

**THE STATE OF NEW HAMPSHIRE  
BEFORE THE  
PUBLIC UTILITIES COMMISSION**

PETITION OF PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE FOR LICENSE TO  
CONSTRUCT AND MAINTAIN ELECTRIC LINES OVER AND ACROSS THE  
BELLAMY RIVER IN THE CITY OF DOVER, NEW HAMPSHIRE.

TO THE PUBLIC UTILITIES COMMISSION:

Public Service Company of New Hampshire ("PSNH"), a public utility engaged in the generation, transmission, distribution and sale of electricity in the State of New Hampshire, hereby petitions the Public Utilities Commission ("Commission"), pursuant to RSA 371:17, for a license to construct and maintain electric lines over and across the public waters of the Bellamy River in Dover, New Hampshire, and in support of its petition states as follows:

1. In order to meet the reasonable requirements of service to the public, PSNH has previously constructed and currently operates and maintains a 115 kV transmission line, designated as line M-183. The M-183 line runs between PSNH's Madbury Substation in Madbury, New Hampshire, and PSNH's Dover Substation, in Dover, New Hampshire, and is an integral part of the PSNH transmission system and the overall New England transmission grid. The M-183 line, as presently constructed, crosses over the public waters of the Bellamy River at one location, situated in the City of Dover, New Hampshire. The existing overhead crossing of the M-183 line has been previously licensed by the Commission in Docket D-E3442, Order No. 6668, dated August 31, 1955.

2. In order to continue to meet the reasonable requirements of service to the public, PSNH has determined it necessary to upgrade the M-183 line conductors to increase the power transfer capability of the line. This need is a result of load growth in the seacoast area of New Hampshire. A 3.2 mile length of the M-183 line between Dover and Madbury Substations (Structures 13-55) is constructed of 477 ACSR conductor. The remainder of this line, from Madbury Substation to Structure 13, and from Structure 55 to Dover Substation, is 795 ACSR conductor. This project will remove all of the 477 ACSR and replace it with 795 ACSR between structures 13 and 55, to match the rest of the M-183 line. Between structures 13 and 55, the two existing 3#6 copperweld static wires will also be replaced with two new 7#8 alumoweld static wires. Upgrading this portion of the M-183 line will allow PSNH to continue to provide reliable electric service to its customers in this area of the State.

3. The necessary conductor upgrade of the M-183 line will utilize the existing centerline of the M-183 line and remain within the right-of-way corridor that it presently occupies. The present M-183 line structures on the east and west sides of the existing Bellamy River crossing (Structures 50 and 51), which are of H-Frame type construction, will remain and have been deemed capable of handling the increased weight and tensions of the new conductor. This was determined through both field measurements of the poles and testing to check for structural soundness.

4. Reconductoring the M-183 line will require the modification of the existing overhead crossing of the Bellamy River. The location map, design and proposed construction plan and profile drawing, and required clearance calculations for the new crossing is attached to this petition as Appendix A.

5. The required technical information provided in this petition is based on the 2007 National Electrical Safety Code (NESC) C2-2007.

6. The Bellamy River crossing will be spanned using the two existing round wood pole structures (Strs. 51 and 50). These structures will be two pole tangent structures (Type D and Type A). A detail design specification for the Type D and Type A structures are attached to this petition as FIGURE 1 and FIGURE 2 respectively. A detail of the bayonet static support bracket is included as FIGURE 1A. As shown on FIGURE 1 and FIGURE 2, the three phase wires have a separation of 14' horizontally. On the existing Type D and Type A structure the static wire is carried on the structure by a support bracket (FIGURE 1A) attached to the top of each pole, with the wire approximately 6" above the top of the structure.

7. Flood water elevations for the crossings were based on information contained in flood insurance rate maps obtained from FEMA. Table 232-1, note 18 of the NESC states that the minimum clearance over a water body must be based on a 10-yr flood elevation. Mean High Water level information for the Bellamy River was based on NGS Elevation Data for Fort Point NH located near the crossing. The chart with this information has been attached as FIGURE 3. The channel depth of the Bellamy River at the location of the crossing is based on the NOAA Navigational Chart No. 13285. The relevant portion of this chart along with the location of the crossing has been attached as FIGURE 4.

8. Based on Table 232-1.7 of the NESC, for open supply conductors 750 V to 22 kV to ground, the minimum clearance to the water surface during normal flood level (10-yr flood for the purpose of this petition) is 20.5' (for waters less than 20 acres), 28.5' (for waters 20-200 acres), and 34.5' (for waters 200-2000 acres). NESC Rule 232.C.1.a states that an additional clearance of 1.6-ft or  $[(69.7 \text{ kV}-22 \text{ kV}) \times 0.4]$  is needed for 115 kV, which brings the total required minimum clearance to 22.1', 30.1', and 36.1', respectively. For overhead shield/surge protection wires that meet NESC Rule 230.E.1, the minimum clearance to the water surface at the normal flood level is 17.5', 25.5', and 31.5' respectively for those water bodies. As the static wires are located above the phase wires at all crossings, this NESC minimum clearance requirement will always be met. Based on Table 232-1.2 of the NESC, for open supply conductors 750 V to 22kV to ground, the minimum clearance to roads subject to truck traffic is 18.5'. With the additional 1.6' of clearance required for 115 kV, the total required clearance to roads subject to truck traffic is 20.1'.

9. There is currently an obstruction that restricts access to the Bellamy River and supersedes the NESC clearance requirements, which are based on open water areas where sailboats may freely travel. The Scammel Bridge located at the mouth of the Bellamy River has a clearance of 11.8' above the water line at mean high water conditions. This low clearance limits the height of any vessel that may pass under the bridge under most high tide

periods. Along with the bridge obstruction, the channel depth at the location of the crossing is approximately four feet deep. These two limits impact the type and size of vessel that may enter and travel down the Bellamy River. The US Army Corp of Engineers, in the attached modification of Corp Permit No. 195400204, dated June 12, 2009 (FIGURE 5), has required overhead transmission lines to remain at least 20' above the elevation of the Scammel Bridge under maximum sag conditions. This height was chosen based on the height restrictions of the bridge and channel depth and the corresponding largest vessel that could reasonably navigate this waterway. A total of 36.6' clearance under maximum sag conditions has been provided to exceed the Corp 20' requirement by 16.6'. With the clearance requirement of the Army Corp of Engineers met, the crossing fulfills the requirements of the NESC based on Notes 20 and 21 of Table 232-1.

10. Three phase wires and two static wires (also known as shield wires) will span the crossing. All three 795 ACSR 26/7 phase conductors and the two 7#8 alumoweld shield wires will be sagged using the NESC Heavy Loading (0 degrees F., 4 pounds per square foot wind loading, ½-inch radial ice) sag charts upon installation in the field. The 795 ACSR conductors will be sagged using a maximum tension of 5,000 pounds from structure 55 to 48. The 7#8 shield wire will be sagged using a maximum tension of 3,600 pounds (unless stated otherwise in the Appendices to this petition). These tensions have been chosen to match the existing clearances as closely as possible to the current conductor while staying within the allowable loads of the existing structures. The sags and clearances to the water surface for each of the proposed crossings are provided in the attached Appendices.

11. There will be no new crossing structures that need to be set inside of jurisdictional wetlands or other areas that require New Hampshire Department of Environmental Services (NHDES) permitting in connection with construction of this crossing.

12. The proposed crossings have been designed and will be constructed, maintained and operated by PSNH in accordance with the applicable requirements of the NESC.

13. PSNH owns permanent easements, not less than a minimum of 135' wide, for its lines and facilities on both sides of the Bellamy River at the proposed crossing location. This crossing will be constructed within the limits of those easements.

14. PSNH submits that the license petitioned for herein may be exercised without substantially affecting the rights of the public in the public waters of the Bellamy River. Minimum safe line clearances above all water surfaces and affected shorelines will be maintained at all times. The use and enjoyment by the public will not be diminished in any material respect as a result of the overhead line crossings.

WHEREFORE, PSNH respectfully requests that the Commission:

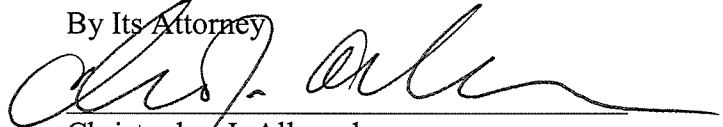
- a. Find that the license petitioned for herein may be exercised without substantially affecting the public rights in the public waters which are the subject of this petition;

- b. Grant PSNH a license to construct and maintain electric lines over and across the public waters of the Bellamy River as specified in the petition; and
- c. Issue an Order Nisi and orders for its publication.

Dated at Manchester this 2nd day of JULY, 2009.

Respectfully submitted,

PUBLIC SERVICE COMPANY OF NEW  
HAMPSHIRE  
By Its Attorney



Christopher J. Allwarden  
Senior Counsel, Legal Department  
PSNH Energy Park  
780 North Commercial Street  
Manchester, NH 03101  
(603) 634-2459

## **APPENDIX A**

### **M-183 BELLAMY RIVER DOVER, NH**

1. The location of this crossing is shown on the attached location map marked as EXHIBIT 1.

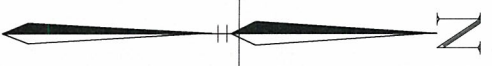
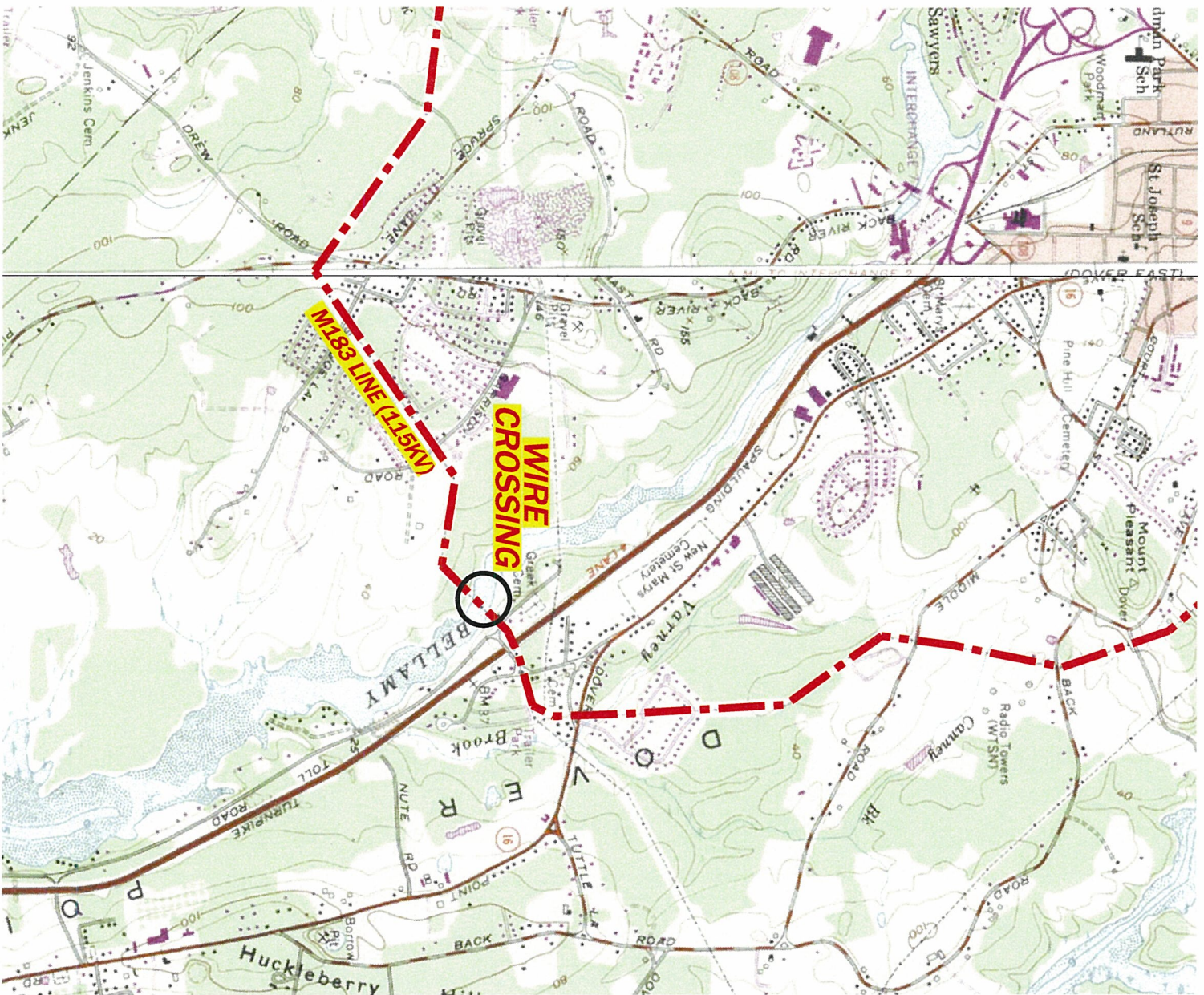
2. The design and proposed construction of this crossing is shown on the attached PSNH Transmission Drawing entitled "M-183 LINE – 115 KV, BETWEEN STRUCTURES 50 & 51, BELLAMY RIVER WATER CROSSING, DOVER, NEW HAMPSHIRE" (Drawing No. D-7649-17) marked as EXHIBIT 2.

3. Line M-183 will cross the Bellamy River on two pole, H-frame structures. Structure 50 (west) will be an existing 50' Type A and Structure 51 (east) will remain a 60' Type D, wood tangent structure with a span of 545.0'. A detail of these structures has been provided with the petition as FIGURE 1, FIGURE 1A and FIGURE 2. As shown on FIGURE 1 and 2, all three phase wires have an approximate separation at the structure of 7' horizontally. On the Type D and Type A structures the static wire is carried on a steel support bracket (FIGURE 1A) above the pole with the wire 8' above and 7' laterally from the conductor. Minimum distances to ground for truck traffic of 20.1' per the NESC have been met as 30.3' of ground clearance is provided at this crossing.

4. Flood water elevations for the Bellamy River were based on information contained in flood insurance rate maps provided by FEMA. The mean high water level of the Bellamy River is based on the NGS Elevation Data for Fort Point, NH which is located near the water crossing. The 10-year flood elevation for this portion of the River is approximately 24'. The mean high water level at this location is 4.75'. These elevations are based on the National Geodetic Vertical Datum of 1929, which is the same datum as the line design. The area of the crossing, as required by the NESC (Table 232-1.7, Note 19), is approximately 66.0 acres. This is based on the total area of the River for a 1-mile stretch in either direction of the crossing (545' x 5,280')/43,560 sf/ac = 66.0 ac). As stated in paragraph 8 of the petition, the minimum required 115 kV conductor clearances for water surface areas between 20 and 200 acres is 30.1'. This clearance requirement is superseded by the attached Army Corp of Engineers' permit according to NESC Table 232-1 Note 21. Due to access restrictions set forth in paragraph 9 of this petition, a clearance of 20' above the elevation of the Scammel Bridge is required based on the type of vessel that could reasonable access this crossing. This 20' requirement has been exceeded by 16.6 ft as shown on EXHIBIT 2.

5. The sags and clearances to the water surface during a Mean High Water level event for this crossing are as follows;

- Shield wires – Due to the fact that the static wires are located above the phase wires, the clearance to the water surface will always exceed the minimum required NESC distance.
- NESC Heavy Loading - The maximum conductor sag for this weather case will be 18.6' with a clearance to the water surface of 56.4'.
- 30 degrees F - The maximum conductor sag for this weather case will be 18' with a clearance to the water surface of 57'.
- 285 degrees F – Max operating temperature (Phase wires) based on PSNH transmission standards - The maximum conductor sag for this weather case will be 26' with a clearance to the water surface of 48.4'. This condition produces the greatest sag in the phase wires and therefore the minimum clearance to the water surface. This design will exceed the minimum clearance requirement of 20' above the elevation of the Scammel Bridge by 16.6' under temporary emergency conditions during a mean high water event.
- Minimum phase to static wire clearance – The weather case that would produce the minimum clearance between the phase wires and the shield wires would be a combination of winter weather factors based on Rule 250D. First, the phase wires would have to be at 30 deg. F just after an ice storm and would have just dropped their ice. The static wire would also be at 30 deg. F and would still be iced with 1" of radial ice. Under these conditions the clearance would be 9.5' vertically and 7.0' horizontally from the shield wires to the closest phase wire. Based on Section 235.C.2.a.1 and Table 235-6 section 2.a of the NESC, the minimum clearance required is 57.4", or approximately 4'-10" [ $29'' + (121 \text{ kV} - 50 \text{ kV}) \times 0.4''$ ].



**EXHIBIT 1**

NO1	REVISION	DATE	DRAWN	CHECK	APPR

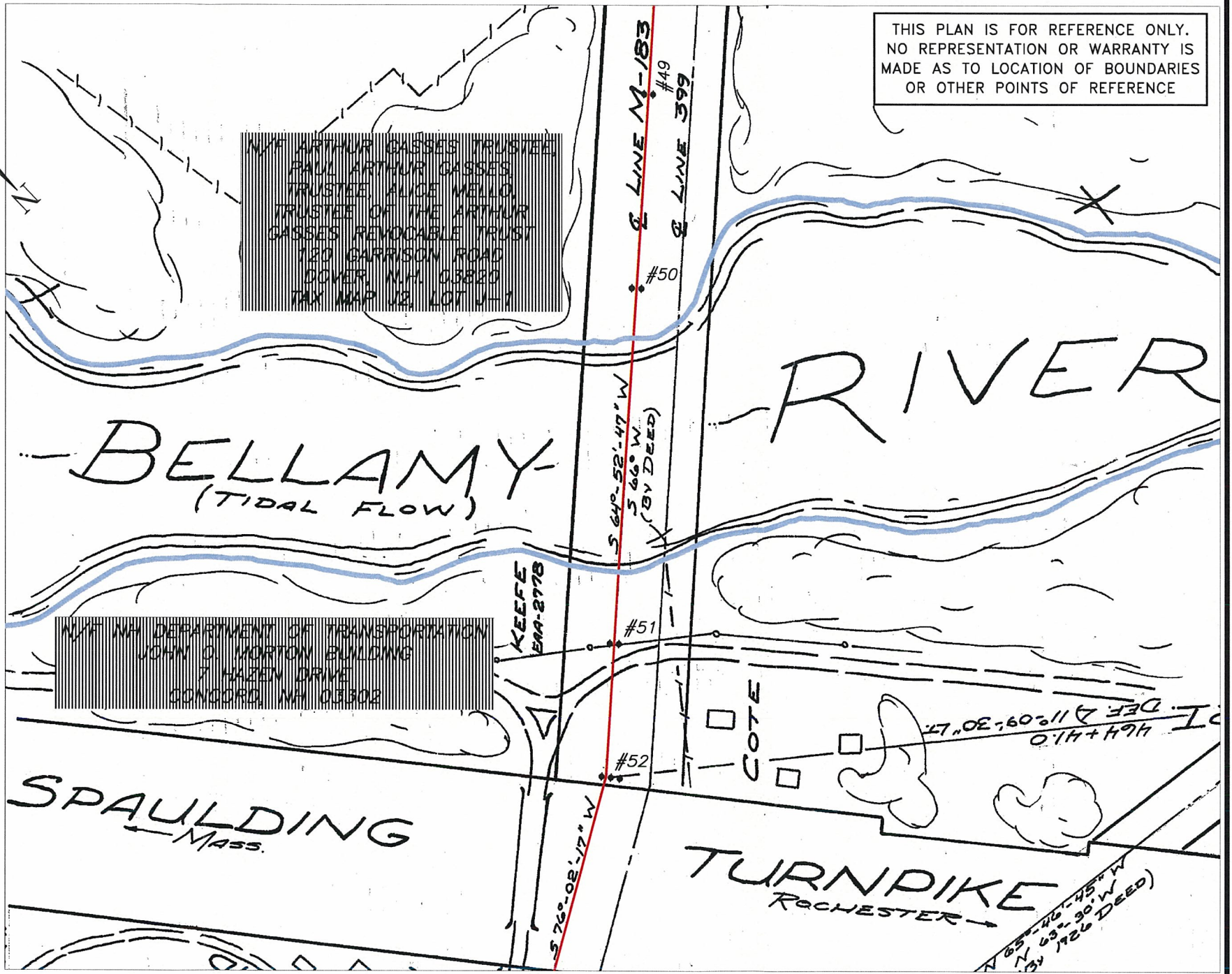
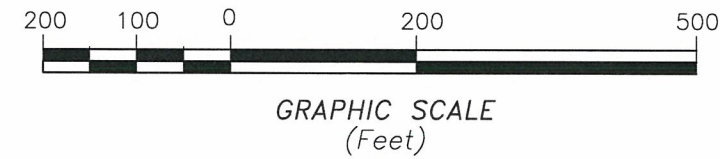
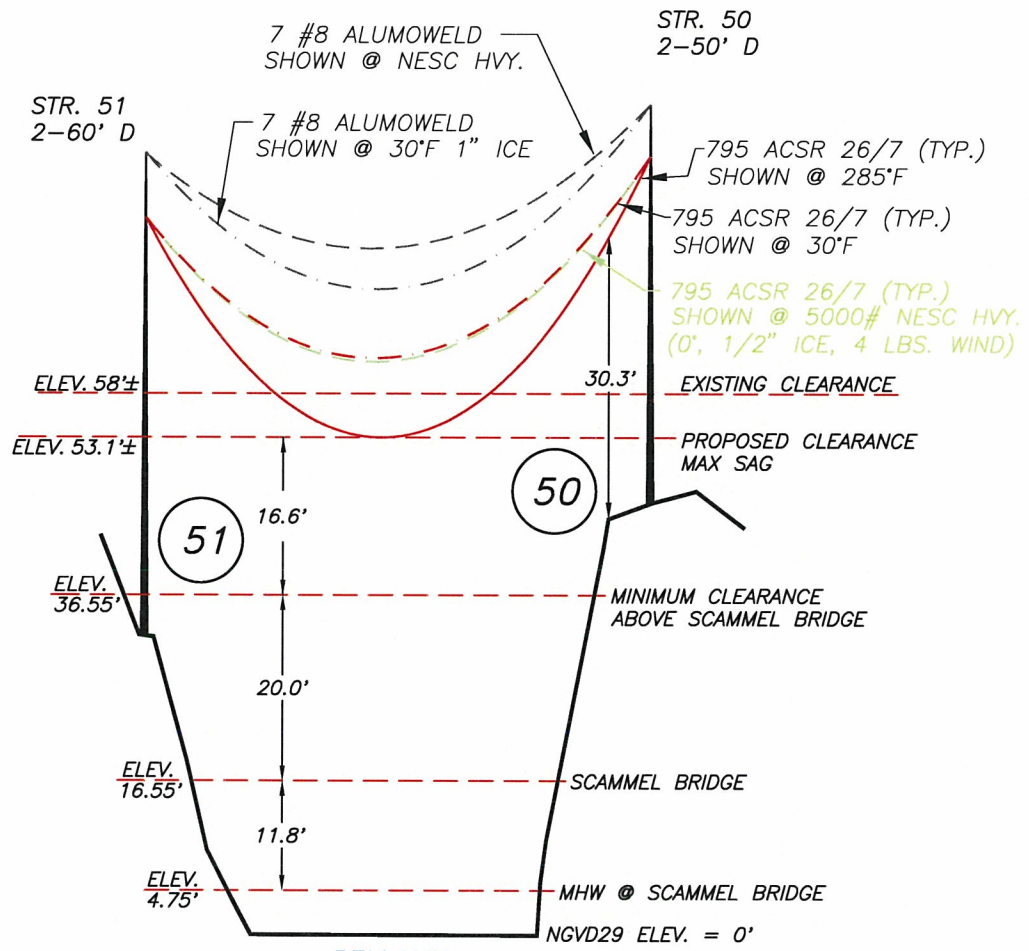
DRAWN	JWH
DESIGNED	JRS
CHECKED	DSD
APPROVED	DSD

Public Service  
of New Hampshire

**LOCATION PLAN**  
**M183 LINE (115 KV)**  
**BELLAMY RIVER WATER CROSSING**  
**DOVER, NEW HAMPSHIRE**

SCALE 1" = 2000'  
DATE 2/5/2009  
SHEET 1 OF 1  
DRAWING NO. D-7649-17A

THIS PLAN IS FOR REFERENCE ONLY.  
NO REPRESENTATION OR WARRANTY IS  
MADE AS TO LOCATION OF BOUNDARIES  
OR OTHER POINTS OF REFERENCE



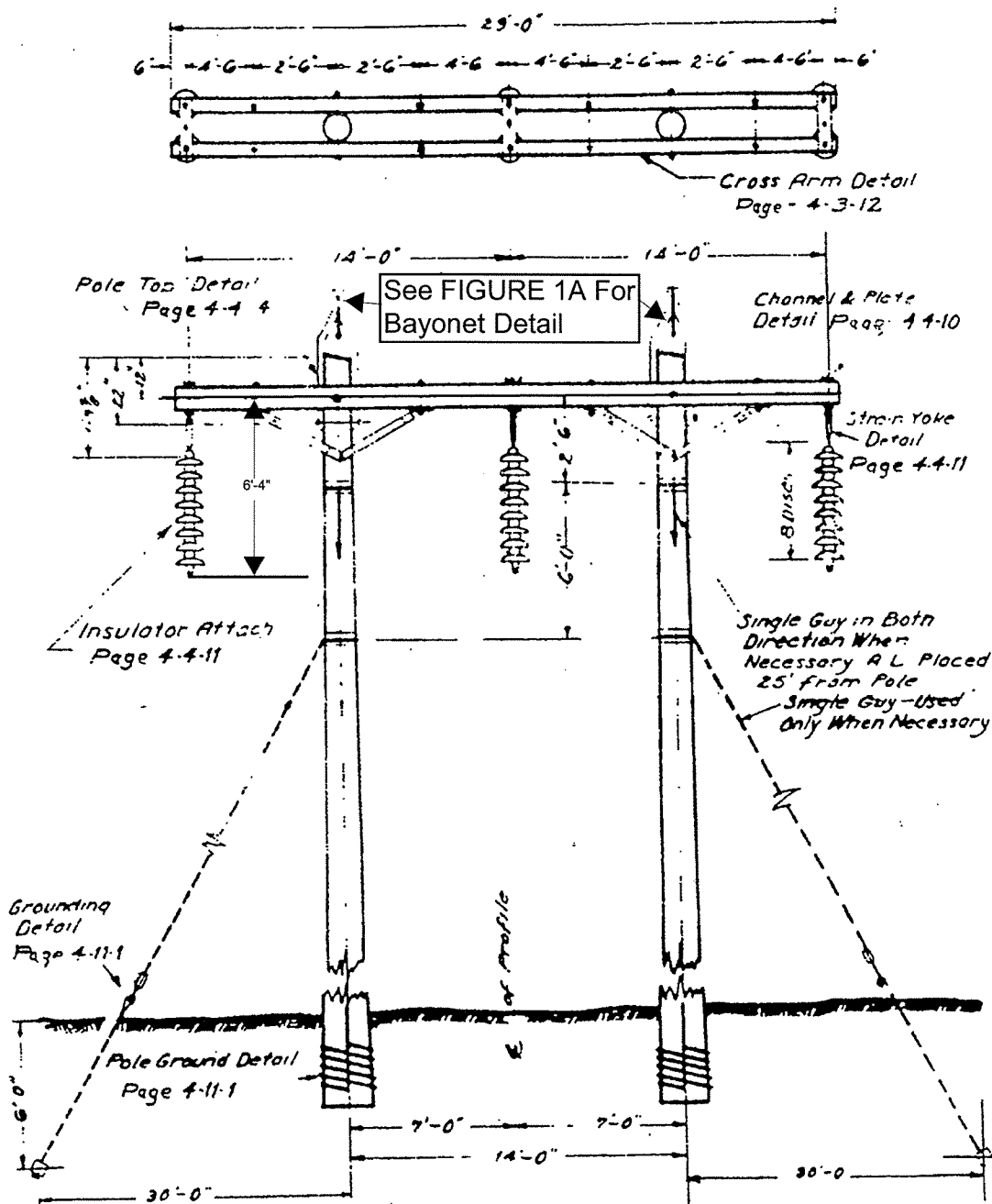
PLAN VIEW  
SCALE: 1"=200'

EXHIBIT 2

		Transmission Business	
DRAWN JWH DESIGNED JRS CHECKED DSD APPROVED DSD	<b>M183 LINE (115 KV) BETWEEN STRUCTURES 50 &amp; 51 BELLAMY RIVER WATER CROSSING DOVER, NEW HAMPSHIRE</b>		
SCALE 1"=200'	DATE 5/11/2009	SHEET 1 OF 1	DRAWING NO. D-7649-17
NO.	REVISION	DATE	DRWN
			CHCK
			APPR



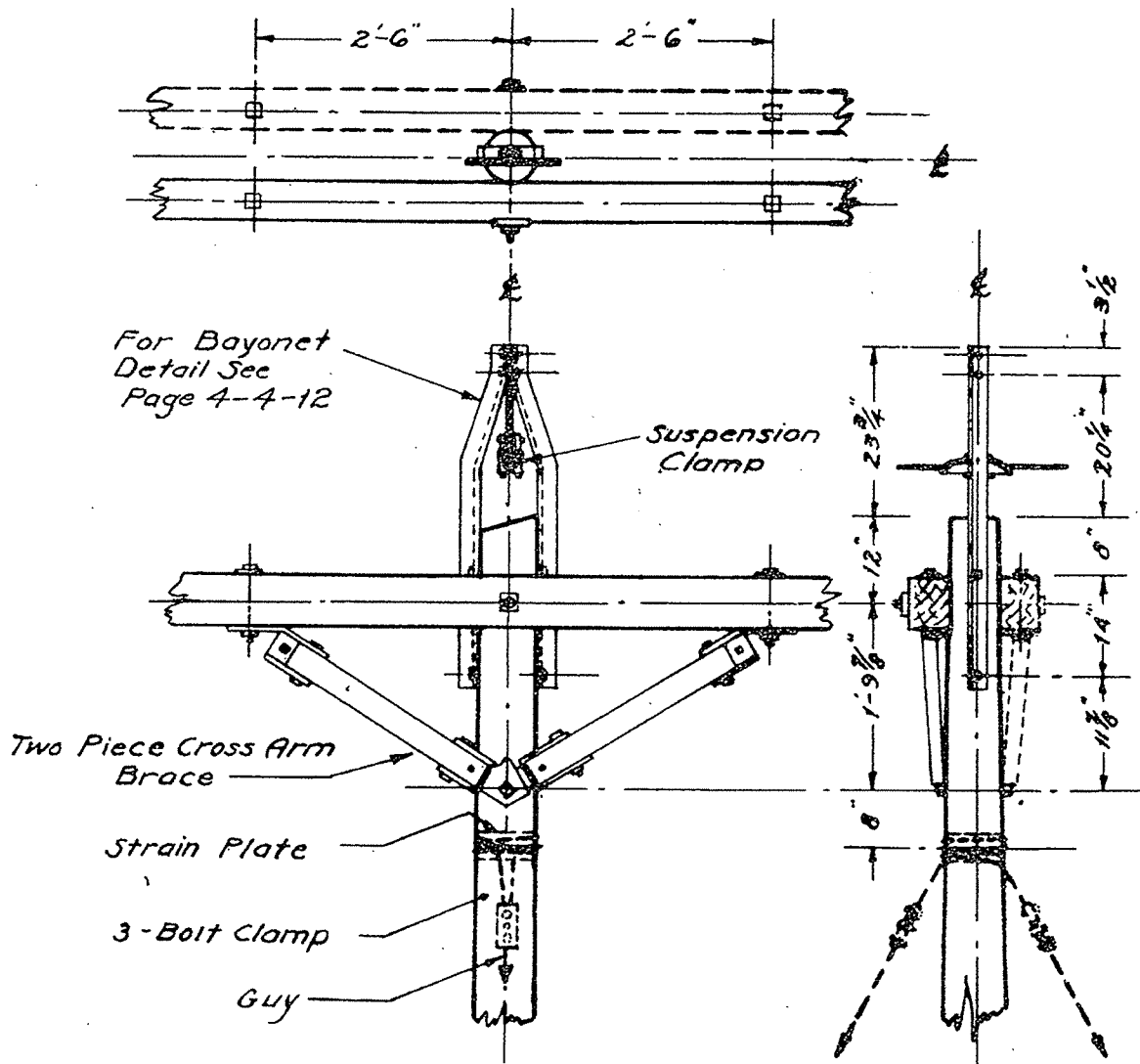
### TYPE D STRUCTURE HIGHWAY & RAILROAD CROSSINGS



*For Method of Pole Guying  
See Page 4-10-15  
For Method of Pole & Guy  
Grounding See Page 4-11-2*

## FIGURE 1

# POLE TOP DETAILS TYPE A&D STRUCTURES



NOTE  
1. Material Shown With Dashed Line Is Used Only On Type D Structure.

**FIGURE 1A**

# TYPE A TANGENT STRUCTURE

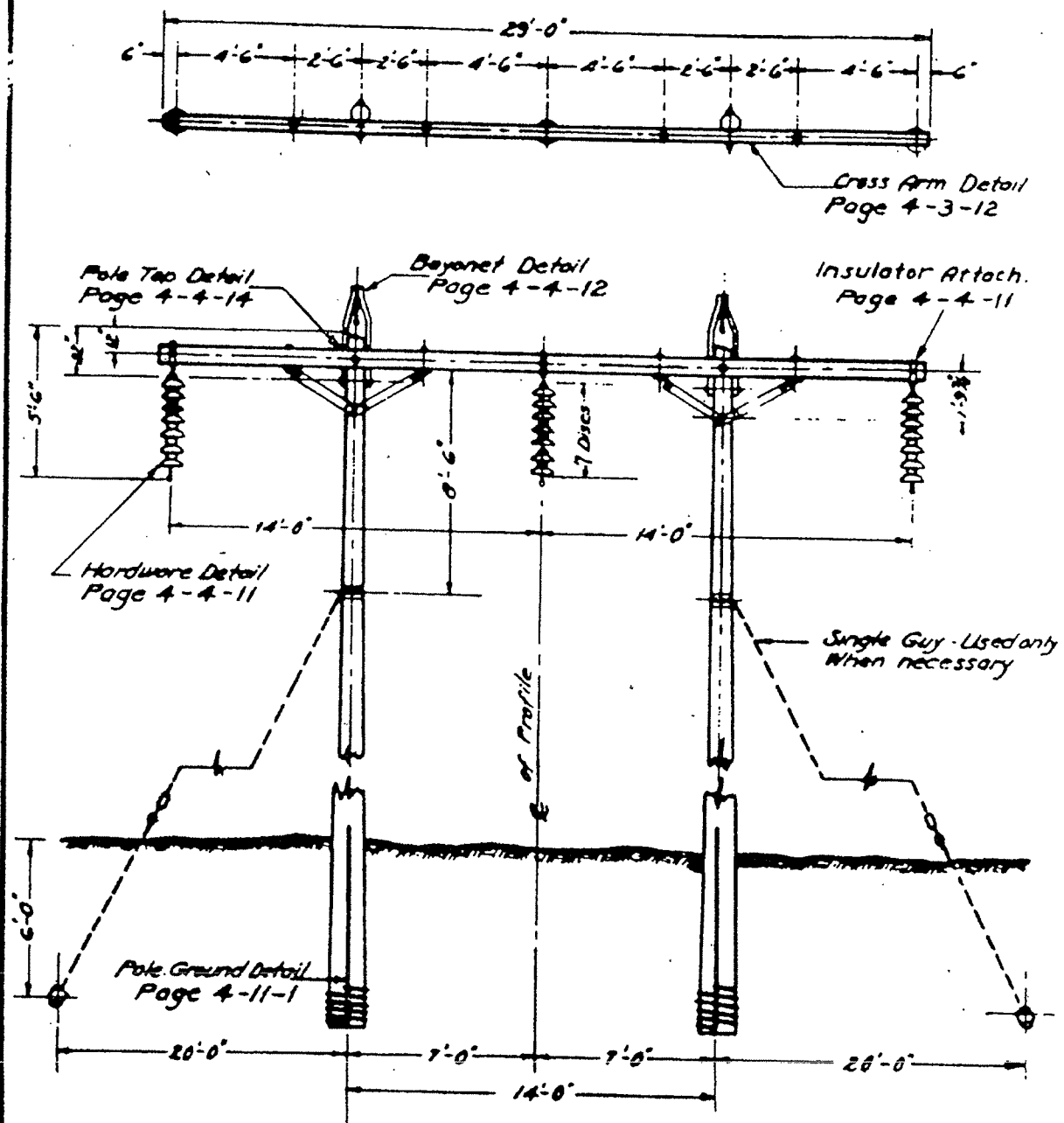


FIGURE 2



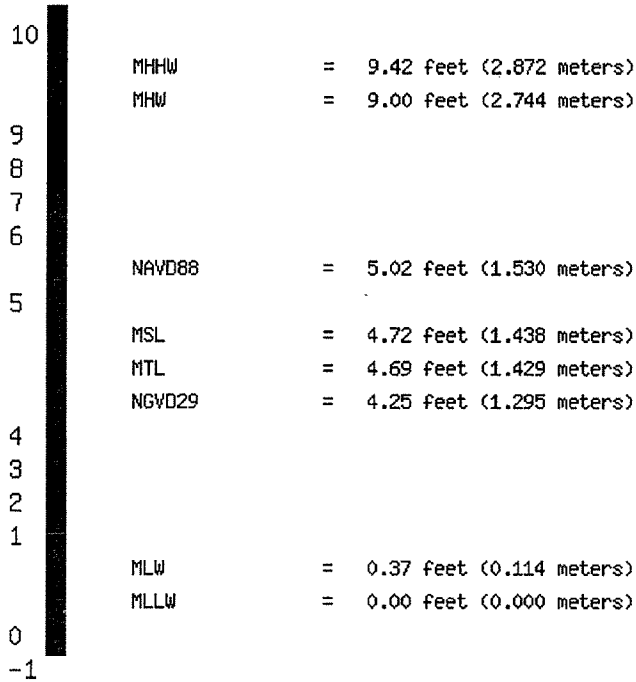
115 KV  
TRANSMISSION STANDARDS

ISSUE	DATE

ORIGINAL

Elevation Information

PID: OC0427  
 VM: 17345  
 Station ID: 8423898  
 Epoch: 1983-2001  
 Date: Mon Apr 20 14:51:02 EDT 2009



The NAVD 88 and the NGVD 29 elevations related to MLLW were computed from Bench Mark, 842 3898 TIDAL 2, at the station.

Displayed tidal datums are Mean Higher High Water(MHHW), Mean High Water (MHW), Mean Tide Level(MTL), Mean Sea Level (MSL), Mean Low Water(MLW), and Mean Lower Low Water(MLLW) referenced on 1983-2001 Epoch.

**FIGURE 3**



DEPARTMENT OF THE ARMY  
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS  
696 VIRGINIA ROAD  
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO:  
ATTENTION OF:

June 12, 2009

**FIGURE 5**

Regulatory Division  
Corps Permit No. 195400204  
File No. NAE-2009-01294

Public Service of New Hampshire  
Attn: Ms. Laura V. Games  
780 North Commercial Street  
P.O. Box 330  
Manchester, New Hampshire 03105-0330

Dear Ms. Games:

In accordance with your recent request, Department of the Army Permit No. 195400204, dated September 14, 1954, a copy of which is enclosed, is hereby modified to change the minimum clearance of the 115-kilovolt (kV) M-183 (Dover to Madbury) aerial transmission line crossing of the Bellamy River in Dover, New Hampshire from 56 feet above high water, as shown on the permit drawing dated July 26, 1954, to 32 feet above mean high water in accordance with the provisions of Corps of Engineers regulations at 33 CFR 322.5(i)(2). This aerial crossing is located at approximate geographic coordinates 43.16352 degrees north latitude and 70.85739 degrees west longitude on the 1983 North American Datum (NAD83). This crossing is located approximately 65 feet downstream of PSNH's 33-kV aerial transmission line crossing of the Bellamy River which was authorized by Department of the Army Permit No. 195400220, dated September 29, 1954. The minimum clearance of that line is 52 feet above high water, as shown on the permit drawing dated August 26, 1954 and as noted on NOAA's Atlantic Coast Chart No. 13285. The location and profile of the M-183 115-kV line are shown on the enclosed two permit drawings entitled "M183 Line (115 KV) Between Structures 50 & 51, Bellamy River Water Crossing, Dover, New Hampshire" dated 5/11/2009.

The following special conditions are hereby added to this Department of the Army permit:

1. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this

requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with Special Condition No. 3 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided below and forward an executed copy of this letter to this office to validate the transfer of this authorization.
4. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.
5. Any time a change is made in this aerial transmission line crossing, information on the location and the actual minimum clearance of the crossing shall be submitted within 30 days of the completion of work to the Corps of Engineers at the address indicated below and to the National Oceanic and Atmospheric Administration (NOAA), at the following address: National Oceanic and Atmospheric Administration (NOAA), Nautical Data Branch, N/CS261, 1315 East West Highway, Silver Spring, MD 20910. The submittals shall reference "Department of the Army Permit No. 195400204, File No. NAE-2009-01294."
6. National Ocean Service (NOS) has been notified of this authorization. You must notify NOS and this office in writing, at least two weeks before you begin work and upon completion of the activity authorized by this permit. Your notification of completion must include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). Notifications to NOS will be sent to the following address: The Director, National Ocean Service (N/CG 222), Rockville, Maryland 20852.
7. The terms and conditions of this permit neither supersede nor are superseded by the terms and conditions of other local, state or federal authorizations.
8. Except where stated otherwise, reports, drawings, correspondence and any other submittals required by this permit shall be marked with the words "Permit No. 195400204, File No. NAE-2009-01294" and shall be addressed to "Policy, Analysis and Technical Support Branch, Regulatory Division, U.S. Army Corps of Engineers, 696 Virginia Road, Concord, MA 01742-2751." Documents which are not marked and addressed in this manner may not reach their intended destination and do not comply with the requirements of this permit.

Limits of this authorization:

- a. This permit does not obviate the need to obtain other federal, state, or local authorizations required by law.
- b. This permit does not grant any property rights or exclusive privileges.

- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed federal project.

Limits of Federal Liability:

In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See "Reliance on Applicant's Data," above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR

209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

Permit Transfer:

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

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Transferee

Date

All other terms and conditions of the original authorization remain in full force and effect.

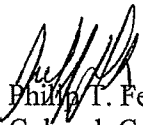
Concerning your letter of April 2, 2009 requesting this permit modification, our processing of this request has found that some clarifications are needed. The 52-foot clearance noted on NOAA Atlantic Coast Chart No. 13285 refers to the 33-kV line mentioned above, not the 115-kV line. The clearance stated on the chart is the distance above mean high water. As noted in e-mail and telephone correspondence over the past two months, there was some confusion about the datum for the elevations stated in your letter. The minimum clearance required by the Corps of Engineers regulations cited above is 20 feet above the clearance the U.S. Coast Guard requires for a fixed bridge across the waterway. The clearance for the Route 4 (Scammel) Bridge across the Bellamy River downstream of the power-line crossing is 11.8 feet above mean high water. That is a fixed bridge. It appears that the minimum clearance required by the New Hampshire Public Utilities Commission (NHPUC), which your letter indicated is 33 feet above the elevation of the 10-year flood, is higher than that required by Corps regulations because the elevation of the 10-year flood is higher than that of mean high water and the distance above the respective reference points is greater to satisfy NHPUC requirements than it is to satisfy those of the Corps.

We continually strive to improve our customer service. In order for us to better serve you, we would appreciate your completing our Customer Service Survey located at [http://www.nae.usace.army.mil/reg/Customer\\_Service\\_Survey.pdf](http://www.nae.usace.army.mil/reg/Customer_Service_Survey.pdf).



If you have questions concerning this, please contact Paul F. Howard, P.E. of my staff at (978) 318-8674, (978) 318-8335/8338, (800) 343-4789, or, if calling from within Massachusetts, (800) 362-4367.

Sincerely,

  
Philip T. Feir  
Colonel, Corps of Engineers  
District Engineer  
*For*

Enclosures

Copies Furnished:

The State of New Hampshire, Department of Environmental Services, Wetlands Bureau, Attn:  
Collis Adams, P.O. Box 95, Hazen Drive, Concord, New Hampshire 03302-0095  
National Marine Fisheries Service, Attn: Mr. Michael Johnson, One Blackburn Drive,  
Gloucester, Massachusetts 01930  
National Oceanic and Atmospheric Administration (NOAA), Nautical Data Branch, N/CS261,  
1315 East West Highway, Silver Spring, MD 20910  
New Hampshire Coastal Program, Attn: Mr. Christian Williams, Suite 200, 50 International  
Drive, Portsmouth, New Hampshire 03801  
Pease International, Ports and Harbors, Attn: Ms. Tracy R. Shattuck, Chief Harbor Master, 555  
Market Street, Suite 1, Portsmouth, New Hampshire 03801

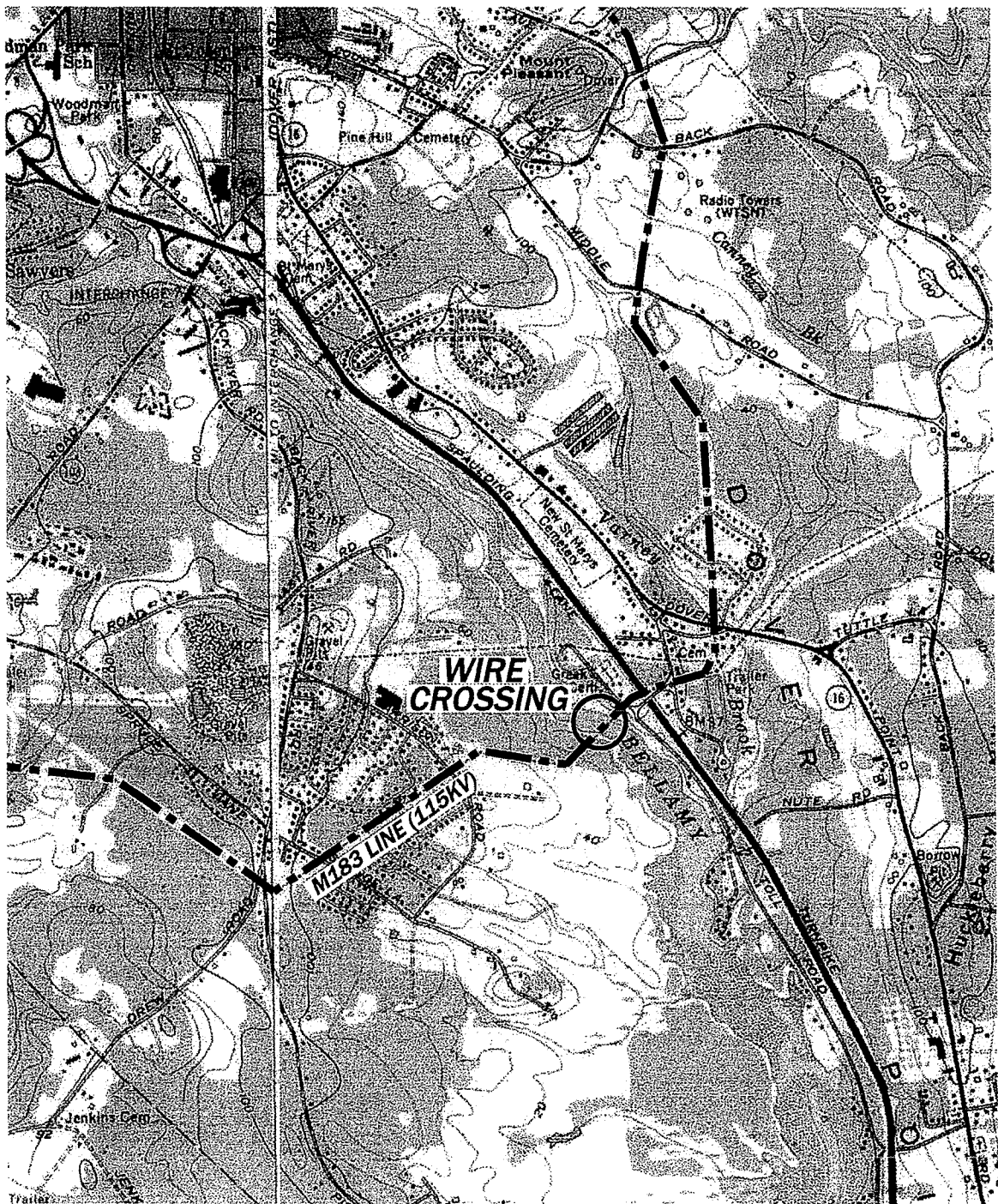
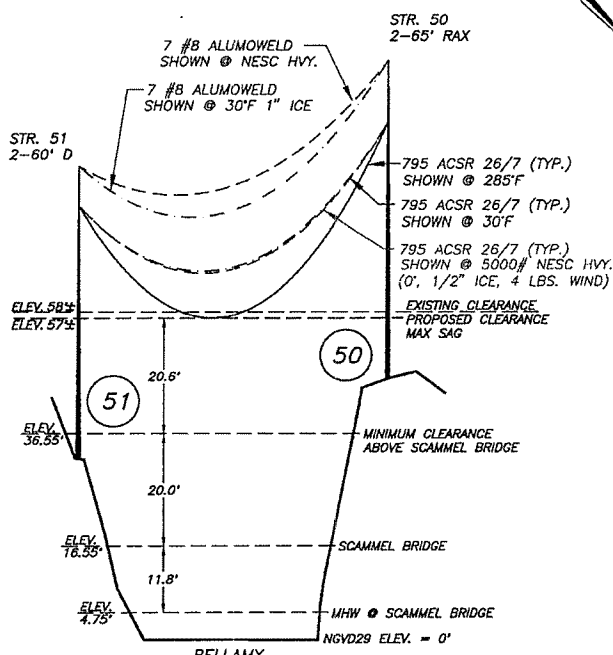


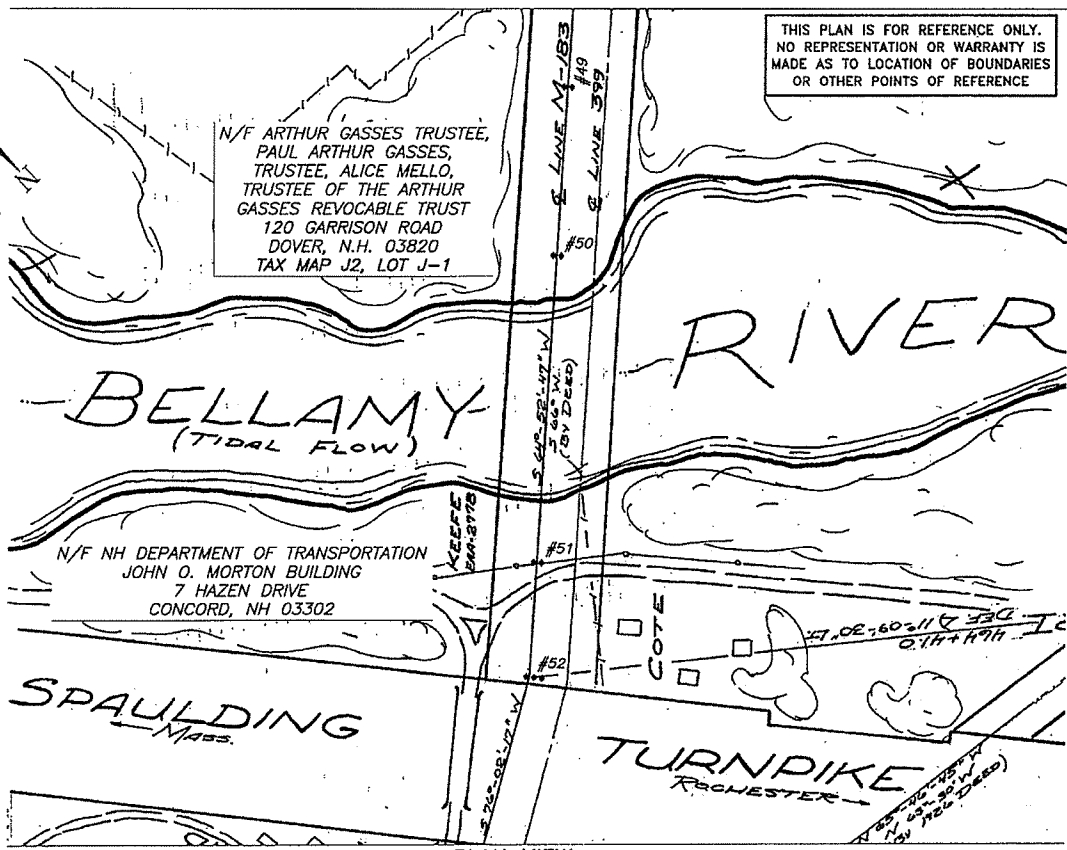
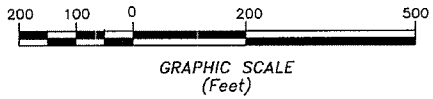
EXHIBIT 1

						DRAWN	Public Service	Transmission		
						JWH	of New Hampshire	Business		
						DESIGNED	LOCATION PLAN			
						JRS	M183 LINE (115 KV)			
						CHECKED	BELLAMY RIVER WATER CROSSING			
						DSD	DOVER, NEW HAMPSHIRE			
						APPROVED	SCALE	DATE	SHEET	DRAWING NO.
						DSD	1" = 2000'	5/11/2009	1 OF 1	D-7649-17A

THIS PLAN IS FOR REFERENCE ONLY.  
NO REPRESENTATION OR WARRANTY IS  
MADE AS TO LOCATION OF BOUNDARIES  
OR OTHER POINTS OF REFERENCE



**PROFILE**  
SCALE: 1"=200' HORIZ.  
20' VERT.



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

**EXHIBIT 2**

Public Service of New Hampshire		Transmission Business	
DRAWN JWH		M183 LINE (115 KV) BETWEEN STRUCTURES 50 & 51 <b>BELLAMY RIVER WATER CROSSING</b> DOVER, NEW HAMPSHIRE	
DESIGNED JRS		SCALE 1"=200'	DATE 5/11/2009
CHECKED DSD		SHEET 1 of 1	DRAWING NO. D-7649-17
APPROVED DSD			
NO.	REVISION	DATE	DRAWN   CHECK   APPR.

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DEPARTMENT OF THE ARMY

H.E.D. FILE

JTH 19

NOTE.—It is to be understood that this instrument does not give any property rights either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining State assent to the work authorized. It MERELY EXPRESSES THE ASSENT OF THE FEDERAL GOVERNMENT SO FAR AS CONCERNS THE PUBLIC RIGHTS OF NAVIGATION. (See *Cummings v. Chicago*, 188 U. S., 410.)

10-12165-2

54-204

PERMIT

EDMP

NEW ENGLAND DIVISION, Corps of Engineers.  
857 Commonwealth Avenue, Boston 15, Mass.  
14 SEPTEMBER 1954

Public Service Company of New Hampshire  
Manchester  
New Hampshire

Gentlemen:

Referring to written request dated 28 July 1954.

I have to inform you that, upon the recommendation of the Chief of Engineers, and under the provisions of Section 10 of the Act of Congress approved March 3, 1899, entitled "An act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," you are hereby authorized by the Secretary of the Army.

to erect an overhead power transmission line consisting of five (5) wires

(Here describe the proposed structure or work.)

(3 transmission and 2 ground)

across Bellamy River  
in

(Here to be named the river, harbor, or waterway concerned.)

at Dover, New Hampshire, about 2.5 miles from the entrance to the river.

(Here to be named the nearest well-known locality—preferably a town or city—and the distance in miles and tenths from some definite point in the same, stating whether above or below or giving direction by points of compass.)

in accordance with the plans shown on the drawing attached hereto entitled:  
(Or drawings; give file number or other definite identification marks.)

"Proposed Overhead Wire Crossing for 115 KV. Transmission Line Over Bellamy River  
at Dover, N.H." Dated: July 26, 1954

subject to the following conditions:

800.6(Public Service Co. of NH-Bellamy River)

170660

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(a) That the work shall be subject to the supervision and approval of the <sup>Division</sup> District Engineer, Corps of Engineers, in charge of the locality, who may temporarily suspend the work at any time, if in his judgment the interests of navigation so require.

(b) That any material dredged in the prosecution of the work herein authorized shall be removed evenly and no large refuse piles, ridges across the bed of the waterway, or deep holes that may have a tendency to cause injury to navigable channels or to the banks of the waterway shall be left. If any pipe, wire, or cable hereby authorized is laid in a trench, the formation of permanent ridges across the bed of the waterway shall be avoided and the back filling shall be so done as not to increase the cost of future dredging for navigation. Any material to be deposited or dumped under this authorization, either in the waterway or on shore above high-water mark, shall be deposited or dumped at the locality shown on the drawing hereto attached, and, if so prescribed thereon, within or behind a good and substantial bulkhead or bulkheads, such as will prevent escape of the material in the waterway. If the material is to be deposited in the harbor of New York, or in its adjacent or tributary waters, or in Long Island Sound, a permit therefor must be previously obtained from the Supervisor of New York Harbor, Whitehall Building, New York City.

(c) That there shall be no unreasonable interference with navigation by the work herein authorized.

(d) That if inspections or any other operations by the United States are necessary in the interest of navigation, all expenses connected therewith shall be borne by the permittee.

(e) That no attempt shall be made by the permittee or the owner to forbid the full and free use by the public of all navigable waters at or adjacent to the work or structure.

(f) That if future operations by the United States require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army, it shall cause unreasonable obstruction to the free navigation of said water, the owner will be required upon due notice from the Secretary of the Army, to remove or alter the structural work or obstructions caused thereby without expense to the United States, so as to render navigation reasonably free, easy, and unobstructed; and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners shall, without expense to the United States, and to such extent and in such time and manner as the Secretary of the Army may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable capacity of the watercourse. No claim shall be made against the United States on account of any such removal or alteration.

(g) That the United States shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the Government for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

(h) That if the display of lights and signals on any work hereby authorized is not otherwise provided for by law, such lights and signals as may be prescribed by the U. S. Coast Guard, shall be installed and maintained by and at the expense of the owner.

(i) That the permittee shall notify the said <sup>division</sup> District Engineer at what time the work will be commenced, and as far in advance of the time of commencement as the said <sup>division</sup> District Engineer may specify, and shall also notify him promptly, in writing, of the commencement of work, suspension of work, if for a period of more than one week, resumption of work, and its completion.

(j) That if the structure or work herein authorized is not completed on or before the 31st day of DECEMBER, 1957, this permit, if not previously revoked or specifically extended, shall cease and be null and void.

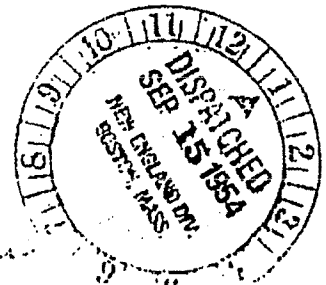
(k) That the permittee shall promptly comply with any future regulations or instructions affecting the work hereby authorized if and when issued in accordance with law by any Department of the Federal Government for the aid or protection of aerial navigation.

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By authority of the Secretary of the Army:

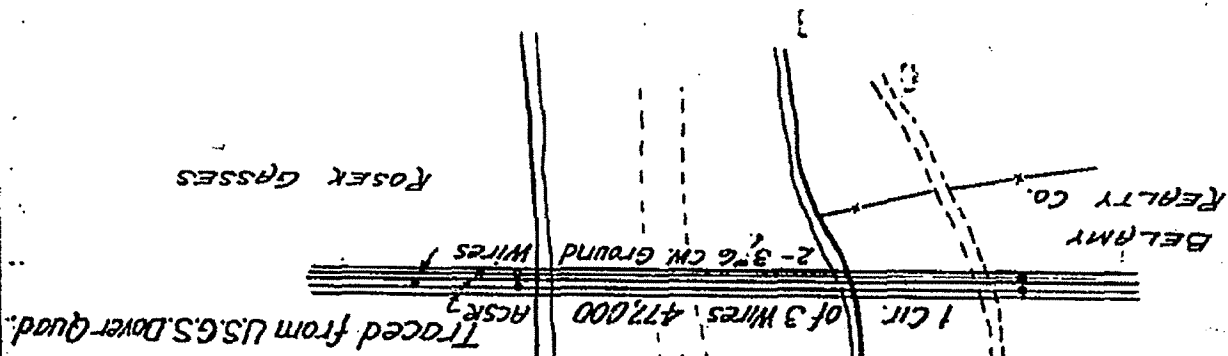
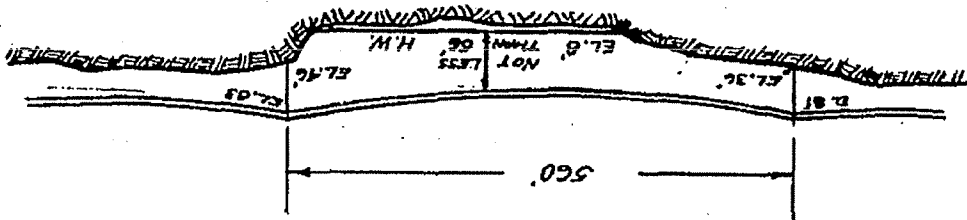
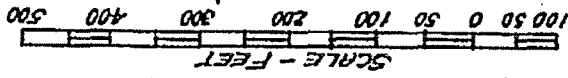
Plan attached

*R. W. Pearson*  
R. W. PEARSON  
Colonel, Corps of Engineers  
Division Engineer



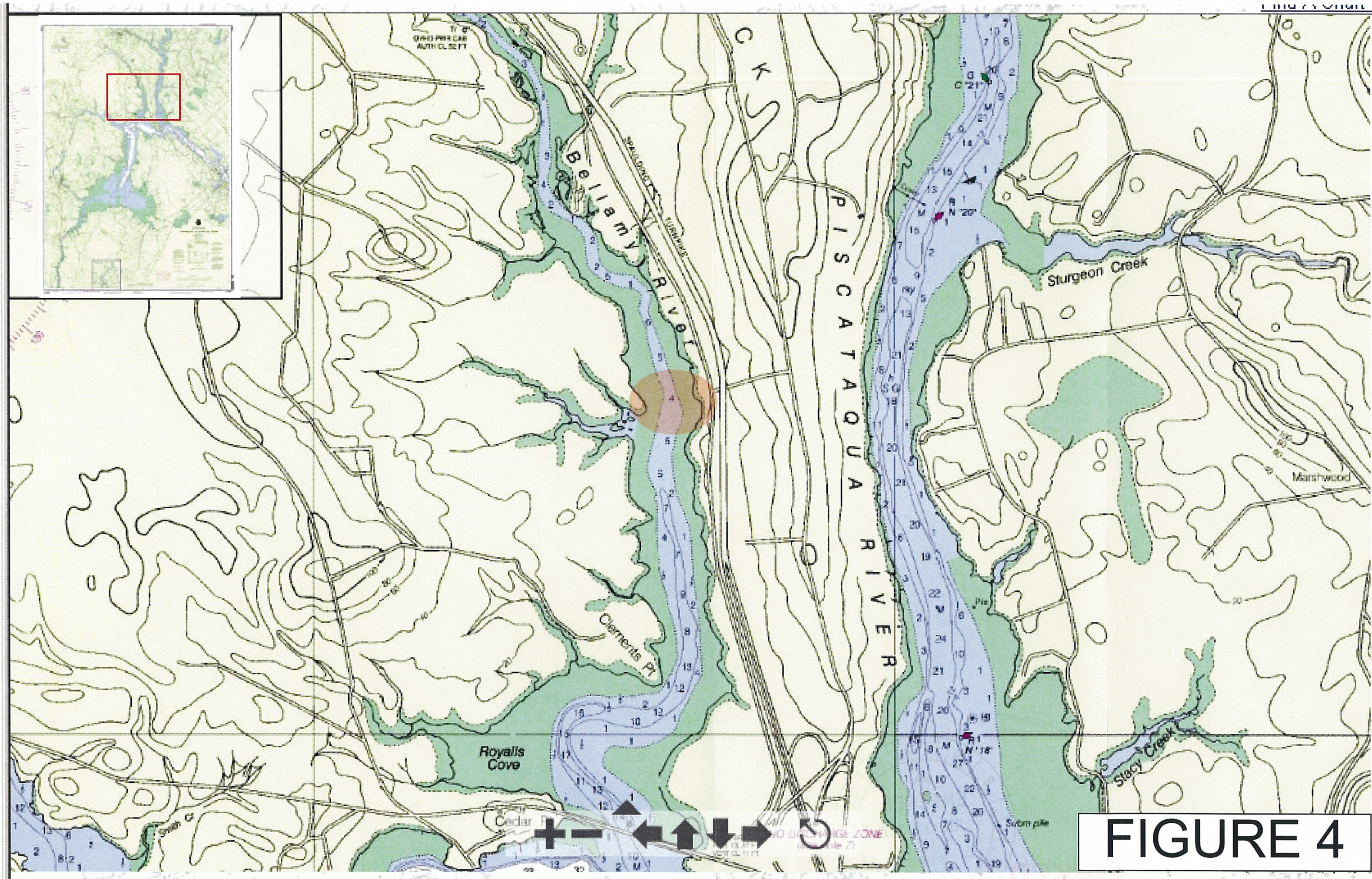
Application By  
Public Service Co. of N.H.  
July 26, 1954

PROPOSED OVERHEAD WIRE CROSSING FOR  
115KV. TRANSMISSION LINE OVER BELAMY RIVER  
AT DOVER, N.H.



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092 0382



**FIGURE 4**