

# THE DETROIT EDISON COMPANY

2000 SECOND AVENUE

DETROIT, MICHIGAN 48226

December 4, 1969

Permit No. ED-2-8-6269

Michigan Public Service Commission  
Lansing 13, Michigan

Gentlemen:

I, Martin F. Wider, Superintendent of Transmission Div. of The Detroit Edison Company, Detroit, Michigan, hereby certify that the wire crossing, covered by Wire Crossing Permit No. ED2-8-6269, issued 7-1-68, has been constructed in accordance with specifications of the Michigan Public Service Commission and construction standards of The Detroit Edison Company, approved by Michigan Public Service Commission on July 19, 1939, file ED 2-9.01, and that this crossing will be maintained as provided in such specifications and construction standards.

Yours very truly,

*Martin F. Wider*

RX No. 3905

Location Van Buren Twp.,

Sec. 23, Wayne County

Railroad Norfolk and Western

Valuation Station 925 + 60  
Writer File No. 9880 S

JVS:mls

Subscribed and sworn to before me this  
4th day of December, 1969.

*Joseph V. Strouse*  
Joseph V. Strouse  
Wayne

Notary Public,  
County, Michigan. 1-23-71  
My Commission expires \_\_\_\_\_

RECORDED RIGHT OF WAY NO. 25319



# THE DETROIT EDISON COMPANY

2000 SECOND AVENUE  
DETROIT, MICHIGAN 48226

August 26, 1968

Railroad File No. 98805

Mr. E. Q. Johnson, Chief Engineer  
Norfolk and Western Railway Company  
8 North Jefferson Street  
Roanoke, Virginia 24011


Dear Mr. Johnson:

We are returning agreement/~~permit~~ in duplicate, covering our facilities over your tracks and ~~an~~ right of way as shown on our Plan RX-3905 and located as follows: **Approximately 845 feet south of Huron River Drive and 3200 feet east of Martinsville Road. Survey Station 925+60**

City/Village \_\_\_\_\_ Township, Van Buren, Section 23,  
County Wayne. The agreement/~~permit~~ has been signed for our Company.

Will you please return one fully executed copy of this agreement/~~permit~~ ~~to~~ to us for our records.

Yours very truly,



I. W. Gamble  
Supervisor of Rights of Way  
Properties and Rights of Way Dept.

JVS/mlid

Enclosures 2

RECORDED RIGHT OF WAY NO. 25319

NORFOLK AND WESTERN RAILWAY COMPANY

8 North Jefferson Street

Roanoke, Virginia 24011

Telephone 703-344-1451 Ext. 3547

I. W. GAMBLE

AUG 21 1968

PROV. & R/W DEPT.

Name Mr. I. W. Gamble  
Title Supervisor of Rights of Way  
Co. The Detroit Edison Company  
St. 2000 Second Avenue  
City Detroit, Michigan 48226

Date August 19, 1968  
Agmt. File 98805  
Location Belleville, Mich.

Dear Mr. Gamble:

This refers to your letter dated April 23, File RX-3905  
with proposal for 345 KV crossing at Survey Station 925+60 at  
Belleville, Michigan.

Attached are two copies of agreement required to cover this project.

Please have both copies executed and return for final handling. As soon as copies are executed by our company, one copy will be returned for your file.

Please do not send check covering fee at this time. In a few weeks after execution of agreement, you will receive a bill covering fee required from our Comptroller.

Yours very truly,



E. Q. Johnson  
Chief Engineer

Attachment - 2 agreement copies.

RECORDED RIGHT OF WAY NO. 25319

August 20, 1968

Mr. E. Q. Johnson, Chief Engineer  
Norfolk and Western Railroad Company  
8 North Jefferson Street  
Roanoke, Virginia 24011

Dear Mr. Johnson:

We refer to our application dated April 23, 1968, our plan RX-3905, covering two 345,000 volt transmission circuits with two ground wires approximately 845 feet south of Huron River Drive and 3200 feet east of Martinsville Road in the Township of Van Buren, Wayne County, Michigan.

As the Michigan Public Service Commission has granted us their Permit No. ED2-8-6269 dated July 1, 1968, we would appreciate having your letter of permission or agreement so we may proceed with construction of this crossing.

Yours very truly,



I. W. Gamble  
Supervisor of Rights of Way  
Properties and Rights of Way Dept.

HB/mld

*Agreement to Proceed  
8-22-68*

RECORDED RIGHT OF WAY NO.

25319

File  
Copy

# THE DETROIT EDISON COMPANY

2000 SECOND AVENUE  
DETROIT 26, MICHIGAN

June 18, 1968

Michigan Public Service Commission  
Lansing 13, Michigan

Gentlemen:

The Detroit Edison Company, Detroit, Michigan, hereby makes application for authority to string the following wires over the tracks of the **Norfolk and Western Railroad in Section 23, Van Buren Township, Wayne County, Michigan.**

**Two 345,000 volt transmission circuits with two ground wires located approximately 845 feet south of Huron River Drive and 3200 feet east of Martinsville Road.**

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. (6-12-68)
- Waiver of hearing by the Railroad Company is covered by blanket waiver.
- 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- 3903

**H.F. & W. Rwy. File 9880 S**

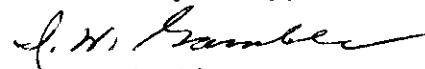
Permit No. ED2-8-6269

Date 7-1-68

By F. M. Hoppe

JVS/mla

Yours very truly,



**I. W. Gamble  
Supervisor of Rights of Way  
Properties and Rights of Way Dept.**

RECORDED RIGHT OF WAY NO. 25319

Check in circle indicates statement applicable.

June 18, 1968

Mr. W. B. Van Lear, Manager  
Signals and Communications  
Norfolk and Western Railway Company  
8 North Jefferson Street  
Roanoke, Virginia 24011

Attention: Mr. S. W. Miller

Gentlemen:

Reference is made to our application RX-3905 whereby we requested permission to construct two 345 KV circuits over your tracks approximately 845 feet south of Huron River Drive and 3200 feet east of Martinsville Road in Section 23, Van Buren Township, Wayne County, Michigan.

As per a telephone conversation between you and our Mr. Strouse, we have revised our drawing to reflect proper distance from fence at Tower 10367.

If there are any further questions on this matter, please feel free to communicate with this office.

Yours very truly,



I. W. Gamble  
Supervisor of Rights of Way  
Properties and Rights of Way Dept.

JVS/mld

Attachment

RECORDED RIGHT OF WAY NO. 25319



# Norfolk and Western Railway Company

SIGNALS AND COMMUNICATIONS DEPARTMENT  
ROANOKE, VIRGINIA 24011

WILLIAM B. VAN LEAR  
MANAGER SIGNALS AND COMMUNICATIONS

June 12, 1968  
Rwy. File 9880 S  
(Belleville, Mich.)

I. W. GAMBLE

*lls*

JUN 17 1968

PROP. & R/W DEPT.

Mr. I. W. Gamble, Supvr. of Rs/W  
Properties and Rs/W Dept.  
The Detroit Edison Co.  
2000 Second Ave.  
Detroit, Michigan 48226

Dear Mr. Gamble:

This refers to your letter dated April 23 regarding your application to Michigan State Commission for approval of your proposed 345 KV electric power line, east of Martinsville Rd., Belleville, Mich., that will cross tracks and right of way of the Norfolk & Western Rwy. as shown on your plan RX-3905.

In order to protect the operation of our Railway, execution of our standard form S T & S 2 agreement, copy attached, is required for each crossing before any construction is started over our right of way; however we need not attend a hearing by the Commission to determine the necessity for construction of this proposed electric transmission line, provided it is understood that the above mentioned agreement will be executed before construction is started.

*Drawn away  
same as  
Records Center  
Copy*

Yours very truly,

*W. B. Van Lear*

Manager Signals & Communications

Attachment - Agreement

cc: Mr. D. E. Turney, Div. Eng., Ft. Wayne - w/attach.

RECORDED RIGHT OF WAY NO. 25319



# THE DETROIT EDISON COMPANY

2000 SECOND AVENUE  
DETROIT, MICHIGAN 48226

TO:

April 23, 1968

Mr. W. B. Van Lear, Manager  
Signals and Communications  
Norfolk and Western Railway Company  
8 North Jefferson Street  
Roanoke, Virginia 24011

Proposed Overhead Wire Crossing:

**Two 345,000 volt transmission circuits with two ground wires**

Specific Location

**Approximately 845 feet south of Huron River Drive and 3200 feet east of Martinsville Road.**

R. R. Valuation Station \_\_\_\_\_ R. R. Mile Post \_\_\_\_\_

City/Village \_\_\_\_\_ Township Van Buren, Section 23

County Wayne Detroit Edison Plan Attached RX-3905

This is a New Crossing  This is a Reconstruction of Existing Crossing \_\_\_\_\_

Previous Agreement Information (if any) Date \_\_\_\_\_ (R. R. Plan) \_\_\_\_\_

RECORDED RIGHT OF WAY NO. 25319

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, Supervisor of Rights of Way  
Properties and Rights of Way Department**

STATE OF MICHIGAN  
BEFORE MICHIGAN PUBLIC SERVICE COMMISSION

Standard Railroad Wire-Crossing Permit No. **MS-8-6369**  
**The Detroit Edison Company**

In Re Application of **3000 Second Avenue**  
**Detroit, Michigan 48226**

Pursuant to Act No. 171 of the Session Laws of 1893, as amended, application having been made to Michigan Public Service Commission by said  
**The Detroit Edison Company**

for permission to string wires across the tracks of the  
**Norfolk and Western Railway Company**

and said  
**The Detroit Edison Company**

having conformed to the Commission's rules governing the filing of notices and issuing of permits for the construction of electrical lines and said rail road company having waived the right of notice and hearing provided for in said act  
THEREFORE, It is ordered that said

**The Detroit Edison Company**  
be permitted to string the following described wires across the tracks of said railroad at the following described place:

Township of  
Van Buren  
  
County of  
Wayne  
  
State of  
Michigan

Crossing of two (2) 345 kv, 60 cycle, 3 phase, 3 wire circuits with two (2) ground wires, known as "Wayne-Lansing" and "Wayne-Fosteria Central" 345 kv circuits, located approximately 845' south of Buren River Drive and 1200' east of Martineville Road in Section 23, T2S, R2E  
12 - #954 NEM (34/7) ACSS Phase Conductors (bundled 2 conductors per phase - 18" spacers)  
2 - #159 NEM (12/7) ACSS Ground Wires

Per Drawing **ME-3905**

as indicated on the attached plans, when, as and if approved.

At the point of crossing said wires shall be installed in accordance with this Commission's rules and regulations.

Given under our hands and the Official Seal of this Commission at the City of Lansing, State of Michigan, this **first** day of **July** A.D. 19 **60**

MICHIGAN PUBLIC SERVICE COMMISSION

**Peter B. Spivak**

Chairman

**Willis F. Ward**

Commissioner,

Countersigned

**Ernest D. Matteson**

Secretary

**William A. Ross, Jr.**

Commissioner.

RECORDED RIGHT OF WAY NO.

25319

STATE OF MICHIGAN SS.  
Office of the Michigan Public Service Commission

I, Knight D. McKesson, Secretary of the Michigan Public Service Commission Do Hereby Certify,  
That I have compared the annexed copy of **Railroad Wire Crossing Permit**  
**No.** ED2-8-6269

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 **first**  
day of **July** in the year of our Lord  
one thousand nine hundred **sixty-eight**

*Knight D. McKesson*

Secretary

RECORDED RIGHT OF WAY NO.

25319

DATA SHEET TO ACCOMPANY DRAWING RX-3905

Name of Company

The Detroit Edison Company

Name and Location of Crossing

Crossing of the "Wayne-Lemoyne" and "Wayne-Fostoria Central" 345KV circuits over the Norfolk and Western Railroad approximately 845' south of Huron River Drive, and 3200' east of Martinsville Road in Section 23, Van Buren Township, Wayne County, Michigan

Circuits

Two 345,000 volt, 60 cycle, 6 wire, 3 phase transmission circuits with two ground wires.

Towers and Crossarms

As per attached drawings, ED, EH and ES.

Conductors

Two 954 MCM 54/7 ACSR conductors per phase with 18" sub spacing and two 159 MCM 12/7 ACSR ground wires.

Insulators

17-5 3/4" X 10" OB #32440 or equivalent in suspension on "EC" and "ES" type towers. 17-5 3/4" X 10" Insulators Lapp #40640 in dead-end on an "EH" tower.

Guy and Guy Attachments

None

Guy Clamps and Insulators

None

Guy Anchor and Anchor Rods

None

Suspension and Deadend Details

As per attached drawing No. ED-5924

RECORDED RIGHT OF WAY NO. 25319

General Engineering Department  
NHH/gmk 4/11/68

SUSPENSION TOWER TYPE EC

LOADS

1. Vertical ( $\frac{1}{2}$ " ice)
  - a. 2 Groundwires @ 1080# = 2160#
  - b. 6 Two-Conductor Bundles @ 4900# = 29400#
  - Total = 31560#
2. Transverse-Wind on Wires ( $\frac{1}{2}$ " ice, 8# wind)
  - a. 2 Groundwires @ 1050# = 2100#
  - b. 6 Two-Conductor Bundles @ 2880 = 17280#
  - Total = 19380#
3. Longitudinal
  - a. 1 Two-Conductor Bundle @ 15000#
  - b. 1 Groundwire @ 6600#
  - c. 1 Two-Conductor Bundle @ 12000#
4. Wind on Tower (from any direction) of 13 psf on  $1\frac{1}{2}$  times projected area of one face
5. Vertical Load of Tower
6. Vertical-Heavy (1" ice)
  - a. 2 Groundwires @ 2400# = 4800#
  - b. 6 Two-Conductor Bundles @ 8500# = 51000#
  - Total = 55800#

- Combine
- 1.65 x (1+2+4+5)
  - 1.0 x (3a)
  - 1.0 x (3b)
  - 1.65 x (1+2+4+5)+1.0x (3c)
  - 1.65 x (6)
- = Intact
  - = Broken Conductor Bundle, Independent
  - = Broken Groundwire, Independent
  - = Double ckt., 1 Broken Conductor Bundle
  - = Heavy Vertical

**Material**  
Steel per ASTM spec. A36, latest revision, & High Strength Steel - 44,000 psi yield  
- 50,000 psi yield  
- 60,000 psi yield

**Coating**  
All material galvanized to ASTM spec. 123, latest revision.

**Connections**  
Bolted with 3/4" diameter machine bolts, ASTM spec A394, latest revision.

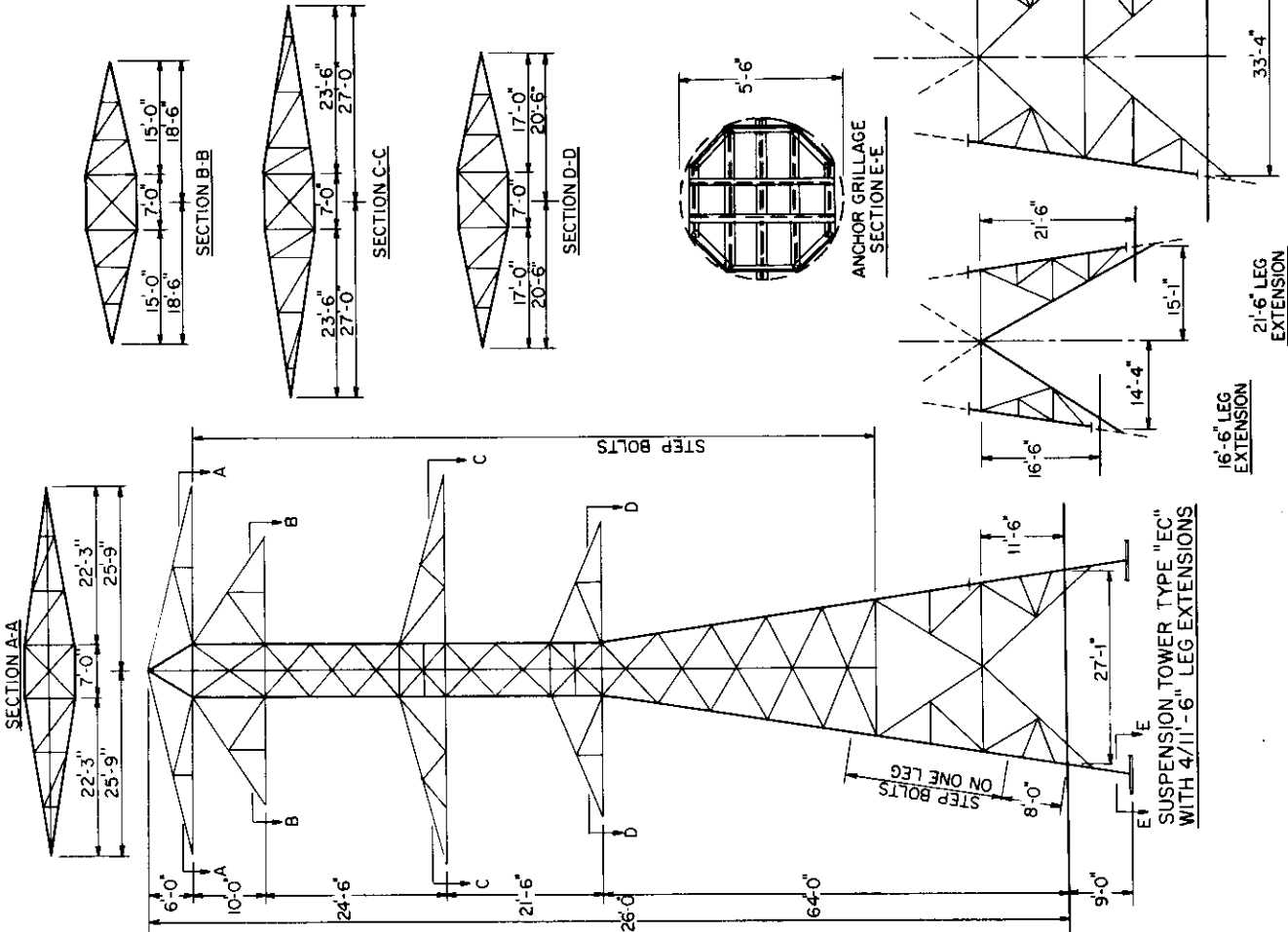
**Ultimate Unit Stresses**

Tension, Net Section =  $0.9F_y$  ( $F_y$ =Yield Stress in psi)  
Compression, Gross Section;  
For  $L/r \leq 50$   $S_c = F_y(1 - \frac{F_y}{900})$

For  $50 < L/r \leq \frac{3x10^4}{\sqrt{F_y}}$   $S_c = F_y(1 - \frac{2x10^{-4}}{9} \frac{L}{r} \sqrt{F_y})$

For  $\frac{3x10^4}{\sqrt{F_y}} < L/r$   $S_c = \frac{3x10^8}{(L/r)^2}$

Shear on Bolts = 30,000psi  
Bearing on Bolts = 60,000psi



SUSPENSION TOWER TYPE "EC"		APPROVED	
THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT		LAYOUT BY	R.O.S.
DRAWN BY W.E.S.		DATE	1-2-68
SCALE NONE		DRAWING NUMBER	EC

RECORDED RIGHT OF WAY NO. 25319

HEAVY ANGLE DEAD-END TOWER TYPE EH

LOADS

1. Vertical
  - a. 2 Groundwires @ 1100#
  - b. 6 Two-Conductor Bundles @ 5000#  
Total
- 2a. Transverse-Wind on Wires ( $\frac{1}{2}$ " ice, 8# wind)
  1. 2 Groundwires @ 1100#
  2. 6 Two-Conductor Bundles @ 3000#  
Total
- 2b. Transverse-Angle in Line
  1. 2 Groundwires @ 6000#
  2. 6 Two-Conductor Bundles @ 22000#  
Total
3. Longitudinal
  - a. 2 Groundwires @ 6000# or
  - b. 6 Dual Conductors @ 22000#  
Total
4. Wind on Tower (from any direction) of 13 psf on  $1-\frac{1}{2}$  times projected area of one face
5. Vertical Load of Tower
6. Torsion
  - a. 1 Groundwire @ 6000#
  - b. 3 Two-Conductor Bundles @ 22000#  
Total
7. Vertical-Heavy (1" ice)
  - a. 2 Groundwires @ 2400
  - b. 6 Two-Conductor Bundles @ 8000#  
Total

- Combine
- 1.65x(1+2a+2b+4+5)
  - 1.65x(1+2a+3+4+5)
  - 1.25x(1+1/4of2a+4+5+6)
  - 1.65x(7)
- Material
- Intact (on Angle)
  - Dead End
  - Torsional
  - Heavy Vertical

Steel per ASTM spec. A7, latest revision & ASTM spec A242, latest revision

Coating

All material galvanized to ASTM spec. 123, latest revision

Connections

Bolted with  $\frac{3}{4}$ " diameter machine bolts, ASTM spec. A394, latest revision

Ultimate Unit Stresses

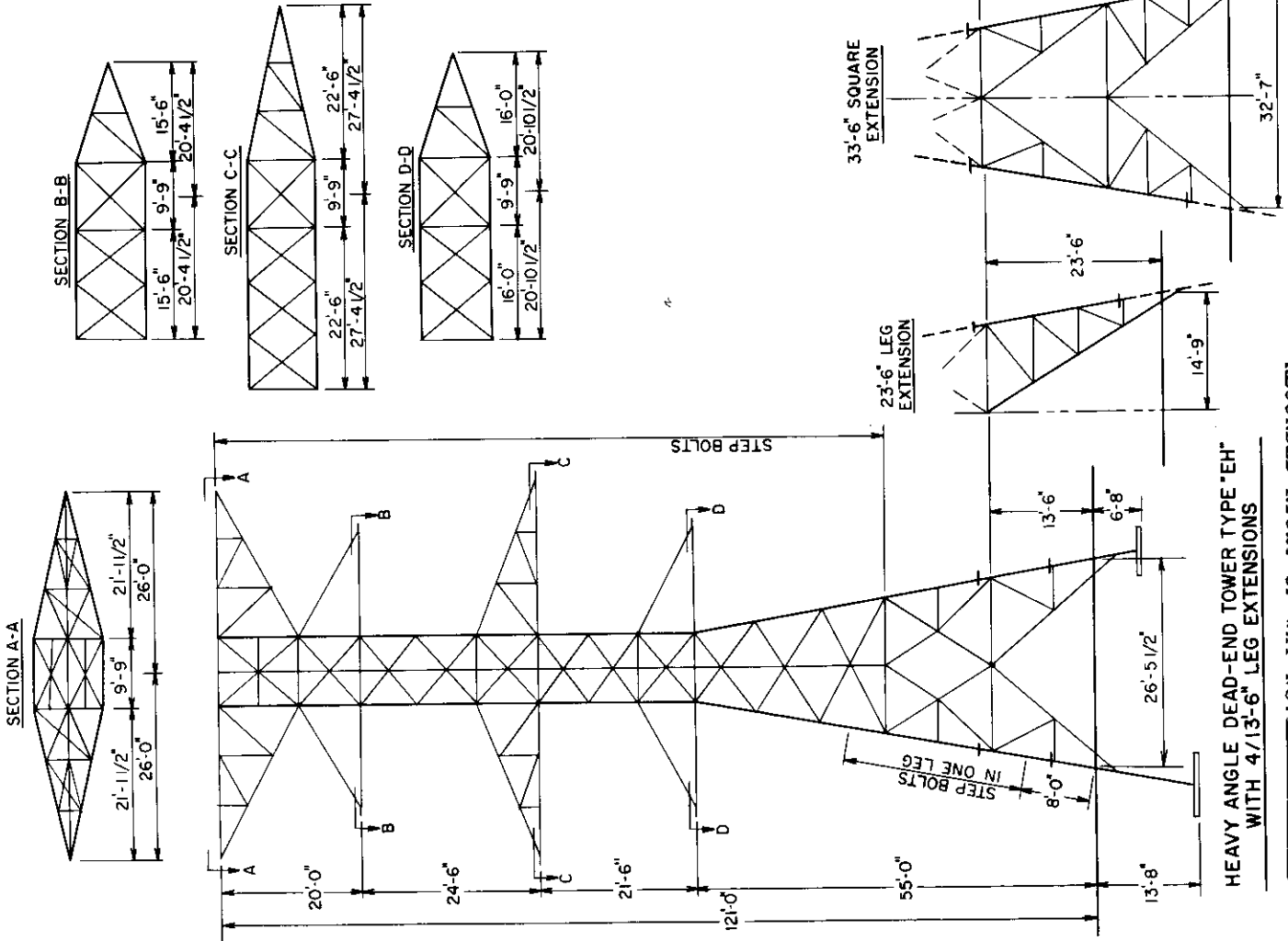
Tension, net section	33,000#/in <sup>2</sup>	A242	45,000#/in <sup>2</sup>
Compression, Gross Section;	33,000#/in <sup>2</sup>		49,500#-218L/r/in <sup>2</sup>
L/r < 100	130L/r/in <sup>2</sup>		(39,000#Max.)
L/r < 150	33,000#/in <sup>2</sup>		43,000#-170L/r/in <sup>2</sup>
L/r < 200	130L/r/in <sup>2</sup>		39,000#-145L/r/in <sup>2</sup>
70L/r/in <sup>2</sup>			

Shear on Bolts = 45,000psi

Root of Thread

nom. diameter = 30,000psi

Bearing on Bolts = 60,000psi



RECORDED RIGHT OF WAY NO. 25319

HEAVY ANGLE DEAD-END TOWER TYPE "EH" WITH 4/13-6" LEG EXTENSIONS

<p>HEAVY ANGLE DEAD-END TOWER TYPE "EH"</p>		APPROVED	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
		<p>DATE 1-8-68</p> <p>SCALE NONE</p>	<p>LAYOUT BY R.O.S.</p> <p>DATE 1-8-68</p>	<p>DRAWN BY W.E.S.</p> <p>DRAWING NUMBER</p> <p>EH</p>

SUSPENSION TOWER TYPE ES

LOADS

1. Vertical ( $\frac{1}{2}$ " ice)
  - a. 2 Groundwires @ 1500#
  - b. 6 Two-Conductor Bundles @ 6700#
  - Total = 3000#
  - = 40200#
  - = 43200#
2. Transverse-Wind on Wires ( $\frac{1}{2}$ " ice, 8# wind)
  - a. 2 Groundwires @ 1450#
  - b. 6 Two-Conductor Bundles @ 4350#
  - Total = 2900#
  - = 26100#
  - = 29000#
3. Longitudinal
  - a. 1 Two-Conductor Bundle @ 14,400#
  - b. 1 Groundwire @ 6600#
  - Total = 6600#
  - = 69000#
  - = 75600#
4. Wind on Tower (from any direction) of 13 psf on 1- $\frac{1}{2}$  times projected area of one face
5. Vertical Load of Tower
6. Vertical - Heavy (1" ice)
  - a. 2 Groundwires @ 3300#
  - b. 6 Two-Conductor Bundles @ 11500#
  - Total = 6600#
  - = 69000#
  - = 75600#

Combine

1. Double Circuit:
  - 1.65 x (1+2+4+5)
  - 1.65 x (1+15/16x2+3+4+5)
  - 1.65 x (6)
2. Single Circuit:
  - 1.65 x (1+7/16x2+4+5)
  - 1.65 x (1+7/16x2+3b+4+5)
  - 1.65 x (1+7/16x2+4+5) + 1.0 x (3a)
  - 1.65 x (6)

Material

Steel per ASTM spec. A36, latest revision & High Strength Steel -44,000psi yield -50,000psi yield -60,000psi yield

Coating

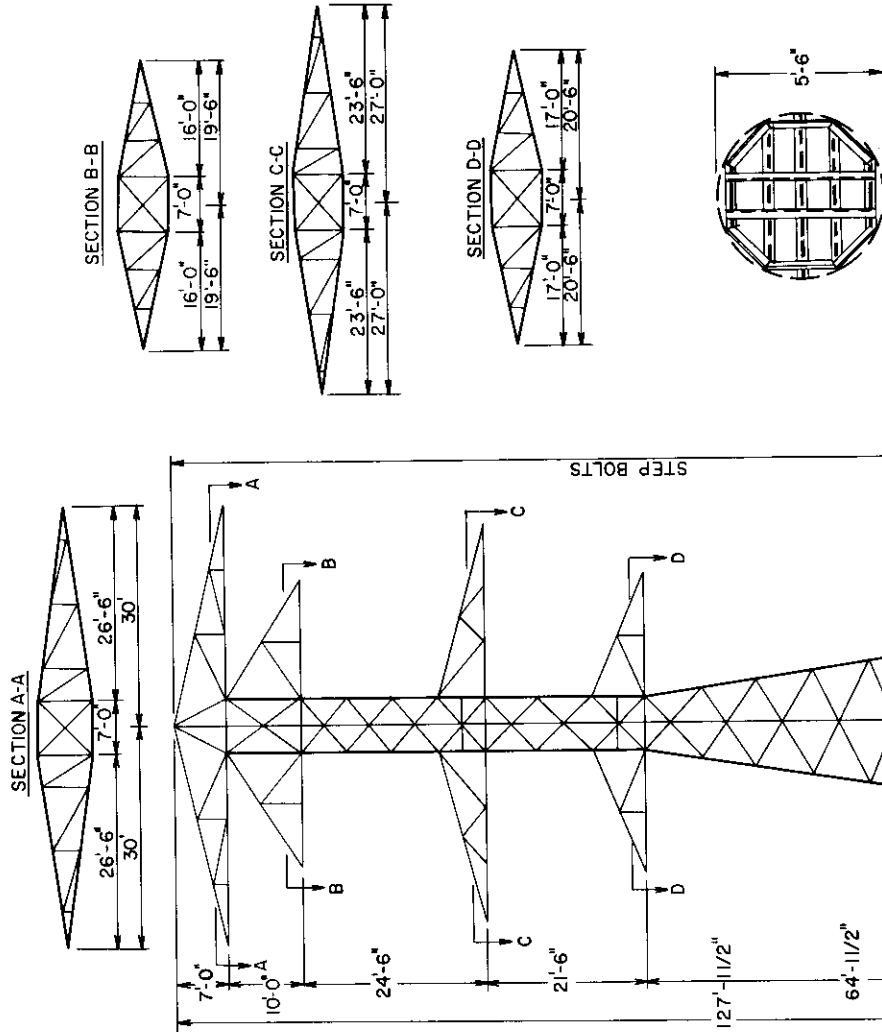
All material galvanized to ASTM spec. 123, latest revision.

Connections

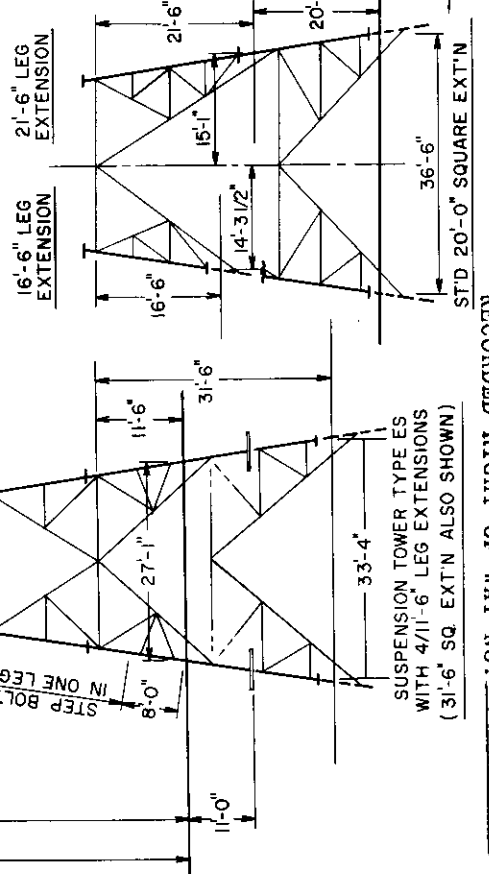
Bolted with 3/4" diameter machine bolts, ASTM spec A394, latest revision.

Ultimate Unit Stresses

Tension, Net Section =  $0.9F_y(F_y = \text{Yield Stress in psi})$   
 Compression, Gross Section;  
 For  $L/r \leq 50$   $Sc = F_y(1 - F_y/900)$   
 For  $50 \leq L/r \leq 2 \times 10^4$   $Sc = F_y(1 - \frac{L/r}{2 \times 10^4})$   
 For  $\frac{3 \times 10^4}{L/r} \leq L/r$   $Sc = \frac{3 \times 10^4}{L/r}$   
 Shear on Bolts = 30,000psi  
 Bearing on Bolts = 60,000psi



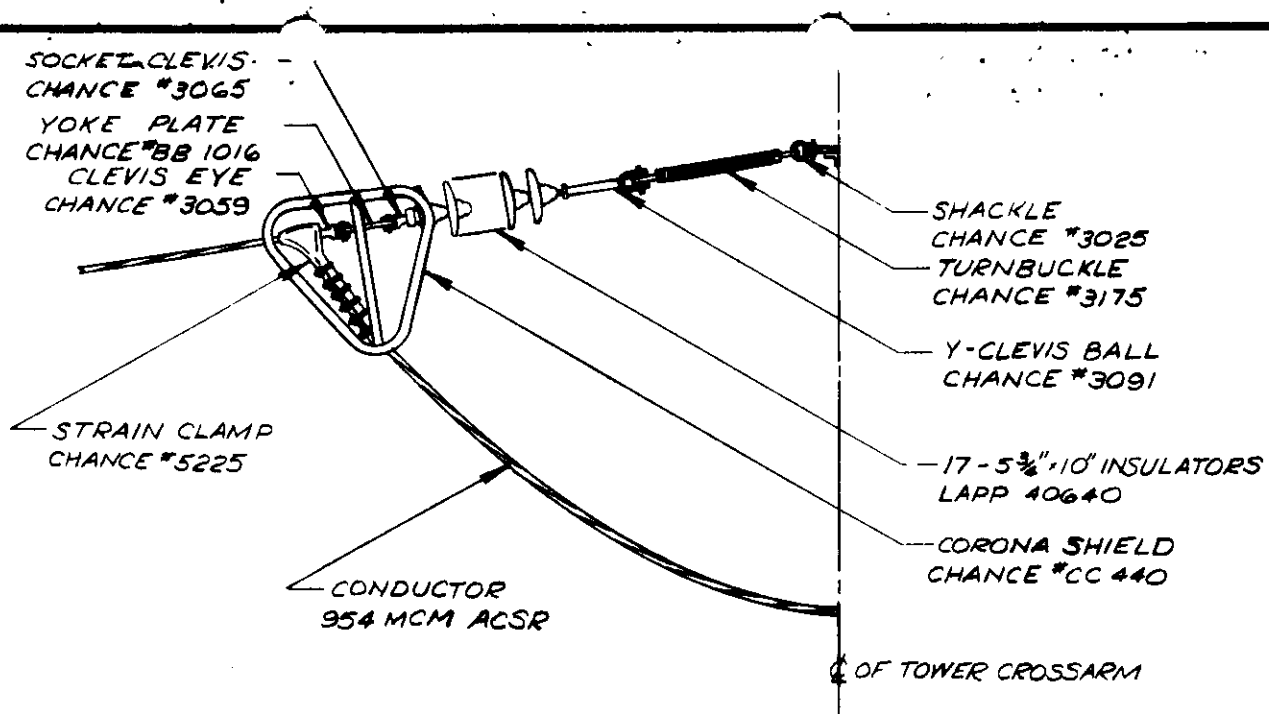
SPECIAL 20'-0" SQUARE EXTENSION FOR USE WITH 31'-6" EXTENSION



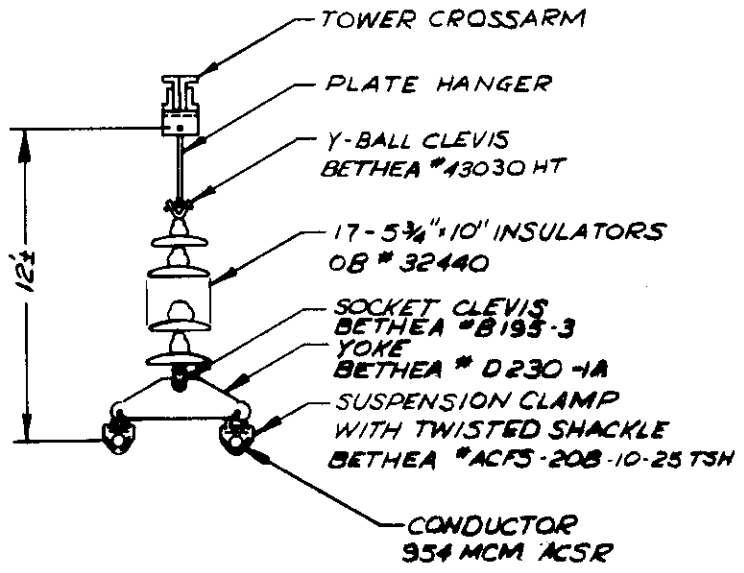
SUSPENSION TOWER TYPE ES WITH 4/11-6 LEG EXTENSIONS (31'-6" SQ. EXT'N ALSO SHOWN)

RECORDED RIGHT OF WAY NO. 25319

<p>SUSPENSION TOWER TYPE ES</p>		APPROVED	
		<p>THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT</p>	
LAYOUT BY R.O.S.		DRAWN BY W.E.S.	
DATE 1-26-68		DRAWING NUMBER ES	
SCALE NONE			



DEAD-END DETAILS  
 TOWER: #



SUSPENSION DETAILS  
 TOWER: #

RECORDED RIGHT OF WAY NO. 25319

<b>345 KV. SUSPENSION AND DEAD-END DETAILS</b>	APPROVED 	<b>THE DETROIT EDISON COMPANY</b> GENERAL ENGINEERING DEPARTMENT	
		LAYOUT BY <b>R.O. STURDY</b>	DRAWN BY <b>R.O. STURDY</b>
		DATE <b>10/12/65</b> SCALE <b>NONE</b>	<b>ED-5924</b>



## NORFOLK AND WESTERN RAILWAY COMPANY

8 North Jefferson Street

Roanoke, Virginia 24011

Telephone 703-344-1451

Ext. 3547

→ Name Mr. I. W. Gamble

Date Sept. 25, 1968

Title Supvr. Rs/W.

Agmt. File 9880S

Co. The Detroit Edison Co.

Location Belleville, Mich.

St. 2000 Second Ave.

City Detroit, Mich. 48226

Dear Mr. Gamble:

This refers to your letter dated Aug. 26, file RX-3905 regarding agreement covering 345 KV crossing at Survey Station 925+60, Belleville, Michigan

Attached is one fully executed copy of agreement Number 90690 for your file.

Please notify Mr. D.E. Turney, Division Engineer at Ft. Wayne, telephone 219-749-5823 a few days ahead of the date you desire your forces to start work on our right of way.

In a few weeks you will receive a one time billing B- 90690 for \$250, covering lump sum fee required

Yours very truly,

E. P. Johnson  
Chief Engineer

Attachment  
cy - Mr. H. J. Bauer, Asst. Comp., St. Louis with executed agreement.

Mr. D. E. Turney Div. Eng., Ft. Wayne with agreement copy.

Mr. W. O. Kesler Aud. of Disb.-Roanoke with billing form.



3. The minimum clearances of said 345 KV wires shall be no less than 40 feet above the top of the rail and 16 feet above the Railway pole line wires, also except for the foregoing, construction shall meet all applicable Safety Rules of the latest edition of the National Safety Code for the Installation and Maintenance of Electric Supply and Communication Lines.

~~Witness: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_~~

4. The said Railway Company shall not be, in any way, responsible for any damage to electric wires, towers or other appliances, or any part thereof, by fire or other casualty whatever, resulting from the operation of its road near the electric wires or other appliances or otherwise.

5. If the Railway Company, its successors or assigns, shall make any change on its right of way at said crossing in the character, height or alignment of any of its power lines, telephone, telegraph or other wires or electrical apparatus, or shall place any structures or additional wires or electrical apparatus upon its said right of way, or shall make on its said right of way any change in its track or structures or in the use thereof, which would be affected by the then existing wires or structures of the Power Company or by the use thereof, the Power Company shall, at its own expense, make such changes in the location and character of its wires as in the opinion of the Chief Engineer of the Railway Company, its successors or assigns, shall be necessary on account of such new alignment or change in location or character of the wires, or erection of such structures or additional wires.

6. The Power Company hereby agrees to indemnify and save harmless the Railway Company against any and all loss or damage, accidents or injuries to persons or property, whether of the Railway Company or of any other persons or corporations, arising in any manner from the construction, operation or maintenance, or failure to properly construct, operate or maintain, the Power Company's wires, poles, fixtures or appurtenances at said crossing, unless such loss, damage or injuries shall be caused solely by the negligence of the Railway Company.

WITNESS the respective signatures of the parties to this agreement, this the day and the year first above written.

NORFOLK AND WESTERN RAILWAY COMPANY

Witness: East

By R. F. DUNLAP  
 Vice President - Operations

THE DETROIT EDISON COMPANY

Witness: Ivan W. Gamble  
 IVAN W. GAMBLE

By R. Q. Duke  
 R. Q. DUKE, DIRECTOR  
 Properties and Rights of Way Dept.

WARREN RAILROAD COMPANY as Lessee of the above described right of way, consents to this agreement.

Witness: Conner

By W. Long  
 Vice-President

RECORDED RIGHT OF WAY NO. 25317

## DMJM Harris

The Atlantic Building, 260 South Broad Street, Suite 1500, Philadelphia, PA 19102  
T 215.735.0832 F 215.735.0903 www.dmjmharris.com

May 9, 2006

Barbara A. Mention  
Property Management Specialist  
International Transmission Company  
39500 Orchard Hill Place  
Novi, Michigan 48375

Subject: Belleville Van Buren, Wayne County, Michigan  
Milepost D-22.21, Detroit-Montpelier Line, Lake Division  
Activity No. 1088599  
Maintenance replacement of an existing neutral wire for 345kV electric power transmission wire line.

Dear Ms. Mention:

Attached is the fully executed Cancel & Supersede Agreement dated May 4, 2006 between Norfolk Southern Railway Company and International Transmission Company covering the above referenced project.

This new Agreement cancels your existing agreement, dated September 20, 1968. This letter also acknowledges receipt of your payment in the amount of \$1,000, which covers the insurance fee of \$1,000.

Prior to construction, certificates of insurance must be furnished in accordance with Sections 11(a) and 11(b) of the Agreement.

Prior to start of work on Railway right of way, you are required to contact the following for scheduling of flag protection and inspection:

*CHRIS CARNEY*

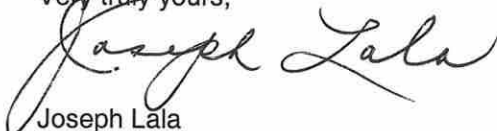
~~Dwayne Roberts~~ of our Lake Division Engineer's office, telephone (260) 493-5346

R.O. Baker, Gen. Supv. Communications & Signals, (260) 493-5500

Once contacted, the Division Engineer requires 72 hours to review the need for and availability of flagmen for this project and will advise you of the cost of said flagmen. No work is permitted on Railway right of way without a flagman or the Division Engineer's agreement to waive the flag protection requirement. Entry onto Railway property without the Division Engineer's prior approval is considered trespassing.

Thank you for your cooperation.

Very truly yours,



Joseph Lala  
Contract Administrator  
(215) 966-4853  
joseph.lala@dmjmharris.com

THIS AGREEMENT, dated as of the 4TH day of MAY, 2006 is made and entered into by and between

**NORFOLK SOUTHERN RAILWAY COMPANY**, a Virginia corporation, whose mailing address is Three Commercial Place, Norfolk, Virginia, 23510 (hereinafter called "Railway"), and

**INTERNATIONAL TRANSMISSION COMPANY**, a Michigan corporation, whose mailing address is 39500 Orchard Hill Place, Suite 200, Novi, Michigan 48375 (hereinafter called "Licensee").

WITNESSETH

WHEREAS, The Detroit Edison Company (predecessor to Licensee) and the Norfolk and Western Railway Company (predecessor to Railway) entered into a License Agreement dated September 20, 1968 (hereinafter called the "Original License"), covering the overhead transverse occupation of a 345kV electric power line across and above Railway's Detroit - Montpelier Line, Milepost D-22.21, located in Belleville, Wayne County, Michigan (Railway's Custodian No. 36242); and

WHEREAS, Licensee certifies to Railway that Licensee is the lawful owner of the Facilities and that Licensee succeed to all rights granted to, and obligations assumed by, The Detroit Edison Company under the Original License; and

WHEREAS, Licensee proposes to replace the neutral wire on the existing electric power line; and

WHEREAS, License and Railway desire to supersede and cancel the prior above mentioned Original License between the parties hereto and enter into a new agreement covering the 345kV electric power line transverse crossing;

NOW, THEREFORE, in consideration of the premises and of the promises and covenant hereinafter set forth, it is agreed between the parties hereto as follows:

This Agreement is intended to, and hereby does, supersede and cancel, as of the effective date hereof, the Original License dated September 20, 1968 (Railway Custodian No. 36242) between the Norfolk and Western Railway Company and The Detroit Edison Company (predecessor to Licensee) covering the transverse crossing of one 345kV electric power wire line across and above Railway's Detroit - Montpelier Line, Milepost D-22.21, at or near Belleville, Wayne County, Michigan

In consideration of the premises, the payment of a non-refundable, non-assignable one-time fee in the amount of ONE THOUSAND AND 00/100 DOLLARS (\$1,000.00) (hereinafter called the "Fee") to cover the insurance fee in the amount of \$1,000, and the covenants hereinafter set forth, Railway hereby permits and grants to Licensee, insofar as Railway has the right to do so, without warranty and subject to all encumbrances, covenants and easements to



which Railway's title may be subject, the right to use and occupy so much of Railway's right-of-way or property as may be necessary for the installation, maintenance, operation and removal the transverse crossing of one 345kV electric power wire line (hereinafter called the "Facilities" located across and above Railway's Detroit – Montpelier Line, Milepost D-22.21, at or near **Belleville, Wayne County, Michigan**, the same to be located in accordance with and limited to the installation shown on print of drawings marked Exhibits A, B, C, D and E all dated May 2, 2006, attached hereto and made a part hereof (said right-of-way or property of Railway being hereinafter collectively called the "Premises"), upon the following terms and conditions:

1. Use and Condition of the Premises. The Premises shall be used by Licensee only for the maintenance, operation and removal of the Facilities and for no other purpose without the prior written consent of Railway, which consent may be withheld by Railway in its sole discretion. Licensee accepts the Premises in their current "as is" condition, as suited for the operation of the Facilities, and without the benefit of any improvements to be constructed by Railway.

2. Installation of the Facilities; Railway Support. Licensee shall, at its expense, maintain and operate the Facilities on a lien-free basis and in such a manner as will not interfere with the operations of Railway, or endanger persons or property of Railway. Such maintenance and operation of the Facilities shall be in accordance with (a) the plans and specifications (if any) shown on the prints attached hereto and any other specifications prescribed by Railway, (b) applicable laws, regulations, ordinances and other requirements of federal, state and local governmental authorities, and (c) applicable specifications of the National Electric Safety Code, when not in conflict with the applicable plans, specifications, laws, regulations, ordinances or requirements mentioned in (a) and (b), above. Any change to the character, capacity or use of the Facilities shall require execution of a new agreement.

3. Railway Support. Railway shall, at Railway's option, furnish, at the sole expense of Licensee, labor and materials necessary, in Railway's sole judgment, to support its tracks and to protect its traffic (including, without limitation, flagging) during the maintenance, repair, renewal or removal of the Facilities.

4. Electronic Interference. If the Facilities cause degradation of Railway's signal, communications and other electronic systems (hereinafter collectively called the "Electronic Systems") or endanger Railway's personnel or other individuals entitled to be on or about the Premises, through inductive or electrostatic interference or otherwise, Licensee, at its expense, will modify the Facilities to the satisfaction of Railway so as to eliminate such degradation or danger. Such modifications may include, without limiting the generality of the foregoing, transposing circuits or providing additional shielding, reactance or other corrective measures deemed necessary by Railway. The provisions of this paragraph 4 shall apply to the Electronic Systems existing as of the date of this Agreement and to any Electronic Systems that Railway may install in the future.

5. Corrective Measures. If Licensee fails to take any corrective measures requested by Railway in a timely manner, or if an emergency situation is presented which, in Railway's

judgment, requires immediate repairs to the Facilities, Railway, at Licensee's expense, may undertake such corrective measures or repairs as it deems necessary or desirable.

6. Railway Changes. If Railway shall make any changes, alterations or additions to the line, grade, tracks, structures, roadbed, installations, right-of-way or works of Railway, or to the character, height or alignment of the Electronic Systems, at or near the Facilities, Licensee shall, upon thirty (30) days prior written notice from Railway and at its sole expense, make such changes in the location and character of the Facilities as, in the opinion of the chief engineering officer of Railway, shall be necessary or appropriate to accommodate any construction, improvements, alterations, changes or additions of Railway.

7. Assumption of Risk. Unless caused solely by the negligence of Railway or caused solely by the willful misconduct of Railway, Licensee hereby assumes all risk of damage to the Facilities and Licensee's other property relating to its use and occupation of the Premises or business carried on the Premises and any defects to the Premises; and Licensee hereby indemnifies Railway, its officers, directors, agents and employees from and against any liability for such damage.

8. Entry Upon Premises. Prior to commencement of any work to be performed on or about the Premises, Licensee shall notify the appropriate Division Engineer for the scheduling of protection and inspection. Within seventy-two (72) hours after the Division Engineer's actual receipt of such notification, the Division Engineer shall review the necessity and availability of flagmen for the proposed work and advise Licensee of such matters and the estimated cost therefor. No work shall be permitted on or about the Premises without the presence of Railway's flagman or the Division Engineer's waiver of the requirement for flag protection. Entry on or about the Premises or any other Railway right-of-way without the Division Engineer's prior approval shall be deemed trespassing. Licensee agrees to pay Railway, within thirty (30) days after delivery of an invoice therefor, for any protection and inspection costs incurred by Railway, in Railway's sole judgment, during any such entry.

9. Liens; Taxes. Licensee will not permit any mechanic's liens or other liens to be placed upon the Premises, and nothing in this Agreement shall be construed as constituting the consent or request of Railway, express or implied, to any person for the performance of any labor or the furnishing of any materials to the Premises, nor as giving Licensee any right, power or authority to contract for or permit the rendering of any services or the furnishing of any materials that could give rise to any mechanic's liens or other liens against the Premises. In addition, Licensee shall be liable for all taxes levied or assessed against the Facilities and any other equipment or other property placed by Licensee within the Premises. In the event that any such lien shall attach to the Premises or Licensee shall fail to pay such taxes, then, in addition to any other right or remedy available to Railway, Railway may, but shall not be obligated to, discharge the same. Any amount paid by Railway for any of the aforesaid purposes, together with related court costs, attorneys' fees, fines and penalties, shall be paid by Licensee to Railway within ten (10) days after Railway's demand therefor.

10. Indemnification. Licensee hereby agrees to indemnify and save harmless Railway, its officers, directors, agents and employees, from and against any and all liabilities,

claims, losses, damages, expenses (including attorneys' fees) or costs for personal injuries (including death) and property damage to whomsoever or whatsoever occurring (hereinafter collectively called "Losses") that arise in any manner from (a) the installation, construction, maintenance, operation, presence or removal of, or the failure to properly install, construct, maintain, operate or remove, the Facilities, or (b) any act, omission or neglect of Licensee, its agents, servants, employees or contractors in connection therewith, unless caused solely by the negligence of Railway or caused solely by the willful misconduct of Railway.

11. Insurance.

(a) Without limiting in any manner the liabilities and obligations assumed by Licensee under any other provision of this Agreement, and as additional protection to Railway, Licensee shall, at its expense, procure and maintain with insurance companies satisfactory to Railway, the insurance policies described in subparagraphs (i) and (ii).

(i) Prior to any entry by Licensee upon the Premises or other Railway property, Licensee, and each of its contractors, shall at its sole expense procure and maintain for the course of any such entry, a Commercial General Liability Insurance policy having a combined single limit of not less than \$1,000,000 for each occurrence, naming Railway as an additional insured and containing products and completed operations and contractual liability coverage;

(ii) Prior to any entry upon the Premises or other Railway property occurring after installation of the Facilities, unless Railway elects to make available and Licensee pays the then current risk financing fee for each affected installation, Licensee, or its contractor, shall at its sole expense procure and maintain during such entry a policy of Railroad Protective Liability Insurance naming Norfolk Southern Railway Company as a named insured and having combined single limits of not less than \$2,000,000 for each occurrence and \$6,000,000 in the aggregate. Such policy shall be written using Insurance Services Offices Form Numbers CG 00 35 01 07 98 and Pollution Exclusion Amendment Form CG 28 31 07 98.

(b) All insurance required under the preceding subsection (a) shall be underwritten by insurers, and be of such form and content, as may be acceptable to Railway. Evidence of such insurance (a certificate of insurance for the Commercial General Liability Insurance policy and an original Railroad Protective Liability Insurance policy for subsequent entry when Railway does not make available a risk financing fee therefor) shall be furnished to Railway's Director Risk Management, Three Commercial Place, Norfolk, Virginia 23510-2191 for review and approval.

12. Environmental Matters. Licensee assumes all responsibility for any environmental obligations imposed under applicable laws, regulations, ordinances or other requirements of federal, state and local governmental authorities relating to (a) the installation, construction, maintenance, operation or removal of the Facilities, including notification and reporting of any releases, and (b) any contamination of any property, water, air or groundwater



arising or resulting, in whole or in part, from Licensee's operation or use of the Premises pursuant to this Agreement. In addition, Licensee shall obtain any necessary permits to install, construct, maintain, operate or remove the Facilities. Licensee agrees to indemnify and hold harmless Railway from and against any and all fines, penalties, demands or other Losses (including attorneys' fees) incurred by Railway or claimed by any person, company or governmental entity relating to (a) any contamination of any property, water, air or groundwater due to the use or presence of the Facilities on the Premises, (b) Licensee's violation of any laws, regulations or other requirements of federal, state or local governmental authorities in connection with the use or presence of the Facilities on the Premises or (c) any violation of Licensee's obligations imposed under this paragraph. Without limitation, this indemnity provision shall extend to any cleanup and investigative costs relating to any contamination of the Premises arising or resulting from, in whole or in part, Licensee's use of the Facilities or any other activities by or on behalf of Licensee occurring on or about the Premises. Licensee further agrees not to dispose of any trash, debris or wastes, including hazardous waste, on the Premises and will not conduct any activities on the Premises which would require a hazardous waste treatment, storage or disposal permit.

13. Assignments and Other Transfers.

(a) Licensee shall not assign, transfer, sell, mortgage, encumber, sublease or otherwise convey (whether voluntarily, involuntarily or by operation of law) this Agreement or any interest therein, nor license, mortgage, encumber or otherwise grant to any other person or entity (whether voluntarily, involuntarily or by operation of law) any right or privilege in or to the Premises (or any interest therein), in whole or in part, without the prior written consent of Railway, which consent may be withheld by Railway in its sole discretion. Any such assignment or other transfer made without Railway's prior written consent shall be null and void and, at Railway's option, shall constitute an immediate default of this Agreement. Notwithstanding the foregoing, upon prior written notice to Railway, Licensee may assign this Agreement to a parent, a wholly-owned subsidiary of Licensee or a wholly-owned subsidiary of Licensee's parent without Railway's consent; provided, however, that no such assignment shall relieve Licensee of its obligations under this Agreement.

(b) Railway shall have the right to transfer and assign, in whole or in part, all its rights and obligations hereunder and in or to the Premises. From and after the effective date of any such assignment or transfer, Railway shall be released from any further obligations hereunder; and Licensee shall look solely to such successor-in-interest of Railway for the performance of the obligations of "Railway" hereunder.

14. Meaning of "Railway". The word "Railway" as used herein shall include any other company whose property at the aforesaid location may be leased or operated by Railway. Said term also shall include Railway's officers, directors, agents and employees, and any parent company, subsidiary or affiliate of Railway and their respective officers, directors, agents and employees.

15. Default; Remedies.

(a) The following events shall be deemed to be events of default by Licensee under this Agreement:

(i) Licensee shall fail to pay the Fee or any other sum of money due hereunder and such failure shall continue for a period of ten (10) days after the due date thereof;

(ii) Licensee shall fail to comply with any provision of this Agreement not requiring the payment of money, all of which terms, provisions and covenants shall be deemed material, and such failure shall continue for a period of thirty (30) days after written notice of such default is delivered to Licensee;

(iii) Licensee shall become insolvent or unable to pay its debts as they become due, or Licensee notifies Railway that it anticipates either condition;

(iv) Licensee takes any action to, or notifies Railway that Licensee intends to file a petition under any section or chapter of the United States Bankruptcy Code, as amended from time to time, or under any similar law or statute of the United States or any State thereof; or a petition shall be filed against Licensee under any such statute; or

(v) A receiver or trustee shall be appointed for Licensee's license interest hereunder or for all or a substantial part of the assets of Licensee, and such receiver or trustee is not dismissed within sixty (60) days of the appointment.

(b) Upon the occurrence of any event or events of default by Licensee, whether enumerated in this paragraph 15 or not, Railway shall have the option to pursue any remedies available to it at law or in equity without any additional notices to Licensee. Railway's remedies shall include, but not be limited to, the following: (i) termination of this Agreement, in which event Licensee shall immediately surrender the Premises to Railway; (ii) entry into or upon the Premises to do whatever Licensee is obligated to do under the terms of this License, in which event Licensee shall reimburse Railway on demand for any expenses which Railway may incur in effecting compliance with Licensee's obligations under this License, but without rendering Railway liable for any damages resulting to Licensee or the Facilities from such action; and (iii) pursuit of all other remedies available to Railway at law or in equity, including, without limitation, injunctive relief of all varieties.

16. Railway Termination Right. Notwithstanding anything to the contrary in this Agreement, Railway shall have the right to terminate this Agreement and the rights granted hereunder, after delivering to Licensee written notice of such termination no less than sixty (60) days prior to the effective date thereof, upon the occurrence of any one or more of the following events:

(a) If Licensee shall discontinue the use or operations of the Facilities; or

(b) If Railway shall be required by any governmental authority having jurisdiction over the Premises to remove, relocate, reconstruct or discontinue operation of its railroad on or about the Premises; or

(c) If Railway, in the good faith judgment of its Superintendent, shall require a change in the location or elevation of its railroad on or about the location of the Facilities or the Premises that might effectively prohibit the use or operation of the Facilities; or

(d) If Railway, in the good faith judgment of its Superintendent, determines that the maintenance or use of the Facilities unduly interferes with the operation and maintenance of the facilities of Railway, or with the present or future use of such property by Railway, its lessees, affiliates, successors or assigns, for their respective purposes.

17. Condemnation. If the Premises or any portion thereof shall be taken or condemned in whole or in part for public purposes, or sold in lieu of condemnation, then this Agreement and the rights granted to Licensee hereunder shall, at the sole option of Railway, forthwith cease and terminate. All compensation awarded for any taking (or sale proceeds in lieu thereof) shall be the property of Railway, and Licensee shall have no claim thereto, the same being hereby expressly waived by Licensee.

18. Removal of Facilities; Survival. The Facilities are and shall remain the personal property of Licensee. Upon the expiration or termination of this Agreement, Licensee shall remove the Facilities from the Premises within thirty (30) days after the effective date thereof. In performing such removal, unless otherwise directed by Railway, Licensee shall restore the Premises to the same condition as existed prior to the installation or placement of Facilities, reasonable wear and tear excepted. In the event Licensee shall fail to so remove the Facilities or restore the Premises, the Facilities shall be deemed to have been abandoned by Licensee, and the same shall become the property of Railway for Railway to use, remove, destroy or otherwise dispose of at its discretion and without responsibility for accounting to Licensee therefor; provided, however, in the event Railway elects to remove the Facilities, Railway, in addition to any other legal remedy it may have, shall have the right to recover from Licensee all costs incurred in connection with such removal and the restoration of the Premises. Notwithstanding anything to the contrary contained in this Agreement, the expiration or termination of this Agreement, whether by lapse of time or otherwise, shall not relieve Licensee from Licensee's obligations accruing prior to the expiration or termination date, and such obligations shall survive any such expiration or other termination of this Agreement.

19. Entire Agreement. This Agreement contains the entire agreement of Railway and Licensee and supersedes any prior understanding or agreement between Railway and Licensee respecting the subject matter hereof; and no representations, warranties, inducements, promises or agreements, oral or otherwise, between the parties not embodied in this Agreement shall be of any force or effect.

20. Attorneys' Fees. If Railway should bring any action under this Agreement, or consult or place the Agreement or any amount payable by Licensee hereunder, with an attorney concerning or for the enforcement of any of Railway's rights hereunder, then Licensee agrees in each and any such case to pay to Railway all costs, including but not limited to court costs and attorneys' fees, incurred in connection therewith.

21. Severability. If any clause or provision of this Agreement is illegal, invalid or unenforceable under present or future laws effective during the term of this Agreement, then and in that event, it is the intention of the parties hereto that the remainder of this Agreement shall not be affected thereby; and it is also the intention of the parties to this Agreement that in lieu of each clause or provision of this Agreement that is illegal, invalid or unenforceable, there be added as a part of this Agreement a clause or provision as similar in terms to such illegal, invalid or unenforceable clause or provision as may be possible and be legal, valid and enforceable.

22. Modifications; Waiver; Successors and Assigns. This Agreement may not be altered, changed or amended, except by instrument in writing signed by both parties hereto. No provision of this Agreement shall be deemed to have been waived by Railway unless such waiver shall be in a writing signed by Railway and addressed to Licensee, nor shall any custom or practice that may evolve between the parties in the administration of the terms hereof be construed to waive or lessen the right of Railway to insist upon the performance by Licensee in strict accordance with the terms hereof. The terms and conditions contained in this Agreement shall apply to, inure to the benefit of, and be binding upon the parties hereto, and upon their respective successors in interest and legal representatives, except as otherwise herein expressly provided. If there shall be more than one Licensee, the obligations hereunder imposed upon Licensee shall be joint and several.

23. Notice. Any and all other notices, demands or requests by or from Railway to Licensee, or Licensee to Railway, shall be in writing and shall be sent by (a) postage paid, certified mail, return receipt requested, or (b) a reputable national overnight courier service with receipt therefor, or (c) personal delivery, and addressed in each case as follows:

If to Railway:

c/o Norfolk Southern Corporation  
1200 Peachtree Street, NE – 12<sup>th</sup> Floor  
Atlanta, Georgia 30309-3504  
Attention: Director Contract Services

If to Licensee:

International Transmission Company  
39500 Orchard Hill Place – Suite 200  
Novi, Michigan 48375

Either party may, by notice in writing, direct that future notices or demands be sent to a different address. All notices hereunder shall be deemed given upon receipt (or, if rejected, upon rejection).

24. Miscellaneous. All exhibits, attachments, riders and addenda referred to in this License are incorporated into this Agreement and made a part hereof for all intents and purposes. Time is of the essence with regard to each provision of this Agreement. This Agreement shall be construed and interpreted in accordance with and governed by the laws of the State in which the Premises are located. Each covenant of Railway and Licensee under this Agreement is independent of each other covenant under this Agreement. No default in performance of any covenant by a party shall excuse the other party from the performance of any other covenant. The provisions of Paragraphs 7, 9, 10, 12 and 18 shall survive the expiration or earlier termination of this Agreement.

25. Limitations of Grant. Licensee acknowledges that the license granted hereunder is a quitclaim grant, made without covenants, representations or warranties with respect to Railway's (a) right to make the grant, (b) title in the Premises, or (c) right to use or make available to others the Premises for the purposes contemplated herein. Railway is the owner and/or holder of the Premises subject to the terms and limitations under which it is owned or held, including without limitation conditions, covenants, restrictions, easements (including any pre-existing fiber optic easements or licenses), encroachments, leases, licenses, permits, mortgages, indentures, reversionary interests, fee interests, zoning restrictions and other burdens and limitations, of record and not of record, and to rights of tenants and licensees in possession, and Licensee agrees that the rights licensed hereunder are subject and subordinate to each and all of the foregoing. Licensee accepts this grant knowing that others may claim that Railway has no right to make it, and Licensee agrees to release, hold harmless and indemnify (and, at Railway's election, defend, at Licensee's sole expense, with counsel approved by Railway) Railway, its affiliated companies, and its and their respective officers, directors, agents and employees, from and against any detriments to, or liabilities of, any type or nature arising from such claims, including punitive damages and any forfeitures declared or occurring as a result of this grant.

26. Limitations Upon Damages. Notwithstanding any other provision of this Agreement, Railway shall not be liable for breach of this Agreement or under this Agreement for any consequential, incidental, exemplary, punitive, special, business damages or lost profits, as well as any claims for death, personal injury, and property loss and damage which occurs by reason of, or arises out of, or is incidental to the interruption in or usage of the Facilities placed upon or about the Premises by Licensee, including without limitation any damages under such claims that might be considered consequential, incidental, exemplary, punitive, special, business damages or loss profits.

[Remainder of page intentionally left blank]



IN WITNESS WHEREOF, the parties hereto have executed this Agreement in duplicate, each part being an original, as of the date first above written.

Witness:

**NORFOLK SOUTHERN RAILWAY  
COMPANY**

Nancy D. Smith  
As to Railway

By: Malcolm D. Loop  
Real Estate Manager

Witness:

**INTERNATIONAL TRANSMISSION  
COMPANY**

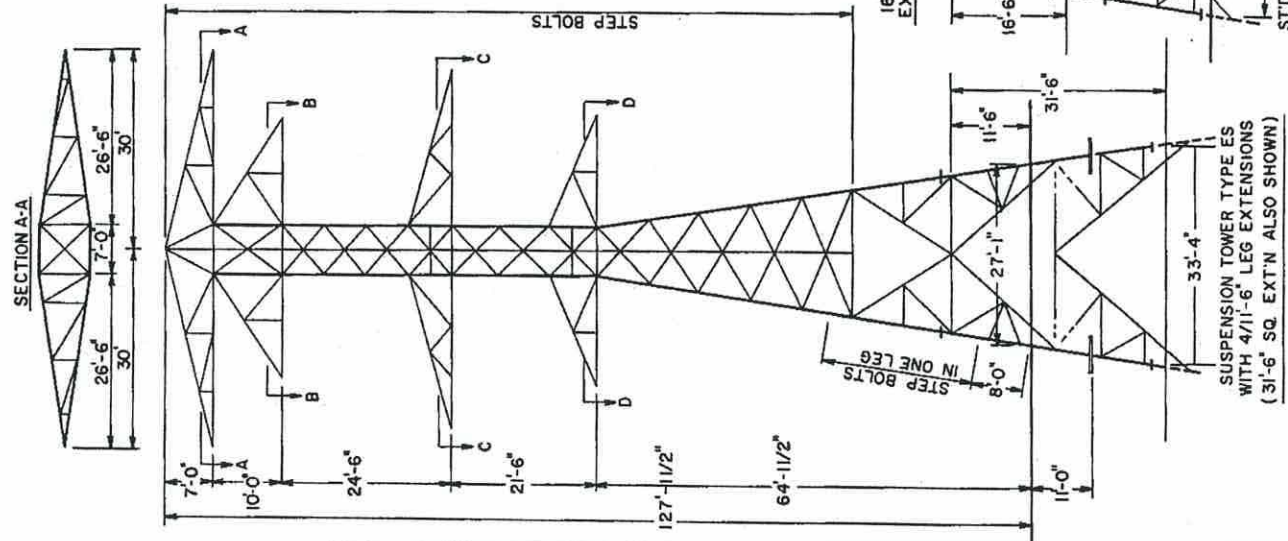
Barbara A. Menton  
As to Licensee

By: Daniel J. Oginsky  
Title: DANIEL J. OGINSKY  
VICE PRESIDENT - GENERAL COUNSEL

Activity Number **1088599**  
JML: May 2, 2006

Exhibit A  
5/2/06

SUSPENSION TOWER TYPE ES



LOADS

- Vertical ( $\frac{1}{2}$ " ice)
  - a. 2 Groundwires @ 1500#
  - b. 6 Two-Conductor Bundles @ 6700#
  - Total = 3000#
  - = 40200#
  - = 43200#

- Transverse-Wind on Wires ( $\frac{1}{2}$ " ice, 8# wind)
  - a. 2 Groundwires @ 1450#
  - b. 6 Two-Conductor Bundles @ 4350#
  - Total = 2900#
  - = 26100#
  - = 29000#

- Longitudinal
  - a. 1 Two-Conductor Bundle @ 14,400#
  - b. 1 Groundwire @ 6600#

- Wind on Tower (from any direction) of 13 psf on  $1\frac{1}{2}$  times projected area of one face

- Vertical Load of Tower

- Vertical - Heavy (1" ice)
  - a. 2 Groundwires @ 3300#
  - b. 6 Two-Conductor Bundles @ 11500#
  - Total = 6600#
  - = 69000#
  - = 75600#

Combine

- Double Circuit:
    - 1.65 x (1+2+4+5)
    - 1.65 x (1+15/16x2+3+4+5)
    - 1.65 x (6)
  - Single Circuit:
    - 1.65 x (1+7/16x2+4+5)
    - 1.65 x (1+7/16x2+3b+4+5)
    - 1.65 x (1+7/16x2+4+5) + 1.0 x (3a)
    - 1.65 x (6)
- Broken Conductor Bundle or Groundwire = Heavy Vertical
- Broken Conductor Bundle = Broken Conductor Bundle
- 5) + 1.0 x (3a)

Material

Steel per ASTM spec. A36, latest revision & High Strength Steel -44,000psi yield -50,000psi yield -60,000psi yield

Coating

All material galvanized to ASTM spec. 123, latest revision.  
Bolted with 3/4" diameter machine bolts, ASTM spec A394, latest revision.  
Ultimate Unit Stresses  
Tension, Net Section =  $0.9F_y(F_y = \text{yield stress in psi})$   
Compression, Gross Section:  
For  $L/r \le 50$   $S_c = F_y(1 - F_y/900)$   
For  $50 \le L/r \le 210$   $S_c = F_y(1 - 210 - \frac{L}{r})$   
For  $\frac{3x10^4}{\sqrt{F_y}} \le L/r$   $S_c = \frac{3x10^8}{L/r}$   
Shear on Bolts = 30,000psi  
Bearing on Bolts = 60,000psi

SPECIAL 20'-0" SQUARE EXTENSION FOR USE WITH 3'-6" EXTENSION

16'-6" LEG EXTENSION

21'-6" LEG EXTENSION

SUSPENSION TOWER TYPE ES WITH 4'/11'-6" LEG EXTENSIONS (31'-6" SQ. EXTN ALSO SHOWN)

RECORDED RIGHT OF WAY NO. 25319

APPROVED		THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
		LAYOUT BY R.O.S.	DRAWN BY W.E.S.
DATE 1-26-68	SCALE NONE	DRAWING NUMBER ES	

**Exhibit B**  
5/2/06

HEAVY ANGLE DEAD-END TOWER TYPE EH

LOADS

1. Vertical
  - a. 2 Groundwires @ 1100#
  - b. 6 Two-Conductor Bundles @ 5000#

Total
- 2a. Transverse-Wind on Wires ( $\frac{1}{2}$ " ice, 8# wind)
  1. 2 Groundwires @ 1100#
  2. 6 Two-Conductor Bundles @ 3000#

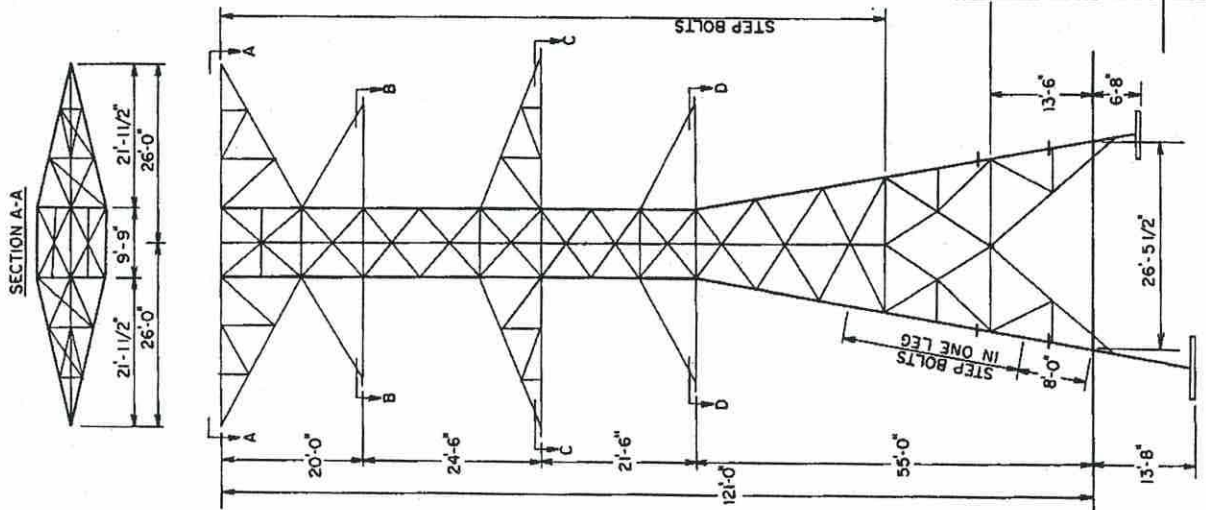
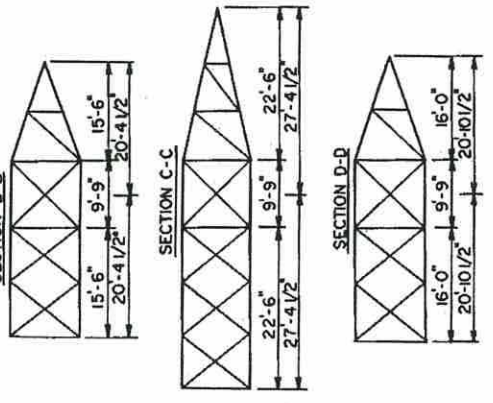
Total
- 2b. Transverse-Angle in Line
  1. 2 Groundwires @ 6000#
  2. 6 Two-Conductor Bundles @ 22000#

Total
3. Longitudinal
  - a. 2 Groundwires @ 6000# or
  - b. 6 Dual Conductors @ 22000#

Total
4. Wind on Tower (from any direction) of 13 psf on  $1\frac{1}{4}$  times projected area of one face
5. Vertical Load of Tower
6. Torsion
  - a. 1 Groundwire @ 6000#
  - b. 3 Two-Conductor Bundles @ 22000#

Total
7. Vertical-Heavy (1" ice)
  - a. 2 Groundwires @ 2400
  - b. 6 Two-Conductor Bundles @ 8000#

Total



RECORDED RIGHT OF WAY NO. 25319  
HEAVY ANGLE DEAD-END TOWER TYPE "EH"  
WITH 4/13-6" LEG EXTENSIONS

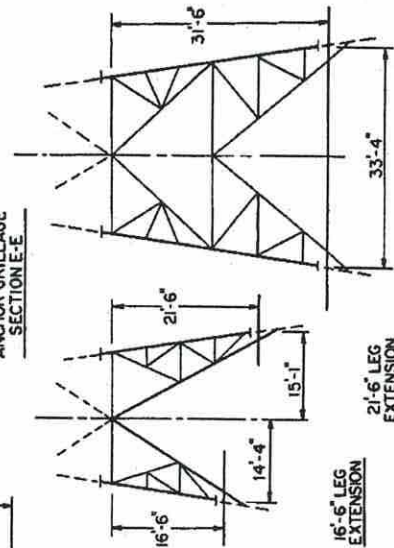
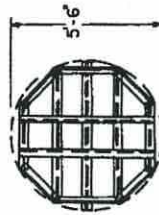
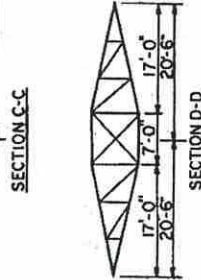
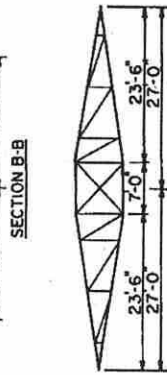
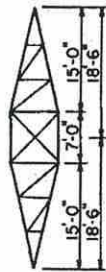
- Combine
- 1.65x(1+2+2b+4+5)
  - 1.65x(1+3+2a+3+4+5)
  - 1.25x(1+1/4o2+4+5+6)
  - 1.65x(7)
- Material
- = Intact (on Angle)
  - = Dead End
  - = Torsional
  - = Heavy Vertical
- Steel per ASTM spec. A7, latest revision & ASTM spec A242, latest revision
- Coating
- All material galvanized to ASTM spec. 123, latest revision
- Connections
- Bolted with 3/4" diameter machine bolts, ASTM spec. A394, latest revision
- Ultimate Unit Stresses
- |                             |                         |                                |
|-----------------------------|-------------------------|--------------------------------|
| Tension, net section        | A7                      | A242                           |
|                             | 33,000#/in <sup>2</sup> | 45,000#/in <sup>2</sup>        |
| Compression, Gross Section; | 33,000#/in <sup>2</sup> | 49,500#-218L/r/in <sup>2</sup> |
|                             | 130L/r/in <sup>2</sup>  | (39,000#Max.)                  |
| L/r<100                     | 33,000#/in <sup>2</sup> | 43,000#-170L/r/in <sup>2</sup> |
| L/r<150                     | 130L/r/in <sup>2</sup>  | 39,000#-145L/r/in <sup>2</sup> |
| L/r<200                     | 28,000#/in <sup>2</sup> | 70L/r#/in <sup>2</sup>         |
- Shear on Bolts
- Root of Thread = 45,000psi
  - nom. diameter = 30,000psi
  - Bearing on Bolts = 60,000psi

HEAVY ANGLE DEAD-END TOWER TYPE "EH"		APPROVED	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
		<i>[Signature]</i>	LAYOUT BY R.O.S.	DRAWN BY W.E.S.
		DATE 1-8-68	DRAWING NUMBER	
		SCALE NONE	EH	



**Exhibit C**  
5/2/06

SUSPENSION TOWER TYPE EC



- LOADS**
- Vertical ( $\frac{1}{2}$ " ice)
    - a. 2 Groundwires @ 1080# = 2160#
    - b. 6 Two-Conductor Bundles @ 4900# = 29400#
    - Total = 31560#

- Transverse-Wind on Wires ( $\frac{1}{2}$ " ice, 8# wind)
  - a. 2 Groundwires @ 1050# = 2100#
  - b. 6 Two-Conductor Bundles @ 2880 = 17280#
  - Total = 19380#

- Longitudinal
  - a. 1 Two-Conductor Bundle @ 15000#
  - b. 1 Groundwire @ 6600#
  - c. 1 Two-Conductor Bundle @ 12000#

- Wind on Tower (from any direction) of 13 psf on  $1-\frac{1}{2}$  times projected area of one face

- Vertical Load of Tower
  - a. 2 Groundwires @ 2400# = 4800#
  - b. 6 Two-Conductor Bundles @ 8500# = 51000#
  - Total = 55800#

- Combine**
- 1.65 x (1+2+4+5)
  - 1.0 x (3a)
  - 1.0 x (3b)
  - 1.65 x (1+2+4+5)+1.0x (3c)
  - 1.65 x (6)
- = Intact
  - = Broken Conductor Bundle, Independent
  - = Broken Groundwire, Independent
  - = Double ckt., 1 Broken Conductor Bundle
  - = Heavy Vertical

**Material**  
Steel per ASTM spec. #36, latest revision, & High Strength Steel - 44,000 psi yield - 50,000 psi yield - 60,000 psi yield

**Coilside**  
All material galvanized to ASTM spec. 123, latest revision.

**Connections**  
Bolted with 3/4" diameter machine bolts, ASTM spec A394, latest revision.

**Ultimate Unit Stresses**  
Tension, Net Section =  $0.9F_y$  ( $F_y$ =Yield Stress in psi)  
Compression, Gross Section;  
For  $L/r \leq 50$   $S_c = F_y(1 - F_y/900)$

For  $50 \leq L/r \leq 3x10^4$   $S_c = F_y(1 - \frac{2x10^{-4} L}{9})$   
For  $\frac{3x10^4}{F_y} \leq L/r$   $S_c = \frac{3x10^8}{(L/r)^2}$

Shear on Bolts = 30,000psi  
Bearing on Bolts = 60,000psi

<p>SUSPENSION TOWER TYPE "EC"</p>		APPROVED	THE DETROIT EDISON COMPANY	
		<i>M.P.K.</i>	GENERAL ENGINEERING DEPARTMENT	
LAYOUT BY	R.O.S.	DRAWN BY	W.E.S.	
DATE	1-2-68	DRAWING NUMBER	EC	
SCALE	NONE			

RECORDED RIGHT OF WAY NO. 25319

SOCKET CLEVIS  
 CHANCE #3065  
 YOKE PLATE  
 CHANCE #BB 1016  
 CLEVIS EYE  
 CHANCE #3059

STRAIN CLAMP  
 CHANCE #5225

CONDUCTOR  
 954 MCM ACSR

SHACKLE  
 CHANCE #3025  
 TURNBUCKLE  
 CHANCE #3175

Y-CLEVIS BALL  
 CHANCE #3091

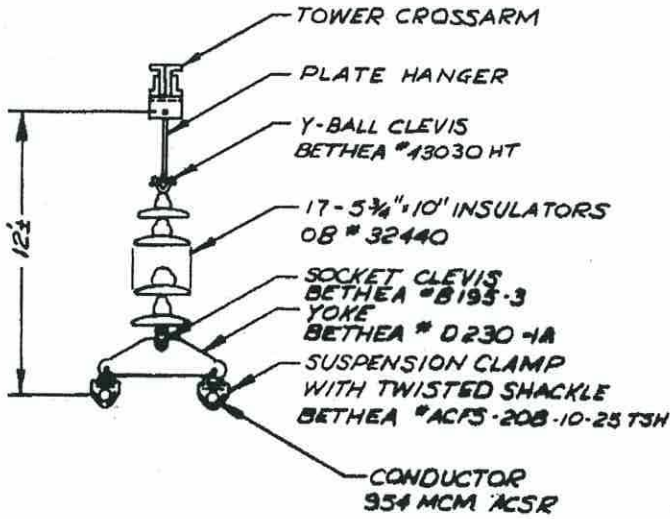
17-5 3/4" 10' INSULATORS  
 LAPP 40640

CORONA SHIELD  
 CHANCE #CC 440

C OF TOWER CROSSARM

DEAD-END DETAILS

TOWER: #



SUSPENSION DETAILS

TOWER: #

RESERVED RIGHT OF WAY NO. 25319

**Exhibit D**

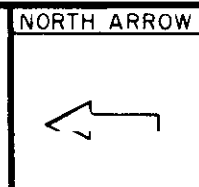
5/2/06

345 KV. SUSPENSION AND DEAD-END DETAILS

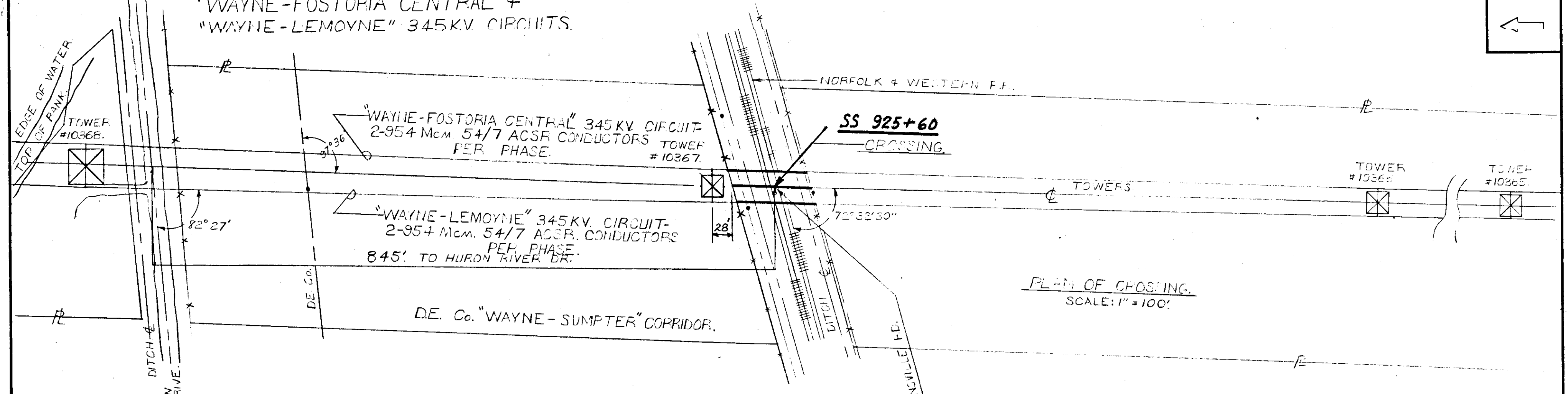
APPROVED <i>JMY</i>	THE DETROIT EDISON COMPANY GENERAL ENGINEERING DEPARTMENT	
	LAYOUT BY R.O. STURDY	DRAWN BY R.O. STURDY
	DATE 10/18/65	
	SCALE NONE	ED-5924



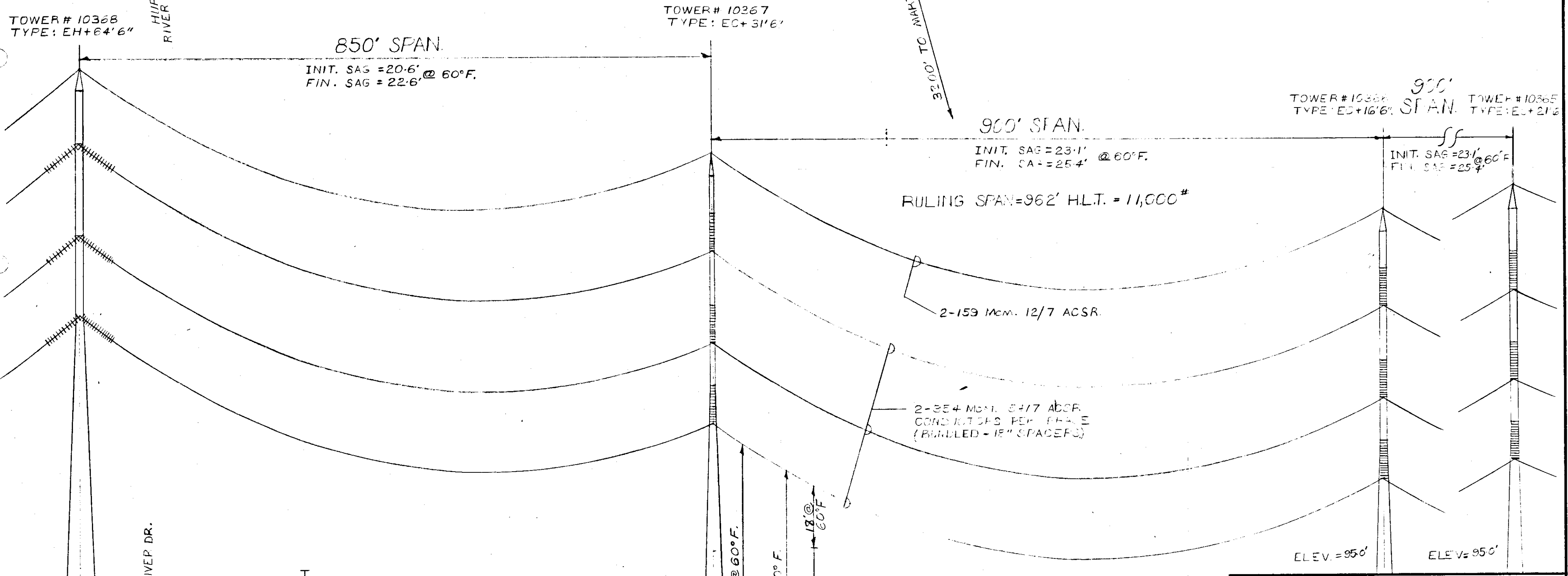




"WAYNE-FOSTORIA CENTRAL" &  
"WAYNE-LEMOYNE" 345KV. CIRCUITS.

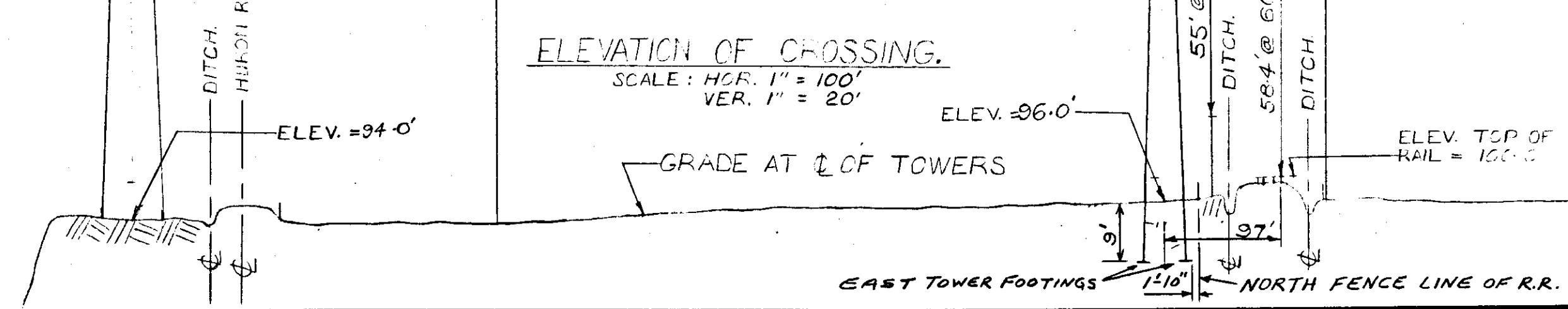


PLAN OF CROSSING.  
SCALE: 1" = 100'



ELEVATION OF CROSSING.

SCALE: HGR. 1" = 100'  
VER. 1" = 20'



THE DETROIT EDISON COMPANY  
 PLAN SUBMITTED TO  
 MICHIGAN PUBLIC SERVICE COMMISSION  
 FOR 345,000 VOLT CROSSING  
 OVER NORFOLK & WESTERN RAILWAY  
 DRAWN BY N.H.H. DATE 4-10-68  
 APPROVED BY *John S. Hennes* DATE 4-15-68

PERMIT NO. <b>ED</b>	DRAWING NO. <b>RX-3905</b>
-------------------------	-------------------------------

CITY \_\_\_\_\_  
 COUNTY WAYNE  
 TOWNSHIP VAN BUREN  
T.S.S. - R.8.E.  
 SECTION NO. 23.

RECORDED RIGHT OF WAY NO. 25319