

NEW ENGLAND  
**EAST**  **WEST**  
**SOLUTION**

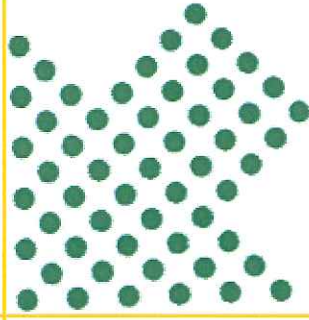
**Interstate Reliability Project**  
**CSC Field Tour**

**April 18, 2012**



**Connecticut  
Light & Power**

A Northeast Utilities Company



**RECEIVED**

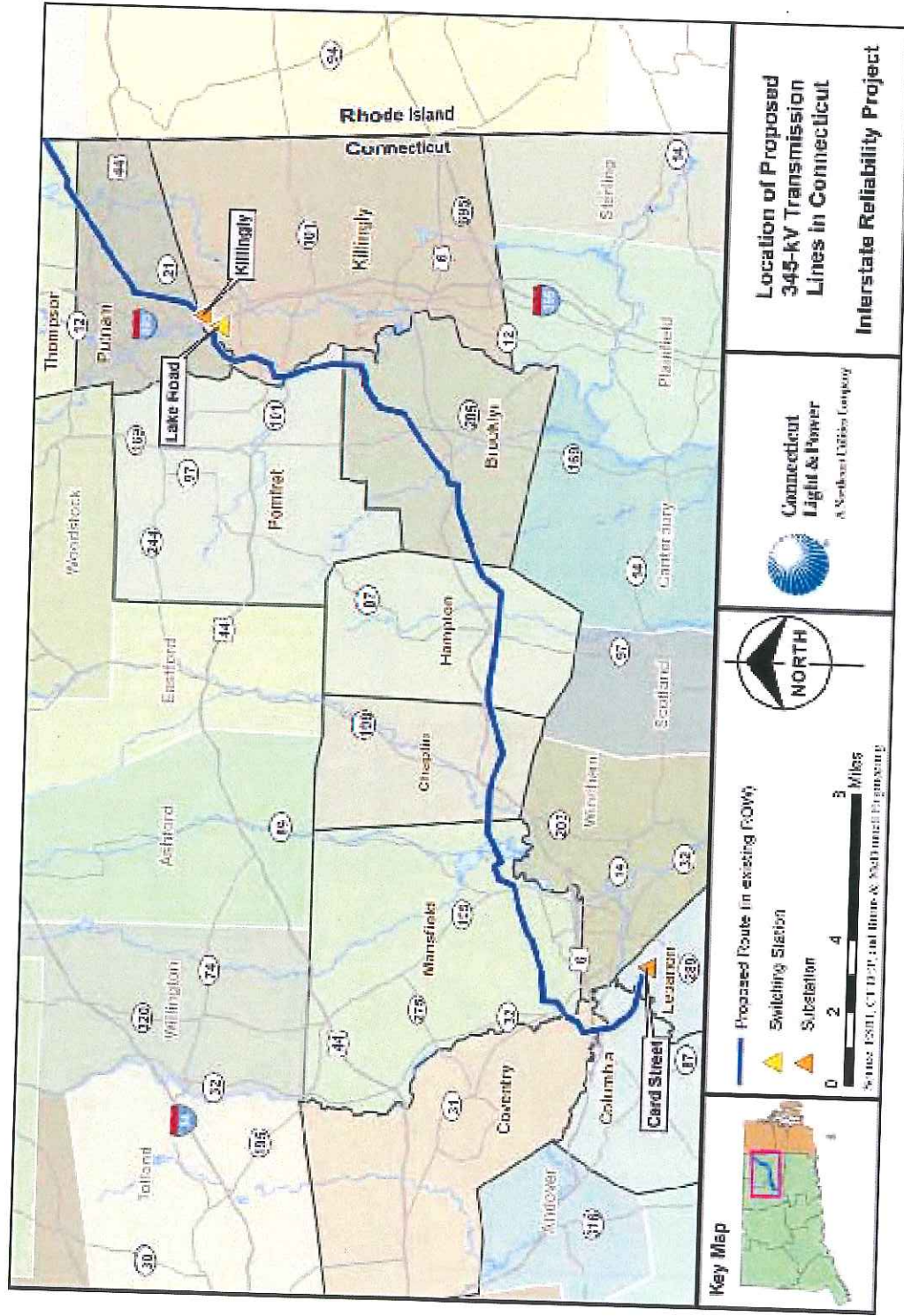
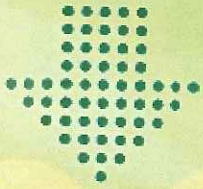
APR 18 2012

CONNECTICUT  
SITING COUNCIL



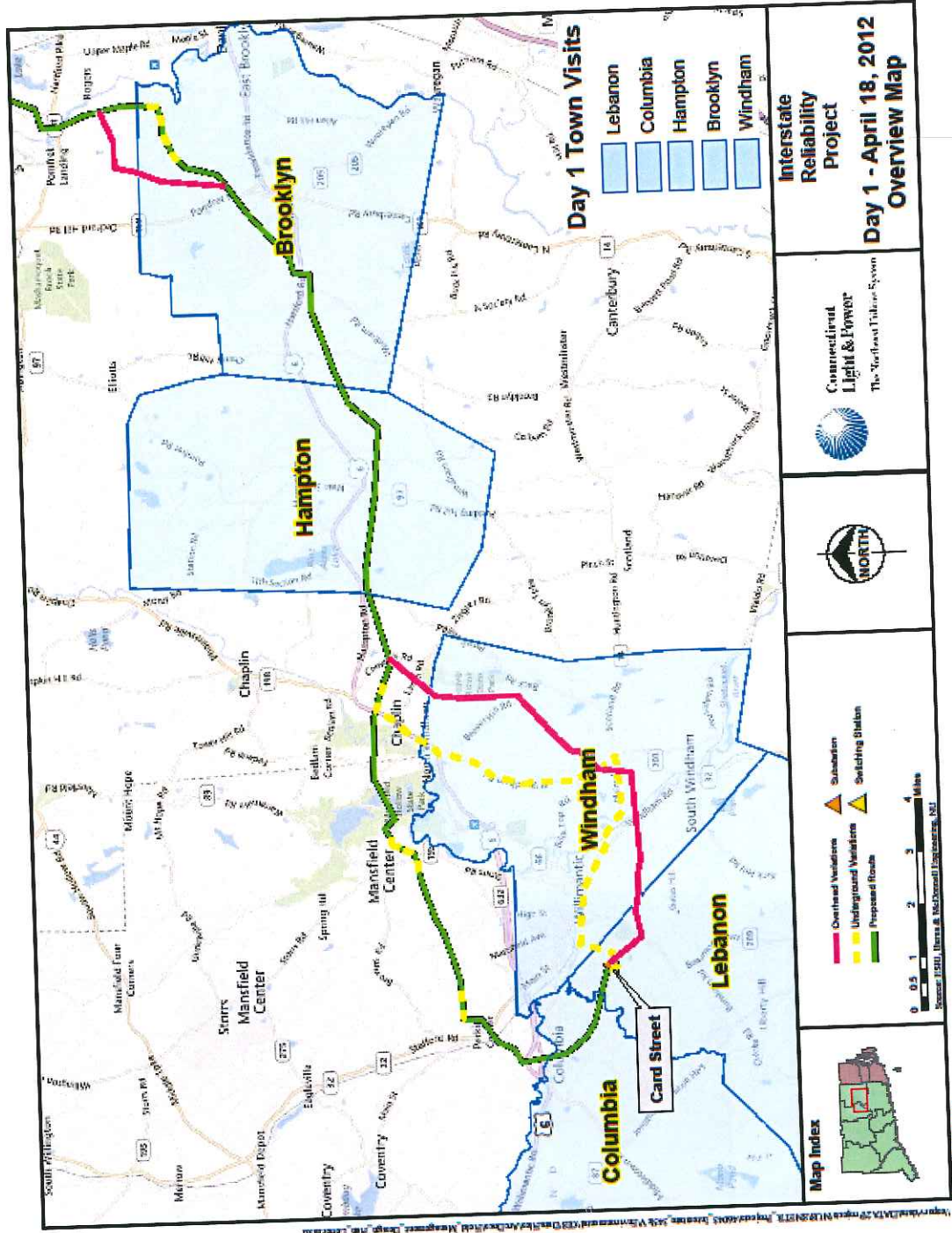
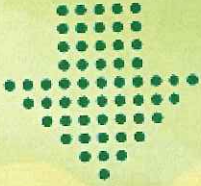
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# Overview – Interstate Reliability Project Route in Connecticut





# Tour Overview – April 18, 2012



# Tour Agenda – April 18, 2012



## Lebanon

- ▶ 1. Card Street Substation

## Columbia

- ▶ 2. Cards Mill Road / Scalise Drive
- ▶ 3. Old Willimantic Road / Willimantic Road

## Hampton

- ▶ 4. Pudding Hill Road / Cemetery Road / South Bigelow Road
- ▶ 5. Drain Street

## Brooklyn

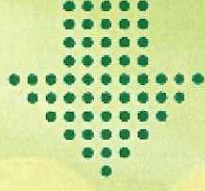
- ▶ 6. Stetson Road
- ▶ 7. Windham Road / Route 6
- ▶ 8. Laurel Hill Road / Wolf Den Road

## Willimantic South Underground Variation

- ▶ 9. Travel south on Route 6 from Chaplin to Windham, then follow Route 203, North Windham Road/Route 14, onto Plains Road, and Pleasant Street to Card Street in Lebanon.

Proceed back to hearing location at 23 Goshen Hill Road, Lebanon.

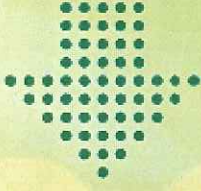
# LEGEND



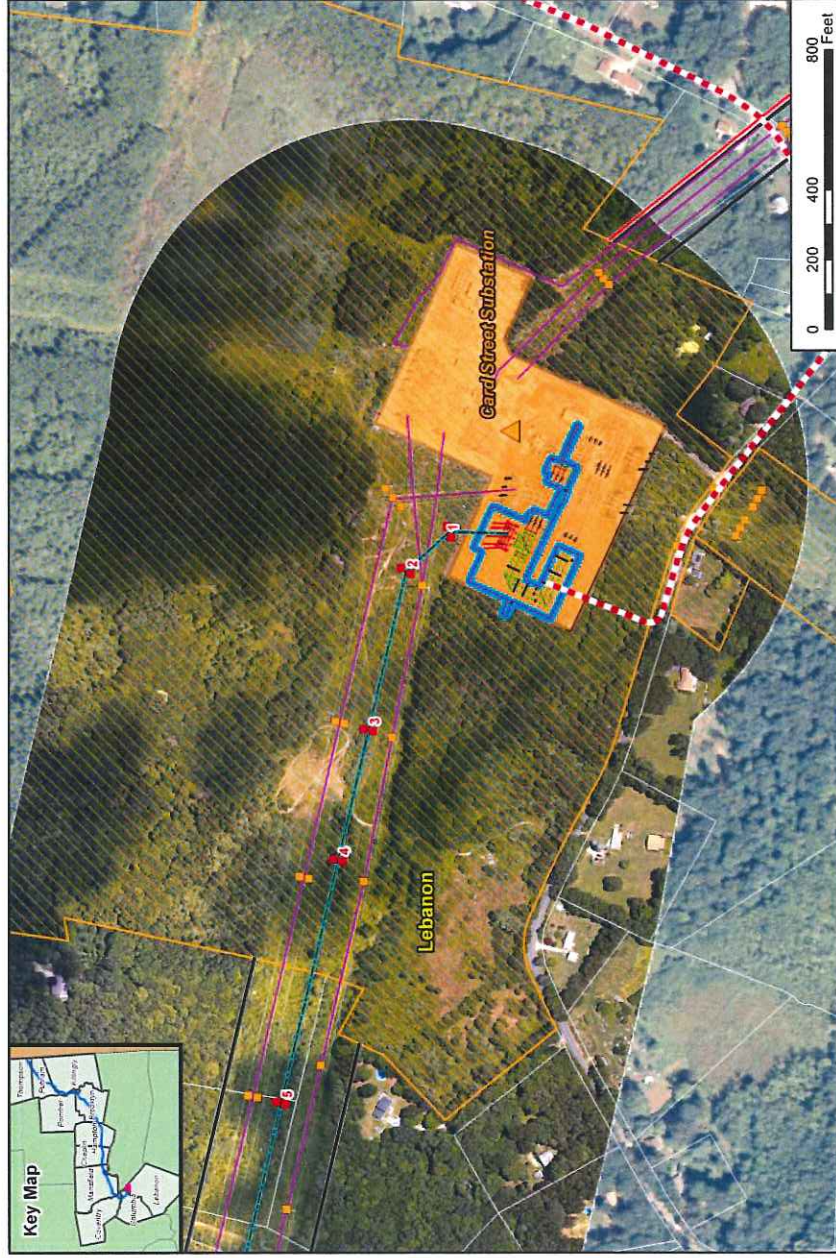
	Right-of-Way (Existing)		Town Boundary
	Right-of-Way (Expanded)		Property Line
	Proposed 345-kV (Centerline)		CL&P Property
	Existing Transmission Line (Centerline)		Potential Transition Station Site
	Existing Structure		Underground Variation
	Proposed Structure		School/Licensed Daycare Facility



# 1. Card Street Substation - Lebanon



- 10 acres of 150-acre parcel of CL&P-owned land.
- No expansion or modification to existing fence line required.
- Expand existing three-position 345-kV ring bus to four-position ring bus with one new 345-kV transmission line terminal; position (for new 3271 line) for total of four 345-kV transmission line terminal positions.
- Install three new 345-kV circuit breakers, one new 345-kV transmission line terminal structure approx. 110 ft. high and four lightning masts approx. 110 ft. high.
- Install four disconnect switches, 435 linear feet of bus, 500 feet of control-cable trench, six CCVT's and one wave trap.
- Install new protection and control equipment within existing relay/control enclosure.



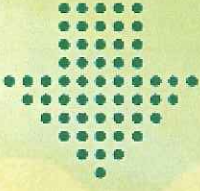




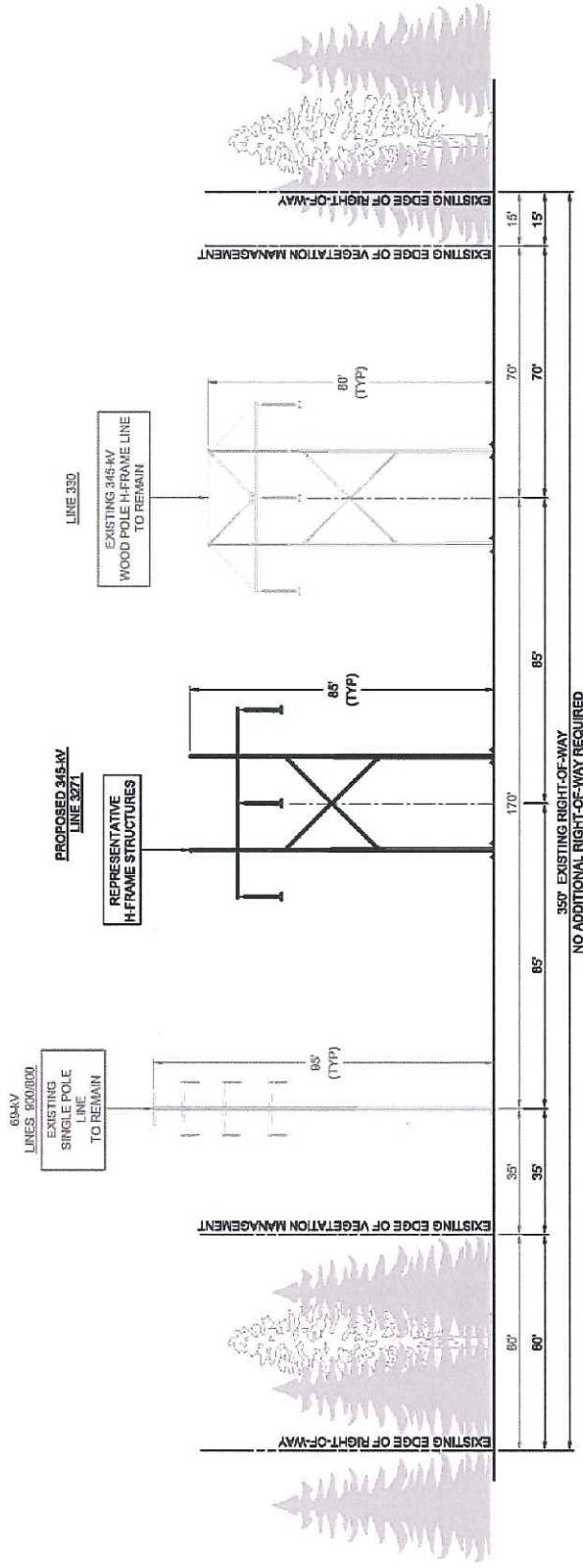
## 2. Cards Mill Road / Scalise Drive - Columbia







## 2. Cards Mill Road / Scalise Drive - Cross section

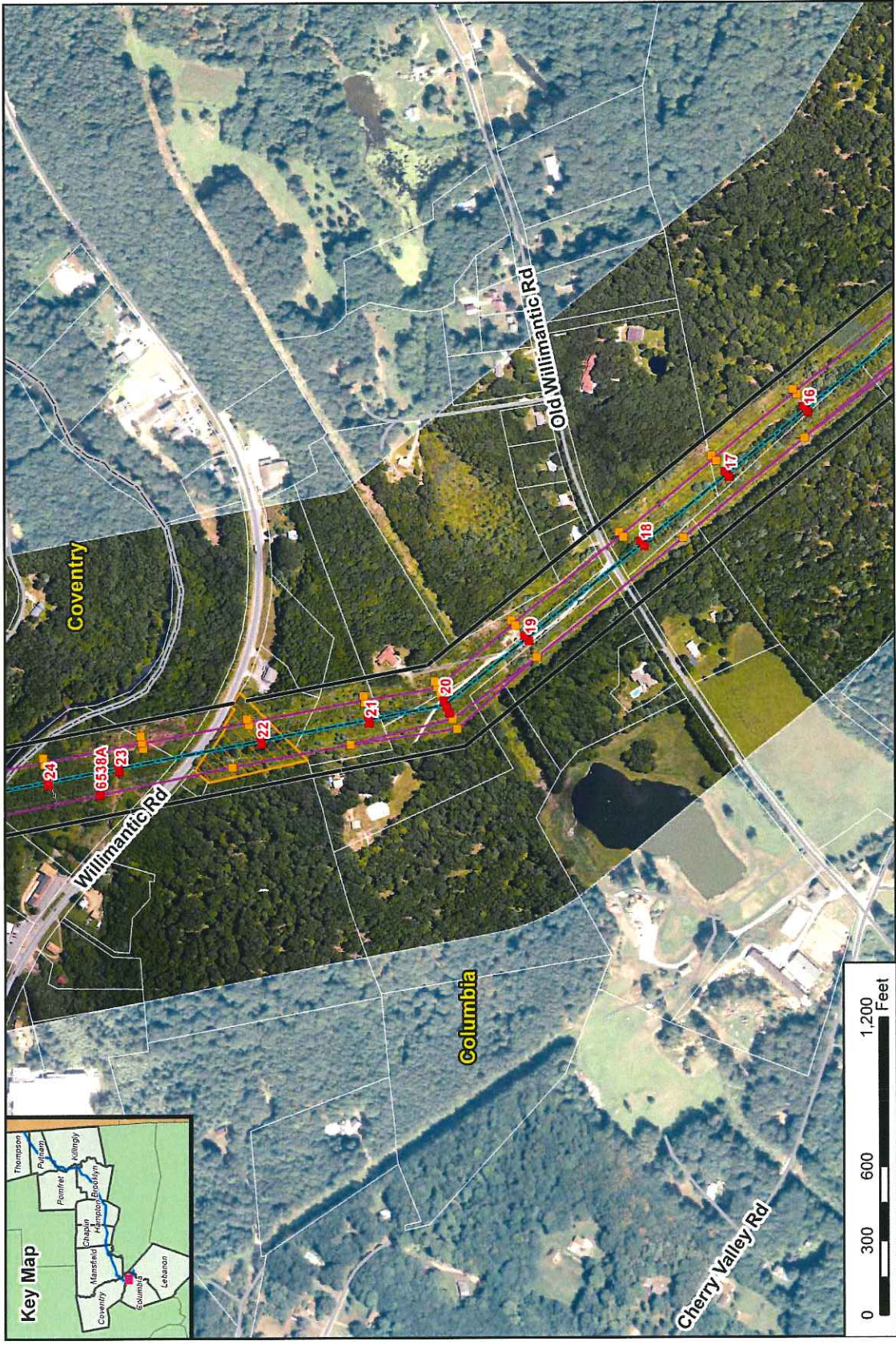


- **Right-of-Way Vegetation:** Open field-shrub, upland and wetland forest, house/yard
- **Terrain:** Hilly to steep
- **Existing Right-of-Way Width:** 350 feet
- **Proposed Expansion of Right-of-Way Width:** 0 feet
- **Existing Managed Right-of-Way Width:** 275 feet
- **Additional Managed Right-of-Way Width Required:** 0 feet





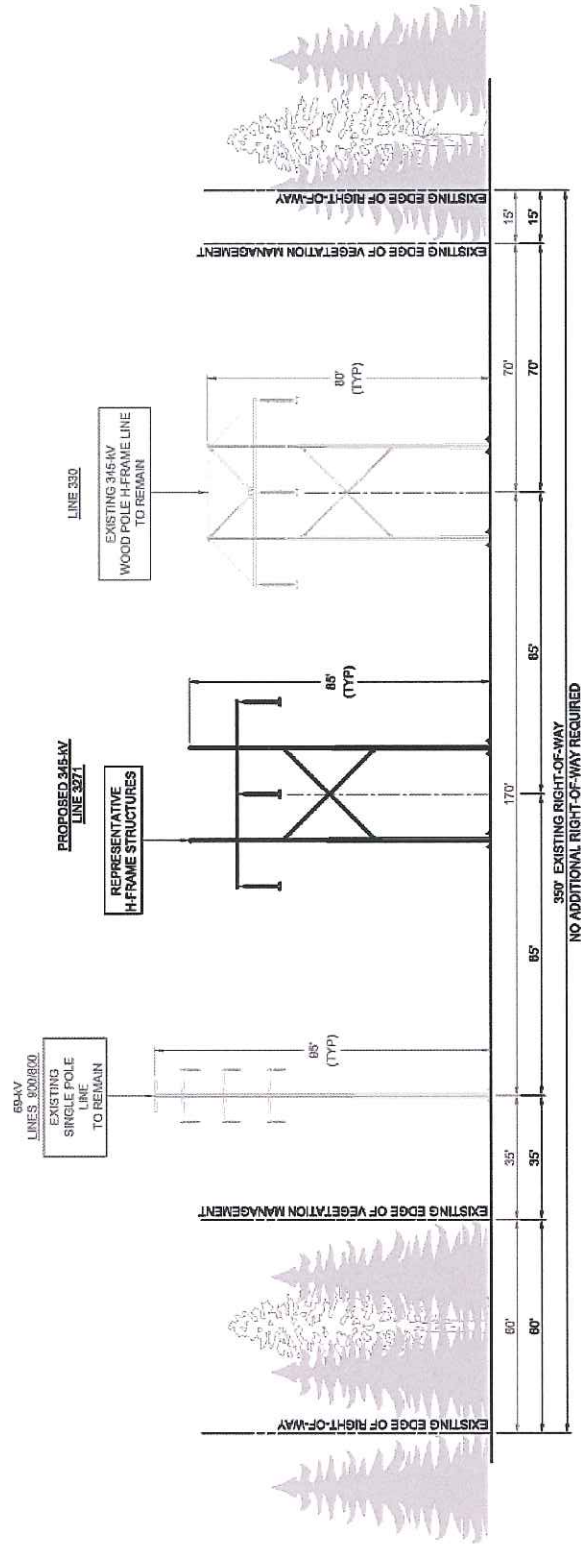
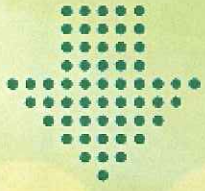
# 3. Old Willimantic Road / Willimantic Road - Columbia





# 3. Old Willimantic Road / Willimantic Road

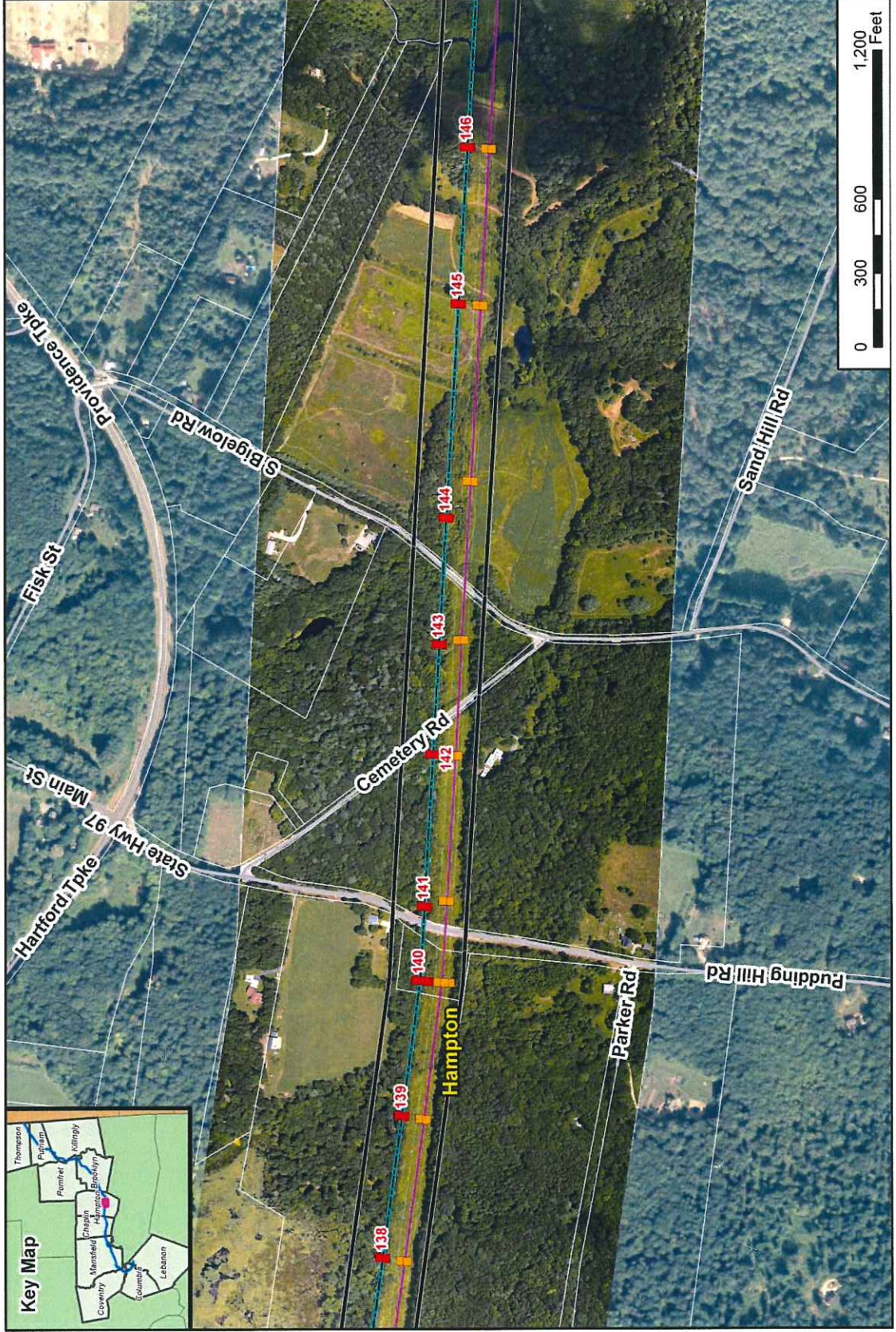
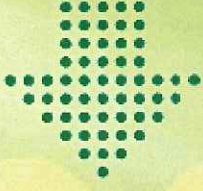
## - Cross section



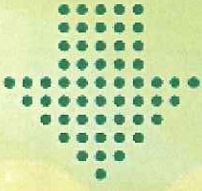
- **Right-of-Way Vegetation:** Open field-shrub, upland and wetland forest, house/yard
- **Terrain:** Broad hill tops to steep; floodplain
- **Existing Right-of-Way Width:** 350 feet
- **Proposed Expansion of Right-of-Way Width:** 0 feet
- **Existing Managed Right-of-Way Width:** 275 feet
- **Additional Managed Right-of-Way Width Required:** 0 feet



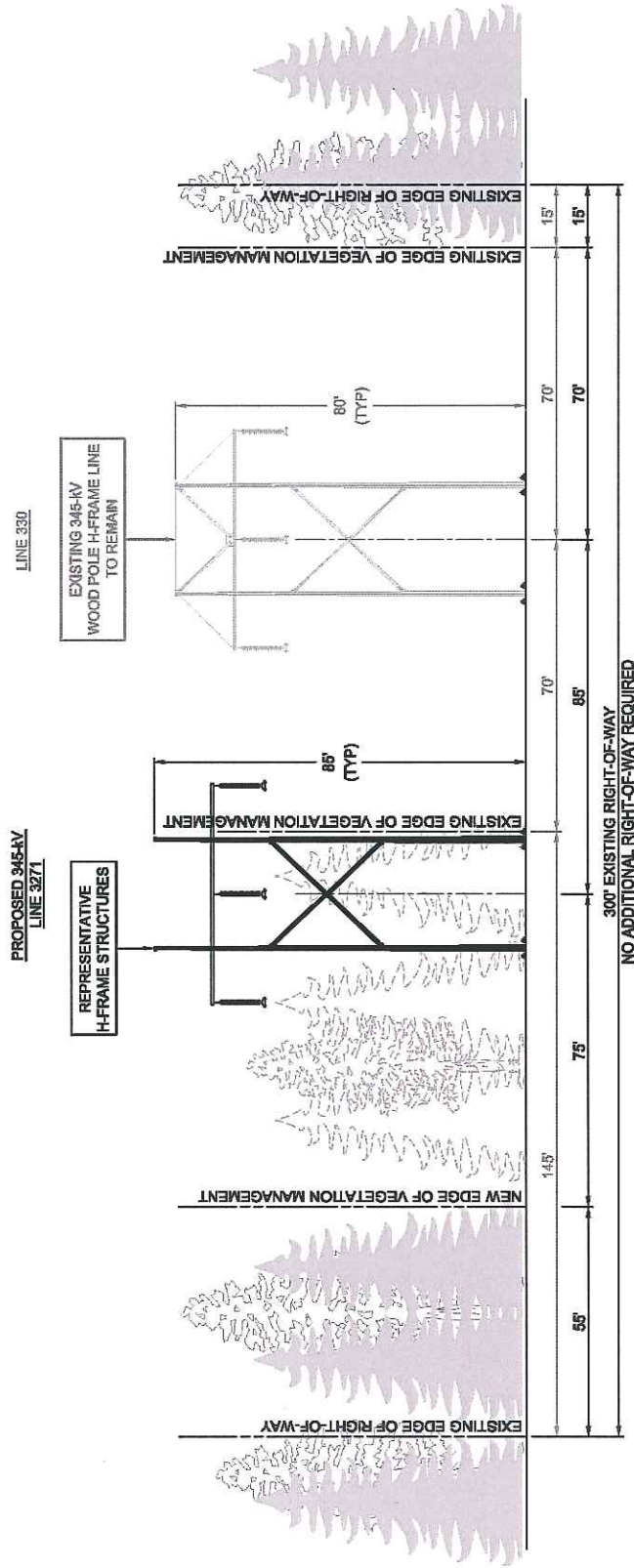
# 4. Pudding Hill Road / Cemetery Road / South Bigelow Road - Hampton







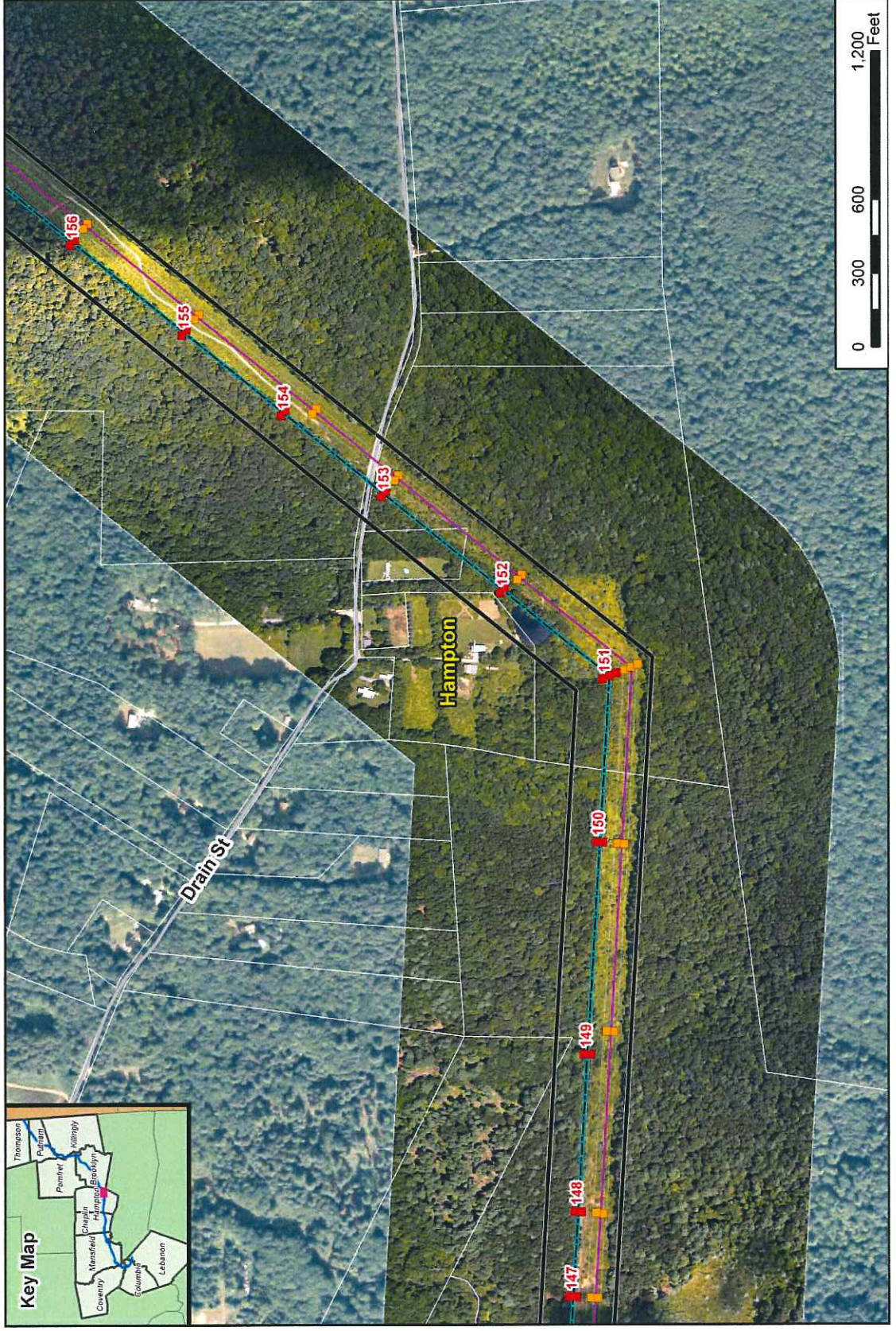
# 4. Pudding Hill Road / Cemetery Road / South Bigelow Road - Cross section



- **Right-of-Way Vegetation:** Open field-shrub, upland and wetland forest, agricultural, house/yard
- **Terrain:** Hilly with broad, gentle slopes
- **Existing Right-of-Way Width:** 300 feet
- **Proposed Expansion of Right-of-Way Width:** 0 feet
- **Existing Managed Right-of-Way Width:** 140 feet
- **Additional Managed Right-of-Way Width Required:** 90 feet

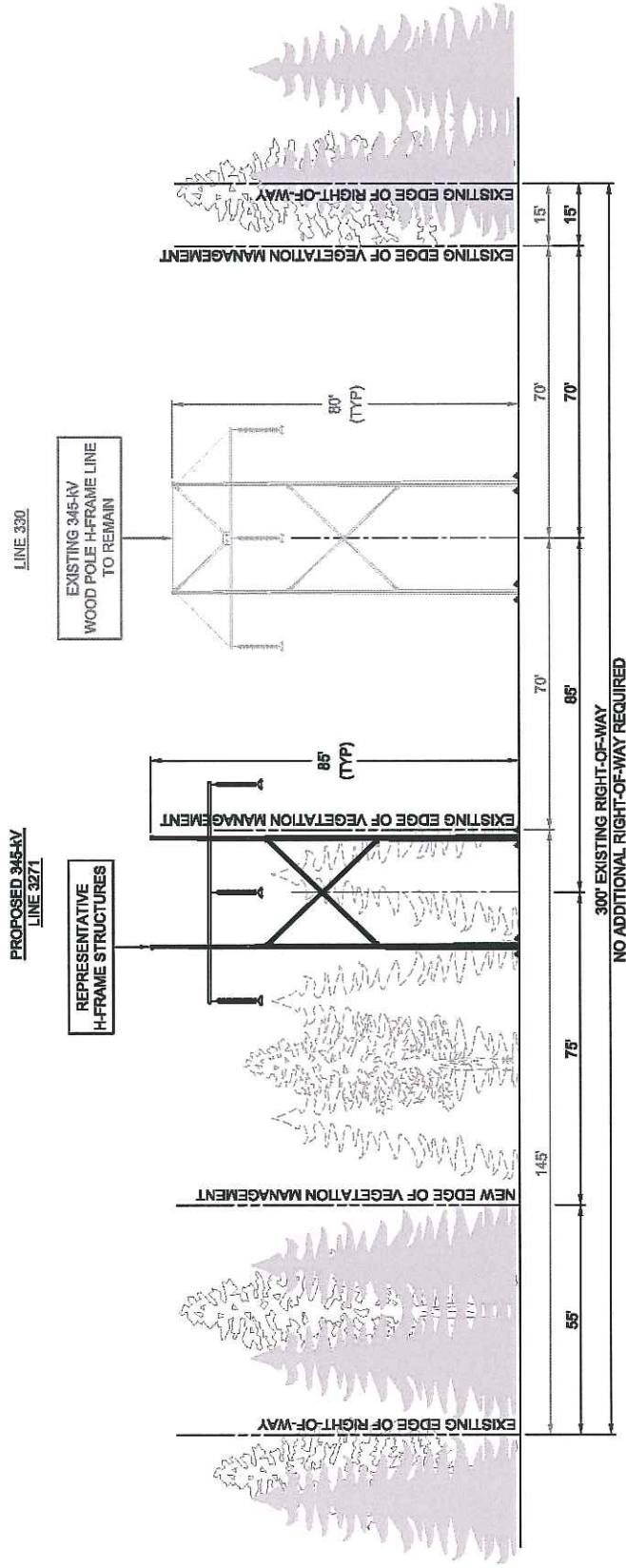


# 5. Drain Street - Hampton



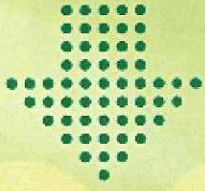


# 5. Drain Street - Cross section

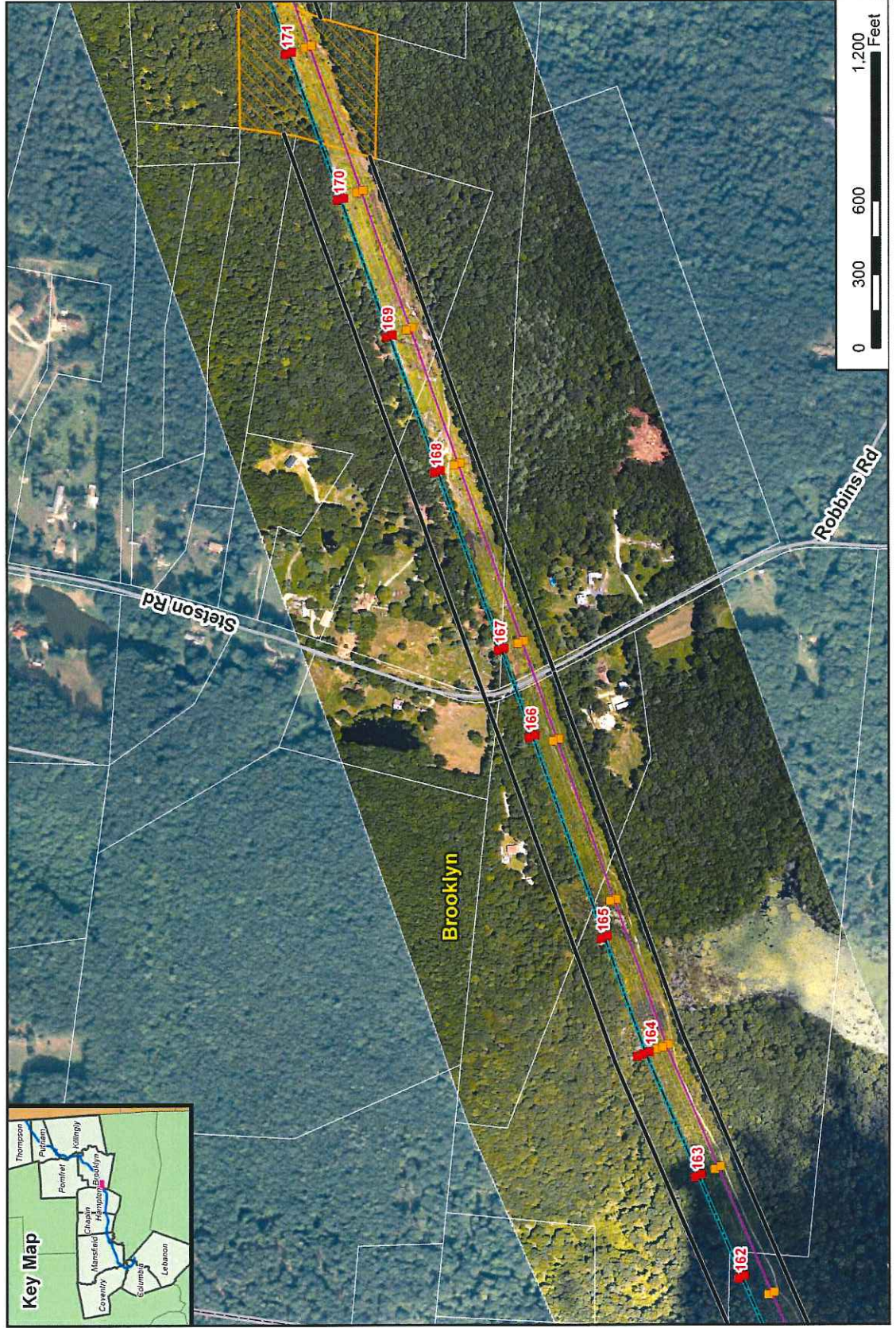


- **Right-of-Way Vegetation:** Open field-shrub, upland and wetland forest, agricultural, house/yard
- **Terrain:** Broad, gentle slopes
- **Existing Right-of-Way Width:** 300 feet
- **Proposed Expansion of Right-of-Way Width:** 0 feet
- **Existing Managed Right-of-Way Width:** 140 feet
- **Additional Managed Right-of-Way Width Required:** 90 feet



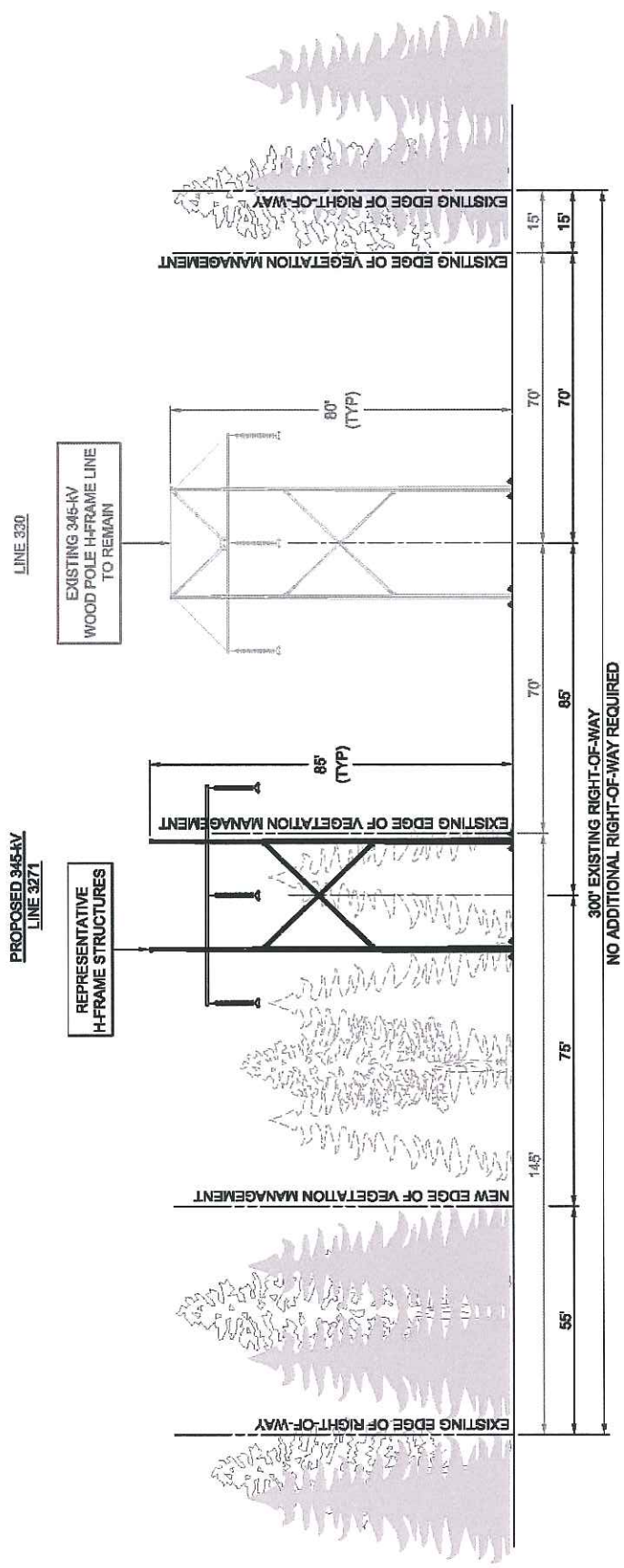
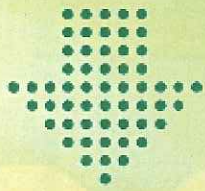


# 6. Stetson Road - Brooklyn





# 6. Stetson Road - Cross section

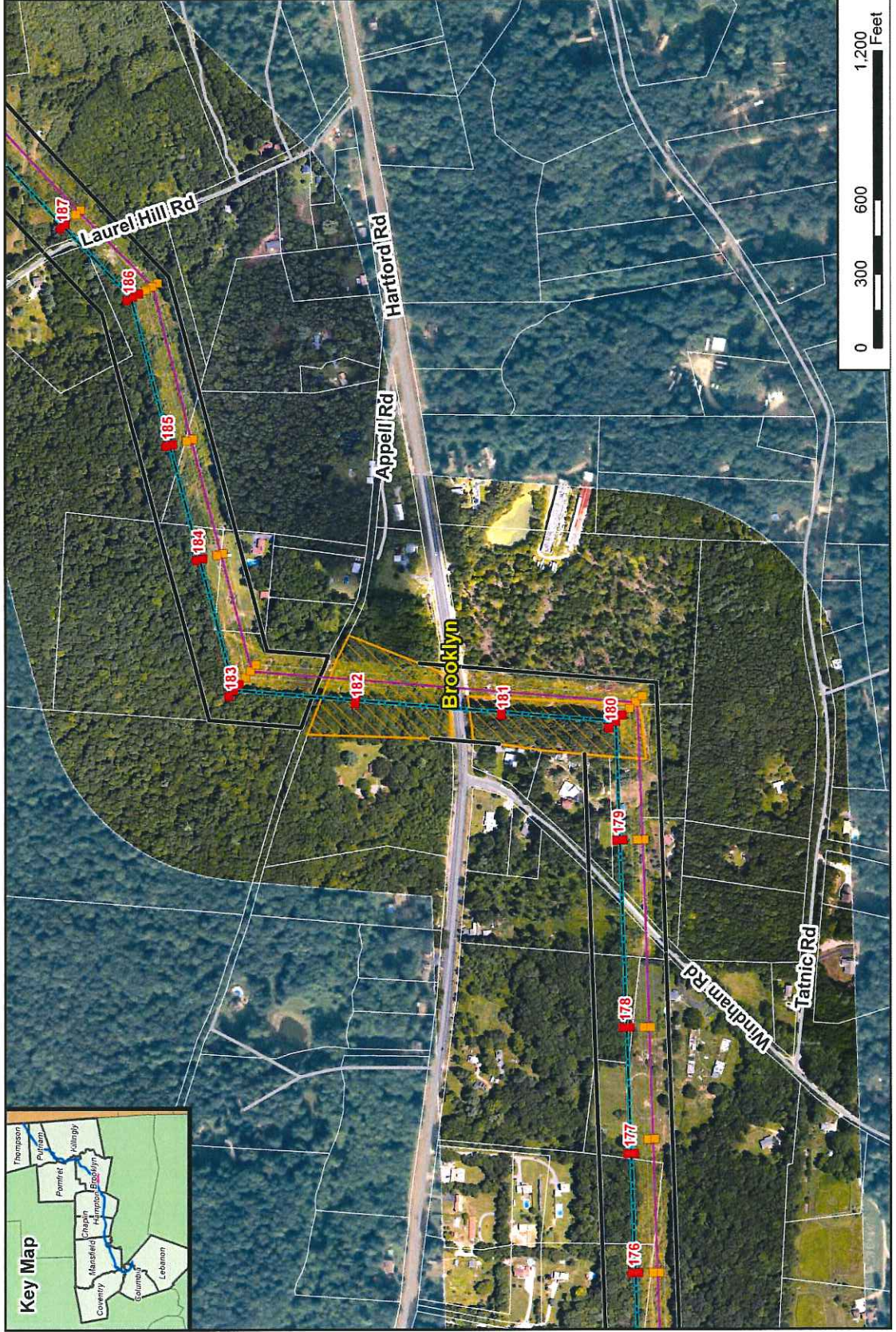


**Right-of-Way Vegetation:** Open field-shrub, upland and wetland forest, house/yard  
**Terrain:** Broad, gentle slopes to hilly  
**Existing Right-of-Way Width:** 300 feet  
**Proposed Expansion of Right-of-Way Width:** 0 feet  
**Existing Managed Right-of-Way Width:** 140 feet  
**Additional Managed Right-of-Way Width Required:** 90 feet

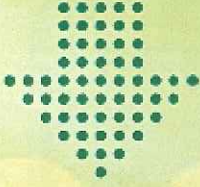




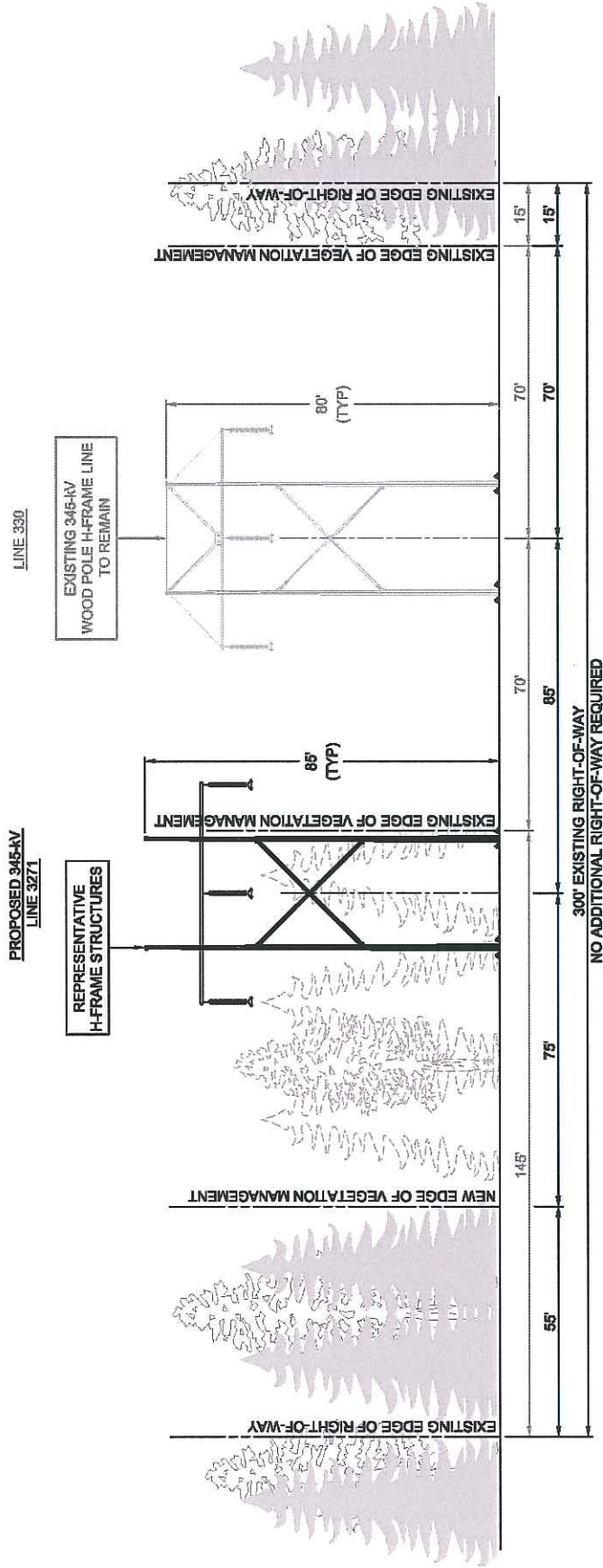
# 7. Windham Road / Route 6 - Brooklyn







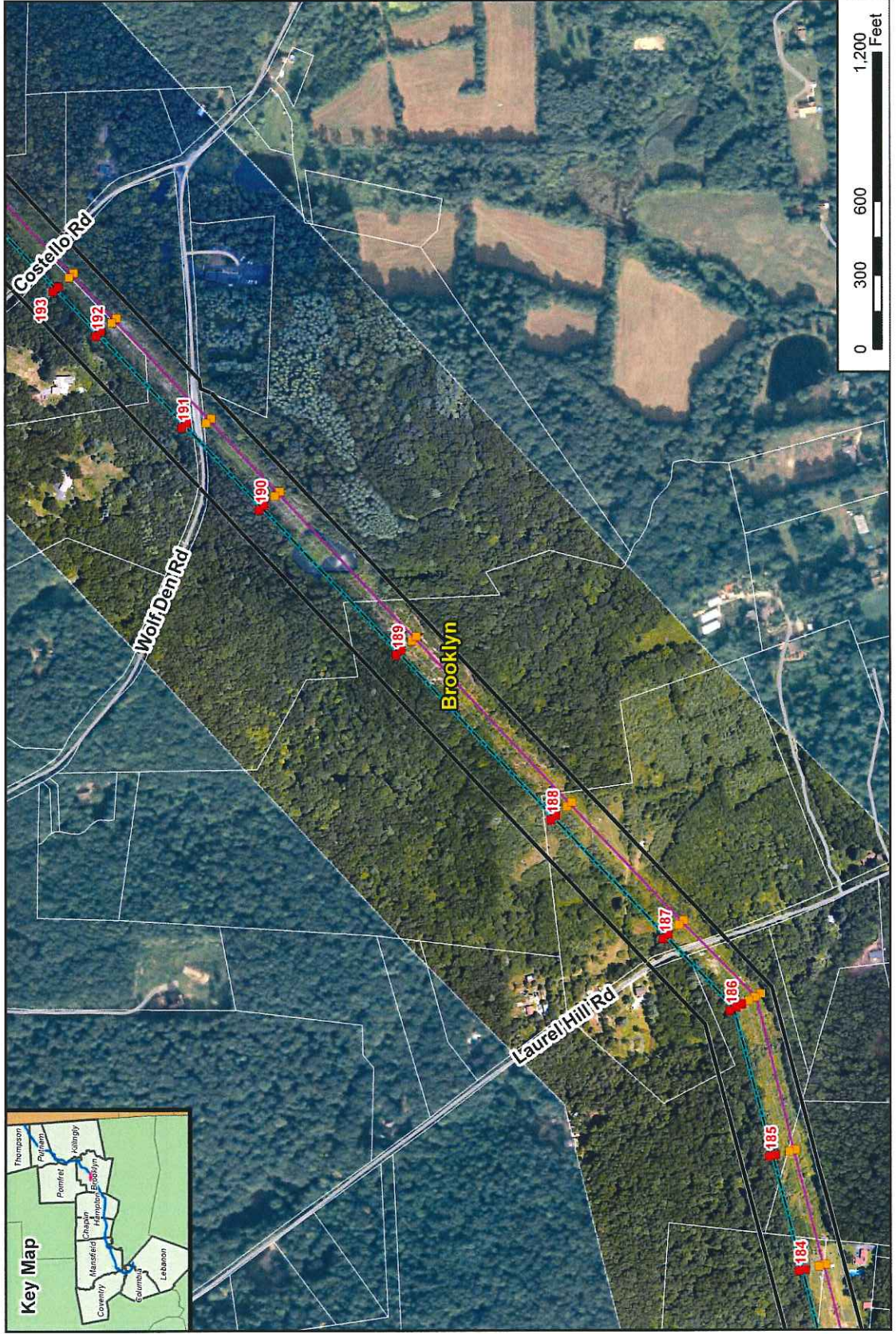
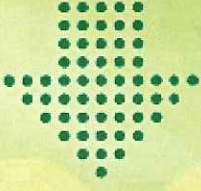
# 7. Windham Road / Route 6 - Cross section



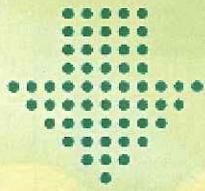
**Right-of-Way Vegetation:** Open field-shrub, upland and wetland forest, house/yard  
**Terrain:** Broad, gentle slopes to hilly  
**Existing Right-of-Way Width:** 300 feet  
**Proposed Expansion of Right-of-Way Width:** 0 feet  
**Existing Managed Right-of-Way Width:** 140 feet  
**Additional Managed Right-of-Way Width Required:** 90 feet



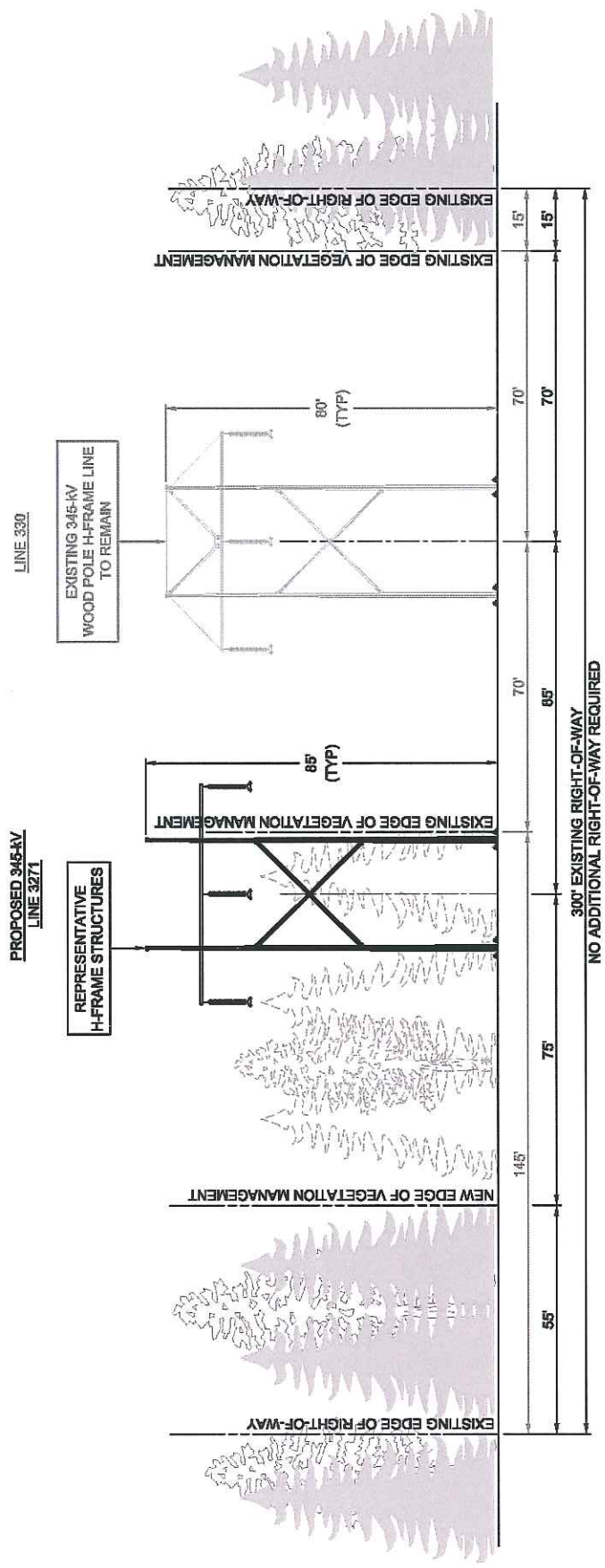
# 8. Laurel Hill Road / Wolf Den Road - Brooklyn







# 8. Laurel Hill Road / Wolf Den Road - Cross section

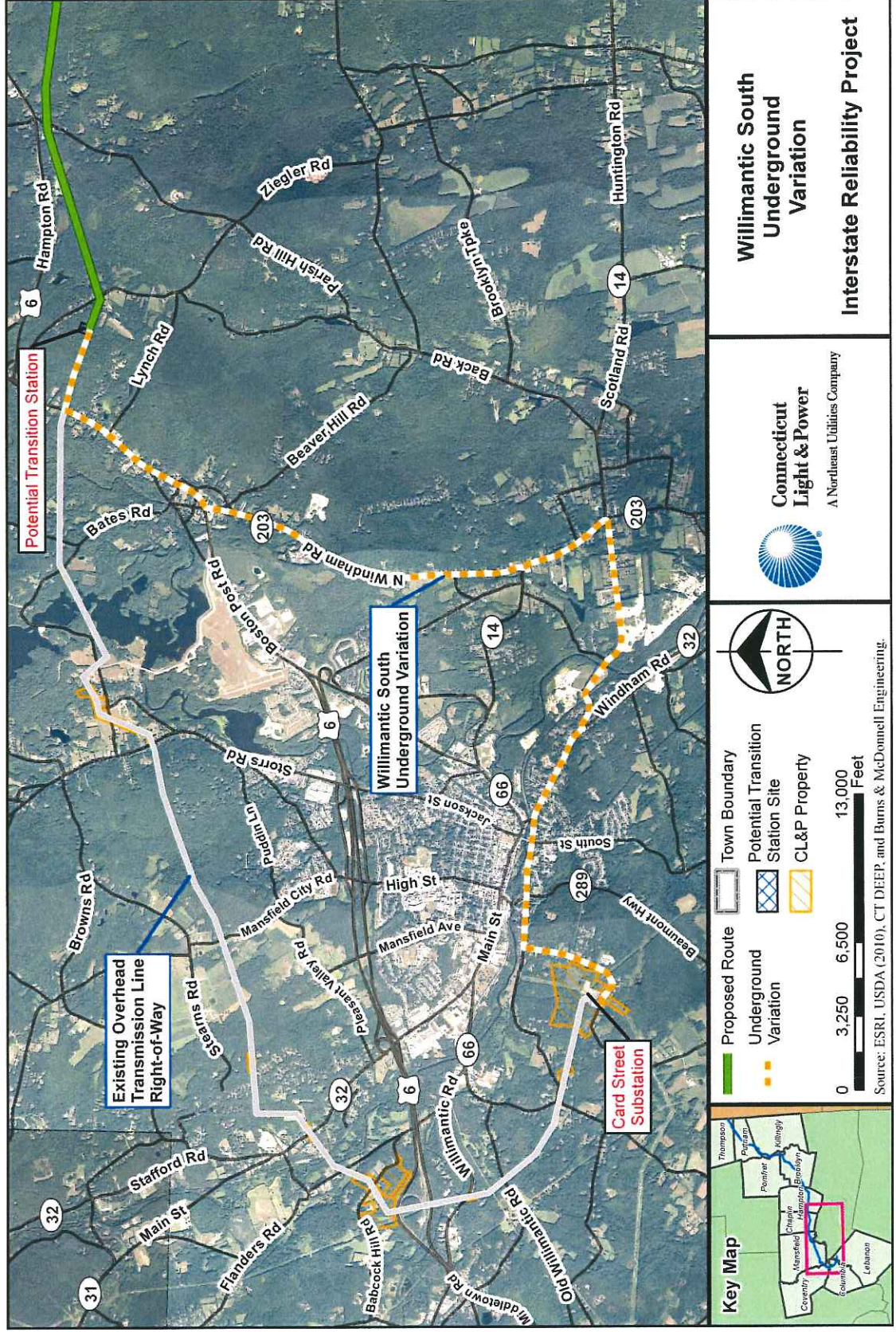


**Existing Right-of-Way Vegetation:** Open field-shrub, upland and wetland forest, house/yard  
**Terrain:** Broad, gentle slopes to hilly  
**Existing Right-of-Way Width:** 300 feet  
**Proposed Expansion of Right-of-Way Width:** 0 feet  
**Existing Managed Right-of-Way Width:** 140 feet  
**Additional Managed Right-of-Way Width Required:** 90 feet





# 9. Willimantic South Underground Variation - Chaplin, Windham, Lebanon



**Willimantic South Underground Variation**  
Interstate Reliability Project



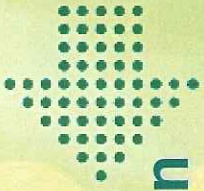
Legend:  
 Proposed Route  
 Underground Variation  
 Potential Transition Station Site  
 CL&P Property

Scale: 0 3,250 6,500 13,000 Feet

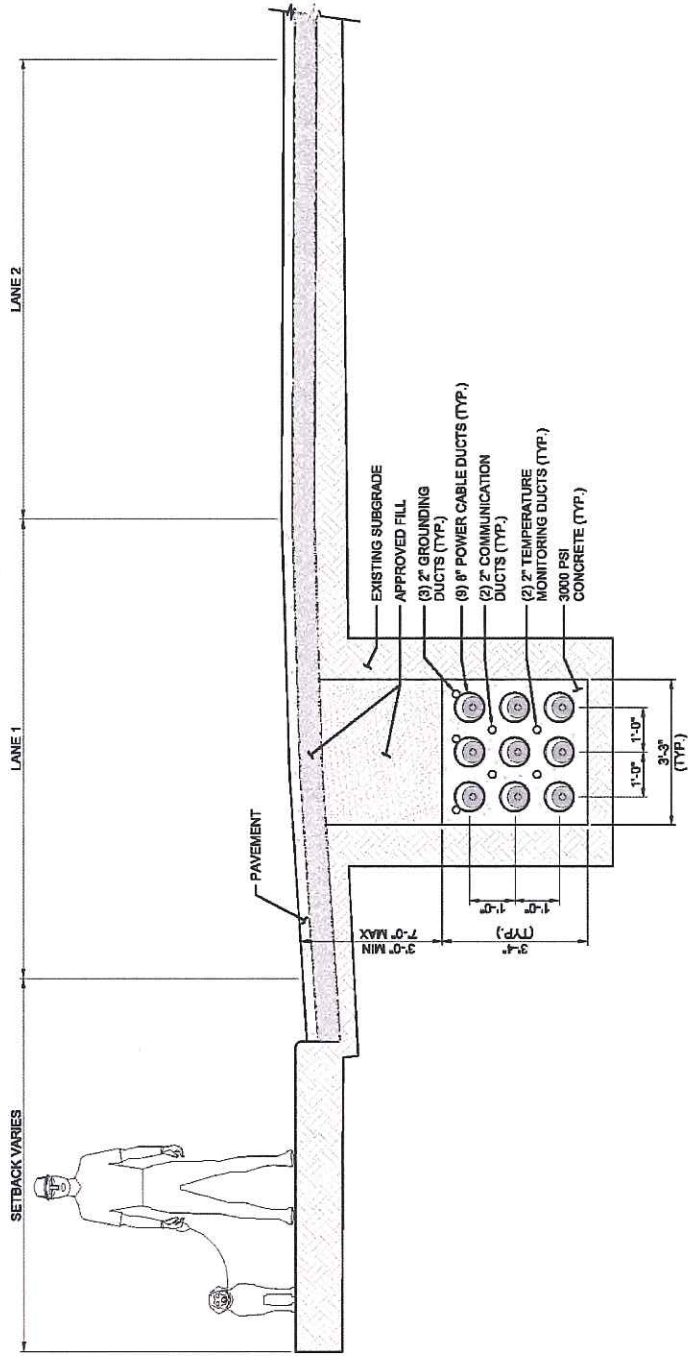
Source: ESRI, USDA (2010), CT DEEP, and Burns & McDonnell Engineering.







# 9. Willimantic South Underground Variation - Chaplin, Windham, Lebanon - Typical Cross section



NOTE: Transition station would be located adjacent to the ROW, a short distance east of Route 6 in Chaplin.