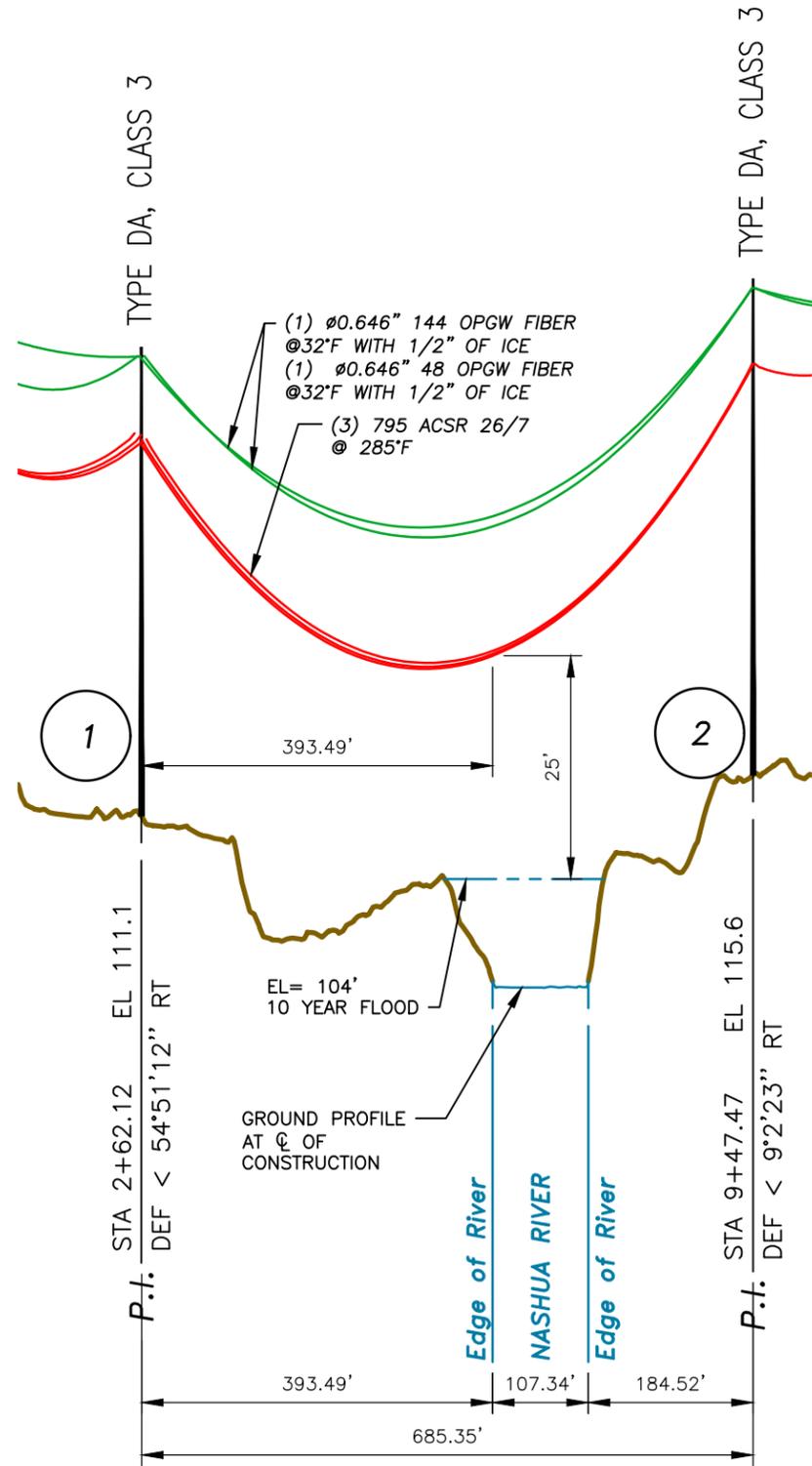


**LEGEND:**

- G192 LINE:
- G192 STR:

DWG REV	EPN/DESCRIPTION	CDNT/PE#	DATE	DRN	CHKD	APPR
1	SUBMITTED TO NH PUC		3/24/21	CTS	JRS	CJN

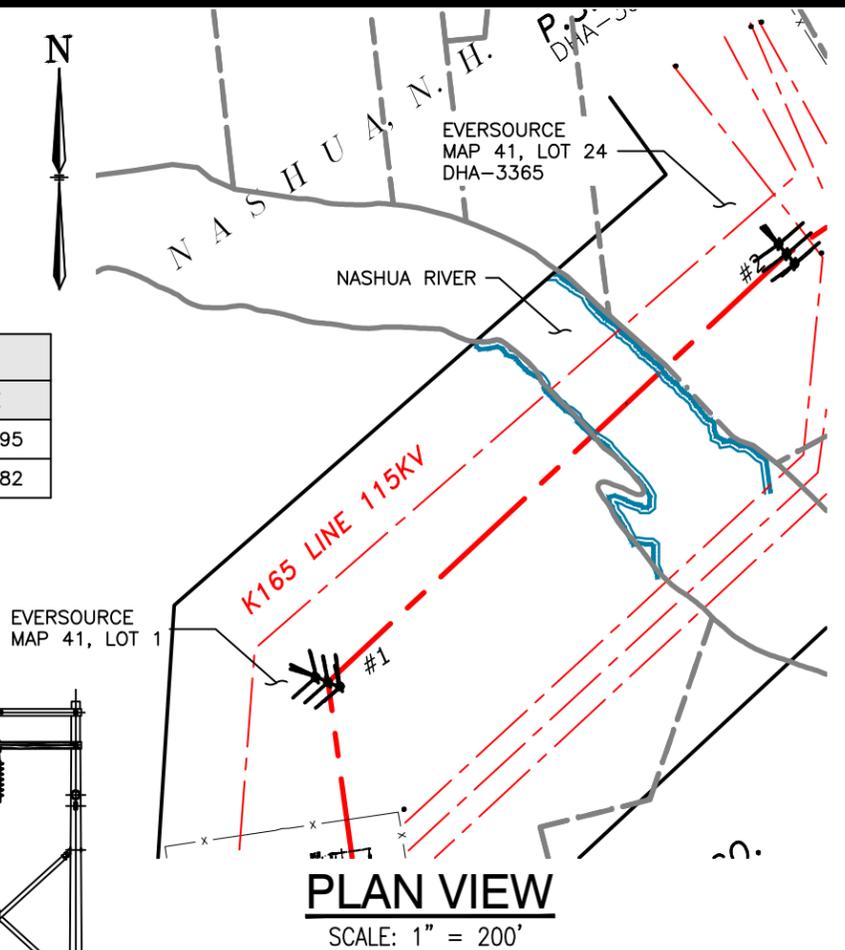
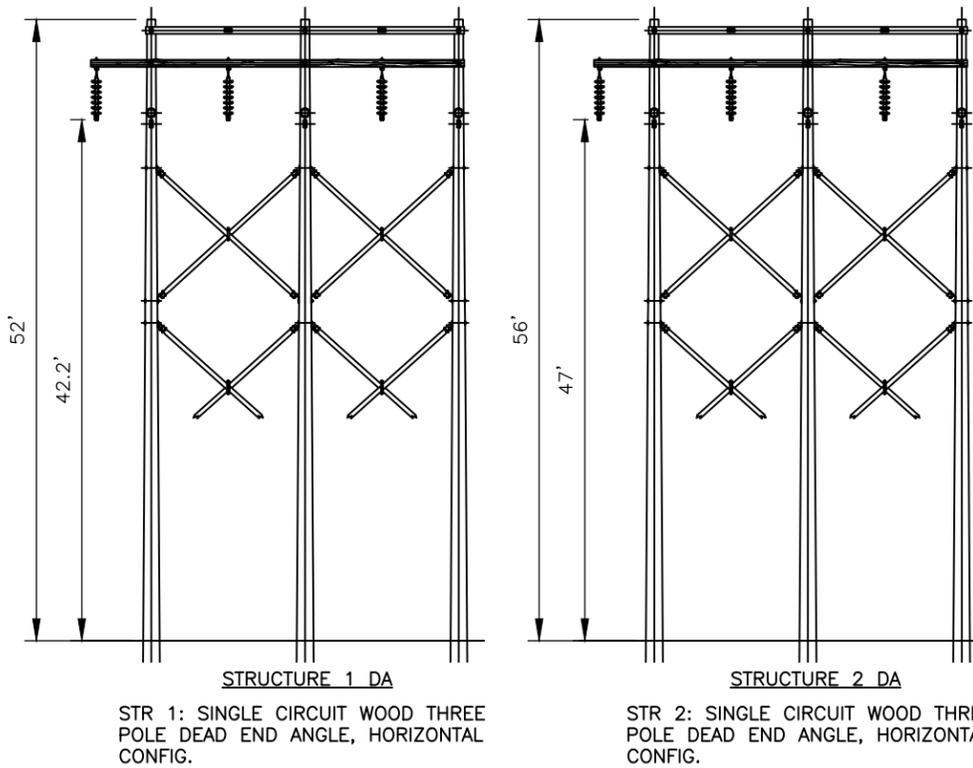
<h1 style="margin: 0;">EVERSOURCE</h1> <h2 style="margin: 0;">ENERGY</h2>		T	1
		DRAWN CTS	ENGINEER CJN
<p>G192 115kV LINE PUBLIC WATERBODY CROSSING, LOCATION PLAN NASHUA/HUDSON, NEW HAMPSHIRE EXHIBIT 1</p>		CHECKED JRS	APPROVED CJN
		DATE 3/24/21	
SCALE 1:1500	FILE: G19243901.DWG IMAGE:	DRAWING NO. G19243901	



CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITION			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSR 795 Kcmil 26	6200	0	0.5	4
OPGW	1	OPGW 144F	5500	0	0.5	4
OPGW	1	OPGW 48F	5500	0	0.5	4

NESC VERTICAL CLEARANCE (FT)	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
WATER AREAS NOT SUITABLE FOR SAIL BOATING OR WHERE SAIL BOATING IS PROHIBITED	18.6

STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
1	-71.45427754	42.76576195
2	-71.45240510	42.76703982



**LEGEND:**

- STRUCTURE (WITH GUYS)
- EDGE OF RIVER
- TOWN BOUNDARY
- PROPERTY BOUNDARY
- LIMITS OF EVERSOURCE RIGHT OF WAY
- LINE,  $\varnothing$  OF CONSTRUCTION

**G192 LINE 115KV**

**NOTES:**

- ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
- 10 YEAR FLOOD ELEVATION FROM THE FEMA FLOOD MAP SERVICE CENTER, NATIONAL FLOOD HAZARD LAYER FIRMETTE.
- PARCEL INFORMATION PROVIDED BY NH GRANIT.



DWG REV	ISSUED FOR PERMIT	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	APPR
1	ISSUED FOR PERMIT			3/24/21	CTS	JRS	CJN

**EVERSOURCE ENERGY**

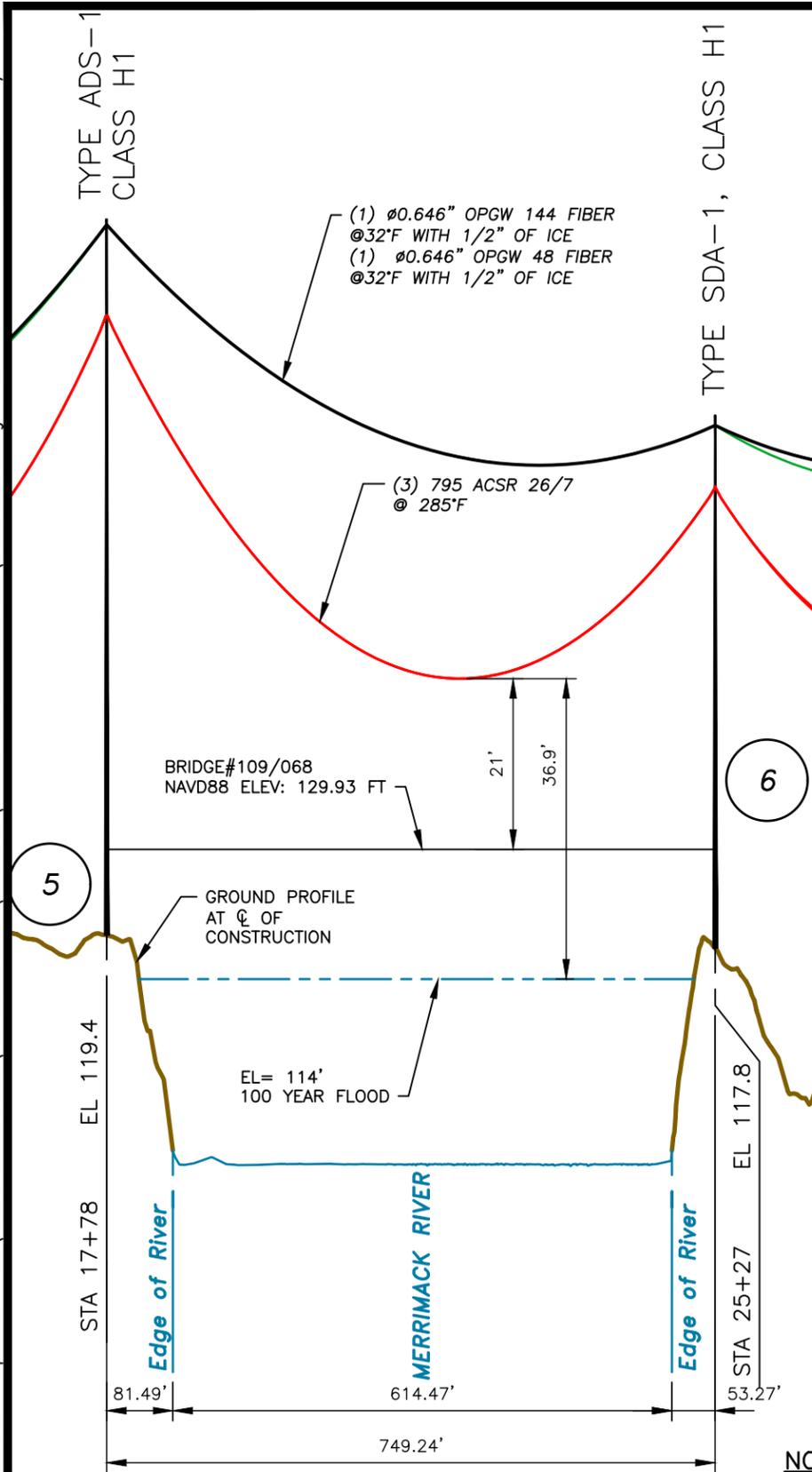
G192 LINE 115kV  
NASHUA RIVER, WATERBODY CROSSING  
NASHUA, NEW HAMPSHIRE  
EXHIBIT 2

T	1
DRAWN	CTS
ENGINEER	CJN
CHECKED	JRS
APPROVED	CJN
DATE	3/24/21

SCALE AS SHOWN

FILE: G19243902.DWG

DRAWING NO. G19243902

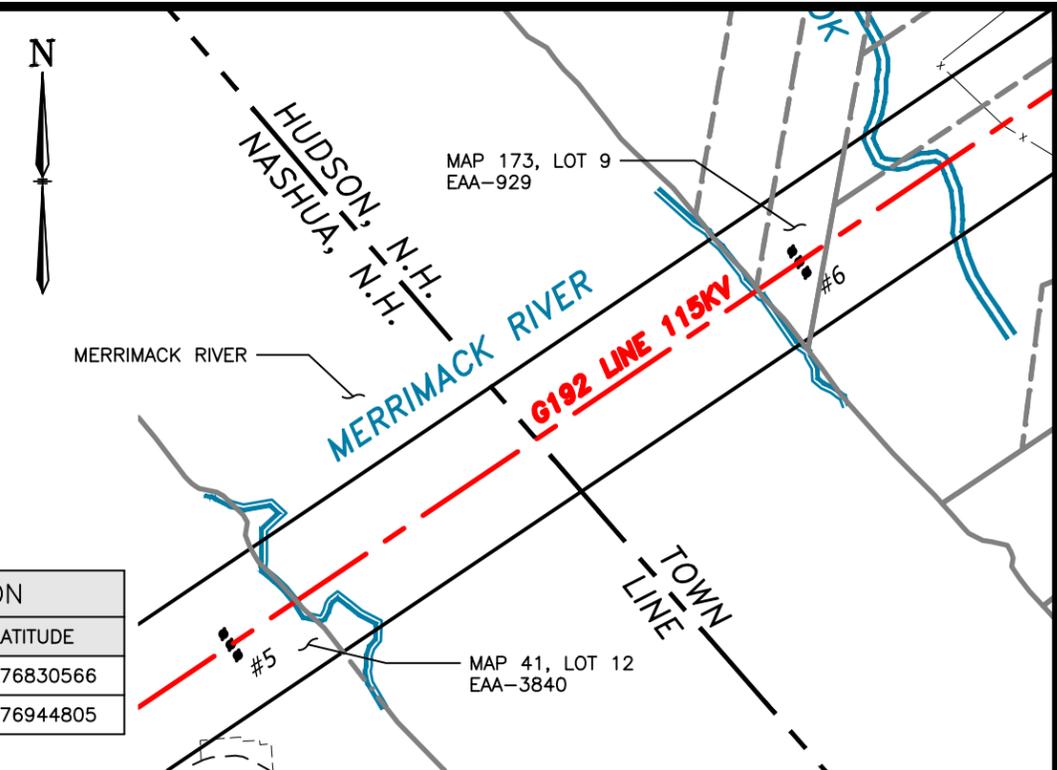


NESC VERTICAL CLEARANCE (FT)	
NATURE OF SURFACE UNDERNEATH WIRES, CONDUCTORS OR CABLES	115kV
WATER AREAS SUITABLE FOR SAIL BOATING INCLUDING RIVERS, B. OVER 20 TO 200 ACRES	30.1

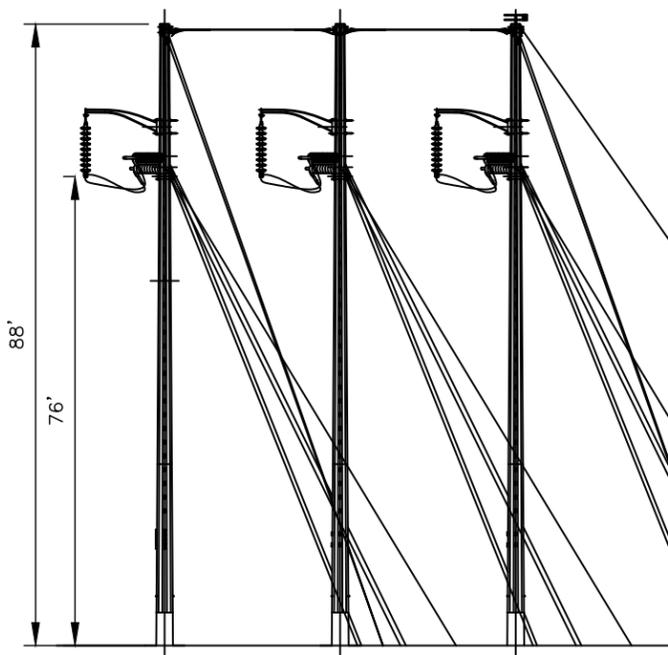
CABLE SCHEDULE						
WIRE	QTY OF CABLES	DESCRIPTION	DESIGN CONDITION			
			MAX DESIGN TENSION (lb)	TEMP (°F)	ICE (in)	WIND (psf)
CONDUCTOR	3	ACSR 795 Kcmil $\phi$	8000	0	0.5	4
OPGW	1	OPGW 144F	6000	0	0.5	4
OPGW	1	OPGW 48F	6000	0	0.5	4

US ARMY CORPS OF ENGINEERS	
33 CFR 322 MINIMUM ADDITIONAL CLEARANCE (FT)	
NOMINAL SYSTEM VOLTAGE, kV	ABOVE CLERAANCE REQUIRED FOR BRIDGES
115 AND BELOW	20.0

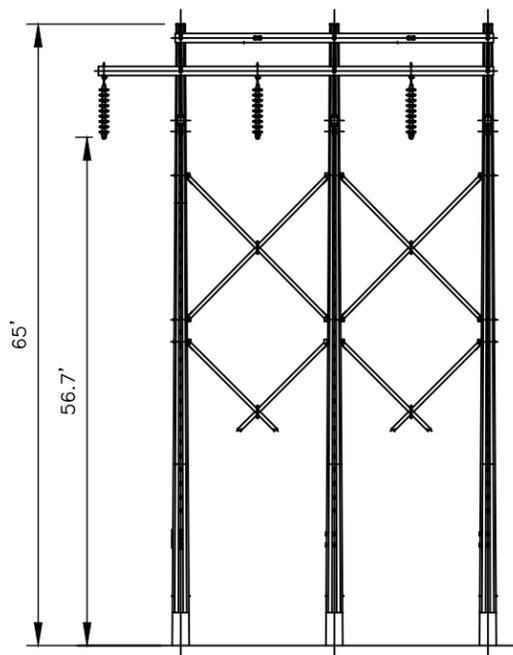
STRUCTURE LOCATION		
STRUCTURE	LONGITUDE	LATITUDE
5	-71.44983541	42.76830566
6	-71.44751561	42.76944805



**PLAN VIEW**  
 SCALE: 1" = 200'



STR 5: SINGLE CIRCUIT STEEL THREE POLE DEAD END ANGLE, HORIZONTAL CONFIG., GUYED. (NTS)



STR 6: SINGLE CIRCUIT STEEL THREE POLE DEAD END ANGLE, HORIZONTAL CONFIG. (NTS)

**LEGEND:**

- STRUCTURE (WITH GUYS)
- EDGE OF RIVER
- TOWN BOUNDARY
- PROPERTY BOUNDARY
- LIMITS OF EVERSOURCE RIGHT OF WAY
- LINE,  $\phi$  OF CONSTRUCTION

G192 LINE 115KV

**PROFILE VIEW**  
 SCALE: HORZ 1" = 200'  
 VERT 1" = 20'

- NOTES:**
- ELEVATIONS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
  - 100 YEAR FLOOD ELEVATION FROM THE FEMA FLOOD MAP SERVICE CENTER, NATIONAL FLOOD HAZARD LAYER FIRMETTE, 01/31/2020.
  - PARCEL INFORMATION PROVIDED BY NH GRANIT.

DWG REV	ISSUED FOR PERMIT	EPN/DESCRIPTION	CONT/PE#	DATE	DRN	CHKD	JRS	CUN	APPR
1	ISSUED FOR PERMIT			3/24/21	CTS	JRS	CUN		

**EVERSOURCE ENERGY**

G192 LINE 115kV  
 MERRIMACK RIVER, PUBLIC WATER CROSSING  
 NASHUA/HUDSON, NEW HAMPSHIRE  
 EXHIBIT 3

T	1
DRAWN	CTS
ENGINEER	CJN
CHECKED	JRS
APPROVED	CJN
DATE	3/24/21

SCALE AS SHOWN

FILE: G19243901.DWG

DRAWING NO. G19243901

## GCA-218 Index Antrim-Whitefield

### Petition

### Order 12,219 – April 1976– 52 Appendices (below)

#	Town/City	Exhibit(s) Location (s)
1	Antrim	Antrim-Deering 2.4 kv
2	Atkinson	Island Pond 2.4kv
3	Bedford	Bedford-Manchester 34.5kv
4	Belmont	Belmont-Tilton (Winnisquam Lake, Silver Lake) 2.4; 7.2; 34.5
<b>5</b>	<b>Berlin</b>	<b>Androscoggin River 115kv; 4.16kv, 12.47,Guys</b>
<b>6</b>	<b>Bethlehem</b>	<b>Baker Brook Pond 34.5kv; 115kv</b>
7	Bow	Bow-Concord - Merrimack River 34.5 (x2) 115kv (x3)
<b>8</b>	<b>Bridgewater</b>	<b>Pemigewasett River 115kv</b>
9	Campton	Pemigewasett River 34.5 kv
10	Concord	Contoocook River 34.5kv, Merrimack River 34.5kv, Bow-Concord Merrimack River (x5)
11	Conway	Pequawket Pond Outlet 4.16kv (x2); Saco River 4.16kv; Saco River 12.47kv (x2)
<b>12</b>	<b>Dalton</b>	<b>Connecticut River 115kv; Mirror Lake 115kv</b>
1	Deering	See Antrim
13	Derry	Island Pond 2.4kv
14	Dover	Cochecho River 115kv (x2); 34.5kv x1; 13.2kv
15	Durham	Durham-Newmarket - Lamprey River 34.5kv (Appendix 15 Revision in the front of GCA-218)
16	Errol	Androscoggin River 1.2kv
<b>17</b>	<b>Franklin</b>	<b>Pemigewasett River 34.5kv; Franklin-Boscawen-Merrimack River 115kv (x2)</b>
18	Gilford	Lake Winnepesaukee 2.4kv
19	Goffstown	Piscataquog River – 34.5kv (x3); 12.47kv; 2.4kv (2)
20	Gorham	Androscoggin River – 34.5kv
21	Greenville	Souhegan River – 4.16kv (x2)
22	Henniker	Contoocook River – 34.5kv
<b>23</b>	<b>Hill</b>	<b>Pemigewasett River – 115kv; 69kv</b>
<b>24</b>	<b>Hinsdale</b>	<b>Connecticut River – 69kv</b>
25	Holderness	Pemigewasett River – 34.5kv (x2)
26	Hooksett	Pinnacle Pond 34.5kv (x2)
<b>27</b>	<b>Hudson</b>	<b>Merrimack River 115kv (x2); 34.5kv (x3)</b>
28	Jaffrey	Mountain Brook 12.47kv
29	Lee	Wheelwright Pond 7.2kv
<b>30</b>	<b>Lincoln</b>	<b>Bog Pond 115kv</b>
31	Litchfield	Merrimack River 115kv (x3); 12.47kv
32	Lyman	Dodge Pond 1.2kv
33	Manchester	Merrimack River 34.5kv (x 2) and see Bedford #3
34	Merrimack	Souhegan River 34.5kv; 115kv; Merrimack River see Litchfield #31

35	Milan	Androscoggin River 7.2kv (x2)
36	Milton	Salmon Falls River 7.2kv
37	Nashua	Nashua River 34.5kv (x4); 4.16kv Merrimack River see Hudson #27
<b>38</b>	<b>New Hampton</b>	<b>Pemigewasett River 34.5kv; see Hill #23 and Bridgewater#8</b>
39	Newmarket	Lamprey River 34.5kv; and see Durham #15
<b>17</b>	<b>Northfield</b>	<b>Merrimack River see Franklin #17</b>
40	Northumberland	Ammonoosuc River 4.16kv; 7.2kv; Connecticut River 2.4kv
25	Plymouth	Pemigewasett River see Holderness #25
41	Portsmouth	Piscataqua River 4.16kv; 2.4kv; Sagamore Creek 2.4kv
42	Rindge	Island Pond 2.4kv
43	Sanbornton	Cawley Pond 7.2kv
44	Stark	South Pond 1.2kv
45	Strafford	Wild Goose Pond 7.2kv
46	Stratford	Connecticut River 7.2kv
<b>47</b>	<b>Swanzey</b>	<b>Ashuelot River 115kv</b>
4	Tilton	Winnisquam Lake; Silver Lake see Belmont #4
48	Wakefield	Lovell Lake 7.2kv; Great East Lake 7.2kv (x2); 1.2kv; Pine River Pond 7.2kv (x2); Balch Pond 7.2kv
49	Washington	Island Pond 7.2kv
50	Weare	Horace Lake Water Reservoir 7.2kv; 2.4kv
51	Webster	Blackwater River 7.2kv
52	Whitefield	Mirror Lake 7.2kv; Hazen Pond 34.5kv

Supplemental Order #12,444

GCA-218

**PUBLIC SERVICE**

Company of New Hampshire

1000 Elm Street, Manchester, N. H. 03105

August 26, 1976

The State of New Hampshire  
Public Utilities Commission  
26 Pleasant Street  
Concord, New Hampshire 03301

Re: Water Crossing over the Lamprey River  
Towns of Durham and Newmarket, New Hampshire

To the Commission:

Enclosed are the original and five copies of a petition by Public Service Company of New Hampshire for amendment of a license issued by Commission Order No. 12,219 under RSA 371:17 for a 34.5 KV line over and across the Lamprey River in Newmarket and Durham, N. H.

In DE 76-22, the Commission licensed a 34.5 KV transmission line crossing. The Company has received a request for service in an area which can be served by the same line if a neutral is added so that it can be used for distribution purposes.

The line was the subject of Appendix 15 filed in DE 76-22. The only proposed change is addition of a neutral 4 feet lower than the primary wires, so that the resulting height is 21.6 feet over the surface of the Lamprey River.

If appropriate state agencies and other interested parties are in agreement, we respectfully request that the license be granted without the necessity of a hearing.

Very truly yours,

/s/ Russell A. Winslow

Russell A. Winslow  
Corporate Counsel

RAW:sms

Enclosures

*K-165  
License # 273  
Exhibit 31 B1*

THE STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION

Petition of Public Service Company of New Hampshire under RSA 371:17-20 for a license for an electric line over and across the public waters of the Lamprey River in the Towns of Durham and Newmarket, New Hampshire.

TO THE PUBLIC UTILITIES COMMISSION:

Public Service Company of New Hampshire, a corporation duly organized and existing under the laws of the State of New Hampshire and engaged in the generation, transmission and sale of electric energy in said State (hereinafter called the Petitioner), respectfully represents as follows:

(1) That in order to meet the reasonable requirements of service to the public, Petitioner maintains and operates a 34.5 KV electric line of wires and cables over and across the Lamprey River in the Towns of Durham and Newmarket, New Hampshire, licensed by the Commission in DE 76-22 (Appendix 15).

(2) That the Petitioner now desires to serve distribution loads directly from the 34.5 KV line, and to add a neutral wire in connection with that use. The neutral wire is to prevent possible unbalanced voltages to distribution customers during steady state and fault conditions.

(3) That the location of the crossing is shown on Exhibit 15A1. The design is shown on Petitioner's Plan No. D-7649-181-Rev., attached as Exhibit 15A2 (Rev.).

(4) That the overall length of the crossing is approximately 454 feet, with approximately 230 feet crossing the River.



DE 76-22

## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Petition by Public Service Company of New Hampshire for licenses to maintain electric lines over and across public waters in the State of New Hampshire.

..00..

ORDER NO. 12,219

WHEREAS, by petition filed March 12, 1976, Public Service Company of New Hampshire seeks licenses pursuant to RSA 371:17-21 as amended by c. 21, Laws of 1967, for licenses to maintain electric lines over and across public waters in the State of New Hampshire; the location, construction and design of which are shown on the fifty-two (52) appendices attached to the petition; and

WHEREAS, the petition represents that it is necessary for the petitioner to maintain electric transmission and distribution lines of wires and cables over and across certain lakes, ponds and streams in the State of New Hampshire which lines are part of its electric system throughout the state; and

WHEREAS, due to the increased recreational use of certain waters of the State, the petitioner has reviewed its construction and design of electric lines crossing lakes, ponds and streams within the State of New Hampshire and determined that certain crossings for which applications were not filed in the initial general licensing proceedings of the Commission in 1955 or thereafter now may require licenses as crossings of "public waters" pursuant to RSA 371:17-21; and

WHEREAS, following due notice no objections were raised by any of the interested parties to the petitioners request and upon investigation of all the facts before the Commission, it is found that the licenses hereby requested may be exercised without substantially affecting the public rights in said waters; it is

ORDERED, that licenses, be and hereby are, granted to Public Service Company of New Hampshire for those crossings described in the fifty-two (52) appendices of the petition which is on file at the office of this Commission.

By order of the Public Utilities Commission of New Hampshire this twenty first day of April, 1976.

  
Secretary

The following P.U.C. Order was superseded by previously added Order. A correction of the date 1973 to 1955 on the 24th line was made.

## PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

Petition by Public Service Company of New Hampshire for licenses to maintain electric lines over and across public waters in the State of New Hampshire.

..00..

ORDER NO. 12,219

WHEREAS, by petition filed March 12, 1976, Public Service Company of New Hampshire seeks licenses pursuant to RSA 371:17-21 as amended by c. 21, Laws of 1967, for licenses to maintain electric lines over and across public waters in the State of New Hampshire; the location, construction and design of which are shown on the fifty-two (52) appendices attached to the petition; and

WHEREAS, the petition represents that it is necessary for the petitioner to maintain electric transmission and distribution lines of wires and cables over and across certain lakes, ponds and streams in the State of New Hampshire which lines are part of its electric system throughout the state; and

WHEREAS, due to the increased recreational use of certain waters of the State, the petitioner has reviewed its construction and design of electric lines crossing lakes, ponds and streams within the State of New Hampshire and determined that certain crossings for which applications were not filed in the initial general licensing proceedings of the Commission in 1973 or thereafter now may require licenses as crossings of "public waters" pursuant to RSA 371:17-21; and



**PUBLIC SERVICE**

Company of New Hampshire 1000 Elm Street, Manchester, N. H. 03105

March 12, 1976

The State of New Hampshire  
Public Utilities Commission  
26 Pleasant Street  
Concord, New Hampshire 03301

Re: Water Crossings  
State of New Hampshire

To the Commission:

Enclosed are the original and four copies of a master petition with appendices by Public Service Company of New Hampshire for licenses under RSA 371:17 to maintain water crossings over and across public waters in the State of New Hampshire.

This petition covers the planned licensing of existing crossings based upon the Petitioner's comprehensive review of its water crossing facilities in response to the increase in recreational use of state waters and concerns therefore with safety standards.

If all interested parties are in agreement, we respectfully request that these licenses be granted without the necessity of a hearing pursuant to RSA 371:20, as amended.

Very truly yours,

/s/ Russell A. Winslow

Russell A. Winslow  
Corporate Counsel

RAW/djh

Enclosures

THE STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

Petition by Public Service Company of New Hampshire under RSA 371:17-20 as amended by c. 21, Laws of 1967, for licenses to maintain electric lines over and across public waters in the State of New Hampshire.

TO THE PUBLIC UTILITIES COMMISSION:

Public Service Company of New Hampshire, a corporation duly organized and existing under the laws of the State of New Hampshire and engaged in the generation, transmission and sale of electric energy in said State (hereinafter called the Petitioner), respectfully represents as follows:

1. That in order to meet the reasonable requirements of service to the public, it is necessary for the Petitioner to maintain electric transmission and distribution lines of wires and cables over and across certain lakes, ponds and streams in the State of New Hampshire which lines are part of its electric system throughout said State.

2. That as a result of increased recreational use of certain waters of the State and concerns expressed by the Public Utilities Commission and the Department of Safety Services for the need to reassess height requirements and other safety standards concerning the Petitioner's electric lines crossing said waters, the Petitioner has, after discussions with the Public Utilities Commission reviewed its construction and design of electric lines crossing lakes, ponds and streams within the State of New Hampshire.

3. That as a result of said review, the Petitioner has determined that certain crossings for which applications were not filed in the initial general licensing proceedings of the Commission in 1955 (Commission Order No. 6668 relating to the Petitioner and Order No. 6667 relating to



TOWN OF HUDSON

1. Over the Merrimack River in the Town of Hudson and the City of Nashua 1/2 mile northeasterly of the Bridge Street Substation in Nashua as shown on Exhibits 27-A-1 and 27-A-2.

Minimum Water Clearance: 46.2 feet.

2. Over the Merrimack River in the Town of Hudson and the City of Nashua at Atherton Avenue in Nashua as shown on Exhibits 27-B-1 and 27-B-2.

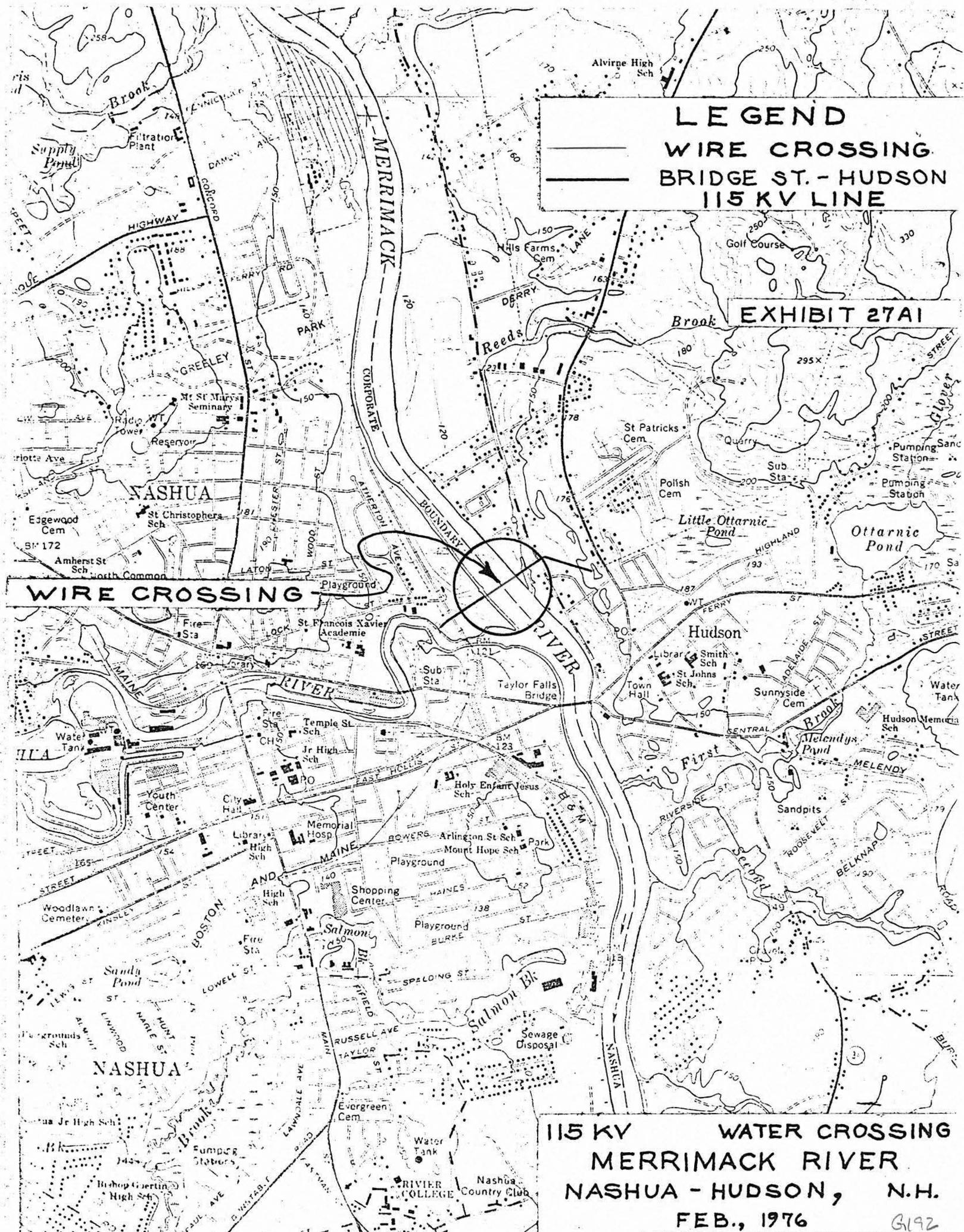
Minimum Water Clearance: 31.7 feet.

3. Over the Merrimack River in the Town of Hudson and the City of Nashua near the Long Hill Substation in Nashua as shown on Exhibits 27-C-1 and 27-C-2.

Minimum Water Clearance: 54.5 feet.

4. Over the Merrimack River in the Town of Hudson and the City of Nashua northeasterly of the Nashua Country Club as shown on Exhibits 27-D-1 and 27-D-2.

Minimum Water Clearance: 38.5 feet.



**LEGEND**

— WIRE CROSSING  
 — BRIDGE ST. - HUDSON  
 115 KV LINE

**EXHIBIT 27A1**

**WIRE CROSSING**

**115 KV WATER CROSSING  
 MERRIMACK RIVER  
 NASHUA - HUDSON, N.H.  
 FEB., 1976**

G192

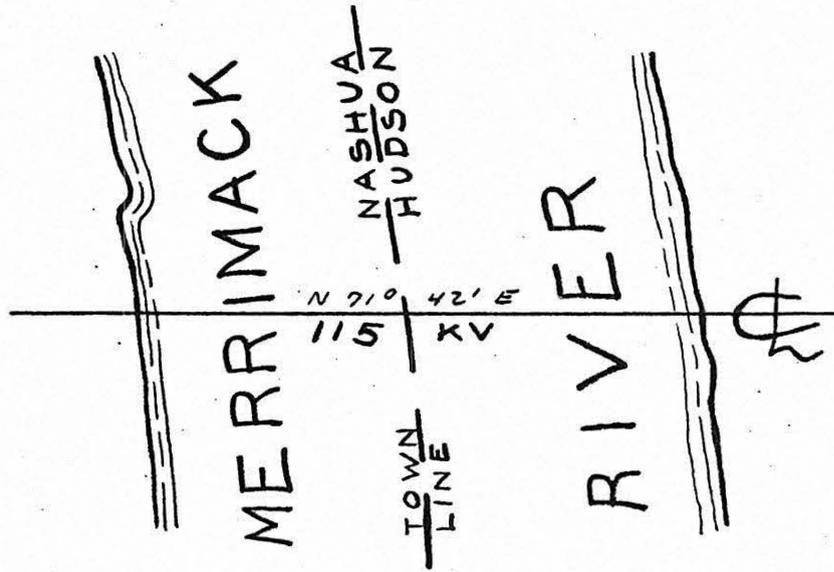
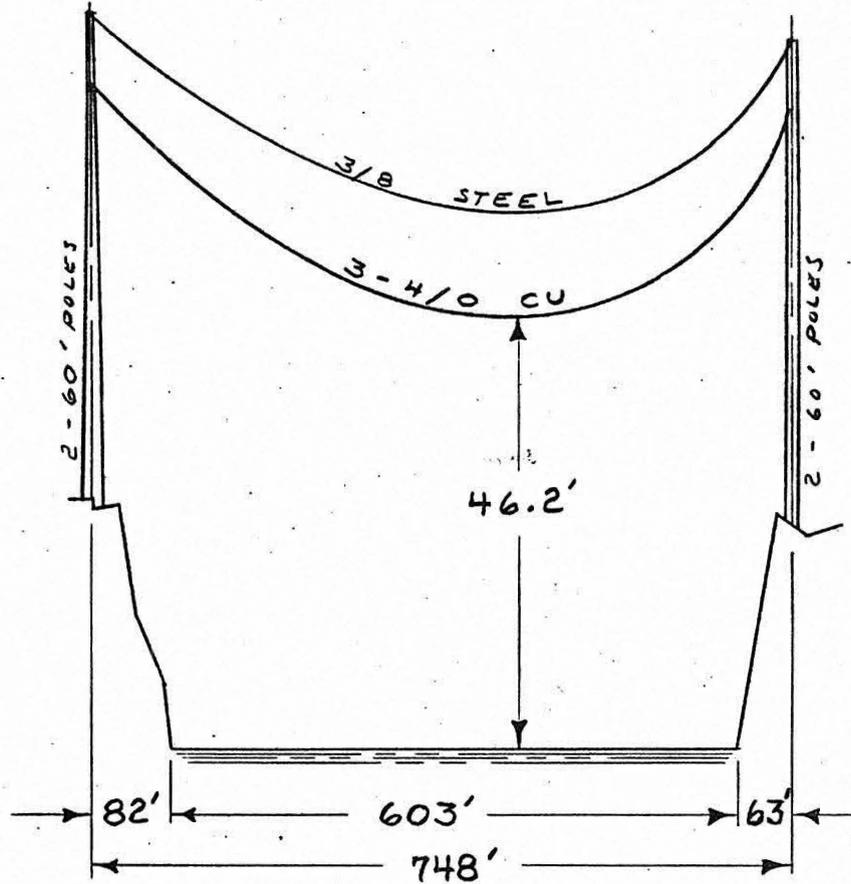


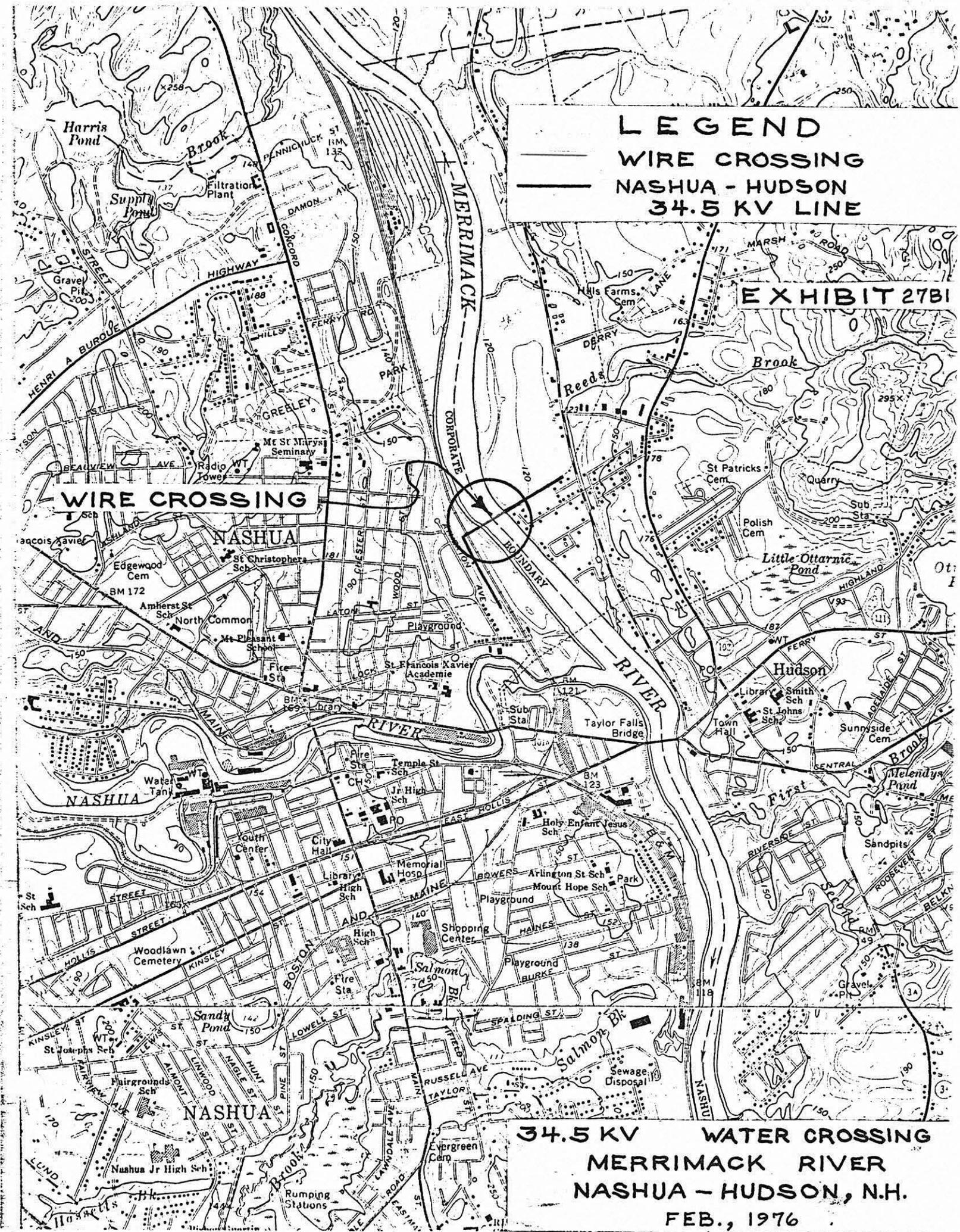
EXHIBIT 27A2



G192

DES.	NO.	REVISION	DATE	BY	115 KV WATER CROSSING	
DR. MAS	1				MERRIMACK RIVER	
TR.	2				NASHUA - HUDSON, N.H.	
CK. ERP	3				PUBLIC SERVICE CO. OF NEW HAMPSHIRE	
APPR.	4				ENGINEERING DEPARTMENT	
	5				SCALE: HORIZ. 1"=200' VERT. 1"=20'	
	6				DATE 2/24/76	

D-7649-205



**LEGEND**

- WIRE CROSSING
- NASHUA - HUDSON  
34.5 KV LINE

**EXHIBIT 27B1**

**WIRE CROSSING**

**34.5 KV WATER CROSSING  
MERRIMACK RIVER  
NASHUA - HUDSON, N.H.  
FEB., 1976**

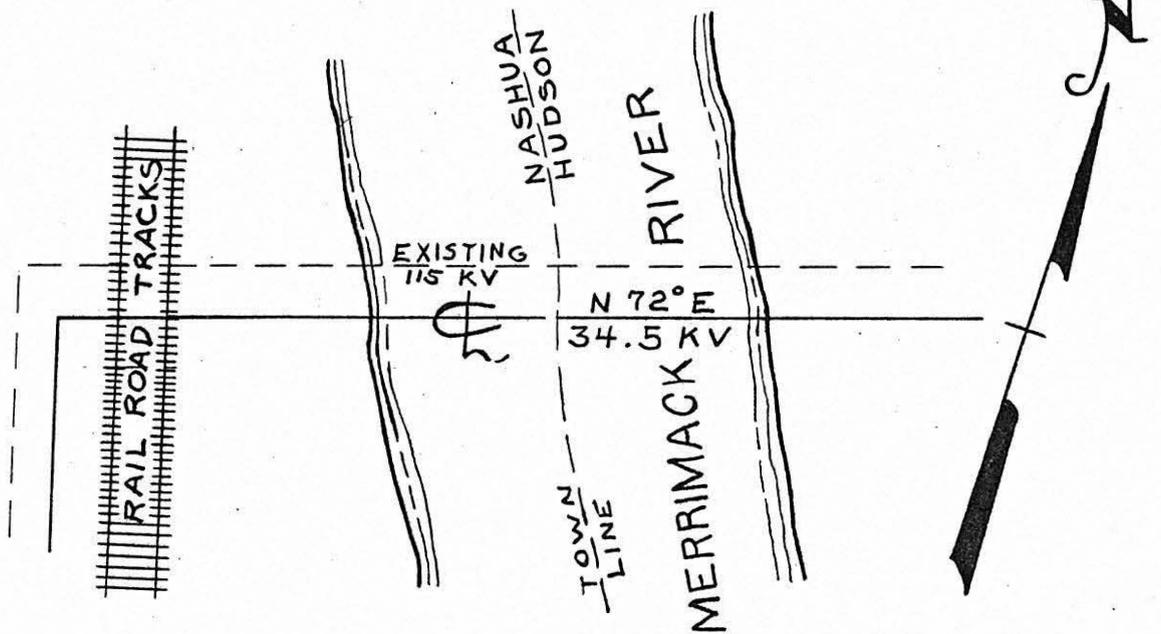
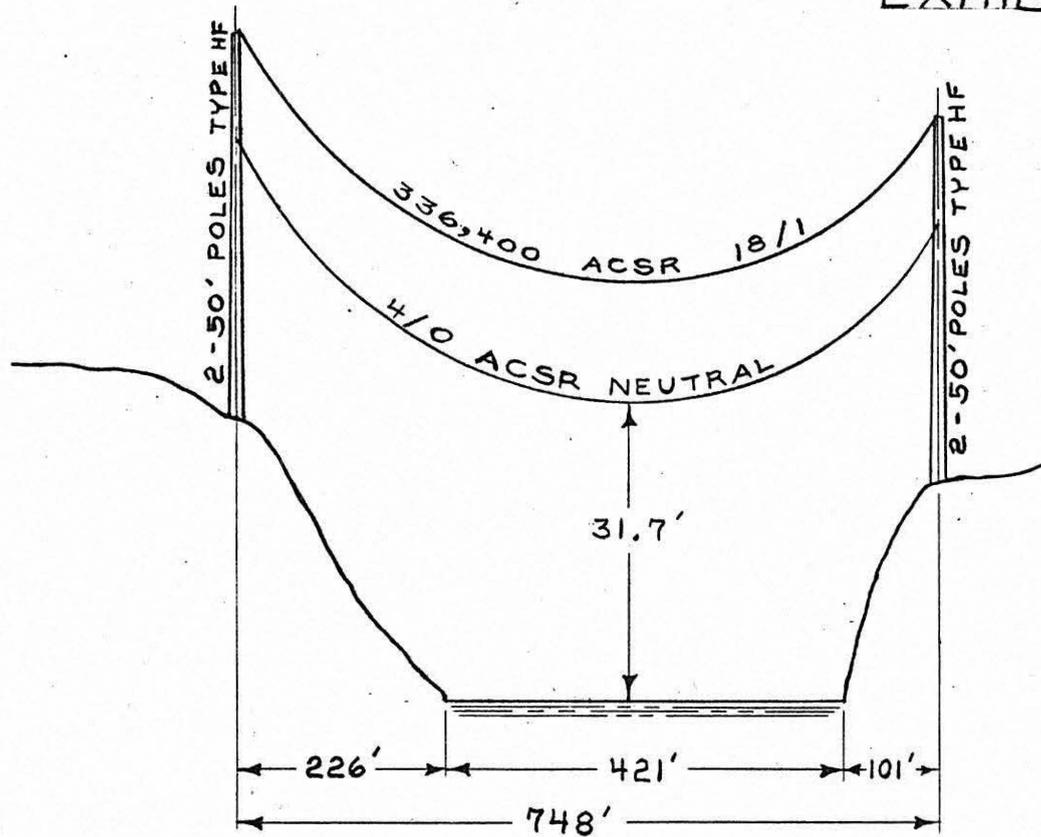
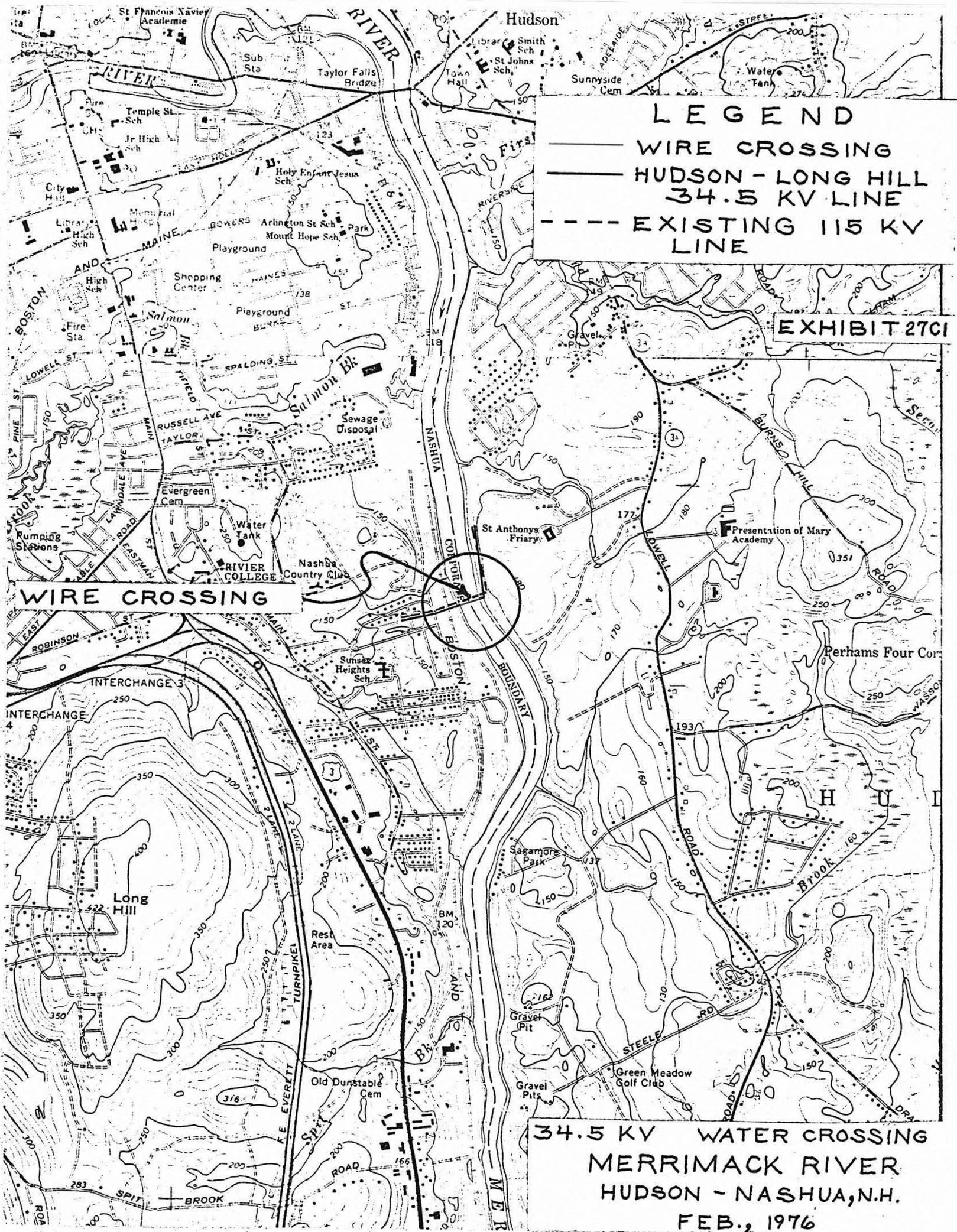


EXHIBIT 27B2



DES.	NO.	REVISION	DATE	BY	
DR. MAS	1				34.5 KV WATER CROSSING
TR.	2				MERRIMACK RIVER
CK. ERP	3				NASHUA - HUDSON, N.H.
APPR.	4				
	5				
	6				

PUBLIC SERVICE CO. OF NEW HAMPSHIRE  
 ENGINEERING DEPARTMENT  
 SCALE 1" = 20' VERT. 1" = 200' HOR. DATE 2/24/76  
 D-7649-206



**LEGEND**

- WIRE CROSSING
- HUDSON - LONG HILL  
34.5 KV LINE
- - - EXISTING 115 KV  
LINE

EXHIBIT 2701

WIRE CROSSING

34.5 KV WATER CROSSING  
MERRIMACK RIVER  
HUDSON - NASHUA, N.H.  
FEB., 1976

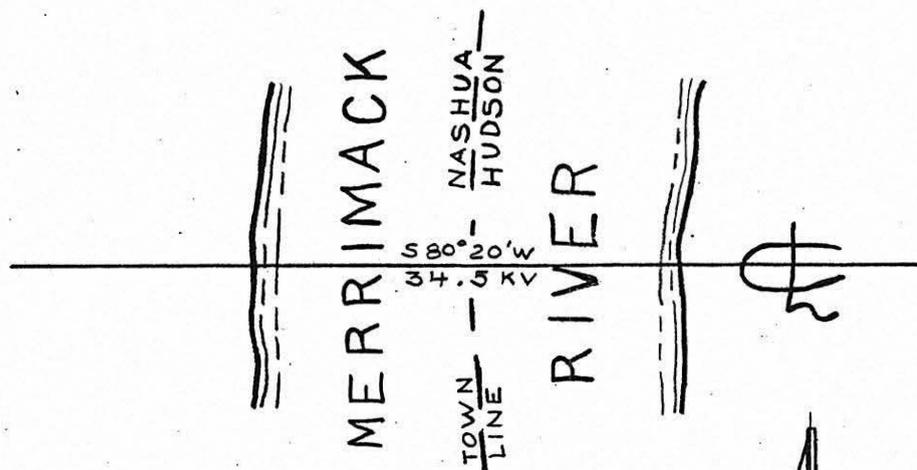
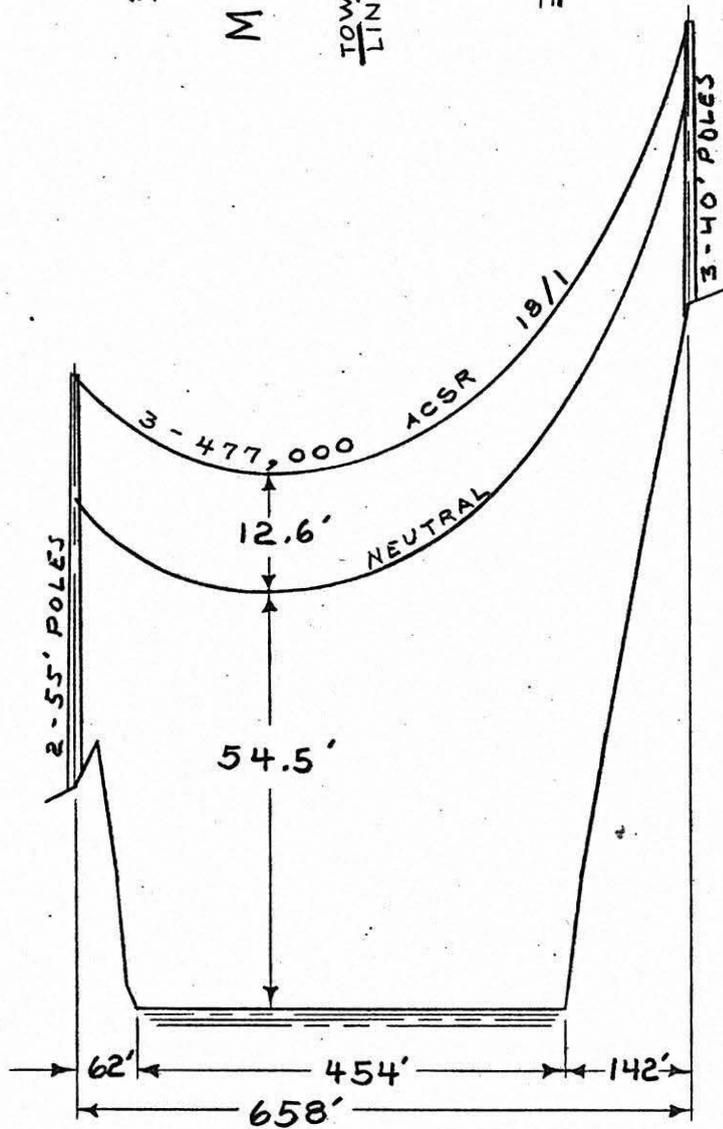


EXHIBIT 27C2



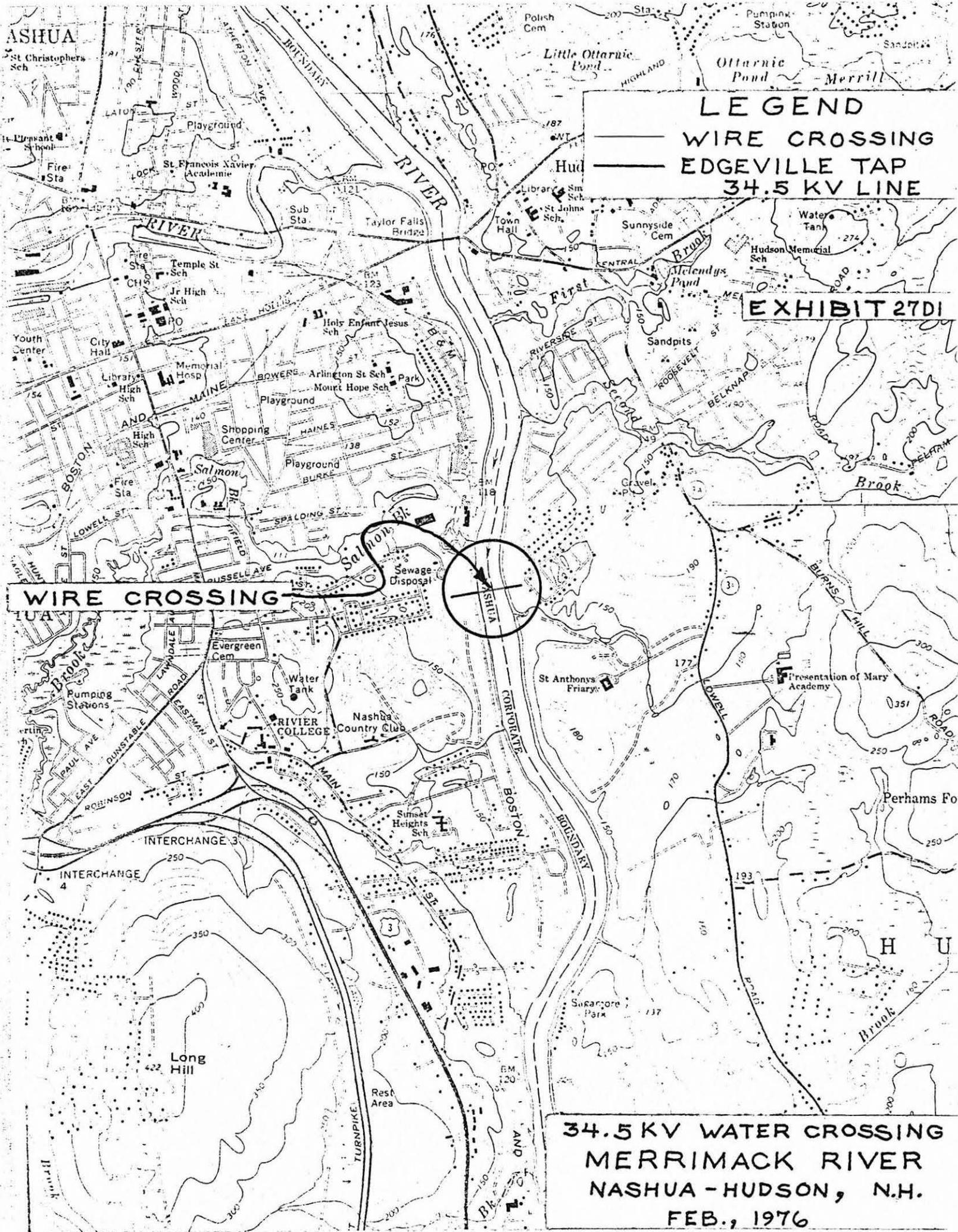
DES.	NO.	REVISION	DATE	BY
DR. MAS	1			
TR.	2			
CK. ERP	3			
APPR.	4			
	5			
	6			

34.5 KV WATER CROSSING  
MERRIMACK RIVER  
HUDSON - NASHUA, N.H.

PUBLIC SERVICE CO. OF NEW HAMPSHIRE  
ENGINEERING DEPARTMENT

SCALE 1" = 20' VERT. 1" = 200' HOR DATE 2/24/76

D-7649-207



**LEGEND**

— WIRE CROSSING  
 — EDGEVILLE TAP  
 34.5 KV LINE

**EXHIBIT 27DI**

**WIRE CROSSING**

**34.5 KV WATER CROSSING  
 MERRIMACK RIVER  
 NASHUA - HUDSON, N.H.  
 FEB., 1976**

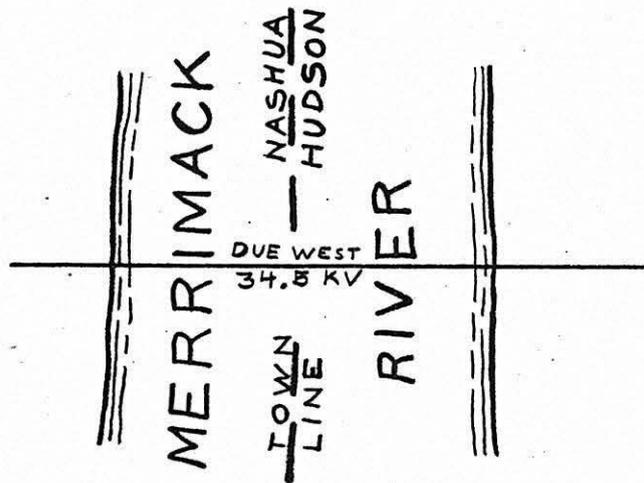
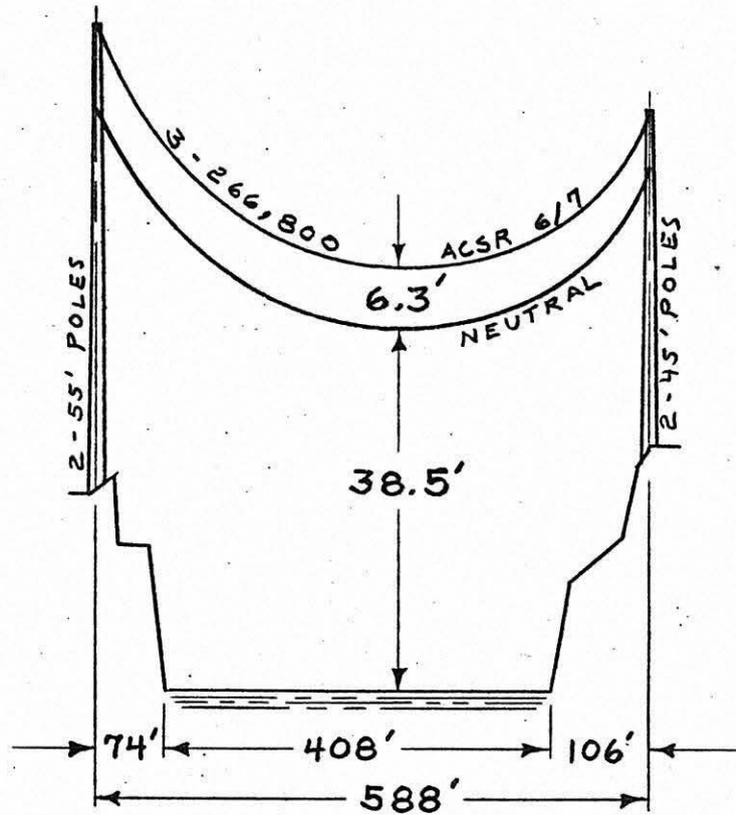


EXHIBIT 2702



DES.	NO.	REVISION	DATE	BY	34.5 KV WATER CROSSING	
DR. M.A.S.	1				MERRIMACK RIVER	
TR.	2				NASHUA - HUDSON, N.H.	
CK.	3				PUBLIC SERVICE CO. OF NEW HAMPSHIRE	
APPR.	4				ENGINEERING DEPARTMENT	
	5				SCALE 1"=20' VERT. 1"=200' HOR. DATE 2/24/76	D-7649-208
	6					

Tioga and the Office of Consumer Advocate on or before January 21, 1997 such Petition stating the facts demonstrating how its rights, duties, privileges, immunities or other substantial interests may be affected by the proceeding, as required by N.H. Admin. Rule Puc 203.02 (a) (2); and it is

FURTHER ORDERED, that any party objecting to a Petition to Intervene make said Objection on or before January 24, 1997.

By order of the Public Utilities Commission of New Hampshire this eleventh day of December, 1996.

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NH.PUC\*12/11/96\*[89463]\*81 NH PUC 1023\*Public Service Company of New Hampshire

[Go to End of 89463]

81 NH PUC 1023

**Re Public Service Company of New Hampshire**

DE 96-370

Order No. 22,454

New Hampshire Public Utilities Commission

December 11, 1996

ORDER authorizing an electric utility to construct and maintain electric lines and fiber optic cables using existing transmission lines crossing over public waters at 10 sites around the southeastern part of the state.

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1. ELECTRICITY, § 7

[N.H.] Authorization for new power lines — Installation of fiber optic cable — Use of existing transmission lines — Multiple site locations — Crossing of public waters as a factor. p. 1024.

2. CONSTRUCTION AND EQUIPMENT, § 5

[N.H.] Cable lines — Fiber optic cables — Use of existing transmission lines — Multiple site locations — Crossing of public waters as a factor — Electric utility. p. 1024.

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BY THE COMMISSION:

ORDER

On November 8, 1996, Public Service Company of New Hampshire (PSNH) filed with the New Hampshire Public Utilities Commission (Commission) a petition pursuant to RSA 371:17 for licenses to construct and maintain electric lines and fiber optic cable at existing electric transmission line public water crossings over public waters at ten locations in the Cities of Dover, Manchester, Nashua, and Portsmouth, and in the Towns of Hooksett and Hudson, New Hampshire.

In order to meet the requirements of service to the public, PSNH has constructed and currently maintains electric transmission lines over and across certain public waters, which lines are an integral part of its electric system. The definition of public waters contained in RSA 371:17 includes, "all ponds of more than ten acres, tidewater bodies, and such streams or portions thereof as the Commission may prescribe." The Commission has determined that these subject crossings are over and across public waters.

PSNH has stated that of the ten existing transmission line crossings, nine have been previously licensed by the Commission, and one crossing, due to an oversight, has not been previously licensed. The unlicensed crossing was found during PSNH's preparation for upgrading the reliability and capacity of the communications system used in its electric system operations.

A summary listing of the subject crossings is attached to the Petition as Appendix A, which includes for each crossing the PSNH line number and voltage, crossing location, and docket and order numbers for each crossing previously licensed. Additionally, Appendices B through K detail the location, clearance, distances and design of the proposed fiber optic cable and existing transmission structures. PSNH has stated that as the installation methods used to place the fiber optic cable will avoid any impacts to any wetlands in the areas of the crossings, no permit is required from the Department of Environmental Service's

**Page** 1023

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Wetlands Board.

On three of the existing crossings, PSNH proposes to replace one of the existing overhead shield wires with a new shield wire containing a core of glass optical fibers, known as Fiber Optic Groundwire (OPGW) cable. The three crossings at which OPGW cable will be installed are the two Line 307 crossings of the Piscataqua River in Dover and Portsmouth, and the Line 0-161 crossing of the Merrimack River in Hooksett. The OPGW cable will be installed above the existing phase conductors and will not affect the existing clearance between the water and the lowest existing cable.

On the other seven existing crossings, PSNH proposes to install an underbuilt all-dielectric self-supporting fiber optic (ADSS) cable. These crossings consist of: Line K165 and Line G192 crossings of the Nashua River in Nashua; Line G192 crossing of the Merrimack River between Nashua and Hudson; Line 372 crossing of the Merrimack River in Manchester; two Line 3891 crossings of the Nashua River in Nashua, which PSNH considers as a single crossing; two Line R169 crossings of the Cocheco River in Dover, which PSNH also considers as a single crossing, and Line M183 crossing of the Cocheco River in Dover.

The Line G192 crossing of the Nashua River in Dover is the one crossing not previously licensed by the Commission. PSNH has stated that it owns the land in fee on both sides of the Nashua River in the location of this crossing.

[1, 2] PSNH has attested and Staff agrees that the existing 115 vK, Line G192 crossing of the Nashua River in Nashua, and the construction of the fiber optic cables will meet or exceed the requirements of the 1993 National Electrical Safety Code. PSNH has stated that the use and enjoyment by the public of said public waters will not be diminished in any material respect as a result of the overhead line and cable crossings.

The following table summarizes information regarding these crossings:

[Graphic(s) below may extend beyond size of screen or contain distortions.]

Summary of PSNH Petition Information					
Line No.	Line Voltage	Location	NHPUC Docket	NHPUC Order	Appendix
307 (1)	345 kV	Piscataqua River Dover	D-SF6213	10,625	B
307 (1)	345 kV	Piscataqua River Portsmouth	D-SF6213	10,625	C
0-161 (1)	115 kV	Merrimack River Hooksett	DE 74-153	11,580	D
K165 (2)	115 kV	Nashua River Nashua	DE 74-224	11,691	E
G192 (2)	115 kV	Merrimack River Nashua/Hudson	DE 76-22	12,219	F
372 (2)	34.5 kV	Merrimack River Manchester	DE 76-22	12,219	G
3891 (2) (3)	34.5 kV	Nashua River Nashua	D-E6448	10,945	H
R169 (2) (3)	115 kV	Cochecho River Dover	DE 76-22	12,219	I
M183 (2)	115 kV	Cochecho River Dover	DE 76-22	12,219	J
G192 (2) (1) (2) (3)	115 kV	Nashua River Nashua	Not licensed		K
		(1) OPGW			
		(2) ADSS			
		(3) Two Crossings			

The Commission finds the fiber optic cable crossings and electric line crossings necessary for PSNH to meet the reasonable requirements of service to the public. However, the public should be offered, consistent with RSA 371:20, the opportunity to respond in support of, or in opposition to, PSNH's petition.

Based upon the foregoing, it is hereby

ORDERED *IN SI*, that PSNH is authorized, pursuant to RSA 371:17, *et seq.*, to construct and maintain electric lines and fiber optic cable over and across public waters in the Cities of Dover, Manchester, Nashua and Portsmouth, and the Towns of Hooksett and Hudson, New Hampshire, as well as associated plant depicted in Appendices A through K and other documentation on file with this Commission unless the Commission directs otherwise prior to the proposed effective date; and it is

FURTHER ORDERED, that all reconstruction hereafter performed conform to the requirements of the National Electrical Safety Code and all other applicable safety standards in existence at that time; and it is

FURTHER ORDERED, that pursuant to N.H. Admin. Rules, Puc 1601.05, PSNH shall cause a copy of this Order *Nisi* to be published once in a newspaper of general circulation in the aforementioned Towns and Cities, such publications to be no later than December 18, 1996 and to be documented by affidavit filed with this office on or before December 25, 1996; and it is

FURTHER ORDERED, that PSNH notify the aforementioned Towns and Cities of this matter by serving a copy of this order on the Town/City Clerks by First Class U.S. Mail, said notification to be verified by affidavit filed on or before December 25, 1996; and it is

FURTHER ORDERED, that all persons interested in responding to this petition be notified that they may submit their comments or file a written request for a hearing on this matter before the Commission no later than January 1, 1997; and it is

FURTHER ORDERED, that any party interested in responding to such comments or request for hearing shall do so no later than January 8, 1997; and it is

FURTHER ORDERED, that this Order *Nisi* shall be effective January 10, 1997, unless the Commission provides otherwise in a supplemental order issued prior to the effective date.

By order of the Public Utilities Commission of New Hampshire this eleventh day of December, 1996.

#### EDITOR'S APPENDIX

##### Citations in Text

[N.H.] Re Public Service Co. of New Hampshire, DE 6448, Order No. 10,945, 58 NH PUC 28, May 15, 1973. [N.H.] Re Public Service Co. of New Hampshire, DE 74-153, Order No. 11,580, 59 NH PUC 287, Sept. 30, 1974. [N.H.] Re Public Service Co. of New Hampshire, DE 74-224, Order No. 11,691, 60 NH PUC 345, Jan. 3, 1975. [N.H.] Re Public Service Co. of New Hampshire, DE 76-22, Order No. 12,219, 61 NH PUC 97, Apr. 21, 1976.

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NH.PUC\*12/16/96\*[89464]\*81 NH PUC 1026\*Consumers New Hampshire Water Company

[Go to End of 89464]

81 NH PUC 1026

### **Re Consumers New Hampshire Water Company**

DR 96-227

Order No. 22,455

New Hampshire Public Utilities Commission

December 16, 1996