



THE CONNECTICUT PORTION OF THE INTERSTATE RELIABILITY PROJECT

BY

THE CONNECTICUT LIGHT AND POWER COMPANY

VOLUME 8: VISUAL RESOURCE ANALYSIS

DECEMBER 2011







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Visual Resource Analysis Report

Appendix A: Proposed Route Location Map with Visual Sites

Appendix B: Photographs of Potential Visual Sites

Appendix C: Photo-Simulations

Appendix D: Representative Photographs of the Proposed Route

and Variations: General Visual Setting from Public

Road Crossings

Reliability Project





Visual Resource Analysis Report

INTERSTATE RELIABILITY PROJECT

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TABLE OF CONTENTS

Section	<u>1</u>	<u>Pa</u>	ge No.
1.	INTI	RODUCTION AND STUDY OBJECTIVES	1
	1.1	Project Overview	
	1.2	Connecticut Siting Council Guidance Regarding Visual Resources	
2.	MET	THODS	6
3.	VISU	UAL SETTING AND RESOURCE SITES	9
	3.1	Project Setting	9
	3.2	Visual Sites	10
4.	RES	ULTS AND CONCLUSIONS	20
	4.1	Summary of Field Visits and Photo-Simulations	20
	4.2	Conclusions	22
		LIST OF FIGURES	
Figure	1-1:	Location of Connecticut Portion of the Proposed Project (345-kV Transmission Line	
		Substation / Switching Stations)	
Figure	1-2:	General Location of Project within Quinebaug and Shetucket Rivers Valley National State Heritage Corridor	
Figure	3-1:	Nipmuck Trail, West Branch: Location along CL&P ROW, Town of Mansfield	
Figure		Nipmuck Trail, East Branch: Location along CL&P ROW, Town of Mansfield	
Figure		Mansfield Hollow State Park	
		<u>LIST OF TABLES</u>	
Table 3	3-1:	Proposed 345-kV Transmission Lines ROWs, by Town	9
Table 3	3-3:	Location of Potential Visual Sites in Relation to the Proposed Route	14
Table 4	1 -1:	Summary of Potential Visual Sites Traversed by or in the Vicinity of the Proposed R	oute
		with Views of the Existing CL&P Transmission Lines (table located at end of Section 4)	23
Table 4	1-2:	List of Locations of "Leaf Off" and "Leaf On" Photo-Simulations	21
<u>APPE</u>	<u>VDICI</u>	<u>ES</u>	
A	_	osed Route Location Map with Visual Sites (U.S. Geological Survey Maps)	
B C		ographs of Potential Visual Sites o-Simulations	
D	Repr	esentative Photographs of the Proposed Route and Variations: General Visual Setting ic Road Crossings	from

1. INTRODUCTION AND STUDY OBJECTIVES

1.1 PROJECT OVERVIEW

The Connecticut Light and Power Company (CL&P), a wholly-owned subsidiary of Northeast Utilities (NU), along with The Narragansett Electric Company and New England Power Company, both of which are wholly-owned subsidiaries of National Grid USA (National Grid), propose to construct and operate new 345-kilovolt (kV) electric transmission lines and to make related modifications and improvements to existing 345-kV and 115-kV transmission lines and facilities in northeastern Connecticut, northwestern Rhode Island, and south central Massachusetts. These proposed electric transmission system improvements are referred to as the Interstate Reliability Project (the Project). This visual resource analysis addresses the Connecticut portion of the Project.

The Connecticut portion of the Project, which is illustrated on Figure 1-1, consists of the following proposed facilities:

- New 345-kV overhead electric transmission lines and associated facilities, extending between CL&P's Card Street Substation in the Town of Lebanon, Lake Road Switching Station in the Town of Killingly, and the Connecticut/Rhode Island border (in the Town of Thompson).
- Related additions within the existing fence lines at CL&P's Card Street Substation, Lake Road Switching Station, and Killingly Substation.

The proposed 345-kV transmission lines between Card Street Substation, Lake Road Switching Station, and the Connecticut / Rhode Island border would traverse approximately 36.8 miles, crossing portions of 11 towns in northeastern Connecticut. The new 345-kV transmission lines (designated by CL&P as the 3271 Line and the 341 Line) would be constructed overhead and aligned adjacent to existing 345-kV overhead transmission lines along existing CL&P rights-of-way (ROWs). The existing 345-kV facilities were constructed in the early 1970s. Segments of the existing ROWs also include other overhead transmission lines (e.g., 69 kV and 115 kV) as well as local distribution lines (23 kV).

The 3271 Line would extend from Card Street Substation to Lake Road Switching Station, adjacent to the 330 Line, whereas the 341 Line would extend from Lake Road Switching Station to the Connecticut/Rhode Island border, adjacent to the 3348 Line and then the 347 Line.

Location of Connecticut Portion of the Proposed Project (345-kV Transmission Lines and Substation / Switching Stations) Interstate Reliability Project (9) Location of Proposed 345-kV Transmission **Lines in Connecticut** Rhode Island 44 Connecticut Sterling 4 695 Killingly Killingly (10) 9 2 Thompson Plainfield Putnam 12 12 A Northeast Utilities Company Lake Road Connecticut Light & Power 205 Brooklyn (101) (169) (169) 97 Pomfret Canterbury Woodstock 244 4 (6) Hampton 4 6 Scotland (198 Chaplin Source: ESRI, CT DEP, and Burns & McDonnell Engineering Miles Windham Proposed Route (in existing ROW) 203 Ashford 68 32 4 (195 Mansfield Switching Station Lebanon (289 Substation Willington (4) 275 32 320 Card Street 4 (87) Columbia Coventry 32 (3) (195 Tolland Figure 1-1: 316 Key Map (8)

The Interstate Reliability Project

The majority of the new overhead 345-kV transmission lines would be supported on H-frame structures similar in appearance and height to the existing H-frame structures that support the 345-kV lines presently occupying the ROWs. However, along certain segments of the 36.8-mile Proposed Route, CL&P's proposed design incorporates steel-monopole structures, either to match the existing 345-kV structure appearance or for magnetic field mitigation.

The new 345-kV line structures would be aligned generally to the north or west (depending on the ROW segment) of the existing 345-kV transmission line structures. Except for 1.4 miles of the ROW through federally-owned lands in the towns of Mansfield and Chaplin (where the existing ROW is only 150 feet wide), the new transmission lines would be located within CL&P's existing ROWs, which are typically 300 feet or more wide. Across the federally-owned properties, CL&P proposes to acquire additional ROW to allow the development of the new 345-kV line using structures that match the existing 345-kV line structures in terms of appearance and height.²

1.2 CONNECTICUT SITING COUNCIL GUIDANCE REGARDING VISUAL RESOURCES

The Connecticut portion of the proposed Project is subject to the jurisdiction of the Connecticut Siting Council (Council), which has established procedures for applicants to follow in applying for a Certificate of Environmental Compatibility and Public Need. These procedures are detailed in the Council's *Application Guide for Electric and Fuel Transmission Line Facilities* (April 2010; *Application Guide*).

With respect to visual resources, the *Application Guide* requires applicants to identify scenic areas in relation to proposed projects and to describe the potential effect that proposed projects would have on such areas. The *Application Guide* also requires applicants to describe and evaluate the potential effects of proposed projects on Connecticut Heritage Areas (as designated by Connecticut General Statutes [C.G.S.] §16a-27) and Connecticut Department of Transportation (ConnDOT) Scenic Lands (C.G.S. §13a-85a).

Prior to the issuance of the April 2010 version of the *Application Guide*, on December 23, 2009, the Council issued a memorandum to routine applicants / participants concerning, among other issues, the consideration of scenic quality and the aesthetic attributes of land that might be affected by projects under

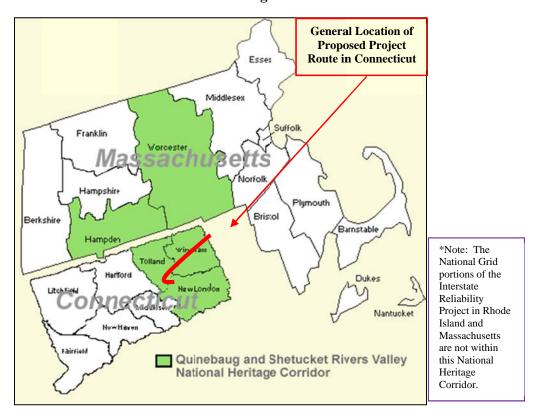
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As discussed in Volume 1, Section 10 of the Supplemental Municipal Consultation Filing, for the alignment of the new 345-kV line across the federally-owned properties, CL&P also has identified two feasible design options: one that would not require any additional easement width and one that would minimize the amount of additional easement required.

the Council's jurisdiction, and specifically referencing the consideration of Connecticut Heritage Areas and ConnDOT Scenic Lands as part of the project planning process. In the same memorandum, the Council advised applicants to provide photographs of aesthetic areas, particularly for use in photosimulations, which depict "leaf off" conditions. In the absence of deciduous vegetative screening, such "leaf off" conditions would tend to represent "worst case" (or maximum) views of existing facilities (e.g., overhead transmission lines, ROWs) and of potential project facilities.

The Project is located within the Quinebaug and Shetucket Rivers Valley National Heritage Area, which encompasses portions of eastern Connecticut and central Massachusetts and also is one of two Connecticut heritage areas, as designated in July 2009 pursuant to state Public Act No. 09-221. Except for the Town of Columbia, all of the 11 towns traversed by the proposed Project route are within this Heritage Corridor (refer to Figure 1-2). As detailed in Public Act No. 09-221, a heritage area is defined as a place within Connecticut that has historic, recreational, cultural, natural, and scenic resources that form an important part of the state's heritage. State agencies must take the resources of the national heritage areas into consideration in planning and project decision-making.

Figure 1-2: General Location of Project within Quinebaug and Shetucket Rivers Valley
National and State Heritage Corridor*



In addition, the proposed 345-kV line route is located approximately 0.7 mile north of two parcels of ConnDOT Scenic Lands located along Interstate 395 (formerly State Route 52) in the Town of Killingly. Such lands are state-owned properties located along highway ROWs that were purchased by the state approximately 40 years ago, using federal Highway Beautification Act funds. The original purpose of the parcels was to preserve the landscape along highway ROWs.

1.3 PURPOSE OF THE VISUAL RESOURCE STUDY

Pursuant to the Council's guidance regarding the consideration of scenic resources, including Connecticut Heritage Areas and ConnDOT Scenic Lands, the objectives of this visual resource study were to:

- Identify the relationship of the proposed Project to designated scenic areas near the proposed Project facilities, including the ConnDOT Scenic Lands in Killingly;
- Describe the proposed Project in relation to the visual resources in the Quinebaug and Shetucket Rivers Valley National Heritage Corridor (which corresponds to the state Heritage Corridor);
- Characterize the existing visual setting in the vicinity of the designated or potential scenic areas, including state recreational lands managed or owned by the Connecticut Department of Energy and Environmental Protection (CT DEEP) such as parks, forests, wildlife management areas and trails;
- Assess the potential effects of the Project on such areas, using photo-simulations of the proposed transmission line and of the associated expansion in the vegetatively managed portions of the ROW to illustrate the incremental changes to the visual environment that would be associated with the development of the new 345-kV transmission lines along the existing ROWs; and
- Prepare photo-simulations of the proposed Project facilities under both "leaf off" conditions, pursuant to the Council's guidance, and "leaf on" conditions, which would be representative of views during the spring fall months.

2. METHODS

The methods used to conduct the visual resource study involved baseline research, followed by field inspection to photo-document views of the existing CL&P ROWs in the vicinity of publicly-designated³ scenic, recreational, open space, and historic properties (collectively referred to herein as the "visual sites"). The photo-documentation subsequently was used to prepare photo-simulations.

CL&P first conducted research to identify visual sites crossed by or in the vicinity of the proposed 345-kV transmission lines and the existing CL&P substations and switching station that would be modified as a result of the proposed Project. These sites were identified based on the review of Project mapping, town plans, Internet research, and other published information, such as the CT DEEP's data concerning state parks, forests, trails, and wildlife management areas (WMAs) and the National Park Service's (NPS's) data concerning natural resources and trails in the Quinebaug-Shetucket Rivers Valley National Heritage Corridor.

To identify hiking trails and land trust parcels containing trails or publicly-accessible scenic areas, CL&P also consulted the Connecticut Forest and Parks Association's (CFPA's) *Walk Book East* (The Guide to the Blue-Blazed Hiking Trails of Eastern Connecticut. 2005, 19th Edition) and the Joshua's Tract Conservation and Historic Trust Inc.'s *Joshua's Tract Walk Book* (2005, 4th Edition). In addition to Joshua's Tract Conservation and Historic Trust, Inc. (which owns properties in Lebanon, Coventry, Columbia, Mansfield, Chaplin, and Hampton), CL&P conducted research to identify parcels preserved by other land trusts in the Project region, including Wolf Den Land Trust (Brooklyn, Hampton, and Killingly) and Wyndham Land Trust (Brooklyn, Pomfret, Killingly, Putnam, and Thompson). Data concerning CL&P-owned properties on which CL&P has established public hiking trails or other recreational uses also were reviewed.

In general, sites within approximately 1 mile of the proposed Project facilities were identified for initial evaluation. Field inspections then were conducted of each of the identified potential visual sites. The objectives of the field inspections were to:

• Assess the relationship of each potential visual site to the existing CL&P ROWs.

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For the purposes of this study, "publicly designated" areas refer to locations identified by federal, state, or municipal governments, land trusts, or associations (such as the Connecticut Forest and Parks Association).

- Determine whether CL&P's existing overhead transmission lines are visible from each potential site.
- Photo-document views, if applicable, of the existing transmission lines in relation to the visual sites. Sites that were determined to be too geographically remote from the ROWs or from which views of the overhead transmission lines were blocked by intervening topography, vegetation, or land uses, were generally not photographed.
- Take photographs, under both "leaf off" and "leaf on" conditions for use in preparing photosimulations to illustrate potential views of the proposed 345-kV transmission lines in the vicinity of visual sites.

Initial field inspections were conducted in early April 2010, with follow-up field visits performed in December 2010, as well as in March, April, May, June, and August 2011. The field visits in April and December 2010 and in March and April 2011 were conducted during "leaf off" conditions. The May, June, and August 2011 visits were performed to characterize "leaf on" conditions. Appendix A provides maps that identify the visual site locations photographed, while Appendix B includes representative photographs of the visual sites. Photo-simulations of the proposed 345-kV transmission lines at the visual sites, depicting both "leaf off" and "leaf on" conditions, are presented in Appendix C.

During deciduous vegetation "leaf off" seasons, all of the sites were visited on clear, sunny days. Thus, the field inspections were conducted under conditions during which the existing overhead transmission lines would be most visible. During the field visits conducted in December 2010 and April 2011, photographs of visual sites were taken for use in preparing simulations to depict views of the proposed 345-kV transmission line and ROW under "leaf off" conditions.

In mid-May 2011, CL&P made follow-up field visits to assess and photo-document conditions at the same sites when deciduous forest vegetation was leafed out. In general, such "leaves on" conditions are representative of the spring through fall seasons, when public use of most of the designated recreational or scenic areas near the ROWs is expected to be highest. Photographs taken during the mid-May field visits were used to prepare photo-simulations depicting the proposed 345-kV transmission lines during "leaf on" conditions. Follow-up visits were performed on June 27, 2011 and during the week of August 22, 2011 to verify views of visual sites under mid-summer "leaf on" conditions; photo-documentation of these field visits are included in Appendix B.

Using the "leaf off" and "leaf on" photographs, computer-generated photo-simulations were prepared to illustrate the expected changes to the visual environment as a result of the new 345-kV transmission line

(e.g., views of the new transmission line structures and conductors alongside the existing overhead transmission lines, increased width of forest vegetation removal along the existing ROWs). New transmission line structure heights and types depicted in these photo-simulations were based on the ROW segment cross-sections for the Proposed Route (refer to Volume 1, Appendix 3A, the Volume 9 maps, and the Volume 10 cross-sections and Plan and Profile drawings).

The photographs used to create the photo-simulations were taken using a 12-megapixel camera with an image stabilizer, mounted on a tripod. The photograph locations were geographically referenced using a sub-meter level accurate GPS unit. The site-specific data was then incorporated into a 3D model and the photo-simulations were developed using 3D software (Autodesk 3D Studio Max 2010-2011®). This software allows the 1:1 re-creation of site depicting the proposed 345-kV facilities, using as input the Project engineering design drawings and related information (e.g., transmission line structure types, line sag, land elevation data). A photo editing program (Adobe Photoshop CS4®) was used to overlay the rendered image on the site-specific photographs.

3. VISUAL SETTING AND RESOURCE SITES

3.1 PROJECT SETTING

The proposed Project would be aligned along existing CL&P ROWs through portions of 11 towns in northeastern Connecticut (refer to Table 3-1). Within CL&P's existing ROWs, lands along and in the vicinity of the existing transmission lines are managed to promote shrub or similar low-growth vegetation, consistent with utility use. Lands encompassing the unmanaged portions of the ROWs are undeveloped and consist of forested, shrub, and agricultural or other open lands.

Table 3-1: Proposed 345-kV Transmission Lines ROWs, by Town

Town	Proposed 345-kV Transmission Line (Miles)	Existing ROW Width Range (Feet, Typical)
Lebanon	0.6	350
Columbia	1.7	300-350
Coventry	1.2	300
Mansfield	6.4	150*-300
Chaplin	3.3	150*-300
Hampton	4.3	300
Brooklyn	7.2	300-360
Pomfret	1.7	360
Killingly	3.0	250-400
Putnam	5.6	340-400
Thompson	1.8	300
Total	36.8	

^{*} The existing CL&P ROW is only 150 feet wide across 1.4 miles of federally-owned property through Mansfield Hollow State Park and the Mansfield Hollow WMA in the Towns of Mansfield and Chaplin.

Lands in the general Project region are characterized by a variety of uses and types, including undeveloped forest, agricultural areas, recreational areas, transportation corridors (state and local roadways), and residential, commercial, and industrial developments. However, forest land is the dominant landscape element. The regional topography is varied, and is characterized primarily by rolling

hills and valleys with associated wetlands and streams. The Proposed Route does not traverse or parallel any traprock ridges.

Major watercourses in the region include the Ten Mile, Hop, Willimantic, Natchaug, Quinebaug, and Fivemile rivers. The 460-acre Mansfield Hollow Lake, which was created as a result of a U.S. Army Corps of Engineers (USACE) flood control project that dammed the Mount Hope, Fenton, and Natchaug rivers, also is a major regional water feature. Following CL&P's existing ROW, the proposed 345-kV transmission line would span this lake adjacent to CL&P's existing overhead 345-kV transmission line.

Appendix D includes representative photographs of the general visual setting of the Proposed Route, as viewed from public roads traversed by the existing CL&P ROWs.⁴ These photographs illustrate the general landscape in the Project region, and also provide typical views of the existing transmission lines and ROW vegetative communities.

3.2 VISUAL SITES

The proposed 345-kV transmission lines would follow CL&P's existing ROWs across or near various areas that have scenic attributes. Such sites include designated recreational trails (e.g., Airline State Park Trail, Hop River State Park Trail, the CFPA's Nipmuck Trail, the Red Trail within Mansfield Hollow State Park, and the levee trail associated with Mansfield Hollow Dam); Mansfield Hollow State Park and WMA; Mansfield Hollow Dam; State Route 169 (a designated National Scenic Byway); land trust parcels; and historic sites.

Table 3-2 (located at the end of this section) lists the potential visual sites identified in the general vicinity of the Proposed Route based on initial research and correlates the location of these sites to the location maps of the Proposed Route presented in Appendix A. Additional maps of the location of the ROW in relation to the CFPA's Nipmuck Trail and Mansfield Hollow State Park and WMA are presented at the end of this section. The most prominent of the visual sites are described below.

Quinebaug and Shetucket Rivers Valley (The Last Green Valley) National Heritage Corridor (All
towns along Proposed Route, except for Columbia). In 1994, Congress designated the Quinebaug
and Shetucket Rivers Valley a National Heritage Corridor, recognizing the region as a unique
national resource. In 1999, Congress enlarged the heritage corridor to include Quinebaug and

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⁴ Appendix D also includes photographs of representative locations along the variations to the Proposed Route. The variations are described in Volume 1A, Section 15 and illustrated on the Volume 9 maps. Each of the variations was found to have overriding cost or environmental issues, compared to the portions of the Proposed Route that each would replace. As a result, no detailed visual studies were performed of these variations.

Shetucket River Valley towns in both Massachusetts and Connecticut. As a result, the heritage corridor now encompasses 35 municipalities (26 in Connecticut). In 2009, Congress reauthorized the heritage corridor designation through September 30, 2015. The heritage corridor is managed by a non-profit organization, The Last Green Valley, Inc. (TLGV). According to the NPS, the National Heritage Corridor encompasses approximately 695,000 acres of land in northeastern Connecticut and south-central Massachusetts. Within the National Heritage Corridor, citizens, businesses, nonprofit cultural and environmental organizations, local and state governments, and the NPS work together to preserve the region's cultural, historical, and natural heritage (NPS, 2006).

Pursuant to Connecticut Public Act 09-221, state agencies, departments, boards and commissions are encouraged to consider Connecticut's Heritage Areas when developing planning documents and to partner with the managing entities on projects concerning, but not limited to, environmental protection, heritage resource preservation, recreation, tourism and trail development. Connecticut's designated Quinebaug-Shetucket Rivers Valley National Heritage Corridor corresponds to the Connecticut portion of the nationally-designated heritage corridor, which encompasses the entire towns of Lebanon, Coventry, Mansfield, Chaplin, Hampton, Brooklyn, Pomfret, Killingly, Putnam, and Thompson. Thus, along the proposed 345-kV transmission line route, only the Town of Columbia is not within the designated heritage corridor.

- Airline State Park Trail (Towns of Lebanon and Hampton). The Airline State Park Trail, a 50-mile multi-use trail aligned along the former Airline Railroad, was declared a national recreational trail in 2001. The trail, which provides hiking, biking and horseback riding opportunities, stretches across 11 towns in eastern Connecticut, extending from the Town of East Hampton to the Town of Thompson. The Proposed Route crosses the trail twice once in Lebanon and once in Hampton.
- Hop River State Park Trail (Town of Coventry). The Hop River State Park Trail is approximately 15 miles long, extending from the Andover town line to the Willimantic River in the Town of Windham. The trail, which is aligned along the Hop River through the towns of Coventry and Columbia, provides opportunities for hiking, biking, horseback riding, and cross-country skiing. The Proposed Route crosses this trail in the Town of Coventry.
- Nipmuck Trail (Town of Mansfield). The 14-mile Nipmuck Trail is part of the CFPA's Blue Blazed Hiking Trail, a system of 800 miles of trails. The Proposed Route crosses two branches of the trail in the Town of Mansfield. The western branch of the trail crosses the ROW approximately 9.3 miles west of State Route 195 and 8.8 miles east of Mansfield City Road, while the eastern branch of the trail is traversed within the Mansfield Hollow WMA on the east side of Mansfield Hollow Lake. Figures 3-1 and 3-2 provide excerpts of the CFPA's Nipmuck Trail maps (from the CFPA's Walk Book East), illustrating the location of CL&P's transmission line ROW in relation to the trail crossings and CFPA-identified scenic vistas.

The Quinebaug and Shetucket Rivers Valley of northeastern Connecticut and south-central Massachusetts also is referred to as "The Last Green Valley" in the sprawling metropolitan Boston-to-Washington corridor. This designation was coined because at night, the region appears distinctively dark amid the urban and suburban glow when viewed from satellites or aircraft. In the daytime, the green fields and forests confirm the rural character of the 1,085-square-mile area defined by the Quinebaug and Shetucket Rivers systems and the rugged hills that surround them. Forest and farmland make up approximately 78% of its 695,000 acres.

• Mansfield Hollow State Park and WMA (Towns of Mansfield and Chaplin). Mansfield Hollow State Park and WMA, which are owned by the federal government (USACE) but managed by CT DEEP, offer a variety of recreational opportunities, including fishing, hiking, biking, and picnicking, as well as – in the WMA – hunting and dog training. Mansfield Hollow Lake, located within the Park, is the result of the dam built by the USACE to control flooding in the Thames River Basin. The lake encompasses approximately 460 acres and offers public boating and fishing activities.

The proposed route follows CL&P's existing ROW across approximately 0.8 mile of the Park and 0.1 mile of the WMA within the Town of Mansfield, and approximately 0.5 mile of the WMA in the Town of Chaplin. Within the Mansfield Hollow State Park, the Proposed Route would span both the Mansfield Hollow Dam levee trail and the Red Trail. (Figure 3-3, located at the end of this section, provides a map of the State Park and WMA in Mansfield and Windham.) In the WMA on the east side of Mansfield Hollow Lake, the Proposed Route also would cross the Nipmuck Trail, East Branch (refer to discussion, above, and to Figures 3-2 and 3-3 at the end of this section).

- Mansfield Hollow Dam and Levee Trail (Towns of Mansfield and Windham). The paved levee trail, which extends both north and south-southeast of the dam, is a popular location for walking, jogging, and bicycling. From the trail, there are views of Mansfield Hollow Lake, Mansfield Hollow State Park and WMA, U.S. Route 6, the Windham Airport, the Mansfield Hollow Historic District, and the hillsides to the west of Storrs Road (State Route 195). The Proposed Route crosses the northern portion of levee trail near Bassetts Bridge Road. However, the majority of the levee trail and the dam area located south of the Proposed Route.
- Natchaug State Forest (Town of Chaplin). The Natchaug River, located in the Natchaug State Forest is popular for fishing, and is also designated a "Trout Park" fishing area by the CTDEEP in the Town of Eastford (which is located approximately 4.5 miles north of the ROW). The Proposed Route crosses an undeveloped portion of the Natchaug State Forest in the Town of Chaplin, and is located within 400 feet of the state forest parcels in the Town of Killingly.
- State Route 169 (Town of Brooklyn). State Route 169 is identified as a National Scenic Byway. The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. Under the program, the U.S. Secretary of Transportation recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities. There are 125 such designated Byways in 44 states. The Proposed Route crosses State Route 169 in the Town of Brooklyn.
- Quinebaug River Trails (Town of Brooklyn). Hiking / recreational use trails on CL&P-owned property in vicinity of Quinebaug River and Day Street Junction. Trails are listed on the Town of Brooklyn web site. Public access to the trails is via Day Street, near CL&P's Brooklyn Substation, south of the Proposed Route. CL&P's existing 115-kV transmission line and

Because CL&P's existing ROW across these federally-owned properties is only 150 feet wide, CL&P proposes to acquire additional easements from the USACE in order to expand the ROW by 55 feet through Mansfield Hollow State Park and WMA in the Town of Mansfield and by 85 feet through the WMA in the Town of Chaplin, thereby allowing the development of the new 345-kV transmission line adjacent to the existing 345-kV line. This proposed ROW expansion would involve the acquisition of an estimated 11 acres of additional easement from the USACE.

substation are visible from the beginning of the trail system. At Day Street Junction, multiple transmission lines (345-kV and 115-kV) extend north along the ROW. These lines are visible from certain portions of the trail system. The proposed new 345-kV would be located west of these existing transmission lines.

CL&P's consultants, Phenix Environmental, Inc. and Burns & McDonnell Engineering Company, Inc., visited each of the sites listed in Table 3-2 to determine whether the existing ROW and transmission lines were visible under "leaf off" conditions. Through all of these areas, the proposed 345-kV lines would be located adjacent to CL&P's existing 345-kV lines and – along certain ROW segments – also adjacent to other CL&P overhead transmission and distribution lines.

 Table 3-2:
 Location of Potential Visual Sites in Relation to the Proposed Route

Town	Location in Relation to	Description of Feature
	Proposed Route	(Photo-simulation [PS] No. in Appendix C, if applicable)
	(Map Number; refer to Appendix A)	
Lebanon	Crosses	Airline State Park Trail (Southern Section)
	(1)	
Lebanon /	1,600 feet	Ten Mile River Bridge (Village Hill Road)
Columbia	(1)	
Columbia	4,000 feet (1)	Joshua's Tract Conservation & Historic Trust, Inc, (Potter's Meadow off Commerce Drive)
Columbia	1,600 feet (1)	Joshua's Tract Conservation & Historic Trust, Inc, (1 Parcel North of Willimantic Road)
Coventry	Crosses	Hop River State Park Trail (PS-1)
Covening	(1)	The first same rank train (15 1)
Coventry	Crosses	Town Open Space (Flanders River Road) (PS-2)
	(1)	
Coventry /	1,000 feet	Flanders Road Bridge (Historic)
Mansfield	(2)	
Mansfield	800 feet	Joshua's Tract Conservation & Historic Trust, Inc. (1 Parcel west of
	(2)	Thornbush Road)
Mansfield	200 feet	Town Open Space (Stafford Road)
	(2)	
Mansfield	Crosses	Town Open Space (Highland Road) (PS-3)
	(2)	
Mansfield	Crosses	Nipmuck Trail, West Branch (PS-4)
	(2)	
Mansfield	Crosses	Town Open Space (Saw Mill Brook Lane)
	(2)	
Mansfield	1,500 feet	Joshua's Tract Conservation & and Historic Trust, Inc. (Jacob's Hill Preserve)
	(2)	
Mansfield	500 feet (2)	Joshua's Tract Conservation & and Historic Trust, Inc. (Wolf Rock Nature Preserve)
Mansfield	4,000 feet	Joshua's Tract Conservation & and Historic Trust, Inc. (Harriet Babcock
	(2)	Preserve)
Mansfield	800 feet	Mansfield Center Historic District
	(2)	
Mansfield	2,500 feet	Mansfield Center Cemetery
	(2)	
Mansfield	800 feet	Mansfield Hollow Historic District
	(2)	
Mansfield	800 feet (2)	Joshua's Tract Conservation & Historic Trust, Inc. Wildlife Area (West of Mansfield Hollow State Park and WMA – north of Proposed Route)
Mansfield	Crosses	Mansfield Hollow State Park (PS-5, PS-6)
	(2)	(, , , , , , , , , , , , , , , , , , ,
Mansfield	2,000+ feet	Mansfield Hollow Dam and Levee Trail (South of Dam) (PS-7, PS-8)
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Town	Location in Relation to	Description of Feature
	Proposed Route	(Photo-simulation [PS] No. in Appendix C, if applicable)
	(Map Number; refer to	
Mansfield	Appendix A)	The Ded Tool (within Meanfield Hellers State Deals)
Mansheid	Crosses	The Red Trail (within Mansfield Hollow State Park)
M C 11	(2)	M CILLII I I D A
Mansfield	1,400 feet	Mansfield Hollow Lake Picnic Area
N. C. 1.1	(2)	M. CHILL I.I. D. (D. (141 G. (D.I.)
Mansfield	2,000 feet	Mansfield Hollow Lake Boat Ramp (within State Park)
M C 11	(2)	T. D. (10 ' V')
Mansfield	1,500-2,000 feet	Town Designated Scenic Vistas ¹
25 0 11	(2)	
Mansfield	Crosses	Nipmuck Trail, East Branch (within WMA) (PS-9)
G! !!	(3)	
Chaplin	Crosses	Mansfield Hollow WMA
	(3)	
Chaplin	Adjacent	Natchaug State Forest
G! !!	(3)	
Chaplin	200 feet	Airline State Park Trail (parallels)
	(3)	
Hampton	Crosses	Airline State Park Trail (Northern Section)
	(3)	
Hampton	550 feet	South Cemetery
	(3)	
Hampton	1,200 feet	James L. Goodwin State Forest and Natchaug Trail (CFPA hiking trail)
	(3)	
Brooklyn	Crosses	Milo Appley Conservation Showcase - Eastern CT Conservation District ²
	(4)	
Brooklyn	2,000 feet	Brooklyn Green Historic District
	(4)	
Brooklyn	Crosses	State Route 169 (National Scenic Byway) (PS-10)
D 11	(5)	
Brooklyn	500 to 800 feet	Town Designated Scenic Vistas (Gray Mare Hill and Barrett Hill Road) ³
D 1.1	(4, 5)	W-If Day Land Tours White Day LC
Brooklyn	Crosses	Wolf Den Land Trust White Brook Sanctuary
D 11	(5)	HTT: 4 T (O : 1 P: TT T) CI (P
Brooklyn	Adjacent	Hiking trails (Quinebaug River Trail) on CL&P-owned property west of and parallel to the Quinebaug River; access off Day Street
17:11: 1	(5)	
Killingly	2,000 feet	Rogers Village Historic District (across Quinebaug River and east of Proposed Route)
D. C.	(5)	
Pomfret	Crosses	Town Canoe / Kayak Boat Launch and Town Open Space along Quinebaug River (PS-11)
D. C.	(6)	
Pomfret	2,400 feet	Wyndham Land Trust (Tucker Preserve)
D. C.	(6)	W II I IT (/ P
Pomfret	2,400 feet	Wyndham Land Trust (Lyon Preserve)
	(6)	

Town	Location in Relation to Proposed Route	Description of Feature (Photo-simulation [PS] No. in Appendix C, if applicable)
	(Map Number; refer to Appendix A)	
Pomfret	6,500 feet	Wyndham Land Trust (Bossworth-Butts Preserve)
	(6)	
Killingly	700 feet	Windham Land Trust (Dunn Preserve)
	(6)	
Killingly	6,000 feet	ConnDOT Scenic Lands adjacent to Interstate 395
	(6)	
Killingly	Crosses	Tracey Road Trail (urban trail)
	(6)	
Putnam	400 feet	Wyndham Land Trust (Chaffee Preserve - off Route 44)
	(7)	
Putnam	1,100 feet	Munyan Cemetery
	(7)	
Putnam/	Crosses	Wyndham Land Trust (Robbins Preserve)
Thompson	(7/8)	
Thompson	Crosses	Wyndham Land Trust (Tamler Preserve)
	(8)	
Thompson	1,100 – 6,000 feet	Quaddick Reservoir, State Park, and State Forest, including trails
	(8)	

Sources: CTDEP, Office of Information Management, GIS Data Guide DEP Property, August 2011. Connecticut Office of Policy and Management, and CTDEP Office of Information Management, GIS Data Guide Municipal and Private Open Space, 1997.

Note: Sites in proximity to the Proposed Route are illustrated on the Volume 9 maps.

¹ Scenic vistas identified in the Mansfield Connecticut 1993 and 2006 Plan of Development (http://www.mansfieldct.gov/filestorage/1904/1932/2043/plan of development 1993.pdf) and (http://www.mansfieldct.gov/filestorage/1904/1932/2043/20060415_final_pocd.pdf).

Names according to the Town of Brooklyn website (http://www.brooklynct.org/anm/templates/?a=428&z=17).

³Scenic vistas identified in the 2011 Town of Brooklyn Plan of Conservation and Development (http://www.brooklynct.org/anm/articlefiles/2579-POCD_final11-11.pdf).

Figure 3-1: Nipmuck Trail, West Branch: Location along CL&P ROW, Town of Mansfield

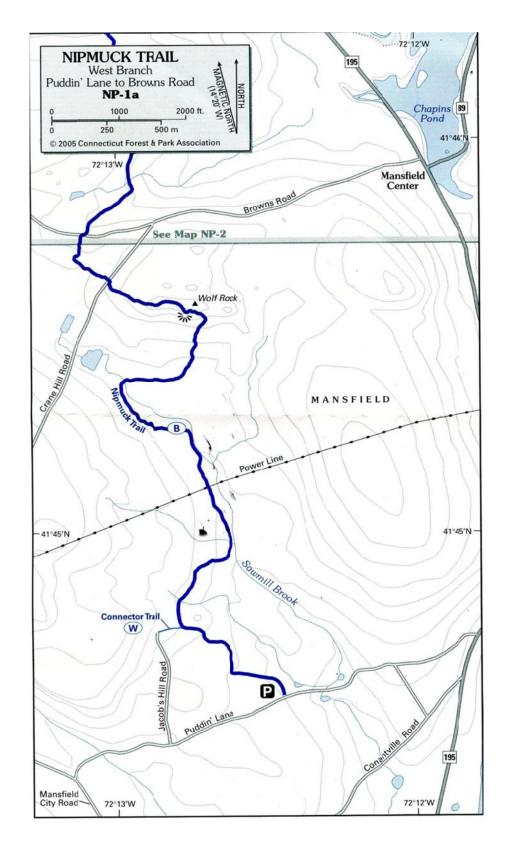
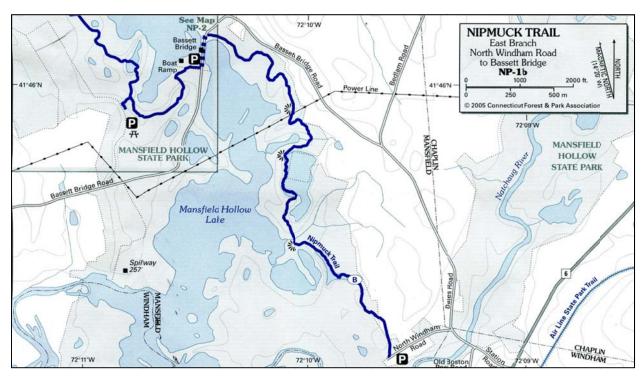


Figure 3-2: Nipmuck Trail, East Branch: Location along CL&P ROW, Town of Mansfield



Mansfield Hollow State Park Mansfield & Windham, Connecticut Mansfield The Red and Yellow blazed trails are non-motorized multi-use trails. Hollow The Blue and White blazed trails (Nipmuck Trail) and the Flood Control Levee Trail are foot travel only. The boundaries of Stale-owned properties as shown or this map are approximate. ail distances between marks (*) are in miles. Explanation Trails A Picnic Area Blue (B) Nipmuck Trail - Foot Travel Only = White (W) Nipmuck Trail - Foot Travel Only Boat Launch Flood Control Levee - FootTravel Only Scenic View Yellow (Y) Non-motorized Multi-use Trail P Parking Area Red (R) Non-motorized Multi-use Trail ---- Unblazed Non-motorized Nulti-use Trail Map Date - April 8, 2009 Mansfield Hollow Wildlife Area Park Road Mansfield Hollow State Park

Figure 3-3: Mansfield Hollow State Park

4. RESULTS AND CONCLUSIONS

4.1 SUMMARY OF FIELD VISITS AND PHOTO-SIMULATIONS

CL&P's consultants visited to each of the visual sites identified in Table 3-2. CL&P photographed each site from which the existing ROW or transmission lines were visible. Appendix B includes representative photographs (under both "leaf off" and "leaf on" conditions) of the sites from which the existing transmission lines are visible, either in foreground or background views.

Table 4-1 (located at the end of this section) identifies the sites from which the existing CL&P transmission lines are visible during "leaf off" and "leaf on" conditions, based on the 2010-2011 field visits. In most cases, distant views of the existing transmission lines from sites remote from the ROWs were found to be precluded by intervening topography, vegetation, and land uses. An exception is the Mansfield Hollow State Park and Mansfield Hollow WMA, where distant views of the existing transmission lines are apparent from the Mansfield Hollow Dam and levee trail in Windham.

For each site with views of the existing transmission line, Table 4-1 (located at the end of this section) identifies its location in relation to the existing CL&P ROWs and summarizes its known aesthetic, recreational, or cultural attributes. Overall, the primary scenic areas from which the existing transmission lines are visible include the Airline State Park Trail (two locations), Hop River Trail, Nipmuck Trail (West and East Branches), Mansfield Hollow Dam and levee system, Mansfield Hollow State Park and WMA, and State Route 169 in Brooklyn (a National Scenic Byway).

At each location where views of the transmission line were identified as a potentially dominant component of the local viewscape, CL&P prepared photo-simulations depicting views of the ROW (illustrating the new and existing transmission lines) under two conditions:

- (1) During the late fall through late winter/early spring, when no deciduous vegetation was present (i.e., "leaf off" conditions); and
- (2) During the late spring/summer, when deciduous vegetation had leafed out (i.e., "leaf on" conditions).

While the "leaf off" conditions would represent the time periods when the ROWs and transmission lines would be most visible, the "leaf on" conditions would be more representative of the seasons when the

public is most apt to utilize the public recreational facilities in the vicinity of the Proposed Route. Table 4-2 identifies the areas for which photo-simulations were prepared. The photo-simulations are included in Appendix C.

Table 4-2: List of Locations of "Leaf Off" and "Leaf On" Photo-Simulations

Town	Location of Photo-Simulation / Photo-Simulation Number (Appendix C)	General View
Coventry	Hop River / Hop River State Park Trail (PS-1)	Looking south from the Hop River Trail, located south of U.S. Route 6.
Coventry	Flanders River Road Town Open Space (PS-2)	View from Flanders River Road of transmission line structures and ROW
Mansfield	Highland Road Town Open Space (PS-3)	View from road looking east along ROW
Mansfield	Nipmuck Trail, West Branch (PS-4)	Looking east along ROW from the Nipmuck Trail – West Branch, toward Sawmill Brook
Mansfield	Mansfield Hollow State Park Levee Trail (PS-5)	View from the Levee Trail north of Bassetts Bridge Road, looking south toward the ROW and state park
Mansfield	Mansfield Hollow State Park Levee Trail (PS-6)	View from the Levee Trail north of Mansfield Hollow Dam, looking northeast toward the ROW, state park, and Bassetts Bridge Road
Mansfield	Mansfield Hollow Dam (PS-7)	Looking west from the Mansfield Hollow Dam, toward the ROW west of Storrs Road.
Windham	Mansfield Hollow Levee Trail south of dam (PS-8)	Looking northeast across Mansfield Hollow Lake from the Levee Trail, located north of Boston Post Road / U.S. Route 6.
Mansfield Nipmuck Trail, East Branch (PS-9)		Looking southwest from the Nipmuck Trail – East Branch, located west of Bassetts Bridge Road.
Brooklyn	State Route 169, Scenic Road (PS-10)	View from road looking east along ROW
Pomfret	Quinebaug River, Vicinity of Canoe/Kayak Boat Launch, State Route 101 (PS-11)	View from boat launch vicinity, looking north along ROW, across State Route 101 and toward the Quinebaug River

4.2 CONCLUSIONS

Based on the field inspections and photo-simulations, the majority of the proposed Project would not affect the visual environment near most visual sites. For the most part, views of the proposed transmission facilities from visual sites, like the views of the existing ROWs and overhead transmission lines, will be limited as a result of combinations of distance from the ROW, topography, dense vegetative cover, and/or intervening land development.

At certain visual sites traversed by the CL&P ROWs, the new transmission lines would be visible at or in the immediate vicinity of the ROW crossing. The photo-simulations show that the new transmission line would have a focused, incremental effect on the visual environment in these areas. This effect would result from both views of the transmission lines and additional removal of forested vegetation along the ROW near the new 345-kV lines.

Because of topography and vegetation, the new transmission lines would be most apparent in the foreground at the actual ROW crossing locations. Distant views of the new transmission lines would generally be limited by the juxtaposition of the ROW, topography, and vegetation. Vegetation particularly limits view of the ROW and transmission lines during "leaf on" conditions, but also provides effective screening from most locations during "leaf off" conditions (due to the density of deciduous vegetation [i.e., tree trunks] or the presence of coniferous vegetation that provides year-round visual screening). In addition, at some visual sites (e.g., the Airline State Park Trail, Hop River State Park Trail, and Nipmuck Trail crossings), the alignment of the features (e.g., bends in the trails) precludes long views of the ROW and transmission lines except at the actual ROW crossings

In the Mansfield Hollow area, the new transmission line would be evident (either as foreground or distance views) within portions of Mansfield Hollow State Park and WMA, particularly to users of the Levee Trail and Red Trail and to travelers along Bassetts Bridge Road within the park. However, the existing CL&P transmission line has been aligned across the park and WMA for over 40 years and thus represents a part of the baseline scenic quality. Although the proposed 345-kV line would represent a change to the visual environment in the park and WMA, this change would be incremental.

Table 4-1: Summary of Potential Visual Sites Traversed by or in the Vicinity of the Proposed Route with Views of the Existing CL&P Transmission Lines

Town / Scenic Feature	Volume 9 Map Sheet No. / Relation to ROW	Feature Information	Summary Results of Field Review
Lebanon			
Airline State Park Trail (Southern Section)	1 Crosses	The Airline State Park Trail is a national recreational trail that is being developed along an abandoned railroad ROW. The trail provides hiking, biking and horseback riding opportunities.	The Airline State Park Trail is well marked and is easily accessible via both Kingsley Road and Village Hill Road. Adjacent land uses consist principally of forest land, with some residences and open fields near the roads, and visible from the trail. At the ROW crossing, the trail is slightly below the surrounding grade and traverses a wet area. Shrubby deciduous vegetation borders both sides of the trail at the ROW crossing. The existing transmission line conductors span the trail: an H-frame structure is located immediately to the northeast of the trail and is visible from it. The transmission line conductors and structures are visible only in the immediate vicinity of the trail. This is due to the dense deciduous forested vegetation that borders either side of the trail leading to the ROW, and also because the trail crosses the ROW at a bend. In this area, the trail is relatively wide and well-maintained, with a gravel and sand base. There was evidence of use by hikers, horseback riders, and bikers.
Coventry			
Hop River	3 Crosses	The Hop River extends through and is bordered by the Hop River State Park Trail (see below). In the vicinity of the Proposed Route, the river forms the town boundary between Columbia and Coventry.	The ROW spans the river between State Route 66 in the Town of Columbia and U.S. Route 6 in the Town of Coventry. In this area, the Hop River State Park Trail is aligned north of and upslope of the river. Outside of the managed ROW, lands adjacent to the river consist of undeveloped deciduous forest, which can be expected to screen long views of the transmission line structures and ROW. From the river at the ROW crossing, the predominant views are to the north, where conductor spans, the transmission line structures, and managed ROW are visible. Long views to the south are screened by topography and vegetation.
Hop River State Park Trail	3 Crosses just north of Hop River	The Hop River State Park Trail, which is on an old railroad bed, connects the state's Charter Oak and Airline trails and is approximately 15 miles long, extending from the Town of Bolton to the Willimantic River in the Town of Windham. The trail is a designated Connecticut Greenway and is used by hikers, bikers, and equestrians. Along the 5.4-mile section of the trail in Columbia and Coventry, the trail meanders adjacent to the Hop River.	The ROW traverses the trail perpendicularly, directly north of the Hop River. Except at the ROW crossing and in the immediate vicinity, views of the transmission lines are limited by both vegetation and topography. On either side of the ROW, the trail is bordered principally by deciduous forest lands. In addition, both to the west and the east of the ROW, bends in the trail preclude long views. Where the ROW crosses the trail, the principal viewpoint is to the south, where the dominant views are of the Hop River (foreground views) and the transmission line structures, extending beyond the river and State Route 66 (long views).
Flanders River Road Town Open Space	5 Crosses, both sides of Flanders Road	The municipal open space extends along both sides of Flanders Road, with the eastern boundary abutting the Willimantic River (which forms the town boundary with Mansfield).	The ROW extends across the open space property on both sides of Flanders Road. The property is undeveloped and consists of a mix of deciduous forest, shrubland, and open fields. Portions of the property on the southwest side of Flanders Road appear to have been previously used for parking, sand/gravel pile storage, etc. There are no signs indicating the property is town open space and no designated trails or other recreational areas. Land uses along Flanders Road generally include scattered rural residential development and agricultural and forest land. The transmission line structures and ROW are prominent at and in the vicinity of the road crossing. At the crossing, there are long views of the ROW extending down a slope to the southwest. At other locations along Flanders Road, views of the ROW are blocked by topography and vegetation.
Mansfield			
Joshua's Tract	5 800 feet to south	This parcel is identified on Mapsheet 5, but is not recorded in the <i>Joshua's Tract Walk Book</i> . The ROW is located to the north/northwest of the parcel.	This parcel is located on the west side of Thornbush Road, adjacent to the Willimantic River. Thornbush Road, which is bordered by scattered mobile homes and small houses, dead ends about 500 feet to the north of the land trust parcel. The land trust parcel does not include any trails and is apparent only due to small signs on some of the trees identifying the area as a wildlife preserve. The parcel itself is characterized by relatively dense deciduous forest vegetation. Under leaf off conditions, the transmission line conductors are visible to the northwest from certain locations on the parcel. However, these views are not a predominant part of the visual environment, which is oriented instead on the river and on the wooded areas of the parcel. In addition, there are no designated trails on the parcel.

The Interstate Reliability Project 23

The Connecticut Light and Power Company

Town / Scenic Feature	Volume 9 Map Sheet No. / Relation to ROW	Feature Information	Summary Results of Field Review
Highland Road Town Open Space	6 Crosses and to the north	This town open space extends along and north of the ROW in the vicinity of several newer residential areas, including Stone Ridge Lane, Highland Road, Stearns Road, and Woodmount Drive. The parcel abuts an area of CL&P-owned land to the east, along the ROW.	This open space does not include any designated trails, and no markers indicating the designation of the property were evident. With the exception of the shrub type vegetation along the ROW, the parcel is characterized by mature deciduous forest vegetation. Several wetlands are located along the ROW within this open space, and a small stream, within a ravine meanders toward the ROW within the portion of the open space that is situated to the east of Woodmount Drive. The ROW and transmission line structures are evident from the open space parcel (and nearby homes) along Stone Ridge Lane (which back up to the ROW), as well as at the ROW crossing of Highland Drive. However, due to topography and vegetation (mostly forested), these views are limited to the immediate vicinity of the
			ROW. The transmission line structures are not evident from the open space areas adjacent to the cul-de-sac along Woodmount Drive, but would be visible to those hiking south (to the ROW) within this parcel. (However, there are no designated hiking trails in this area.)
Nipmuck Trail (CFPA): West Branch	7 Crosses west of Sawmill Brook	The Nipmuck Trail is a CFPA blue-blazed hiking trail that extends across the ROW and north through the Wolf Rock Nature Preserve (owned by Joshua's Tract Conservation and Historic Trust). The existing transmission line crossing is mentioned in CFPA's <i>Walk Book East</i> (p. 148).	The trail extends perpendicularly across the ROW, just west of Sawmill Brook. The trail extends through hilly topography and dense deciduous forest vegetation on either side of the ROW. As a result, views of the ROW and existing transmission line from the trail are limited except in the areas immediately across and adjacent to the ROW. At the trail crossing, the ROW extends up hills both to the west and, after spanning Sawmill Brook, to the east. As a result, long views of the ROW and structures on the ROW also are limited. The CFPA has not identified any vistas along the trail in the vicinity of the transmission line ROW.
Mansfield Hollow Dam	9 About 4000 feet south of ROW	Dam and levee system that forms Mansfield Hollow Lake	The transmission line extends across the levee system, south of Bassetts Bridge Road, and its structures are visible from both the levee and from the top of the Mansfield Hollow Dam. The levee system extends both north and south of the dam. Access to the levee system from the south (in the Town of Windham) is via a parking lot adjacent to U.S. Route 6. The levee extends for approximately 1.2 miles from the parking lot to the dam, traversing adjacent to Windham Airport and Mansfield Hollow Lake. From certain segments of the levee trail, and from the dam, the existing transmission line structures are visible over the tops of the trees within Mansfield Hollow State Park and WMA
			From the top of Mansfield Hollow Dam, the ROW also is visible as it extends down the wooded slope west of Storrs Road (State Route 195).
			The areas in the immediate vicinity of the levee are maintained in grassy vegetation, making the existing transmission line structures visible from various locations on the levee, from Bassetts Bridge Road, and from trails. The Mansfield Hollow Dam area and levee system appears to be well utilized for outdoor recreational purposes, including hiking and biking.
Mansfield Hollow State Park	9 Crosses for 0.5 miles	The park is multi-seasonal recreational area, with fishing, hunting, hiking, biking, boating, ice boating, x-country skiing, dog training, and picnicking.	The transmission line structures and ROW are visible from Bassetts Bridge Road, the levee, the Red Trail, and Mansfield Hollow Lake. However, long views of the structures and ROW generally are precluded by bends in the transmission line ROW, topography, and dense forested vegetation (consisting of a mix of coniferous and deciduous trees) that borders the ROW.
Mansfield Hollow State Park Red Trail	9 Crosses and extends along ROW for short distance	The trail crosses and also extends for a short distance along the transmission line ROW. (See map of trail p. 81 <i>Joshua's Tract Walk Book</i> and also on CTDEEP state park and WMA map).	At the Bassetts Bridge Road crossing of Mansfield Hollow Lake, some of the existing transmission line structures are noticeable above the treetops in views to the south across the lake.
Mansfield WMA / Nipmuck Trail (East Branch)	9/10 Crosses WMA 0.4 miles Crosses trail adjacent to east side of lake	Through the WMA, this trail section extends from the North Windham Road CTDEEP parking area trailhead to the Bassetts Bridge parking lot in the park. Along this segment, there are three CFPA-identified vistas, all extending west across the lake.	In this area, the trail extends primarily through dense forest vegetation (consisting of a mix of coniferous and deciduous species). Although the trail parallels Mansfield Hollow Lake, in most areas, it does not directly border the lake. The trail extends perpendicularly across the existing transmission line ROW. At the trail crossing, there are no views of the lake. Although the CFPA has identified two vistas, looking west toward the lake from the trail (refer to Figure 3-2), the existing transmission lines were either not visible from these areas or not dominant landscape elements. For example, the CFPA vista along the trail to the north of the ROW crossing is oriented to the northwest, toward Bassetts Bridge Road, away from the transmission line ROW. The CFPA vista to the south of the ROW crossing is also oriented to the northwest, but is toward the transmission line ROW across the lake. However, the dense vegetation and orientation of the trail preclude dominant views of the transmission lines from this area.

The Interstate Reliability Project 24

The Connecticut Light and Power Company

Town / Scenic Feature	Volume 9 Map Sheet No. / Relation to ROW	Feature Information	Summary Results of Field Review
Chaplin			
Mansfield Hollow WMA	11	Portion of WMA that extends along either side of the Natchaug River. There is no public access to this portion of the WMA	There are no designated trails or public access points associated with this portion of the Mansfield Hollow WMA. The eastern portion of the WMA abuts privately-owned land near U.S. Route 6, as well as a state park-and-ride lot. Views of the WMA and the transmission line ROW from U.S. Route 6 are limited by a bend in the transmission line ROW and by dense forest cover.
Chaplin / Hampton			
Airline State Park Trail (Northern Section)	12/13 Crosses in Hampton Parallels in Chaplin	Trail parallels ROW on the south for about 1.9 miles, before crossing the ROW north of Parker Road (just south of US Route 6) in Hampton.	In general, this portion of the trail appears less well maintained than the western portion (i.e., near Lebanon). However, the trail was well marked. The ROW crossing of the trail is not visible from Parker Road, due to topography, vegetation, and a curve in the trail. In this area, the trail extends through a rock cut and is below the surrounding grade. Groundwater seeping out of the rock layers has made this section of the trail very boggy. At the ROW crossing, an H-frame structure is visible to the west, as are the conductors. However, views of the transmission line are limited by the curve of the trail (when approaching from either side of the ROW crossing) and – at the crossing – are limited because the trail is in a deep cut. There are no long views of the ROW from the trail. To the west, a portion of the trail extends parallel to and south of the ROW. Under "leaf off" conditions, certain of the transmission line structures are visible from the trail. However, for the most part, the trail is bordered by dense deciduous vegetation, which effectively screens primary views of the transmission structures. Under "leaf on" conditions, these structures are not visible through the trees.
Brooklyn			
Milo Appley Conservation Showcase (Wolf Den Land Trust)	20 Crosses	The ROW extends across a portion of this designated open space for approximately 800 feet, southwest of and adjacent to Wolf Den Road. In this area, lands adjacent to Wolf Den Road consist of undeveloped forest.	This undeveloped open space property consists predominantly of deciduous forested areas, intermixed with some open field, shrubland, and wetlands. The ROW / transmission lines are visible at and in the vicinity of the Wolf Den Road crossing, particularly across the open space parcel, where the maintained open field/shrub vegetation on the ROW allows views of lands to the south and west that are otherwise blocked by the forested vegetation and topography on the rest of the open space parcel.
State Route 169 National Scenic Byway	21/22 Crosses	State Route 169 (Pomfret Road) is a National Scenic Byway. The National Scenic Byways Program is part of the U.S. Department of Transportation, Federal Highway Administration. Under the program, the U.S. Secretary of Transportation	State Route 169 is bordered by various historic structures and settings, including a mix of agricultural / open space lands and forested areas bordered by stone walls. The ROW crosses State Route 169 approximately 0.5 miles north of the northern boundary of the designated Brooklyn Green Historic District. The ROW also is directly south of the Herrick Road "T" intersection with State Route 169.
		recognizes certain roads as National Scenic Byways or All-American Roads based on their archaeological, cultural, historic, natural, recreational, and scenic qualities.	The ROW traverses State Route 169 at an angle, extending through sloped deciduous forested areas to the southwest of the crossing and through flatter terrain in open field and wetlands to the northeast. A low, historic-appearing stone wall extends across the ROW bordering the northeast side of the road.
			For travelers along State Route 169, the ROW is most visible at the road crossing; terrain and forested vegetation otherwise limit long-distance views. In addition, as a result of the open fields, stone wall, and wetlands, the principal view along the ROW is to the northeast. Views of the ROW (to the northeast) also are evident from the Herrick Road intersection.
White Brook Sanctuary (Wolf Den Land Trust)	24 Crosses	Undeveloped open space. White Brook traverses through this parcel	The ROW extends for approximately 1,100 feet through this parcel, which does not include any trails. Existing transmission line structures are visible from Darby Road under "leaf off" conditions. Land uses in the vicinity consist of rural residences and forest land. Under "leaf on" conditions, the existing transmission line structures are much less visible from Darby Road, due to dense shrub type vegetation.
Hiking trails (Quinebaug River Trail) on CL&P-owned property	24, 25 Crosses and parallels	Public hiking trails (identified on Town of Brooklyn web site) on CL&P-owned property accessible from Day Street.	The CL&P-owned property extends along and east of the ROW, generally extending to the Quinebaug River. The property consists of a mix of forested and agricultural areas, and includes public hiking trails, which are used by off-terrain vehicles as well. The multiple existing transmission lines on the ROW are visible from certain locations along the trail, and the new line also will be visible, but will be on the opposite side (i.e., west) of these existing lines.

The Interstate Reliability Project 25

The Connecticut Light and Power Company

Town / Scenic Feature	Volume 9 Map Sheet No. / Relation to ROW	Feature Information	Summary Results of Field Review
Pomfret			
Quinebaug River Town Boat (Canoe / Kayak) Launch	27 Adjacent to ROW	Canoe / kayak boat launch and parking area located adjacent to and within existing ROW.	The canoe / kayak launch and parking area are located on CL&P-owned property adjacent to the State Route 101 (Killingly Road) and the Quinebaug River, and along the existing ROW. The existing transmission lines span the parking area. The multiple overhead transmission lines along this segment of ROW are dominant elements of the landscape at the ROW crossing of State Route 101, as well as from the boat launch.
Killingly			
Tracey Road Trail	32 Crosses	Urban bicycle / hiking trail that extends along Tracy Road (in Killingly) and Park Road (in Putnam)	The existing ROW spans this trail, which consists of a paved bicycle / walking trail located on the east side of Tracy and Park roads. At the crossing, the trail extends across CL&P-owned property. Nearby land uses consist of CL&P's Tracy Substation and various commercial and light industrial facilities.
Thompson			
Baker Preserve (Lower Pond) (Wyndham Land Trust)	38 Crosses	Protected open space encompasses portions of Lower Pond and the Fivemile River.	The existing ROW extends along the southern boundary of this parcel, which is located south of Elmwood Hill Road and west of Quaddick Town Farm Road. The parcel does not include any hiking trails or designated visual areas.
Tamler Preserve (Wyndham Land Trust)	39 Crosses	Largely undeveloped forested open space, accessible off Elmwood Hill Road.	The ROW extends across the northwester portion of the Tamler Preserve. This portion of the Preserve does not include any designated hiking trails. A short trail is located on the eastern portion of the property; however, there are no views of the ROW from this trail.

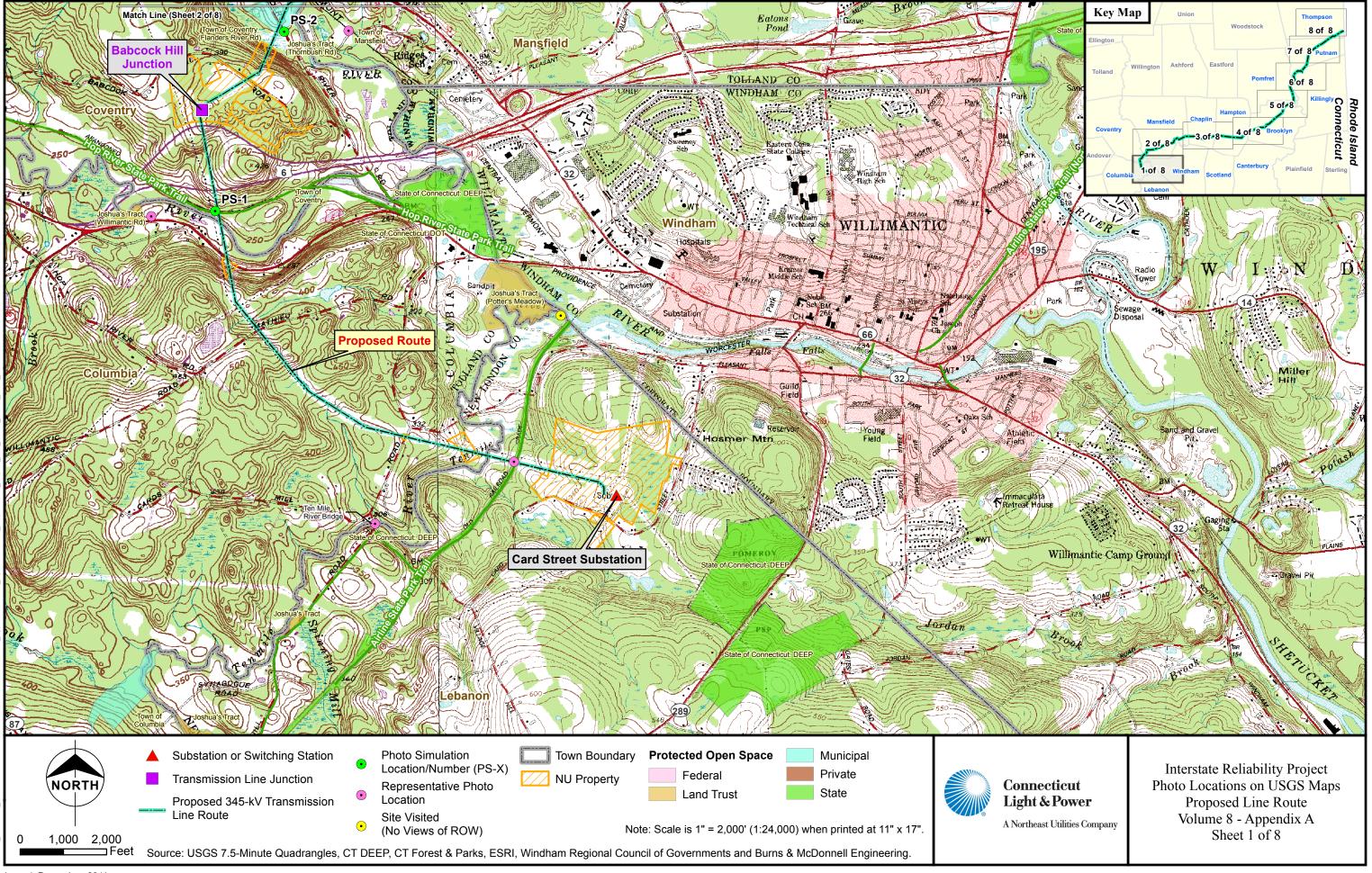
The Interstate Reliability Project 26

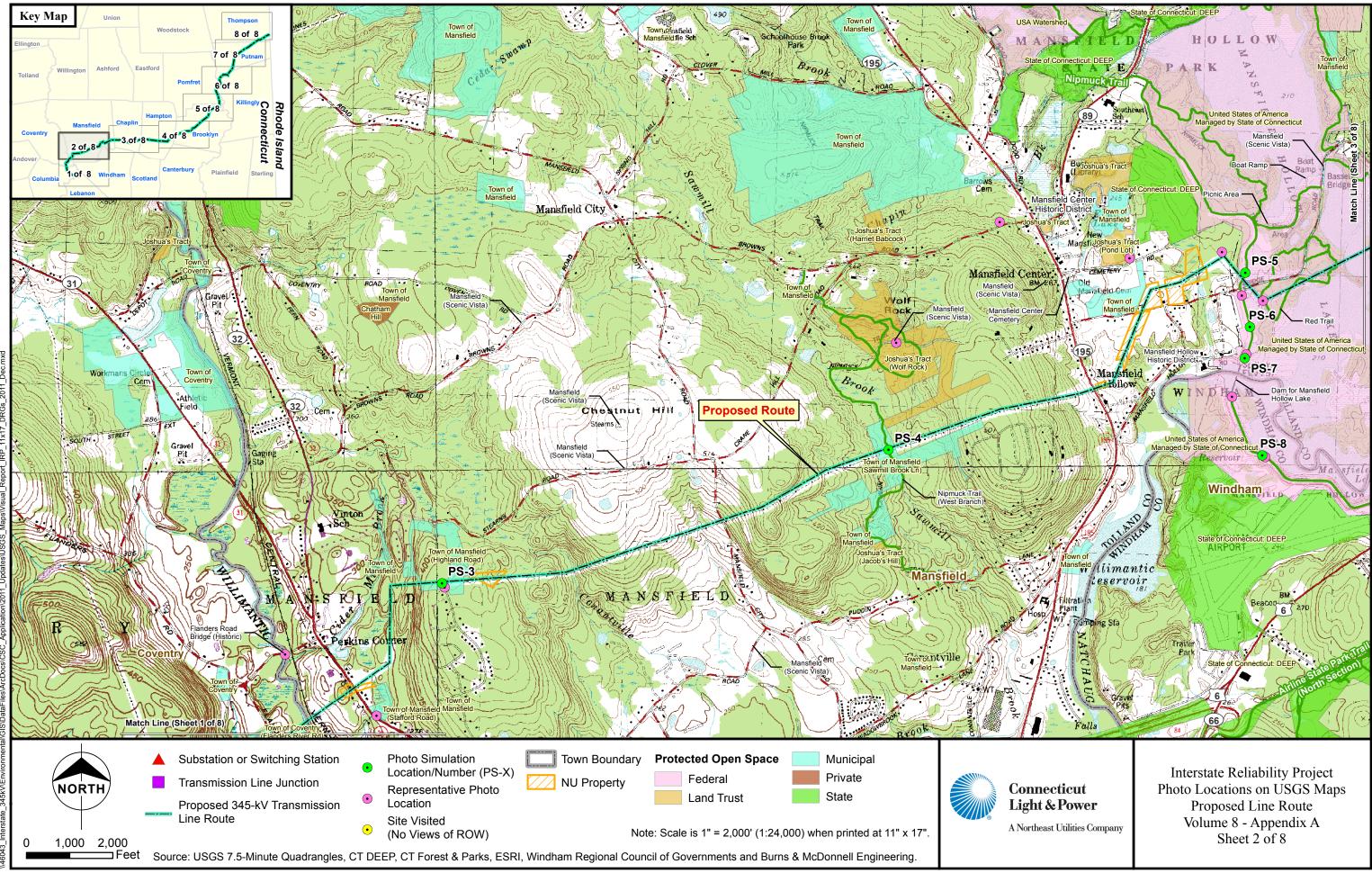
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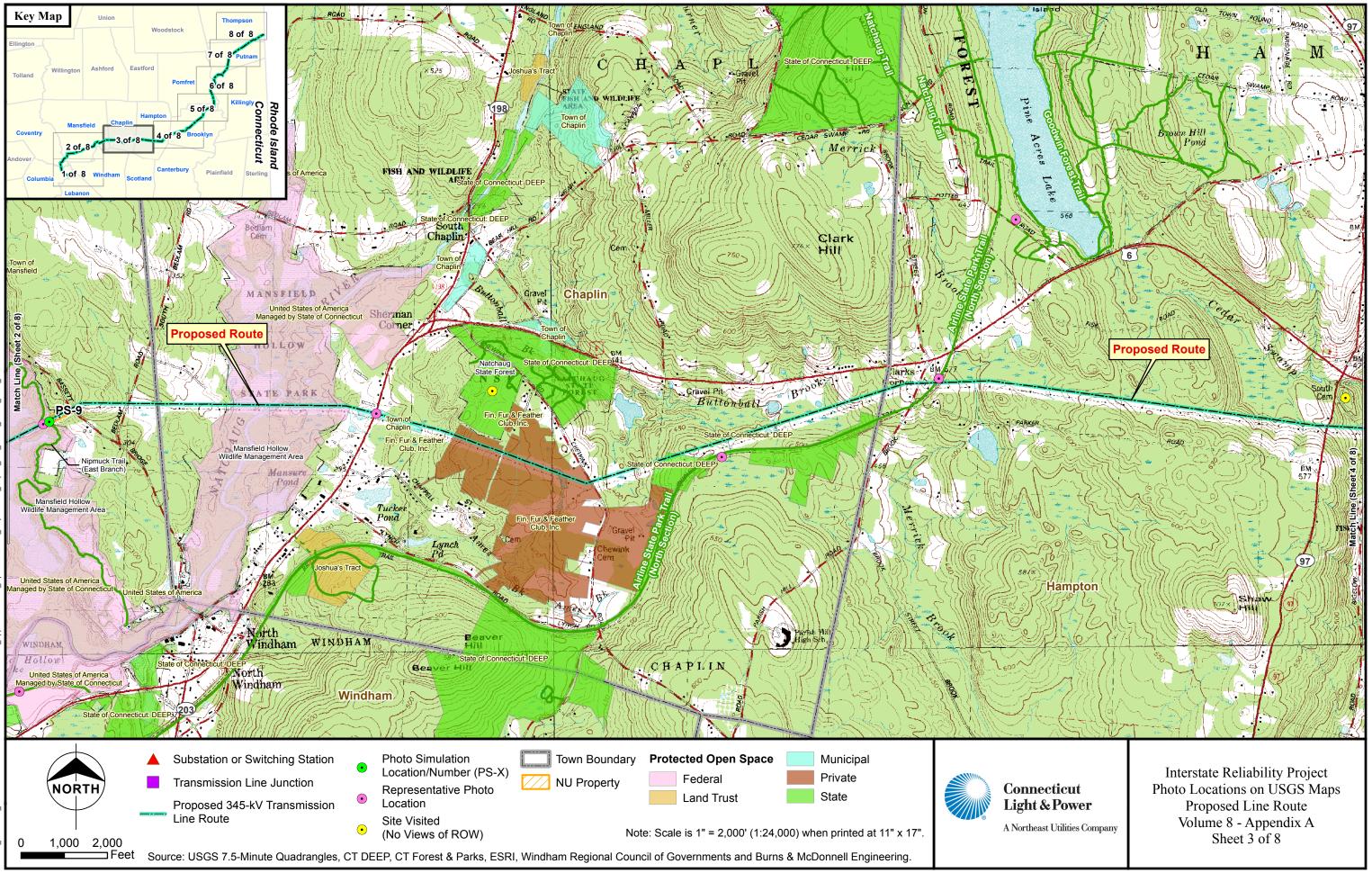


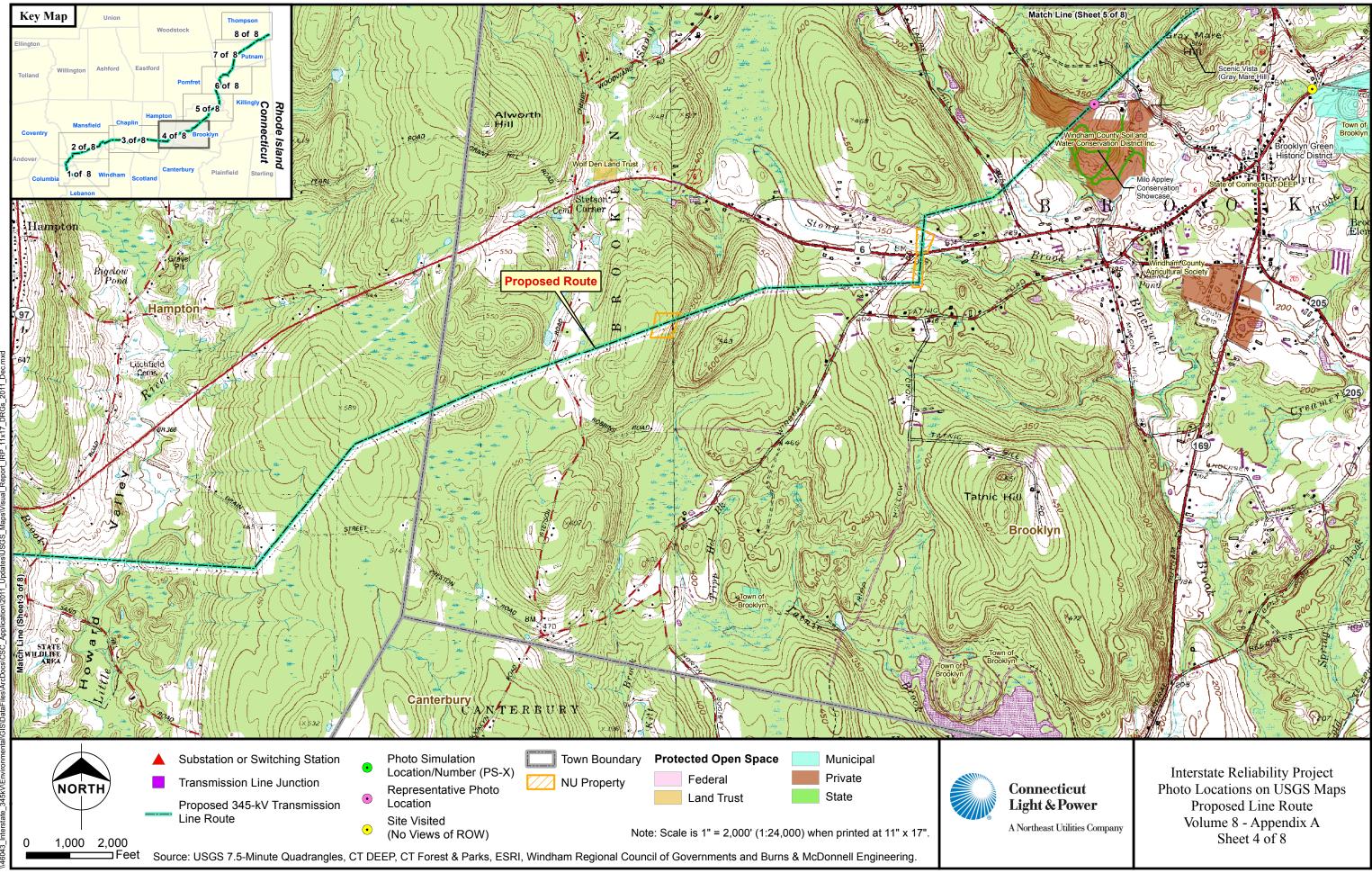


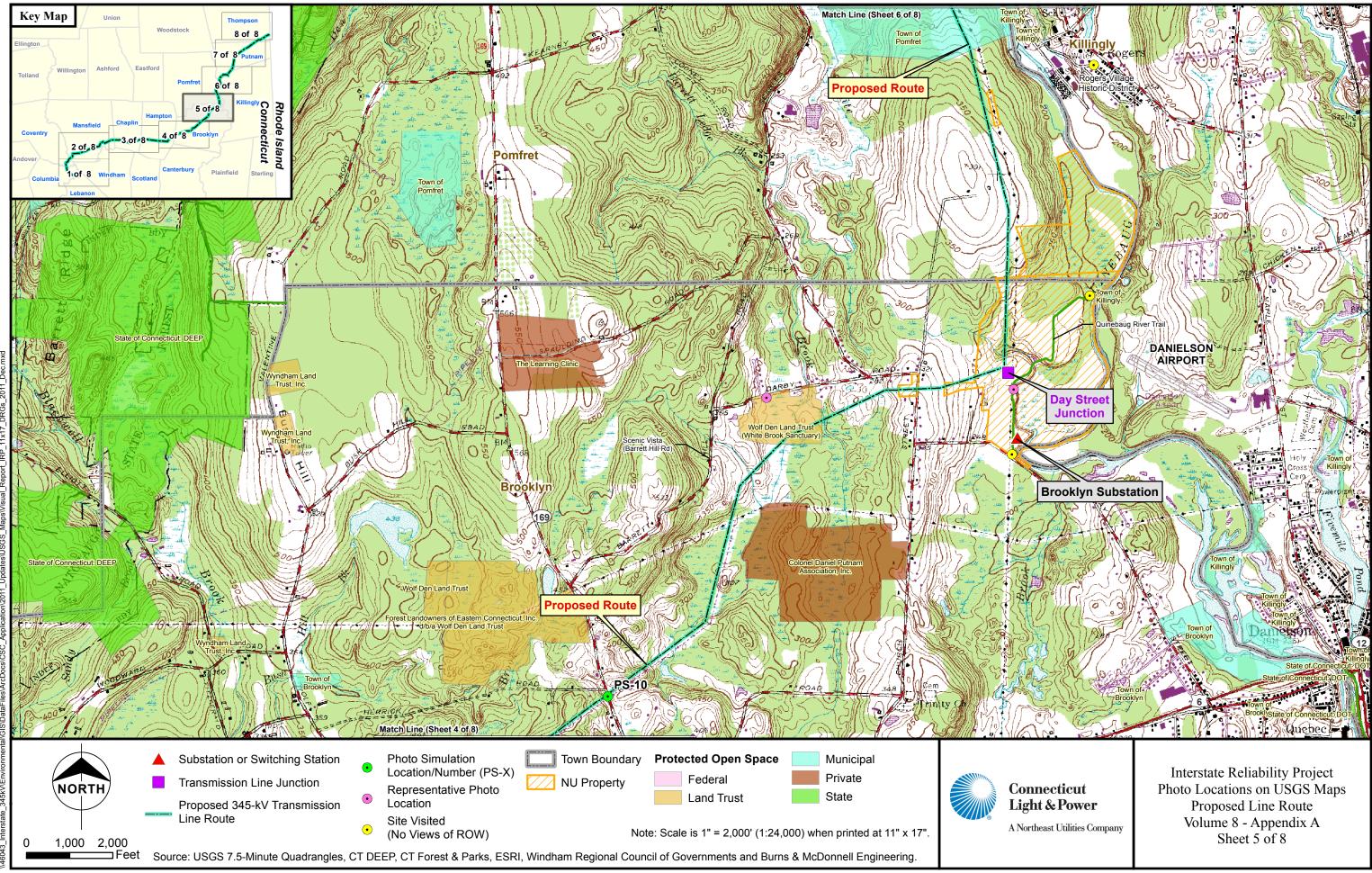
Appendix A: Proposed Route Location Map with Visual Sites

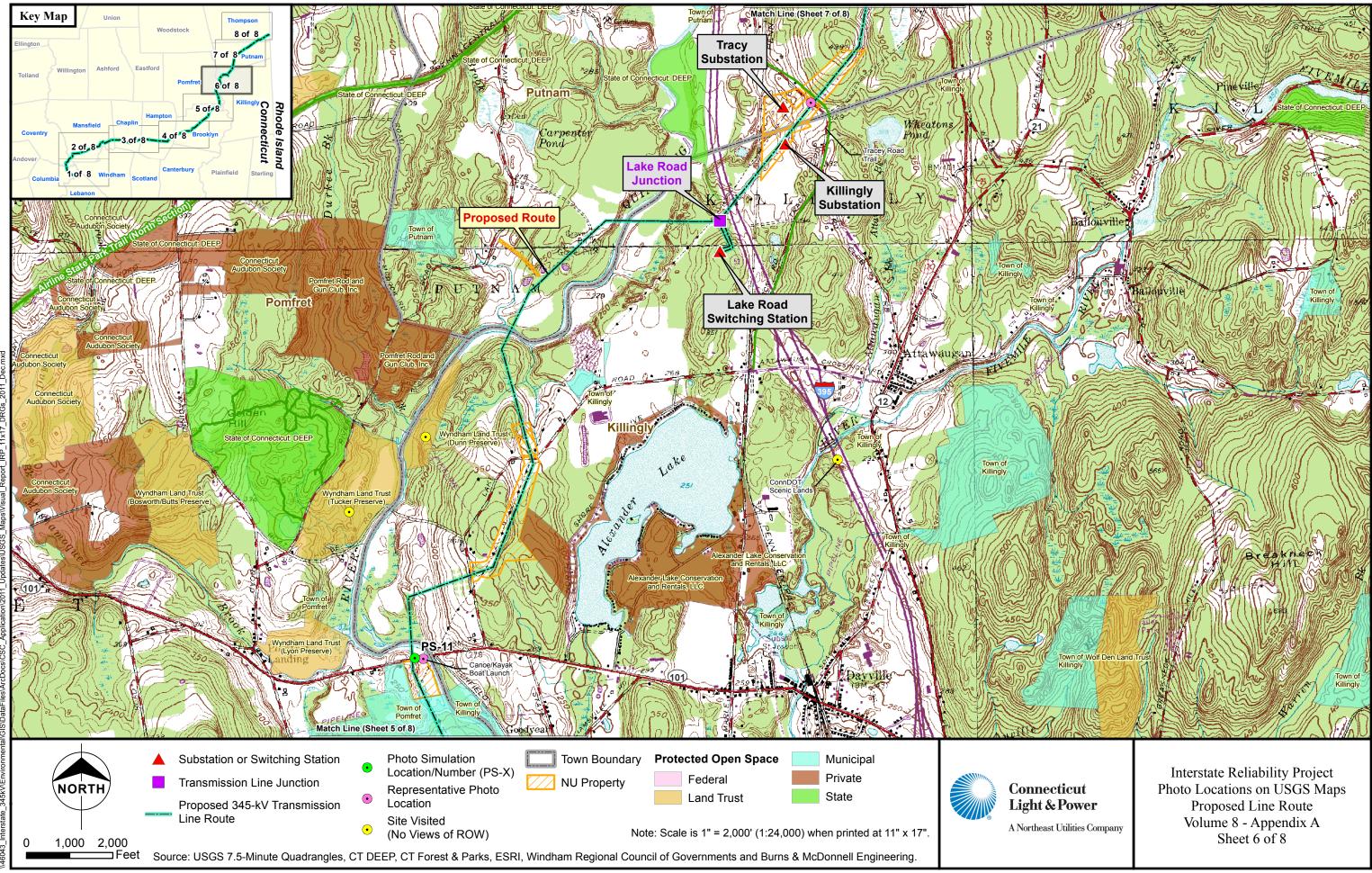


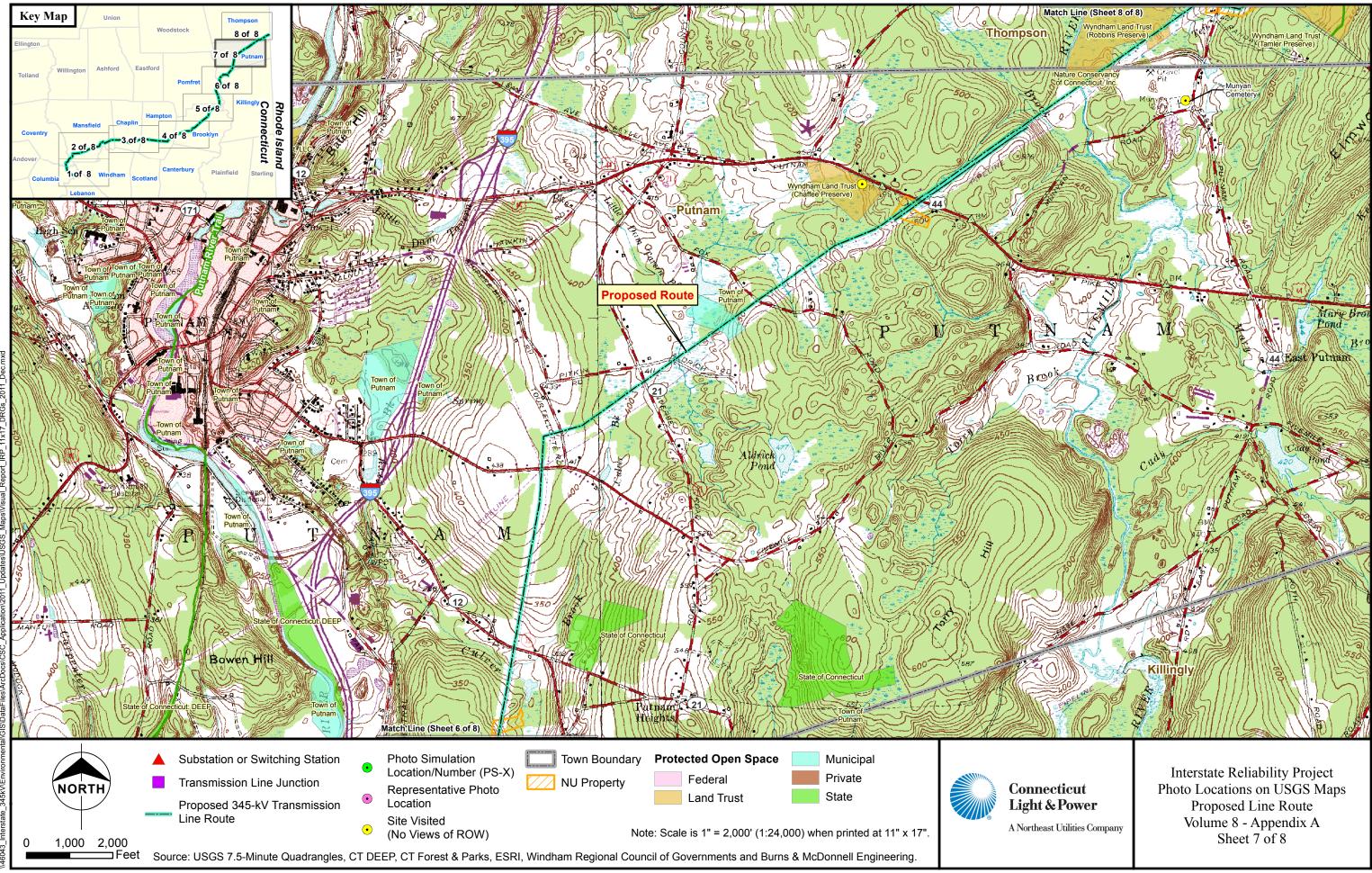


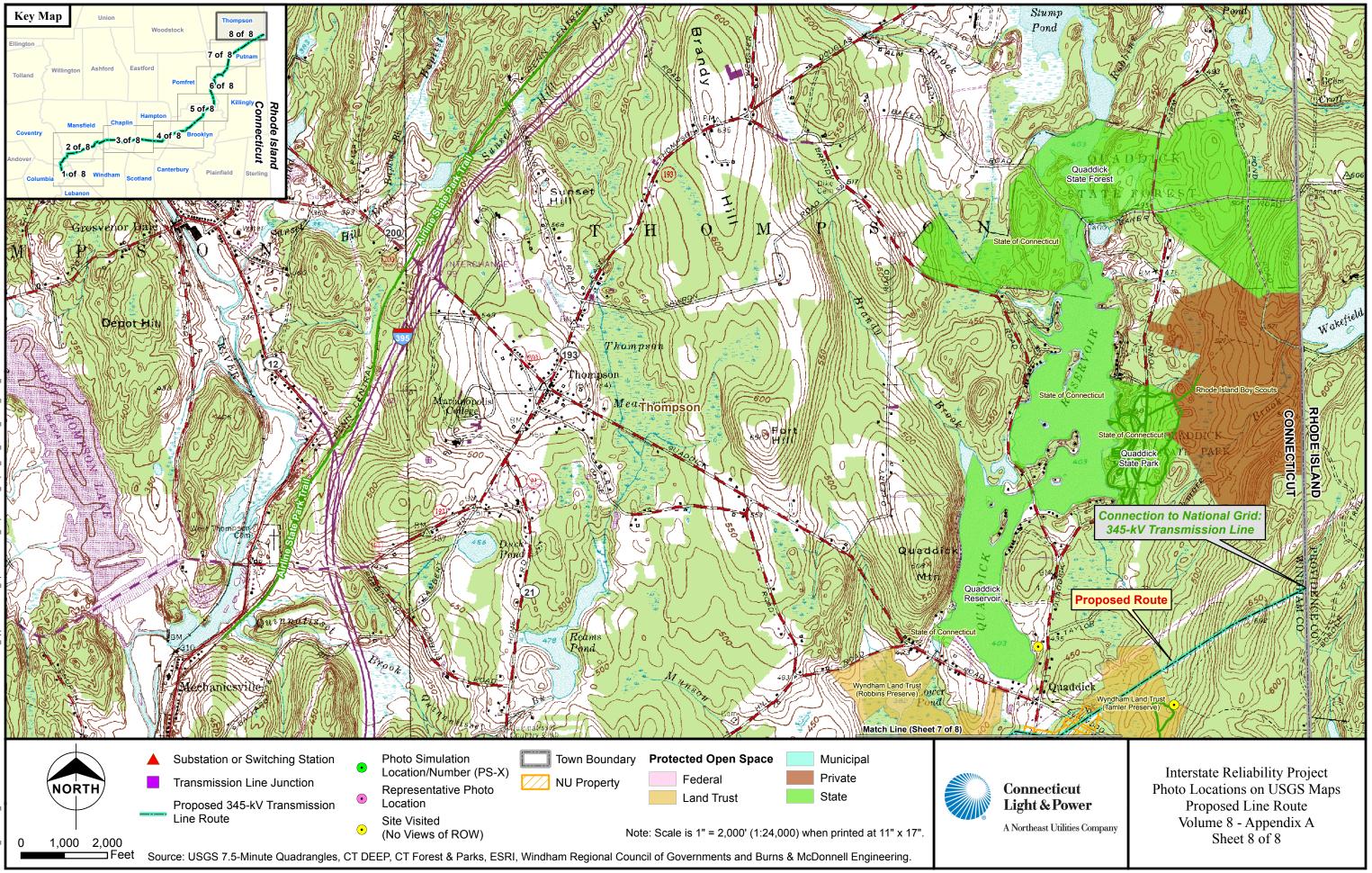
















Appendix B: Photographs of Potential Visual Sites



Photographs 2010-2011 "Leaf Off" Conditions



Photo 1: Airline State Park Trail (Southern Section), Lebanon. View to south along trail from vicinity of Kingsley Road / Baker Hill Road trail access. Transmission line ROW not visible. Trail used for hiking, biking, horseback riding.



Photo 2: Airline State Park Trail (Southern Section), Lebanon. View to south along trail immediately north of transmission line ROW. Conductors visible across trail, but forest vegetation blocks other views of ROW.



Photo 3: Airline State Park Trail (Southern Section), Lebanon. View to south along trail at transmission line ROW. At crossing, trail curves, limiting long views.



Photo 4. Airline State Park Trail (Southern Section), Lebanon. View to southwest of structure located along ROW near trail crossing.



Photo 5: Airline State Park Trail (Southern Section), Lebanon. View to north of along trail, immediately south of transmission line ROW crossing. Structures partially visible through vegetation.



Photo 6: Ten Mile River Bridge, Village Hill Road, Columbia. View from bridge to north, toward transmission line ROW. No views of ROW due to distance, topography, curve in river, and intervening forested vegetation.



Photo 7: Joshua's Tract, Columbia. View to northeast along State Route 66, in direction of transmission line ROW, showing eastern portion of Potter Meadow property. No views of transmission line ROW from property.



Photo 8. Joshua's Tract, Columbia. View to east from Joshua's Tract property, across State Route 66, toward transmission line ROW. No views of transmission line ROW from property.



Photo 9: Town Open Space, Flanders River Road, Coventry. View to southwest, from road crossing, of ROW and open space property.



Photo 10: Town Open Space, Flanders River Road, Coventry. View to northeast, from road crossing, of ROW and open space property. Bend in ROW precludes long views to the east.



Photo 11: Town Open Space, Flanders River Road, Coventry. View southeast along road, toward ROW. Topography, forested vegetation, and curves in road minimize views of ROW.



Photo 12: Flanders Road Bridge, Coventry / Mansfield. View to south from bridge toward ROW. No views of transmission line ROW due to distance, forested vegetation, and meanders in river.



Photo 13: Town Open Space, Stafford Road, Mansfield. View to northwest, toward ROW, along Stafford Road (State Route 32); open space parcel is to the right in the photograph (east side of road). No views of ROW.



Photo 14: Town Open Space, Stafford Road, Mansfield. View from Stafford Road to northeast, toward ROW. Open space parcel includes wetland surrounded by mature forested vegetation. No views of ROW.



Photo 15. Thornbush Road Town Open Space, Mansfield. View (to south) of small wooded parcel adjacent to railroad tracks and southeast side of Thornbush Road. No views of ROW, which is approximately 0.25 mile to the north.



Photo 16: Thornbush Road Town Open Space, Mansfield. View to north from open space parcel, toward ROW along railroad tracks. Vegetation and distance block views of ROW.



Photo 17: Joshua's Tract Land Trust Parcel, adjacent to Thornbush Road and Willimantic River, Mansfield. Parcel is shown on mapsheets but not in Walk Book. View from parcel boundary at road, to northwest toward ROW. Transmission line partially visible through trees.



Photo 18: Joshua's Tract Land Trust Parcel, adjacent to Thornbush Road and Willimantic River, Mansfield. View north along Thornbush Road. Land trust parcel is to the left in the photograph.



Photo 19. Highland Road Town Open Space, Mansfield. View to northeast from Stone Ridge Lane of open space parcel (wooded) adjacent to residence. ROW is visible behind this residence, and also traverses open space parcel.



Photo 20: Highland Road Town Open Space, Mansfield. View along ROW at Highland Road crossing. In this area, ROW is bordered by forest vegetation, which limits views.



Photo 21: Nipmuck Trail, West Branch, Wolf Rock Nature Preserve, Mansfield. Representative view to south along trail, just south of Wolf Rock.



Photo 22: Nipmuck Trail, West Branch, Wolf Rock Nature Preserve, Mansfield. View of Wolf Rock from trail.



Photo 23: Wolf Rock, Wolf Rock Nature Preserve, Mansfield. View to southwest from Wolf Rock, at vista identified in CFPA's Walk Book East. ROW is not visible.



Photo 24. Wolf Rock, Wolf Rock Nature Preserve, Mansfield. View to southwest from Wolf Rock, at vista identified in CFPA's Walk Book East. ROW is not visible.



Photo 25: Trail within Joshua's Land Trust Pond Lot Property, Mansfield. View to north of trail head adjacent to Cemetery Road and Mansfield Center Cemetery. Land Trust property is located entirely on north side of road.



Photo 26: Joshua's Land Trust Pond Lot Property, Mansfield. View to south, across Cemetery Road and toward ROW, from trail entrance. No views of ROW due to terrain, vegetation, and intervening land use (residence).



Photo 27: Mansfield Hollow Dam, Mansfield. View from top of dam / levee to the west, showing ROW extending down forested slope near Storrs Road



Photo 28. Mansfield Hollow Dam Levee, Mansfield. View from dam area to north, along levee and toward ROW.



Photo 29: Mansfield Hollow Dam Levee and State Park and Wildlife Management Area, Mansfield. View north along levee and toward ROW. Transmission line structures visible after bend in levee.



Photo 30: Mansfield Hollow Dam Levee, Mansfield Hollow State Park and Wildlife Management Area, Mansfield. View north along levee and toward ROW (and toward Bassetts Bridge Road).



Photo 31: Mansfield Hollow State Park, Mansfield. View to east of ROW through park (toward Mansfield Hollow Lake) from levee. (Red Trail crosses ROW along this segment.)



Photo 32: Mansfield Hollow Levee, Mansfield. View to south along levee, toward dam from vicinity of ROW.



Photo 33: Fin, Fur, and Feather Club, Chaplin. Driveway entrance to club, off Chewink Road (view to west from road). Transmission line is visible behind clubhouse.



Photo 34: Fin, Fur, and Feather Club, Chaplin. Driveway entrance to club, off Chewink Road (view to west from road). Transmission line is visible behind clubhouse. Proposed transmission line would be on north side of existing line, farther from clubhouse facilities.



Photo 35. Airline State Park Trail (Northern Section), Parker Road Trailhead, Hampton. View to northeast from trail entrance, toward ROW. Transmission line is not visible.



Photo 36: Airline State Park Trail (Northern Section), Hampton. View to northeast along trail near ROW. Trail is below grade and curves in this section, limiting views of the overhead transmission line until at the crossing.



Photo 37: Airline State Park Trail (Northern Section), Hampton. H-frame structure visible only by looking up at trail crossing.



Photo 38: Airline State Park Trail (Northern Section), Hampton. View along trail to southwest, toward ROW. Transmission line is not visible due to curve in trail and intervening vegetation.



Photo 39. Milo Appley Conservation Area (Open Space), Wolf Den Land Trust, Wolf Den Road, Brooklyn. View to west along ROW. Wolf Den Road is bordered predominantly by forested areas. The municipal open space does not include any trails or designated recreational areas.



Photo 40: State Route 169 National Scenic Byway, Brooklyn. ROW crossing, view to east. Nearby land uses consist of rural residential areas and open fields, intermixed with forest. Terrain, vegetation, and land uses limit views of the ROW (to travelers on State Route 169) to the immediate vicinity of the crossing.



Photo 41: Hop River, Coventry. View to south from Hop River State Park Trail, of Hop River and ROW. State Route 66 billboard visible in background.



Photo 42: Hop River State Park Trail, Coventry. View to north of transmission line ROW and structures. Terrain slopes up sharply to the north (toward U.S. Route 6), limiting views of the transmission structures to those in the immediate vicinity of the trail. Predominant views are to the south (refer to Photo 41).



Photo 43: Hop River State Park Trail, Coventry. View to east along trail, toward transmission line ROW. Vegetation and curve in trail limit views of ROW, except at and in immediate vicinity of transmission line crossing.



Photo 44: Hop River State Park Trail, Coventry. View to west along trail near transmission line ROW crossing.



Photo 45: Nipmuck Trail (West Branch), Mansfield. View to north of along trail, immediately south of transmission line ROW crossing. Structure partially visible through vegetation.



Photo 46: Nipmuck Trail (West Branch), Mansfield. View to north of trail aligned perpendicularly across ROW.



Photo 47: Nipmuck Trail (West Branch), Mansfield. View from trail to west along ROW. Dense forest vegetation along ROW limits long views of ROW from trail, except at crossing.



Photo 48. Nipmuck Trail (West Branch), Mansfield. View from trail to east along ROW.



Photo 49: Nipmuck Trail (West Branch), Mansfield. View from trail looking south toward ROW. Forest vegetation limits views of ROW and transmission line structures.



Photo 50: Mansfield Hollow State Park, Red Trail, Mansfield. View to north along trail (toward Bassetts Bridge Road trail head near levee); monopole structure visible through trees to the west.



Photo 51: Mansfield Hollow State Park, Red Trail, Mansfield. View to east along ROW from trail crossing. (View to west is toward flood control levee.)



Photo 52: Mansfield Hollow State Park, Red Trail, Mansfield. View to northeast of trail and transmission line ROW; second Red Trail crossing.



Photo 53: Mansfield Hollow State Park, Red Trail, Mansfield. View to east from third trail crossing showing Mansfield Hollow Lake and transmission line span of lake.



Photo 54: Mansfield Hollow State Park, Red Trail Extension, Mansfield. View across Mansfield Hollow Lake from edge of ROW on west side of lake. This area appears to be used as an overlook by hikers.



Photo 55. Mansfield Hollow State Park, Bassetts Bridge Road, Mansfield. View to southeast, across Mansfield Hollow Lake, toward transmission line crossing. Structures and conductors visible in far background.



Photo 56: Nipmuck Trail (East Branch), Mansfield Hollow WMA, Mansfield. View from trail head near Bassetts Bridge Road, south across Mansfield Hollow Lake toward transmission line ROW. Structures barely visible in background.

Photographs of Visual Sites, "Leaf Off Conditions", December 2, 2010



Photo 57: Nipmuck Trail (East Branch), Mansfield Hollow WMA, Mansfield. View to south along trail near Mansfield Hollow Lake (just south of Bassetts Bridge Road). Dense forest vegetation along most of trail limits potential views of transmission line ROW.



Photo 58: Nipmuck Trail (East Branch), Mansfield Hollow WMA, Mansfield. View to west along transmission line ROW at trail crossing. Vegetation precludes other views of transmission line along portion of trail between ROW and Bassetts Bridge Road.



Photo 59. Nipmuck Trail (East Branch), Mansfield Hollow WMA, Mansfield. View to east (toward Bassetts Bridge Road) along transmission line ROW at trail crossing. (Trail crosses ROW generally perpendicularly.)



Photo Î 0: Mansfield Hollow WMA, Mansfield. View from ROW looking west across Mansfield Hollow Lake toward State Park. Nipmuck Trail not visible from this location; access to the lake is only available along ROW. ROW appears to be used by the public in this area.

Photographs of Visual Sites, "Leaf Off Conditions", December 2, 2010



Photo 61: Nipmuck Trail (East Branch), Mansfield Hollow WMA. View to north, toward ROW, from trail. Vegetation limits views of the ROW.



Photo 62: Nipmuck Trail (East Branch), Mansfield Hollow WMA. View from trail south of ROW (in vicinity of CFPA-identified scenic vista), looking across lake toward transmission line ROW. Intervening vegetation limits views of transmission line structures.



Photo 63: Nipmuck Trail (East Branch), Mansfield Hollow WMA. View from trail south of ROW (in vicinity of CFPA-identified scenic vista), looking across lake toward transmission line ROW. Intervening vegetation limits views of transmission line structures.



Photo 64: Nipmuck Trail (East Branch), Mansfield Hollow WMA. View from trail south of ROW (in vicinity of CFPA-identified scenic vista), looking across lake toward transmission line ROW. Intervening vegetation limits views of transmission line structures.

Photographs of Visual Sites, "Leaf Off Conditions", December 2, 2010



Photo 65: State Route 101 and Quinebaug River Crossing, Pomfret. View to south along ROW on CL&P fee-owned property west of and adjacent to Quinebaug River. Town of Pomfret canoe / kayak boat launch / parking area on south side of road.



Photo 66: State Route 101 and Quinebaug River Crossing, Pomfret. View to north along ROW at crossing of Quinebaug River.



Photo 67: State Route 101 and Quinebaug River Crossing, Pomfret. Town of Pomfret boat launch area along Quinebaug River. Boat launch is south of and adjacent to State Route 101 and is located on CL&P property, east of the transmission line ROW.

Photographs of Visual Sites, "Leaf Off Conditions", March 13, 2011



Photo 1: Mansfield Hollow Wildlife Management Area, Chaplin. View to west along ROW (toward WMA) from U.S. Route 6. There is no access into this segment of the WMA from this location. Distant views of the ROW and transmission structures are blocked by vegetation and a bend in the alignment of the ROW.



Photo 2: Airline State Park Trail (Northern Section), Chaplin. View to southwest along trail. The transmission line ROW parallels to the north, but does not cross, this portion of the trail.



Photo 3: Airline State Park Trail (Northern Section), Chaplin. View to north toward ROW from along trail. H-frame transmission line structures are barely visible through trees.



Photo 4. White Brook Sanctuary, Wolf Den Land Trust, Brooklyn. View to south from Darby Road. Transmission line structure visible in background. This land trust parcel is undeveloped.

Photographs of Visual Sites, "Leaf Off Conditions", March 13, 2011



Photo 5: ROW near State Route 101 and Quinebaug River, Pomfret. View to north of along ROW, toward State Route 101 and Quinebaug River. Town of Pomfret Canoe / Kayak Boat Launch is to the right in the photo.



Photo 6: ROW south of State Route 101. View to south of ROW. Canoe / Kayak Boat Launch (Pomfret) and Quinebaug River in foreground on left in the photo.



Photo 7: Tracey Road Trail, Killingly / Putnam. View of Tracey Road Trail (paved bicycle / walking / jogging trail) located along northeast side of Tracy and Park roads. Trail is located near CL&P's Tracy Road Substation.



Photo 8. Tracey Road Trail, Killingly / Putnam. View of Tracey Road Trail at crossing of existing transmission line ROW. View to south.

Photographs of Visual Sites, "Leaf Off" Conditions, April 7, 2011



Photo 1: Mansfield Hollow Dam, Mansfield. View to north across dam, toward ROW. Some existing transmission line structures visible in background.



Photo 2: Mansfield Hollow Dam and Levee Trail, Mansfield and Windham. View to north, toward dam, from trail. Curve in trail and adjacent vegetation limit views of the ROW to the north and northeast.



Photo 3: Mansfield Hollow Levee Trail, Mansfield and Windham. View to north, toward dam. Adjacent vegetation, curve in levee trail, and distance preclude views of the transmission line structures.



Photo 4. Mansfield Hollow Levee Trail and Lake, Mansfield and Windham. View from trail across Mansfield Hollow Lake, toward ROW. Some transmission line structures visible above the trees in distance.

Photographs of Visual Sites, "Leaf Off" Conditions, April 7, 2011



Photo 5: Mansfield Hollow Levee Trail, Mansfield and Windham. View to northwest along trail, from near start of trail near U.S. Route 6. Windham Airport borders this segment of the levee to the southwest, while Mansfield Hollow Lake is located to the northeast. The transmission line ROW is not visible from this location.



Photo 6: Mansfield Hollow Levee Trail, Mansfield and Windham. View from levee trail toward northern part of Windham Airport. Transmission line ROW extends down forested slope in far background (slope is west of State Route 195, Storrs Road).

Photographs 2011 "Leaf On" Conditions



Photo 1: Airline State Park Trail (Southern Section), Lebanon. View to southwest along trail at transmission line crossing. Conductors visible, but limited views of transmission line structures except at ROW crossing due to dense vegetation.



Photo 2: Airline State Park Trail (Southern Section), Lebanon. View to southwest along trail, looking toward transmission line ROW. Forest vegetation blocks views of the transmission line ROW.



Photo 3: Airline State Park Trail (Southern Section), Lebanon. View to northeast of ROW at trail crossing. Except at ROW crossing, ROW and transmission line structures are not visible. Structures blend with dense forest vegetation in background.



Photo 4: Airline State Park Trail (Southern Section), Lebanon. View of ROW from trail crossing; trail is slightly below grade of ROW in this area.



Photo 5: Town Open Space, Flanders River Road, Coventry. View to southwest, from road crossing, of ROW and open space property. Under leaf on conditions, the ROW is visible, but only at and near the road crossing. Vegetation, topography, and bends in the ROW limit long views.



Photo 6: Town Open Space, Flanders River Road, Coventry. View to northeast, from just south of ROW/road crossing, of transmission line structure within open space property. Bend in ROW precludes long views to the east.



Photo 7: Highland Road Town Open Space, Mansfield. View to east along ROW at Highland Road crossing. In this area, ROW is bordered by forest vegetation, which limits views.



Photo 8: Highland Road Town Open Space, Mansfield. View from ROW to north along Highland Road. Although trees screen most views of ROW, structures and ROW are visible through vegetation from certain nearby residential properties along Highland Road and Stone Ridge Lane.



Photo 9: Mansfield Hollow Dam, Mansfield. View from top of dam / levee to the west, showing ROW extending down forested slope near Storrs Road (State Route 195).



Photo 10. Mansfield Hollow Dam Levee, Mansfield. View from dam area to north, along levee trail and toward ROW.



Photo 11: Mansfield Hollow State Park, Mansfield. View of ROW crossing of Bassetts Bridge Road and field in Mansfield Hollow State Park, adjacent to levee trail.



Photo 12: Mansfield Hollow State Park, Mansfield. View of transmission line structure at bend (where ROW turns east to cross wooded portion of park); ROW across Bassetts Bridge Road shown in background.



Photo 13: Mansfield Hollow State Park, Mansfield. View along ROW (looking east toward Mansfield Hollow Lake [not visible]) from vicinity of Red Trail (hiking trail).



Photo 14: Mansfield Hollow State Park, Mansfield. View to northeast, toward transmission line ROW, from small picnic area adjacent to lake (near dam). Some transmission line structures visible in background above tree line.



Photo 15: Mansfield Hollow Dam, Mansfield. View to north, across dam. Some transmission line structures visible in background.



Photo 16: Mansfield Hollow Levee Trail and Lake, Mansfield and Windham. View from trail to north toward dam. Curve in trail and vegetation limit views of transmission line structures in the distance.



Photo 17: Mansfield Hollow Levee Trail, Mansfield and Windham. View from trail to northeast, toward ROW. From some vantage points, transmission line structures are barely visible in background above tree line.



Photo 18: Mansfield Hollow Levee Trail, Windham. View from start of levee trail toward Windham Airport. Transmission line ROW extends down forested slope in far background (slope is west of State Route 195, Storrs Road).



Photo 19: Mansfield Hollow State WMA, Chaplin. View from park-and-ride parking lot adjacent to U.S. Route 6, of ROW extending west into WMA. Long views of transmission line structures not visible due to bend in ROW.



Photo 20: Mansfield Hollow State WMA, Chaplin. View from U.S. Route 6 crossing of ROW extending west into WMA. Long views of transmission line structures not visible due to bend in ROW.



Photo 21: Airline State Park Trail (Northern Section), Chaplin. View to southwest along trail. ROW is located generally parallel to and north of the trail. Due to dense vegetation and distance, transmission line structures are not visible from trail.



Photo 22: Airline State Park Trail (Northern Section), Hampton. View toward ROW, looking northeast along trail. Trail is below grade and curves in this section. This topography, along with dense forest vegetation, limits views of the overhead transmission line from the trail until at the ROW crossing.



Photo 23: Airline State Park Trail (Northern Section), Hampton. View of ROW at trail crossing (view to southwest). Trail is below grade and curves in this section. This topography, along with vegetation, limits views of the transmission line except at ROW crossing.



Photo 24: Milo Appley Conservation Area (Open Space), Wolf Den Land Trust, Wolf Den Road, Brooklyn. View to west along ROW. ROW and adjacent areas are characterized by dense vegetation, limiting views of the ROW except at crossing.



Photo 25: State Route 169 National Scenic Byway, Brooklyn. ROW crossing, view to east. Terrain and vegetation limit views of the ROW (to travelers on State Route 169) to the immediate vicinity of the crossing.



Photo 26: White Brook Sanctuary, Wolf Den Land Trust, Brooklyn. View from Darby Road, toward ROW. Structure visible in background, but dense vegetation and distance limit views of the ROW from most locations along road.



Photo 27: State Route 101 and Quinebaug River Kayak / Canoe Launch, Pomfret. View to south along ROW from boat launch parking lot. Structures dominate landscape only at ROW; dense vegetation screens views from other locations.



Photo 28: State Route 101 and Quinebaug River Kayak / Canoe Launch, Pomfret. View to north (toward highway and Quinebaug River) along ROW from ROW south of boat launch parking lot. Structures dominate landscape only at ROW; dense vegetation screens views from other locations.



Photo 1: Quinebaug River Trails, CL&P Property, Brooklyn. View of trail looking north toward ROW in vicinity of Day Street Junction. Proposed 345-kV line would be west of these existing 115-kV and 345-kV transmission lines.



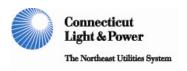
Photo 2: Quinebaug River Trails, CL&P Property, Brooklyn. View of parking / entrance to trails off Day Street, with Brooklyn Substation in background. Existing ROW for Proposed Route not visible.



Photo 3: Quinebaug River Trails, CL&P Property, Brooklyn. View from near Day Street Junction, looking south along trail toward Brooklyn Substation and away from Proposed Route.



Photo 4: Quinebaug River Trails, CL&P Property, Brooklyn. View of portion of trail that extends east through wooded portions of the property, closer to Quinebaug River. View of ROW / transmission line structures generally precluded by vegetation.





Appendix C: Photo-Simulations



Interstate Reliability Project Hop River Trail – Towns of Coventry and Columbia Transmission Rights-of-Way Typical Cross Section XS-1 / Photo Location PS-1

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed. Also, a one new 69-kV double circuit structure for existing lines 800 and 900 will be installed at this location.

(Existing View: Leaf-off Condition)

(Simulation of Post-Project View: Leaf-off Condition)





Existing electric transmission line structures looking south from the Hop River Trail, located south of U.S. Route 6 in Coventry.

Preliminary design of electric transmission line structures looking south from the Hop River Trail, located south of U.S. Route 6 in Coventry.

Interstate Reliability Project Hop River Trail – Towns of Coventry and Columbia Transmission Rights-of-Way Typical Cross Section XS-1 / Photo Location PS-1

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed. Also, a one new 69-kV double circuit structure for existing lines 800 and 900 will be installed at this location.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking south from the Hop River Trail, located south of U.S. Route 6 in Coventry.

Preliminary design of electric transmission line structures looking south from the Hop River Trail, located south of U.S. Route 6 in Coventry.

Interstate Reliability Project Flanders River Road Town Open Space – Town of Coventry Transmission Rights-of-Way Typical Cross Section XS-2 BMP / Photo Location PS-2

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)







Existing electric transmission line structures looking north along Flanders River Road toward the town open space and right-of-way.

Preliminary design of electric transmission line structures looking north along Flanders River Road toward the town open space and right-of-way.

Interstate Reliability Project Flanders River Road Town Open Space – Town of Coventry Transmission Rights-of-Way Typical Cross Section XS-2 BMP / Photo Location PS-2

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking north along Flanders River Road toward the town open space and right-of-way.

Preliminary design of electric transmission line structures looking north along Flanders River Road toward the town open space and right-of-way.

Interstate Reliability Project Highland Road Town Open Space – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-2 BMP / Photo Location PS-3

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)







Existing electric transmission line structures looking east from Highland Road toward the town open space.

Preliminary design of electric transmission line structures looking east from Highland Road toward the town open space.

Interstate Reliability Project Highland Road Town Open Space – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-2 BMP / Photo Location PS-3

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking east from Highland Road toward the town open space.

Preliminary design of electric transmission line structures looking east from Highland Road toward the town open space.

Interstate Reliability Project Nipmuck Trail (West Branch) – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-2 / Photo Location PS-4

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)

(Simulation of Post-Project View: Leaf-off Condition)





Existing electric transmission line structures looking east from the Nipmuck Trail - West Branch, located east of Mansfield City Road and west of Storrs Road.

Preliminary design of electric transmission line structures looking east from the Nipmuck Trail - West Branch, located east of Mansfield City Road and west of Storrs Road.

Interstate Reliability Project Nipmuck Trail (West Branch) – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-2 / Photo Location PS-4

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking east from the Nipmuck Trail - West Branch, located east of Mansfield City Road and west of Storrs Road.

Preliminary design of electric transmission line structures looking east from the Nipmuck Trail - West Branch, located east of Mansfield City Road and west of Storrs Road.

Interstate Reliability Project Mansfield Hollow Park Levee Trail – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-3 / Photo Location PS-5

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)

(Simulation of Post-Project View: Leaf-off Condition)





Existing electric transmission line structures looking south from the Mansfield Hollow Park Levee Trail, located north of Bassetts Bridge Road.

Preliminary design of electric transmission line structures looking south from the Mansfield Hollow Park Levee Trail, located north of Bassetts Bridge Road.

Interstate Reliability Project Mansfield Hollow Park Levee Trail – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-3 / Photo Location PS-6

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)

(Simulation of Post-Project View: Leaf-off Condition)





Existing electric transmission line structures looking northeast from the Mansfield Hollow Park Levee Trail, north of the Mansfield Hollow Lake Dam, located south of Bassetts Bridge Road.

Preliminary design of electric transmission line structures looking northeast from the Mansfield Hollow Park Levee Trail, north of the Mansfield Hollow Lake Dam, located south of Bassetts Bridge Road.

Interstate Reliability Project Mansfield Hollow Dam – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-2 / Photo Location PS-7

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)

(Simulation of Post-Project View: Leaf-off Condition)





Existing electric transmission line structures looking west from the Mansfield Hollow Dam, toward the transmission line right-of-way west of Storrs Road.

Preliminary design of electric transmission line structures looking west from the Mansfield Hollow Dam, toward the transmission line right-of-way west of Storrs Road.

Interstate Reliability Project Mansfield Hollow Dam – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-2 / Photo Location PS-7

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking west from the Mansfield Hollow Dam, toward the transmission line right-of-way west of Storrs Road.

Preliminary design of electric transmission line structures looking west from the Mansfield Hollow Dam, toward the transmission line right-of-way west of Storrs Road.

Interstate Reliability Project Mansfield Hollow Park Levee Trail – Towns of Mansfield and Windham Transmission Rights-of-Way Typical Cross Section XS-3 / Photo Location PS-8

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)







Existing electric transmission line structures looking north from the Mansfield Hollow Park Levee Trail on the Mansfield Hollow Lake levee, located north of Boston Post Road/U.S. 6 west.

Preliminary design of electric transmission line structures looking north from the Mansfield Hollow Park Levee Trail on the Mansfield Hollow Lake levee, located north of Boston Post Road/U.S. 6 west.

Interstate Reliability Project Mansfield Hollow Park Levee Trail – Towns of Mansfield and Windham Transmission Rights-of-Way Typical Cross Section XS-3 / Photo Location PS-8

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking north from the Mansfield Hollow Park Levee Trail on the Mansfield Hollow Lake levee, located north of Boston Post Road/U.S. 6 west.

Preliminary design of electric transmission line structures looking north from the Mansfield Hollow Park Levee Trail on the Mansfield Hollow Lake levee, located north of Boston Post Road/U.S. 6 west.

Interstate Reliability Project Nipmuck Trail (East Branch) – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-3 / Photo Location PS-9

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)

(Simulation of Post-Project View: Leaf-off Condition)





Existing electric transmission line structures looking southwest from the Nipmuck Trail - East Branch, located west of Bassetts Bridge Road.

Preliminary design of electric transmission line structures looking southwest from the Nipmuck Trail - East Branch, located west of Bassetts Bridge Road.

Interstate Reliability Project Nipmuck Trail (East Branch) – Town of Mansfield Transmission Rights-of-Way Typical Cross Section XS-3 / Photo Location PS-9

The existing 345-kV line will remain and a new delta-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





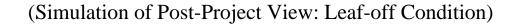
Existing electric transmission line structures looking southwest from the Nipmuck Trail - East Branch, located west of Bassetts Bridge Road.

Preliminary design of electric transmission line structures looking southwest from the Nipmuck Trail - East Branch, located west of Bassetts Bridge Road.

Interstate Reliability Project State Route 169 (Scenic Road) – Town of Brooklyn Transmission Rights-of-Way Typical Cross Section XS-6 / Photo Location PS-10

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)







Existing electric transmission line structures looking east from State Route 169 (Scenic Road).

Preliminary design of electric transmission line structures looking east from State Route 169 (Scenic Road).

Interstate Reliability Project State Route 169 (Scenic Road) – Town of Brooklyn Transmission Rights-of-Way Typical Cross Section XS-6 / Photo Location PS-10

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking east from State Route 169 (Scenic Road).

Preliminary design of electric transmission line structures looking east from State Route 169 (Scenic Road).

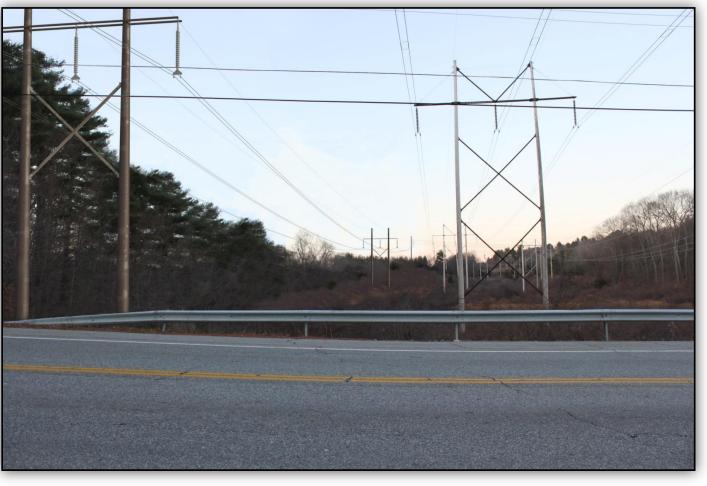
Interstate Reliability Project Quinebaug River – Towns of Pomfret and Killingly Transmission Rights-of-Way Typical Cross Section XS-7 / Photo Location PS-11

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-off Condition)

(Simulation of Post-Project View: Leaf-off Condition)





Existing electric transmission line structures looking north from Killingly Road toward the Quinebaug River. Quinebaug River access parking lot and boat ramp is located in the vicinity.

Preliminary design of electric transmission line structures looking north from Killingly Road toward the Quinebaug River. Quinebaug River access parking lot and boat ramp is located in the vicinity.

Interstate Reliability Project Quinebaug River – Towns of Pomfret and Killingly Transmission Rights-of-Way Typical Cross Section XS-7 / Photo Location PS-11

The existing 345-kV line will remain and a new horizontally-configured 345-kV line will be installed.

(Existing View: Leaf-on Condition)

(Simulation of Post-Project View: Leaf-on Condition)





Existing electric transmission line structures looking north from Killingly Road toward the Quinebaug River. Quinebaug River access parking lot and boat ramp is located in the vicinity.

Preliminary design of electric transmission line structures looking north from Killingly Road toward the Quinebaug River. Quinebaug River access parking lot and boat ramp is located in the vicinity.





Appendix D: Representative Photographs of the Proposed Route and Variations: General Visual Setting from Public Road Crossings

This appendix includes representative photographs both of the existing CL&P ROWs along which the proposed 345-kV lines would be located (i.e., the Proposed Route) and of the variations to the Proposed Route. All of the photographs were taken in the fall or winter of 2008, and illustrate views of the existing CL&P ROWs and route variations from public roads. These photographs do not depict views in relation to visual sites, but rather are intended to show the general visual setting along the Proposed Route and variations. For the Proposed Route, the photographs illustrate the landscapes traversed by the existing CL&P ROWs, as well as the appearance of the existing overhead transmission line structures and ROW vegetation management in relation to surrounding environmental resources and land use features.

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¹ Refer to Volume 1 and Volume 1A (Section 15) for detailed descriptions of the Proposed Route and variations, respectively.

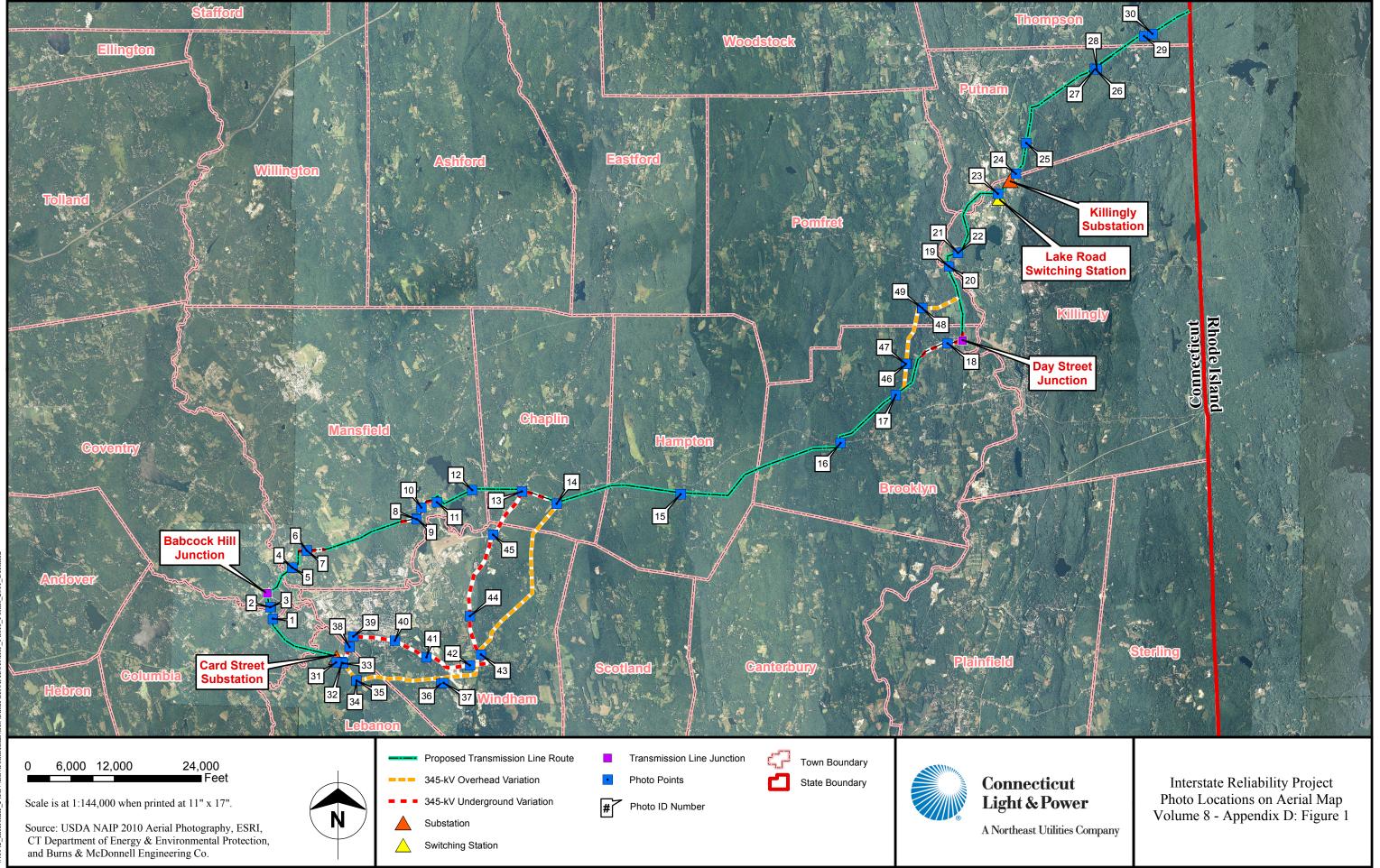




Photo 1: View of transmission lines southwest from Willimantic Road in Columbia, Connecticut.



Photo 2: View north of transmission lines in Coventry, Connecticut.



Photo 3: View south of transmission lines in Coventry, Connecticut.



Photo 4: View southwest of transmission line from Stafford Road in Mansfield, Connecticut.



Photo 5: View east of transmission line from Stafford Road in Mansfield, Connecticut.



Photo 6: View east of transmission line from Highland Road in Mansfield, Connecticut.



Photo 7: View west of transmission line from Highland Road in Mansfield, Connecticut.



Photo 8: View east of transmission line from Storrs Road in Mansfield, Connecticut.



Photo 9: View west of transmission line from Storrs Road in Mansfield, Connecticut.



Photo 10: View southwest of transmission line in Mansfield, Connecticut near Bassetts Bridge Road.



Photo 11: View north of transmission line from Bassetts Bridge Road in Mansfield, Connecticut near Hawthorne Lane.



Photo 12: View southwest of transmission line from Bassetts Bridge Road in Mansfield, Connecticut.



Photo 13: View east of transmission line from Route 6 (Willimantic Road) in Chaplin, Connecticut.



Photo 14: View northeast of transmission line from Chewink Road in Chaplin, Connecticut.



Photo 15: View east of transmission line from Pudding Hill Road in Hampton, Connecticut.



Photo 16: View north of transmission line from Hartford Road in Brooklyn, Connecticut.



Photo 17: View northeast of transmission line from Pomfret Road in Brooklyn, Connecticut.



Photo 18: View east of transmission line from Church Street in Brooklyn, Connecticut.



Photo 19: View south of transmission lines from Route 101 (Killingly Road) in Pomfret, Connecticut.



Photo 20: View north of transmission lines from Route 101 (Killingly Road) in Pomfret, Connecticut.



Photo 21: View southwest of transmission lines from Lake Road in Killingly, Connecticut.



Photo 22: View northeast of transmission lines from Lake Road in Killingly, Connecticut.



Photo 23: View south toward Lake Road Switching Station in Killingly, Connecticut.



Photo 24: View southwest of transmission line from Park Road in Putnam, Connecticut.



Photo 25: View south of transmission line from Killingly Road in Putnam, Connecticut.



Photo 26: View northeast of transmission line from Providence Pike in Putnam, Connecticut.



Photo 27: View southwest of transmission line from Providence Pike in Putnam, Connecticut.



Photo 28: View northwest of transmission line from Providence Pike in Putnam, Connecticut.



Photo 29: View west of transmission line from Quaddick Town Farm Road in Thompson, Connecticut.



Photo 30: View northeast of transmission line from Elmwood Hill Road in Thompson, Connecticut.



Photo 31: View southeast on Card Street in Lebanon, Connecticut.



Photo 32: View northwest of transmission lines from Card Street in Lebanon, Connecticut.



Photo 33: View southeast of transmission line from Card Street Road in Lebanon, Connecticut.



Photo 34: View northwest of transmission line from Beaumont Highway in Lebanon, Connecticut.



Photo 35: View southeast from Beaumont Highway in Lebanon, Connecticut.



Photo 36: View west on Windham Road in Windham, Connecticut.



Photo 37: View east on Windham Road in Windham, Connecticut.



Photo 38: View north along Card Street in (Windham or Lebanon), Connecticut.



Photo 39: View east on Pleasant Street in Windham, Connecticut.



Photo 40: View east on Windham Road in Windham, Connecticut.

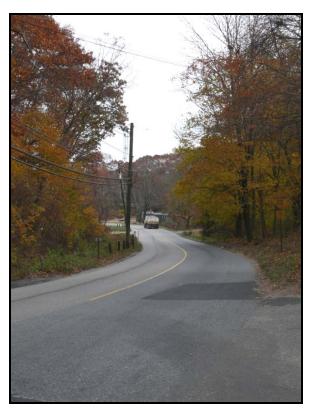


Photo 41: View east on Plains Road in Windham, Connecticut.



Photo 42: View east on Plains Road in Windham, Connecticut.



Photo 43: View north/northwest on North Road in Windham, Connecticut.



Photo 44: View north on North Windham Road, in Windham, Connecticut.



Photo 45: View northeast on Boston Post Road in Windham, Connecticut.

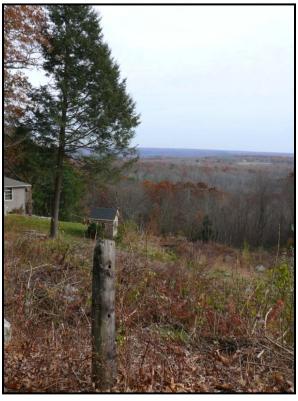


Photo 46: View east in Brooklyn, Connecticut.



Photo 47: View east in Brooklyn, Connecticut.



Photo 48: View west from Searles Road in Pomfret, Connecticut.



Photo 49: View east from Searles Road in Pomfret, Connecticut.