

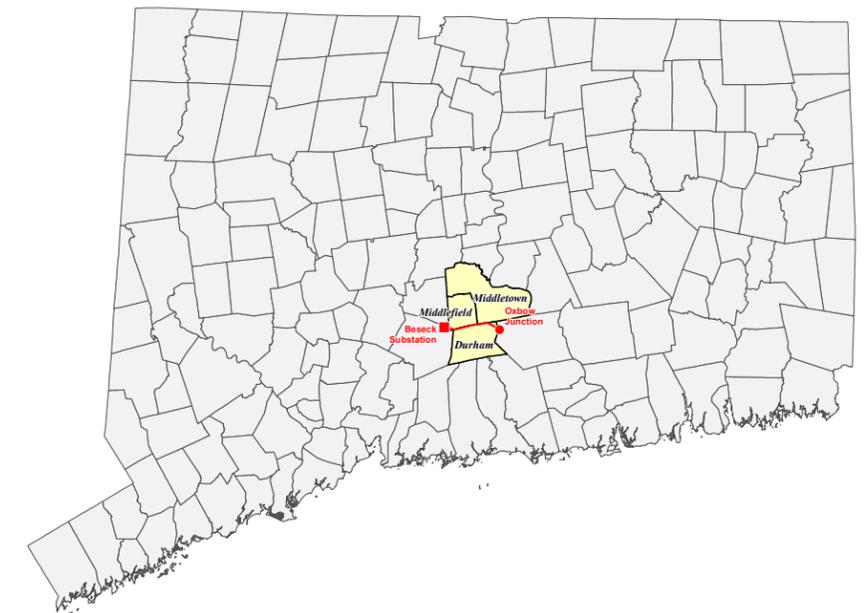
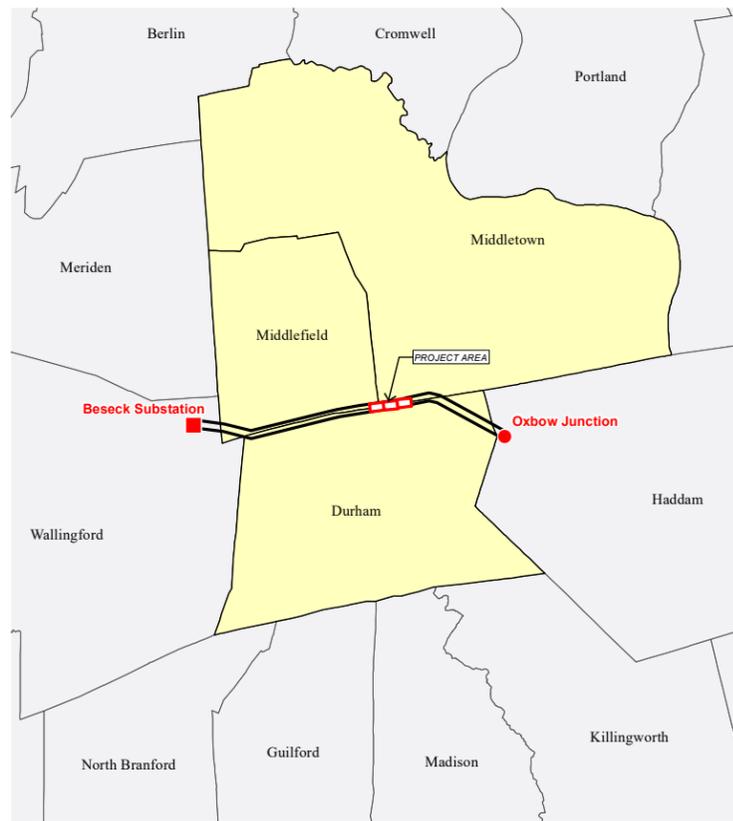


# TRANSMISSION LINE MAINTENANCE 1975 LINE

## DEVELOPMENT AND MANAGEMENT PLAN

### VOLUME 3

AUGUST 2016



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**CROSS SECTION SHEET**

| <u>CROSS SECTIONS</u> | <u>DESCRIPTION</u>  |
|-----------------------|---|
| ROW CROSS SECTION     | LOOKING WEST FROM OXBOW JCT TOWARDS BESECK S/S<br>IN THE TOWNS OF DURHAM AND MIDDLETOWN |

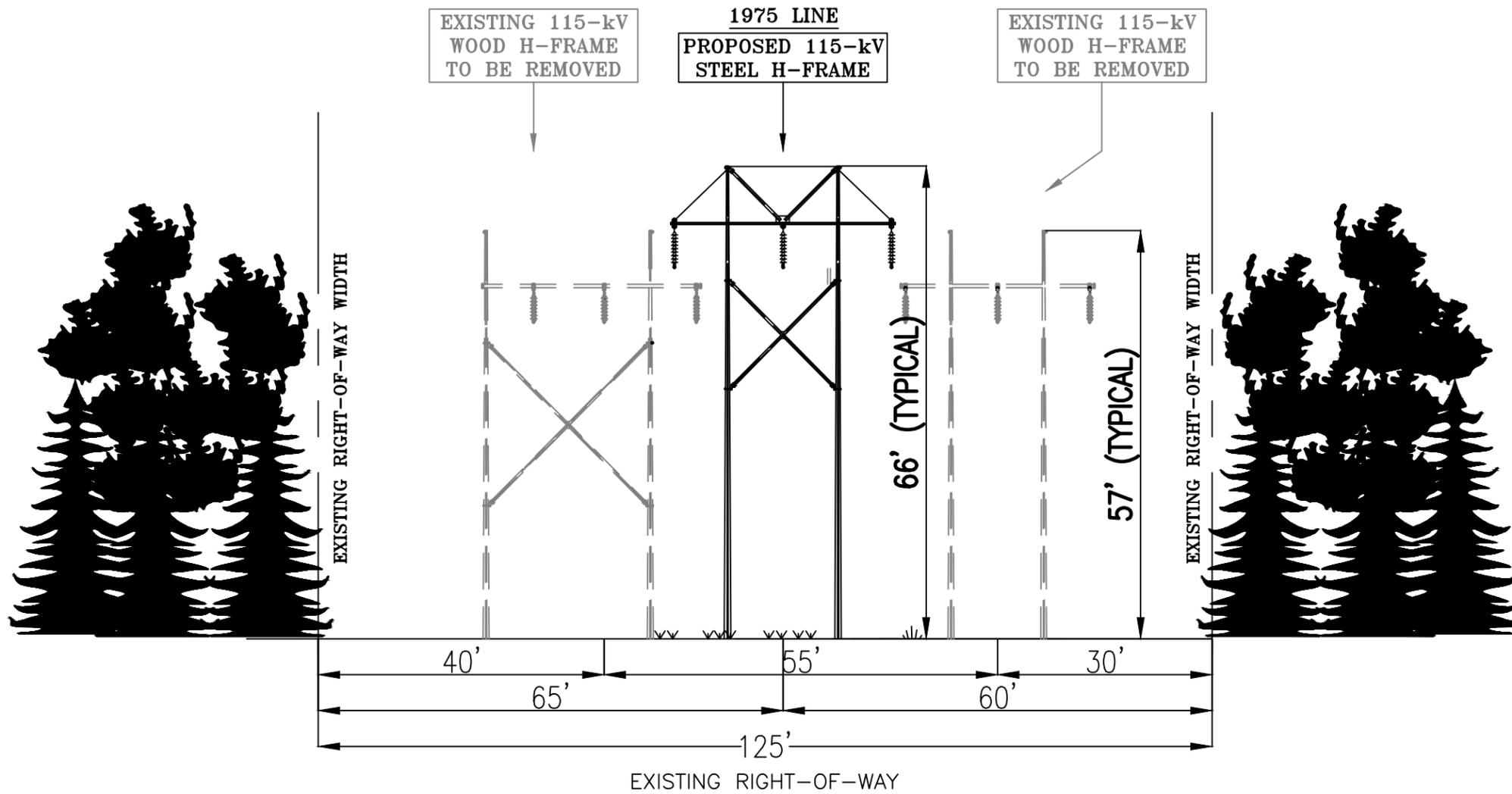
**MAPSHEETS**

| <u>MAPSHEETS</u> | <u>DESCRIPTION</u>  |
|------------------|---|
| INDEX MAP        | USGS 1:24,000 SCALE   |
| SHEETS 1-3       | TRANSMISSION LINE MAINTENANCE<br>1975 LINE<br>DEVELOPMENT AND MANAGEMENT PLAN |

**DETAIL SHEETS**

| <u>SHEET</u> | <u>DESCRIPTION</u>                                    |
|--------------|---|
| 1            | WATER RESOURCE PROTOCOLS                              |
| 2            | EROSION AND SEDIMENTATION CONTROLS<br>TYPICAL DETAILS |
| 3            | POLE EMBEDMENT AND GROUNDING DETAILS                  |

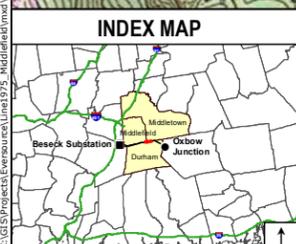
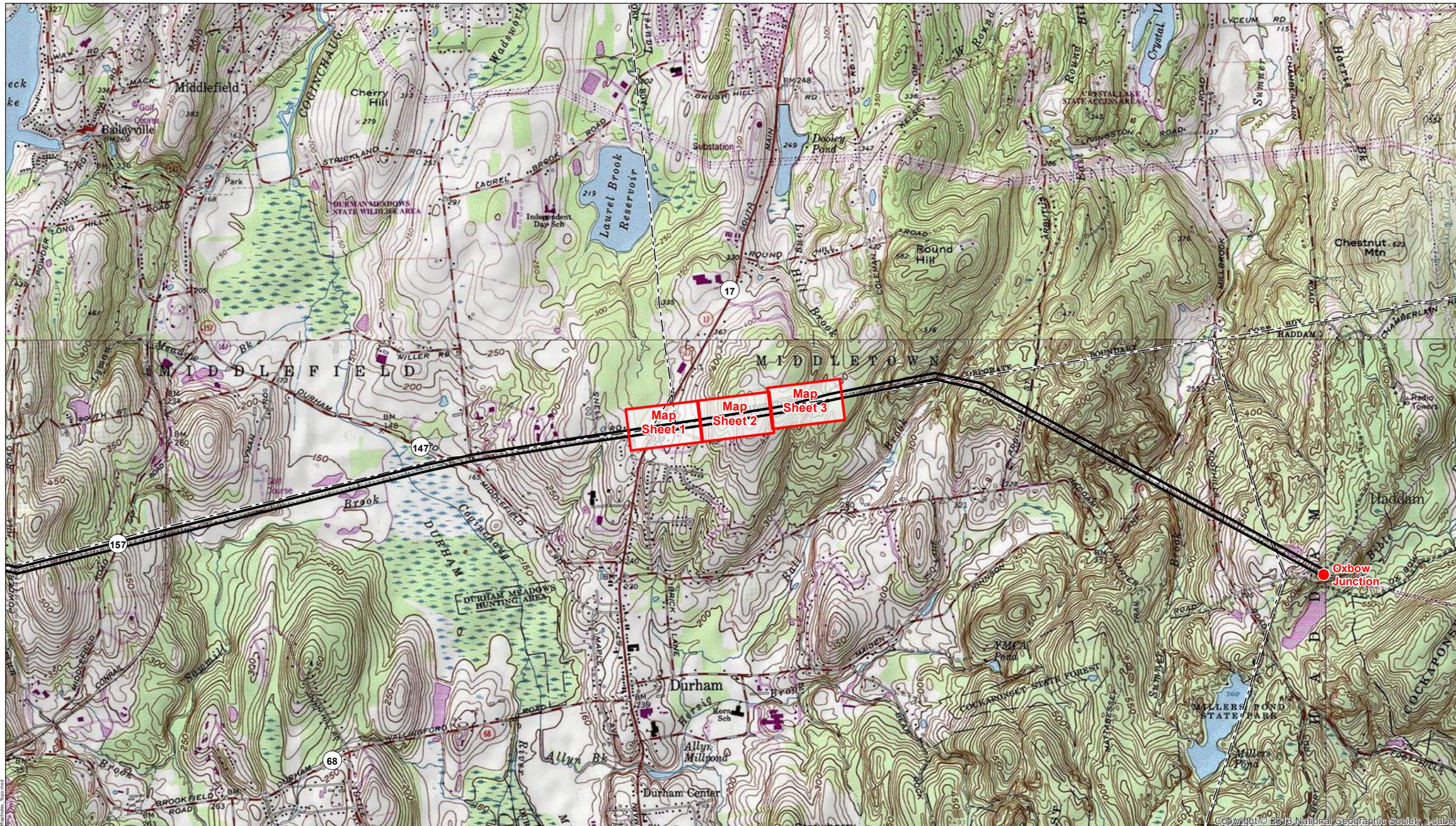
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**LOOKING WEST  
 FROM OXBOW JCT  
 TOWARDS BESECK S/S  
 IN THE TOWNS OF DURHAM AND MIDDLETOWN**

|   |           |         |             |
|---|-----------|---------|-------------|
| <b>EVERSOURCE ENERGY</b>  |           |         |             |
| TITLE 1975 LINE STRUCTURE REPLACEMENT<br>115-kV TRANSMISSION LINE<br>ROW CROSS SECTION<br>DURHAM/MIDDLETOWN, CT |           |         |             |
| BY  | CPS       | CHKD    | APP         |
| DATE  | 5/26/2015 | DATE    | DATE        |
| H-SCALE   | N.T.S.    | SIZE    | B           |
| V-SCALE   | N.T.S.    | V.S.    | R.E. DWG    |
| R.E. PROJ. NUMBER   | 40444101  | DWG NO. | 01043-85001 |

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- Legend**
- Map Sheet
  - 1975 Line
  - Junction
  - Municipal Boundary

Base Map Source: ESRI USA Topo Maps



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**EVERSOURCE**  
ENERGY

**Transmission Line Maintenance  
1975 Line  
Index Map**

Middlefield/Middletown/Durham, CT

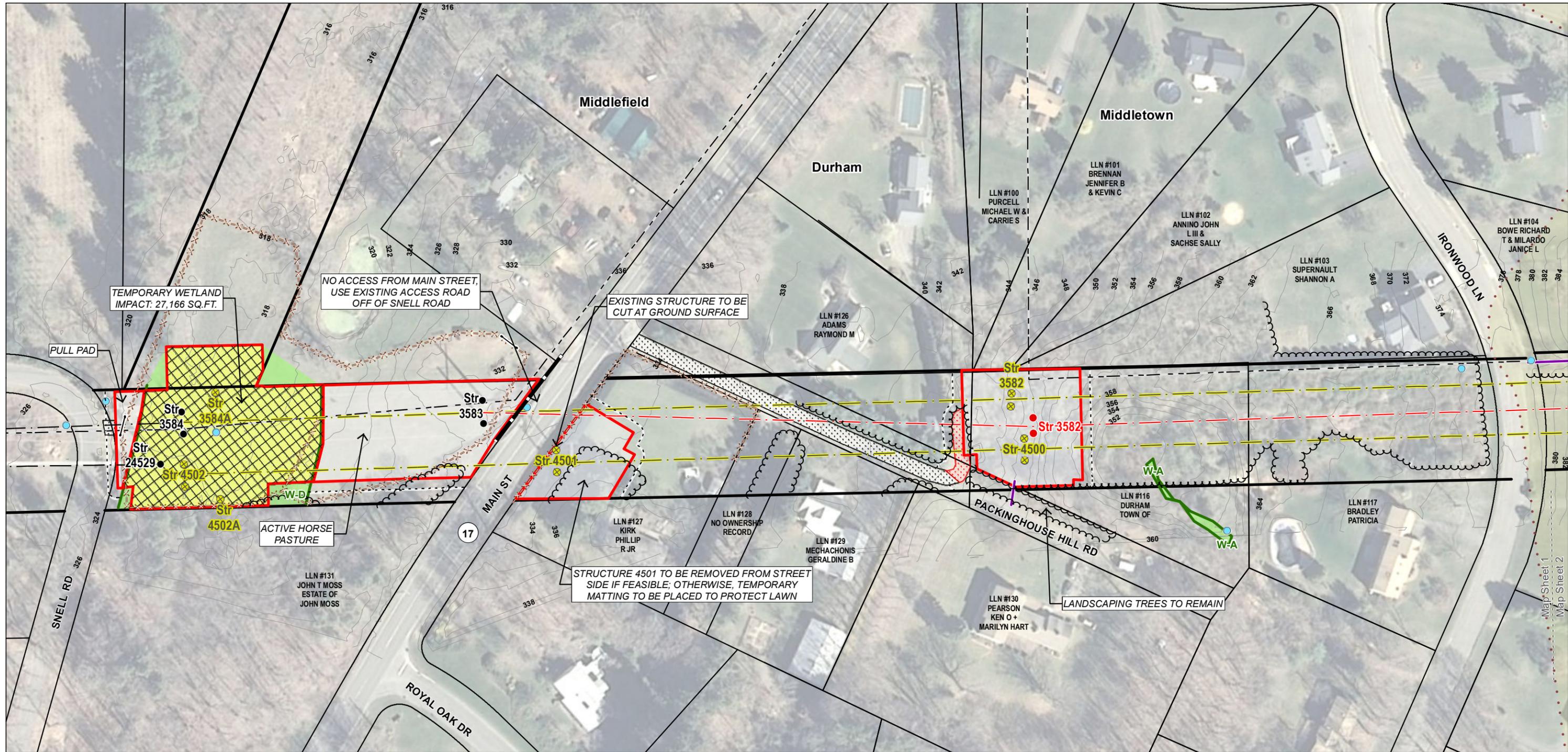
Date: July, 2016

Map Author: N. Castro

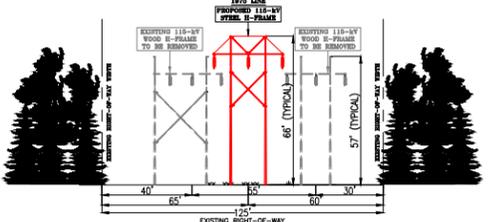


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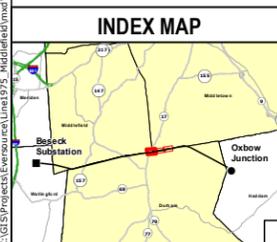
LOOKING WEST FROM OXBOW JCT TOWARDS BESECK S/S IN THE TOWNS OF DURHAM AND MIDDLETOWN



**WORK AREA BOUNDARIES IN / NEAR WETLANDS**  
 1. VEGETATION REMOVAL WILL OCCUR WITHIN THE EXISTING RIGHT-OF-WAY LIMITS AS SHOWN, WITH TEMPORARY ACCESS ROUTES IN AND ACROSS WETLANDS AS NECESSARY UNLESS OTHERWISE NOTED. ADDITIONALLY, DANGER OR HAZARD TREE REMOVAL MAY BE REQUIRED OUTSIDE OF THE VEGETATION REMOVAL LIMITS.  
 2. ALL PROJECT CONSTRUCTION ACTIVITIES IN WETLANDS (EXCLUDING VEGETATION REMOVAL) WILL BE CONTAINED WITHIN THE DEPICTED WORK PADS AND ACCESS ROADS.

**GENERAL NOTES**  
 1. THE LIMITS OF DISTURBANCE AS SHOWN DEFINE AREAS WHERE VEGETATION REMOVAL AND GRUBBING, GRADING, AND EXCAVATION MAY OCCUR  
 2. ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE RELEVANT PORTIONS OF EVERSOURCE'S BMP MANUAL: CONNECTICUT CONSTRUCTION AND MAINTENANCE ENVIRONMENTAL REQUIREMENTS (BMP MANUAL), UNLESS MORE STRINGENT PROJECT-SPECIFIC MEASURES APPLY.  
 3. ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF REGULATORY APPROVALS FROM THE CONNECTICUT SITING COUNCIL, U.S. ARMY CORPS OF ENGINEERS AND THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, AND WITH ALL PROJECT PROTOCOLS.  
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| STR # | DESCRIPTION   | HEIGHT (FT) | FINISH           | FOUNDATION    |
|-------|---------------|-------------|------------------|---------------|
| 3582  | STEEL H-FRAME | 70          | WEATHERING STEEL | DRILLED SHAFT |



**Legend**

- Proposed Structure
- Existing Structure to Remain
- Existing Structure to be Removed
- Existing Right-of-Way
- Proposed Transmission Line
- Transmission Line to Remain
- Transmission Line to be Removed
- 10' Contour Line
- Property Line
- Culvert (center point)
- Well
- Gate
- Fence
- Guardrail
- Drainage Swale
- Delineated Wetland Line
- Wetland Area
- Highly Erodible Soils
- 100-Year Flood Zone (None In Mapped Extent)
- 500-Year Flood Zone (None In Mapped Extent)
- Temporary Work Pad
- Permanent Work Pad
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- New Access Road
- Temporary Matting
- Approximate Existing Tree Line
- Approximate Limit of Disturbance
- Vegetation Removal will be Limited to the Right-of-Way Boundary
- Matchline
- Municipal Boundary

**EVSOURCE ENERGY**  
**Transmission Line Maintenance 1975 Line**  
**Development & Management Plan**  
 Middlefield/Durham/Middletown, CT

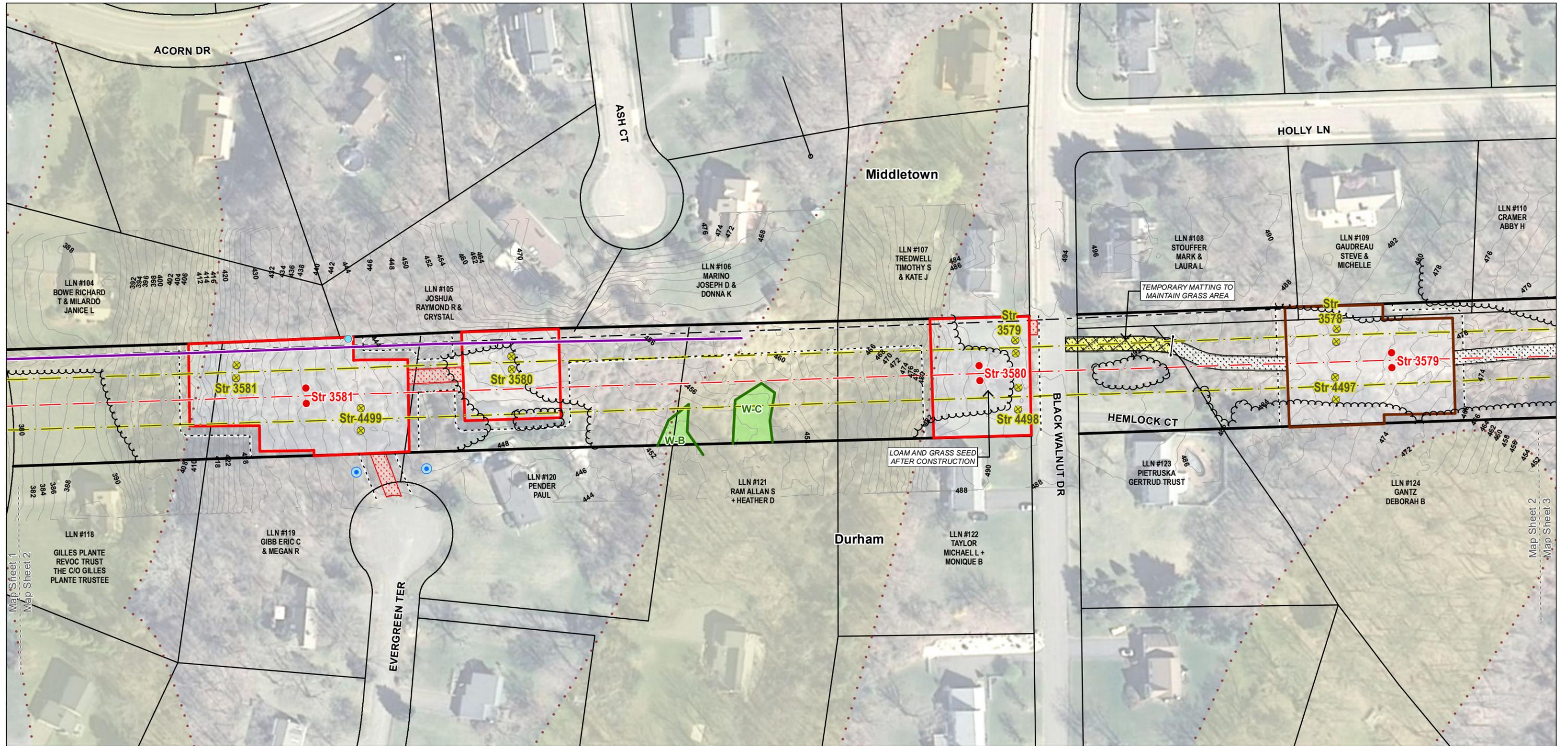
Map Sheet 1 of 3  
 July, 2016

**Tighe & Bond**

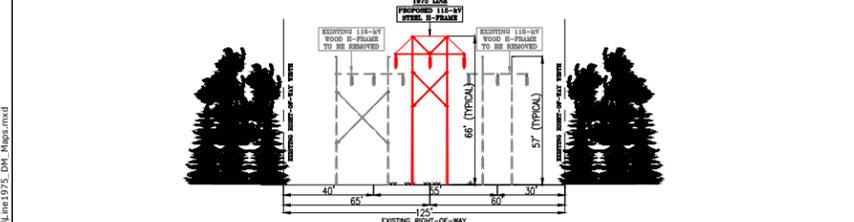
NO. DATE REVISIONS BY CHK APP APP

1 inch = 100 feet  
 0 50 100 Feet  
 Base Map Source: 2012 Aerial Imagery (CTECO)

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LOOKING WEST FROM OXBOW JCT TOWARDS BESECK S/S IN THE TOWNS OF DURHAM AND MIDDLETOWN



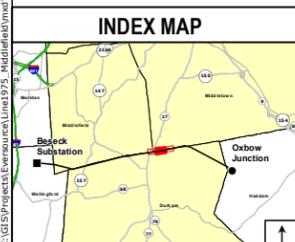
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| STR # | DESCRIPTION   | HEIGHT (FT) | FINISH           | FOUNDATION    |
|-------|---------------|-------------|------------------|---------------|
| 3581  | STEEL H-FRAME | 74.5        | WEATHERING STEEL | DRILLED SHAFT |
| 3580  | STEEL H-FRAME | 65.5        | WEATHERING STEEL | DRILLED SHAFT |
| 3579  | STEEL H-FRAME | 56.5        | WEATHERING STEEL | DRILLED SHAFT |



**Legend**

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- Existing Structure to be Removed
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- Matchline
- Municipal Boundary

**EVERSOURCE ENERGY**

**Transmission Line Maintenance 1975 Line Development & Management Plan**

Durham/Middletown, CT

Map Sheet 2 of 3

July, 2016

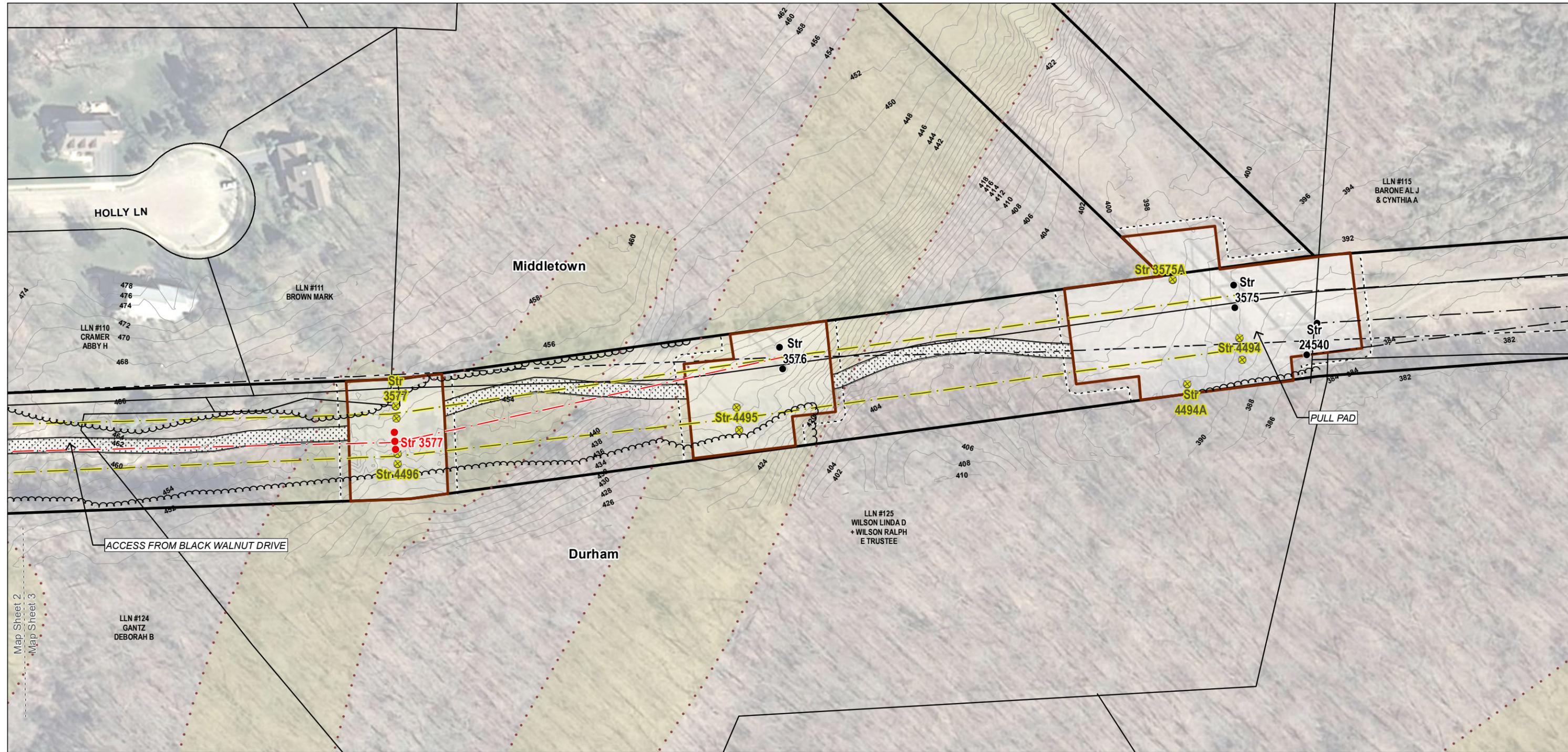
**Tighe & Bond**

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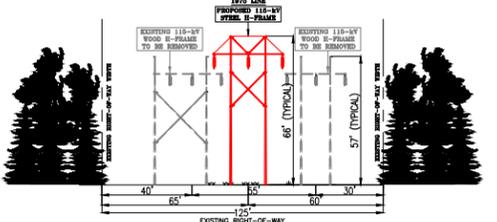
1 inch = 100 feet

0 50 100 Feet

Base Map Source: 2012 Aerial Imagery (CTECO)



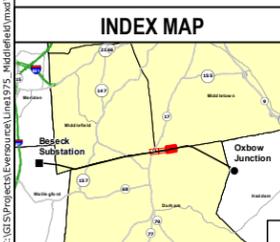
LOOKING WEST FROM ONBOW JCT TOWARDS BESECK S/S IN THE TOWNS OF DURHAM AND MIDDLETOWN



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| STR # | DESCRIPTION   | HEIGHT (FT) | FINISH           | FOUNDATION    |
|-------|---------------|-------------|------------------|---------------|
| 3577  | STEEL H-FRAME | 65.5        | WEATHERING STEEL | DRILLED SHAFT |



**Legend**

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| NO. | DATE | REVISIONS | BY | CHK | APP | APP |
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**EVSOURCE ENERGY**

**Transmission Line Maintenance  
1975 Line  
Development & Management Plan**

Durham/Middletown, CT

Map Sheet 3 of 3

July, 2016

**Tighe & Bond**

ALL-POINTS  
CHALLENGE QUESTIONS  
TECHNOLOGY CORPORATION

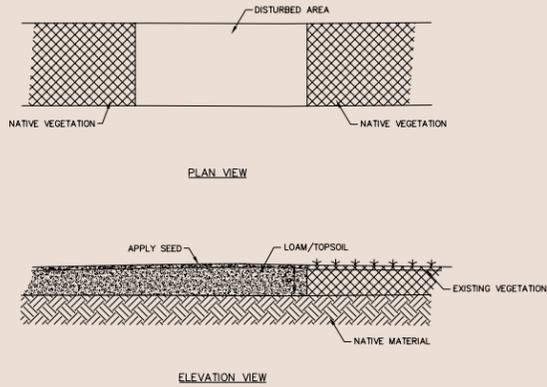
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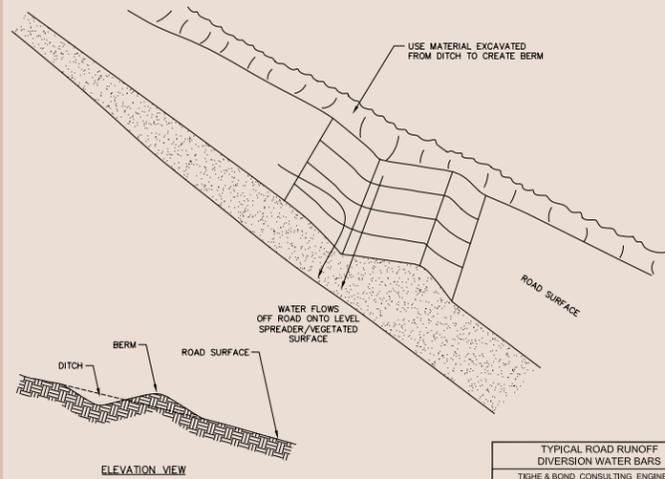
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# EROSION AND SEDIMENTATION CONTROL TYPICAL DETAILS

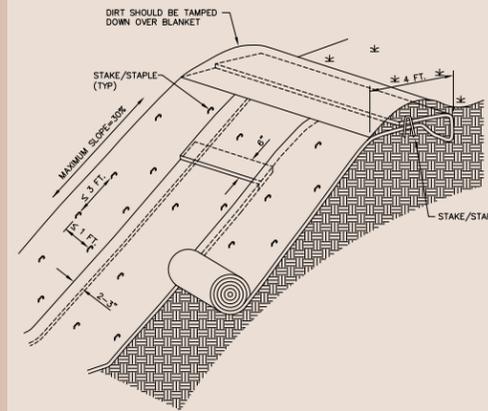


**NOTE:**  
1. SEED MIX APPLICATION IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

**LOAMING AND SEEDING**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2007

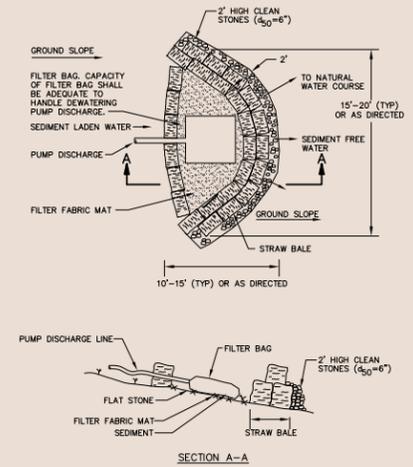


**TYPICAL ROAD RUNOFF DIVERSION WATER BARS**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2007



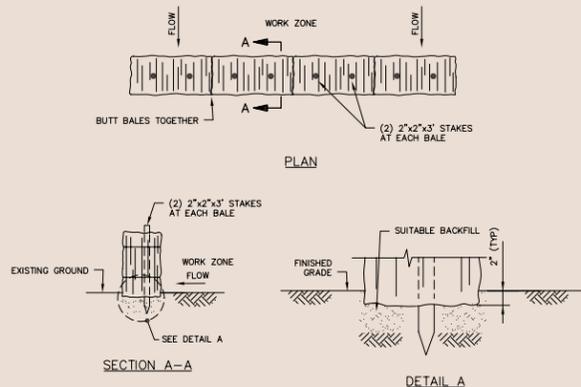
**NOTES:**  
1. EROSION CONTROL BLANKET SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.  
2. STAKES/STAPLES SHOULD BE PLACED NO MORE THAN 3 FT. APART VERTICALLY, AND 1 FT. APART HORIZONTALLY.  
3. SLOPE SURFACE SHOULD BE FREE OF STICKS, ROCKS, AND OTHER OBSTRUCTIONS.  
4. BLANKETS SHOULD BE ROLLED OUT LOOSELY AND STAKED/STAPLED TO MAINTAIN DIRECT SOIL CONTACT. DO NOT STRETCH THE BLANKETS.

**TYPICAL EROSION CONTROL BLANKETS**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2011



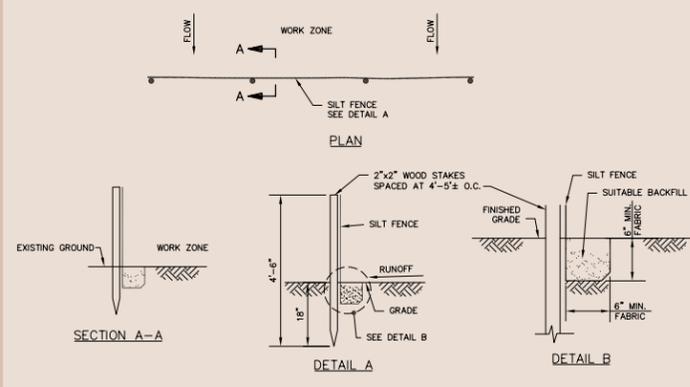
**NOTES:**  
1. LOCATION OF SEDIMENT TRAP SUBJECT TO APPROVAL OF ENGINEER.  
2. SEDIMENT TRAPS OR SETTLING BASINS SHALL BE USED FOR CONSTRUCTION DEWATERING.  
3. DISCHARGE AWAY FROM WORK AREA/DEWATERING AREA.

**TYPICAL SEDIMENT TRAP**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2011

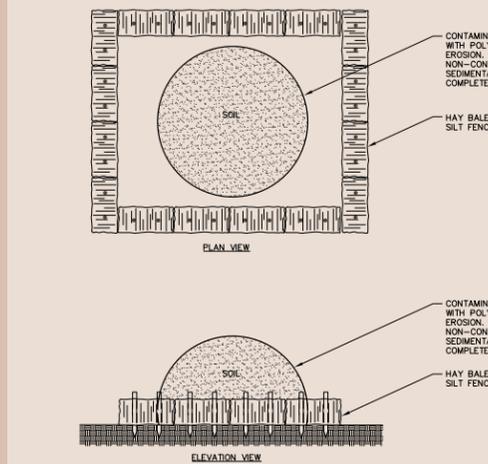


**NOTE:**  
STRAW BALES MAY BE SUBSTITUTED FOR HAY BALES.

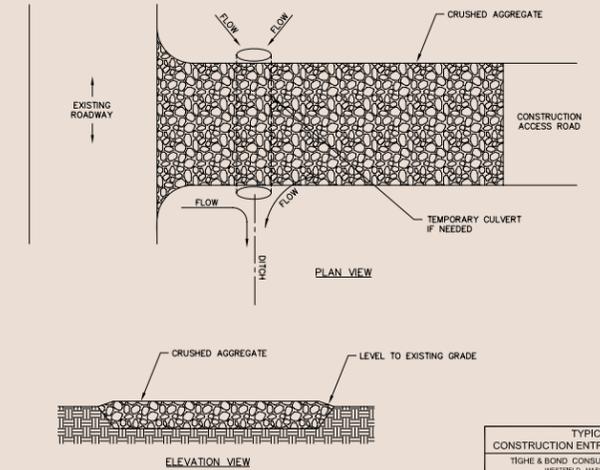
**TYPICAL HAY BALES USAGE**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2007



**TYPICAL SILT FENCE USAGE**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2007



**TYPICAL SOIL STOCKPILE MANAGEMENT**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2011



**TYPICAL CONSTRUCTION ENTRANCE TRACK PAD**  
TIGHE & BOND CONSULTING ENGINEERS  
WESTFIELD, MASSACHUSETTS  
SCALE: NONE DATE: 2007

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|     |      |           |    |     |     |     |

**EVERSOURCE ENERGY**

**Transmission Line Maintenance  
1975 Line**

**EROSION AND SEDIMENTATION CONTROLS  
TYPICAL DETAILS**

**Detail Sheet 02 of 03**

ALL-POINTS TECHNOLOGY CORPORATION

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