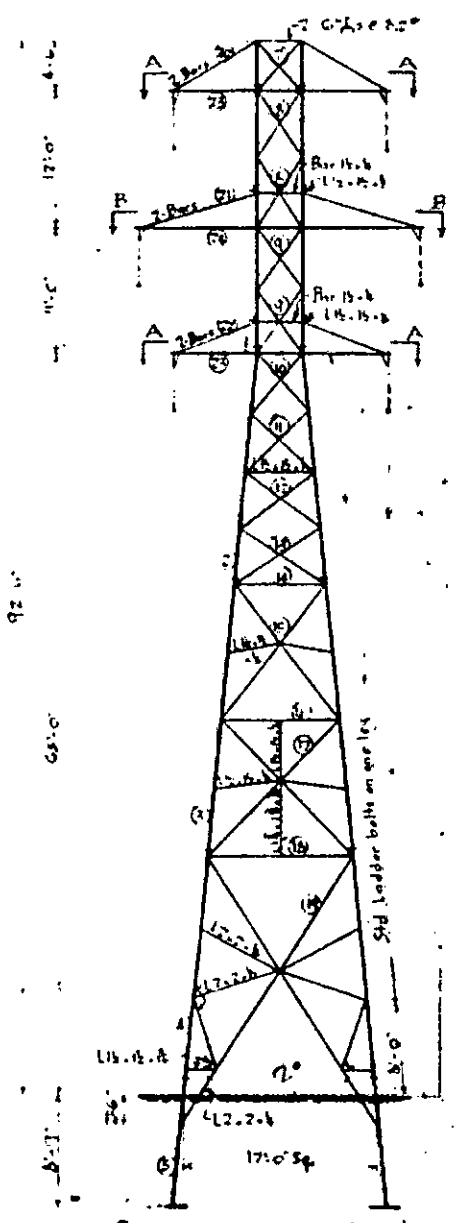
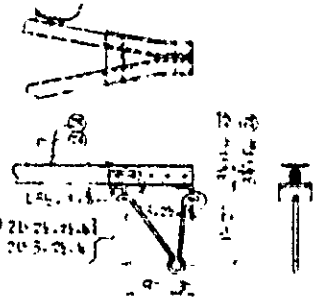
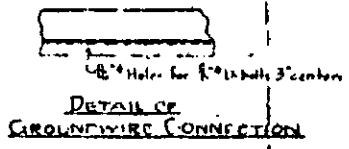
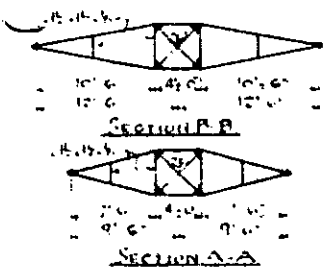
APPROVED	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
LAYOUT BY J. H. HILL	DRAWN BY	
DATE 5-7-71	DRAWING NUMBER	
SCALE	ED1-7572	



RECORDED RIGHT OF WAY NO. 338136

STATION "H" FRAME FOR  
GENDY SUBSTATION

APPROVED <i>MJT</i>	THE DETROIT EDISON COMPANY SYSTEM ENGINEERING DEPARTMENT	
LAYOUT BY	DRAWN BY C. VAN PARISE	
DATE 1-23-86	DRAWING NUMBER	
SCALE NONE	ED 19550	



- GRILLAGE MATERIAL**
- 2-7 X10 @ 90° - 2410
  - 1-6 GR5E155° - 3135
  - 2-6 GR5E155° - 1775
  - 4-1/2 X 8 @ 45° - 1475

Member	Area	Section
1	37.7	14-3-4
2	41.1	4-4-4
3	54.5	4-4-4
4	57.1	do
5	54.4	do
6	67.1	12-3-4
7	25.1	14-14-4
8	49.1	13-13-4
9	127.2	12-7-2
10	104.1	13-13-4
11	67.1	do
12	41.1	do
13	41.1	do
14	36.1	12-7-2
15	92.1	14-14-4
16	52.1	12-7-2
17	57.1	13-13-4
18	59.1	13-13-4
19	112.1	13-13-4
20	57.1	Bar 12-4
21	52.1	do
22	34.1	do
23	185.1	13-13-4
24	75.1	13-13-4
25	82.1	Bar 13-4
26	6.3	13-13-4
27	3.6	14-2-4
28	52.1	14-4-4
29	52.1	14-4-4
30	28.1	12-3-4
31	4.6	13-13-4

**Suspension Tower Type DA**

The tower is designed to support 1-24115 and 1-110000 conductors with minimum tension of 4500' and 1-110000 24115 conductors with minimum tension of 7000' on level spans and sagging loading of maximum tension 4500' on 2 ice coated cables.

**LOADS:**

- (1) Vertical
  - 1-Grid wire @ 270° - 270°
  - 6-Conductors @ 270° - 3360°
- (2) Transverse - wind on cables
  - 1-Grid wire @ 460° - 460°
  - 6-Conductors @ 705° - 4230°
- (3) Longitudinal
  - 1-Grid wire @ 4500' or any
  - 1-Conductor @ 6000' (80% of 7500')
- (4) Wind on tower of 65' per sq ft on 12' tower projected area of one face of the tower
- (5) Dead load of tower.

**Weights:**

- 127-1,254 + 2,744 = 4,127.5
- or 127-1,254 + 1,109 = 2,363 + 77.5

**ULTIMATE UNIT STRESSES - P.F.S. (psi)**

- Tension on net section 33000
- Compression on gross section 33000
- Shear on bolts 33000
- Bearing on bolts 66000

**MATERIAL:** OH Steel A 57 of latest revision

**CONNECTIONS:** All material of standard connections - Bolted, 5/8" x 1/4"

**SPECIFICATIONS:** A.B.D. 14 for suspension towers.

**TRANSMISSION TOWERS**  
 THE DETROIT LUMBER COMPANY

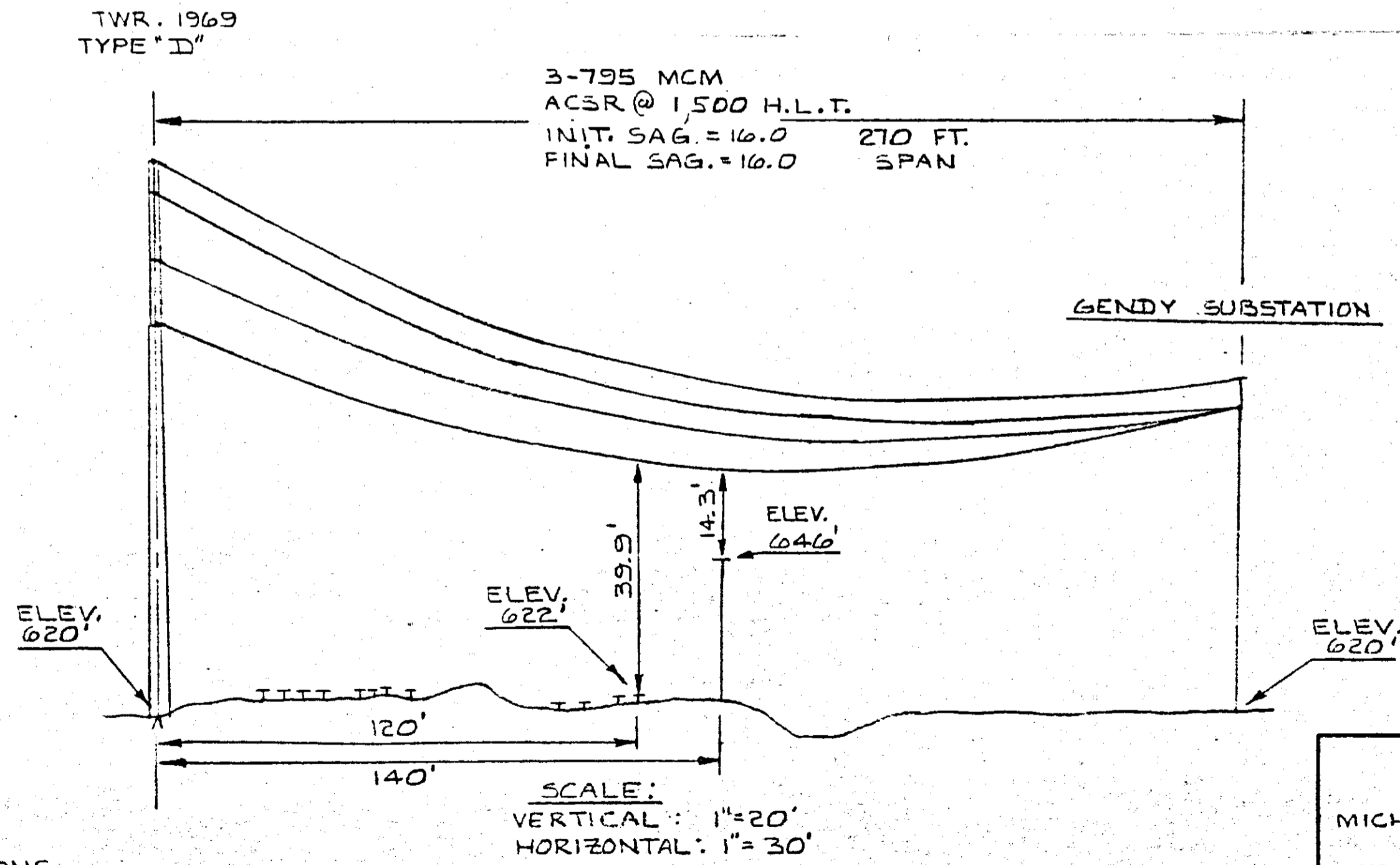
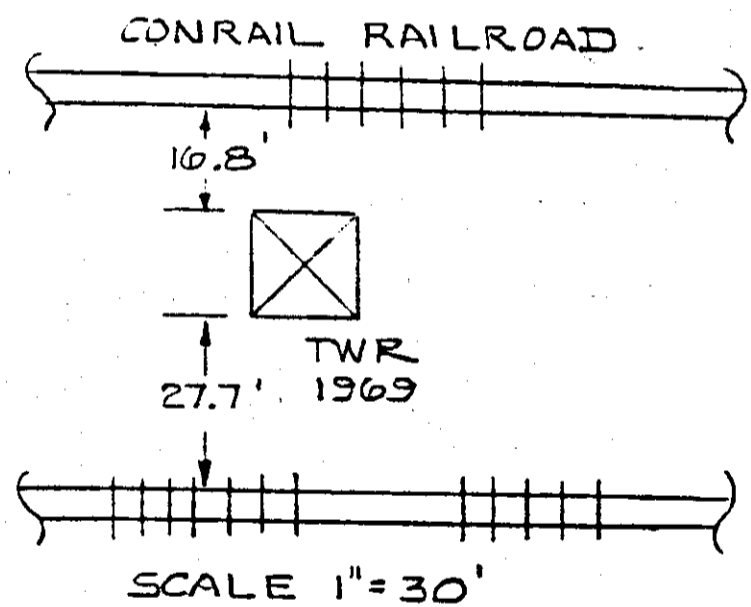
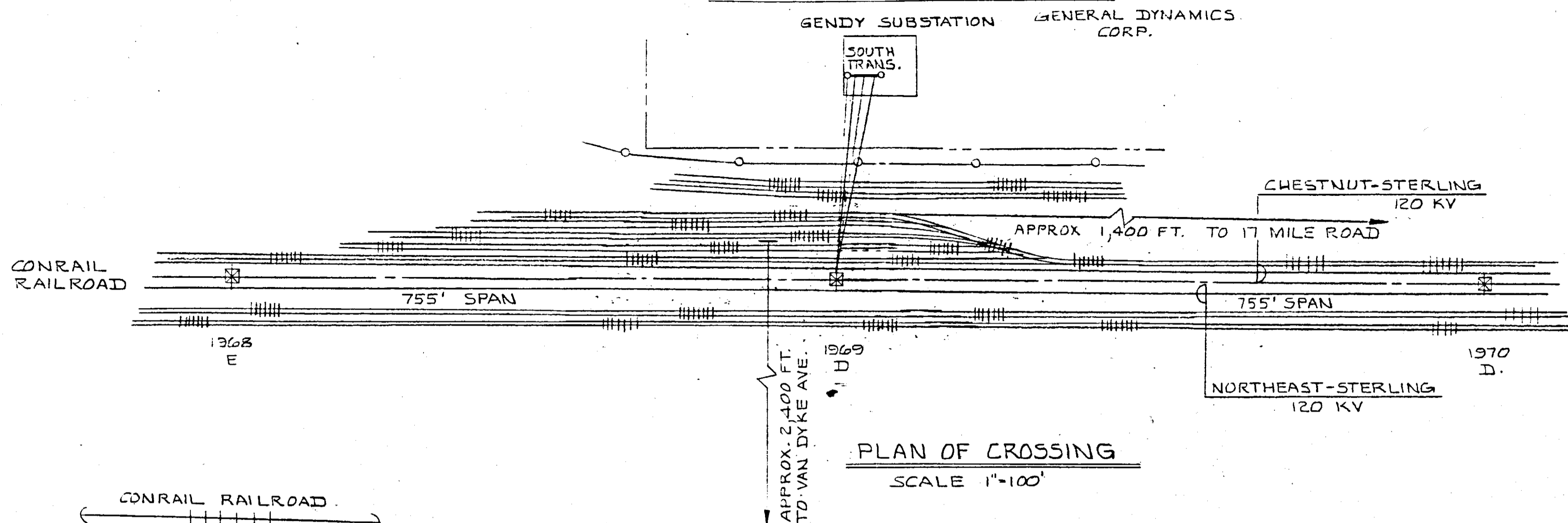
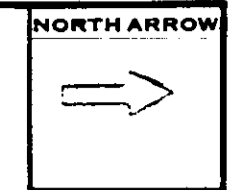
Suspension Tower Type DA

1000' 15000  
 2  
 1-24115  
 1-110000  
 6-14541' Truss

**AMERICAN BRIDGE**  
 1000' 15000  
 2  
 1-24115  
 1-110000  
 6-14541' Truss

DESIGNED BY  
 DRAWN BY  
 JULY 1954

120KV TRANSMISSION LINES



ALL DIMENSIONS AT 60° FINAL

ELEVATION OF CROSSING

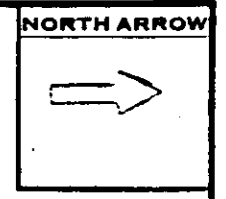
CITY STERLING HEIGHTS  
 COUNTY MACOMB  
 TOWNSHIP \_\_\_\_\_  
 SECTION NO. N.W. 1/4 SEC. 21

THE DETROIT EDISON COMPANY PLAN SUBMITTED TO MICHIGAN DEPT OF TRANSPORTATION MICHIGAN PUBLIC SERVICE COMMISSION FOR 120,000 VOLT CROSSING OVER CONRAIL RAILROAD DRAWN BY C. VAN PARIS DATE 2-19-86 APPROVED BY <i>[Signature]</i> DATE 2-19-86	
PERMIT NO. <b>ED</b>	DRAWING NO. <b>RX-4339</b>

RECORDED RIGHT OF WAY NO. 338136

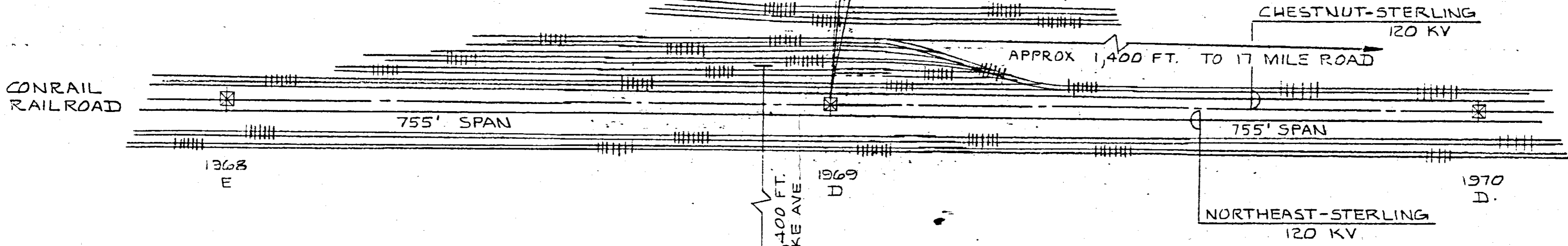


120KV TRANSMISSION LINES

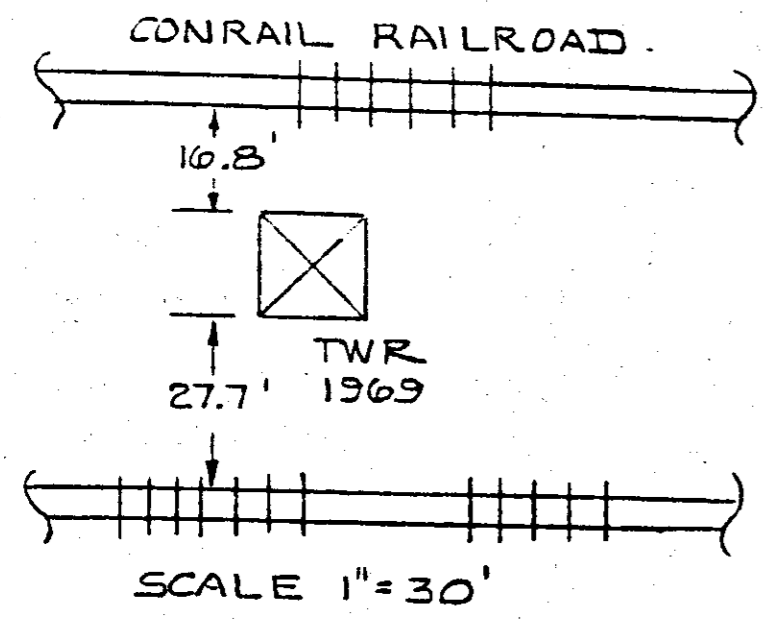


GENDY SUBSTATION GENERAL DYNAMICS CORP.

SOUTH TRANS.

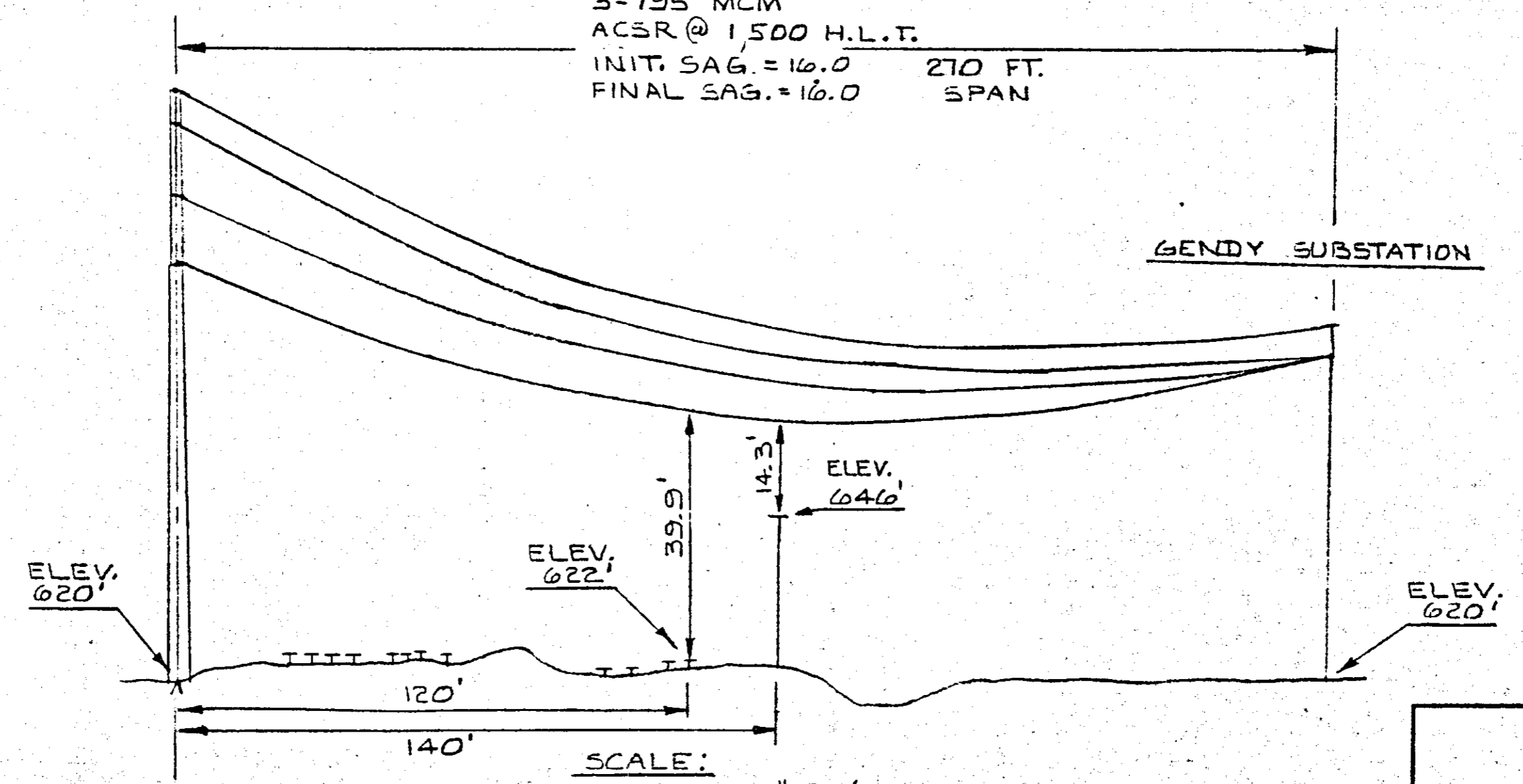


PLAN OF CROSSING  
SCALE 1"=100'



TWR. 1969  
TYPE "D"

3-795 MCM  
ACSR @ 1,500 H.L.T.  
INIT. SAG = 16.0 270 FT.  
FINAL SAG = 16.0 SPAN



ALL DIMENSIONS  
AT 60° FINAL

ELEVATION OF CROSSING

CITY STERLING HEIGHTS  
COUNTY MACOMB  
TOWNSHIP \_\_\_\_\_  
SECTION NO. N.W. 1/4 SEC. 21

THE DETROIT EDISON COMPANY	
PLAN SUBMITTED TO MICHIGAN DEPT OF TRANSPORTATION <del>MICHIGAN PUBLIC SERVICE COMMISSION</del>	
FOR 120,000 VOLT CROSSING OVER CONRAIL RAILROAD	
DRAWN BY <u>C. VAN PARIS</u>	DATE <u>2-19-86</u>
APPROVED BY <u>W. J. Thacker</u>	DATE <u>2-19-86</u>
PERMIT NO. <b>ED</b>	DRAWING NO. <b>RX-4339</b>

RECORDED RIGHT OF WAY NO. 338B6