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January 10, 2018

Mr. Robert Stein, Chairman Connecticut Siting Council Ten Franklin Square New Britain, CT 06051

RE: Docket No. 468: Southwest Connecticut Reliability Project Monthly Construction Progress Report –December 2017

Dear Chairman Stein:

Pursuant to RCSA Section 16-50j-62(b)(3) and as described in Volume 3, Section A.3.3, of the Southwest Connecticut Reliability Project ("Project") *Development and Management (D&M) Plans for the New 115-kV Transmission Line and the Modifications to the Plumtree and Stony Hill Substations,* The Connecticut Light and Power Company doing business as Eversource Energy ("Eversource") hereby provides to the Connecticut Siting Council ("Council") this Project Construction Progress Report for the month of December 2017.

This Construction Progress Report pertains to work on the new 115-kilovolt ("kV") transmission line, as well as to the Project activities at Stony Hill Substation and the associated 115-kV line reconfigurations at that substation. Project construction activities at Plumtree Substation will not commence until later in 2018.

Should you or other Council members have any questions regarding this submission, please do not hesitate to contact me via e-mail at <u>kathleen.shanley@eversource.com</u> or telephone at (860) 728-4527.

Sincerely,

Kathleen M. Sha

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Enclosure

DOCKET NO. 468 SOUTHWEST CONNECTICUT RELIABILITY PROJECT MONTHLY CONSTRUCTION PROGRESS REPORT DECEMBER 2017

1. NEW 115-kV TRANSMISSION LINE

Vegetation clearing activities on the new 115-kV transmission line right-of-way (ROW) commenced the week of December 11, 2017. Civil work (e.g., roads and construction pads) is expected to begin in January 2018. Attachment 1, Table 1 summarizes the status of the transmission line construction work as of December 31, 2017.

2. MODIFICATIONS TO STONY HILL SUBSTATION

The Project modifications to Stony Hill Substation and the associated reconfiguration of the 115-kilovolt (kV) 1770 and 1887 line connections to the substation commenced on September 18, 2017. During December, the 115-kV duct bank was installed, except for the portion nearest the energized capacitor bank.

Attachment 1, Table 2 summarizes the status of this work as of December 31, 2017.

3. MINOR DEVELOPMENT & MANAGMENT (D&M) PLAN CHANGES

In the past month, the following minor changes, as described below, were identified to the D&M Plan for the new 115-kV transmission line.

1. Wood Chip Piles, Volume 2, Map sheet 13, Town of Brookfield

At the request of the landowner (Line List #101, Berkshire North, LLC), Eversource has allowed two piles of wood chips (derived from vegetation clearing activities) to remain within upland areas of the ROW near Structures 1024 and 1025. The Project's Vegetation Clearing Plan (D&M Plan, Volume 3) states that wood chips should not be left in piles in the ROW. The Plan also states that the disposition of brush and timber cut within the ROW on private property will performed in accordance with landowner agreements, consistent with siting and regulatory requirements. In this case, the landowner requested the wood chip piles rather than other timber disposition methods. The wood chip piles are placed in upland, previously disturbed areas of the ROW. In this area, the ROW has been mined for sand and various commercial uses are located nearby. No environmental resources are affected by the wood chip piles.

2. Additional Wetland Invasive Species Control Best Management Practice (BMP): Detail Sheet 2B

As recommended by the Council in its July 21, 2017 approval of the Project, Eversource developed procedures to avoid or minimize the potential for the spread of wetland invasive species by means of soil excavated from wetlands during structure foundation work for the Project. These procedures have been added as Item V.G to the existing *Wetland Invasive Species Control Plan (Plan)*, contained on Detail Sheet 2B, Volume 2 of the D&M Plan for the new 115-kV transmission line, and are reproduced below.

Detail Sheet 2B was revised to incorporate Item V.G and re-issued to Project personnel and contractors.

V. G. WETLAND W1 (STRUCTURES 1000 THROUGH 1013); AS ALL WETLANDS THAT TRAVERSE THE ROW INCLUDE POPULATIONS OF INVASIVE SPECIES, SPECIFICALLY COMMON REED (PHRAGMITES AUSTRALIS), EXCAVATED SOILS FROM THESE WETLANDS (FROM STRUCTURE INSTALLATION) ARE VERY LIKELY TO CONTAIN PLANT MATERIALS THAT, IF IMPROPERLY DISPOSED, COULD RESULT IN THE SPREAD OF INVASIVE SPECIES BEYOND THE PROJECT ROW. COMMON REED HAS AN EXTENSIVE SYSTEM OF SCALY RHIZOMES AND STOLONS WHICH ALLOW THE PLANTS TO SPREAD INTO DENSE MONOTYPIC STANDS. THE RHIZOMES PRODUCE A DENSE MAT THAT RANGES FROM 4 INCHES TO 8 FEET BELOW THE SOIL SURFACE (GUCKER, 2008) ¹. RHIZOME DEPTH IS DEPENDENT ON SITE CONDITIONS. SOIL BORINGS PERFORMED AT THE LOCATION OF PROPOSED STRUCTURE 1000 THROUGH 1013 INDICATE THAT SOILS CONSIST MAINLY OF SILT AND FINE SAND WITH ORGANIC MATERIAL AND ROOTS THAT EXTEND TO A MAXIMUM DEPTH OF 4.5 FEET BELOW. THEREFORE, FOR THE INSTALLATION OF STRUCTURES 1000 THROUGH 1013, SOILS EXCAVATED TO 4.5 FEET BELOW GRADE OR TO THE TOP OF THE MINERAL SOIL LAYER MUST BE DISPOSED OFF SITE AT AN APPROVED LANDFILL. THE EXCAVATED SOILS MUST BE CONTAINED DURING TRANSPORT FROM THE EXCAVATION LOCATION FOR OFF-SITE CHARACTERIZATION AND DISPOSAL AT AN APPROVED LANDFILL FACILITY.

Gucker, D.L. 2008. Phragmites australis. In: fire Effects Information System, [Online]. USDA, forest Service, Rocky Mountain Research Station. Available: http://www.fs.fed.us/database/feis/ [July 27, 2012].

3. Extension of Off-ROW Access Road, Volume 2, Map sheet 3, Town of Bethel

Eversource plans to use an additional 130-foot-long, 20-foot-wide portion of an existing off-ROW access road, which is located on Town of Bethel property (Line List 402) and extends southeast from Shelter Rock Road, east of and parallel to the ROW near Structure 1007. This area will be used as temporary work space, and to support construction activities within wetland W1, which extends along the ROW both north and south of Shelter Rock Road.

An approximately 100-foot-long portion of the existing access road, extending south from Shelter Rock Road, is depicted as temporary work space on D&M Plan map sheet 3. The planned additional temporary work space for Project construction will extend along the Town's existing access road for another 130 feet, to an existing shed.

During the preparation of the D&M Plan, Eversource anticipated that the entire 230-foot-long off-ROW access road would be used as temporary work space during Project construction. Accordingly, Eversource conducted field reviews of the existing access road and consulted with the Town of Bethel and the CT DEEP Natural Diversity Database. The results of these consultations determined that the use of the existing access road, which is situated in an upland area, for temporary work space during construction would not result in adverse environmental effects. However, as of June 2017, when the D&M Plan was submitted to the Council, Eversource had not finalized an agreement with the Town of Bethel to use the southern-most 130-foot section of the road. Thus, that portion of the road was not depicted as temporary work space on the map sheet.

On August 29, 2017, Eversource and the Town of Bethel signed an agreement regarding the use of the entire 230-foot-long off-ROW access road for temporary Project work space. Eversource proposes to use the temporary work space, which amounts to 2,642 square feet (0.06 acre) as defined by the agreement with the Town of Bethel. Timber mats will be used for the temporary access road.

Map sheet 3 has been revised to show the temporary access road extension and is attached,

ATTACHMENT 1

Table 1 Transmission Line Construction Progress (December 31, 2017)

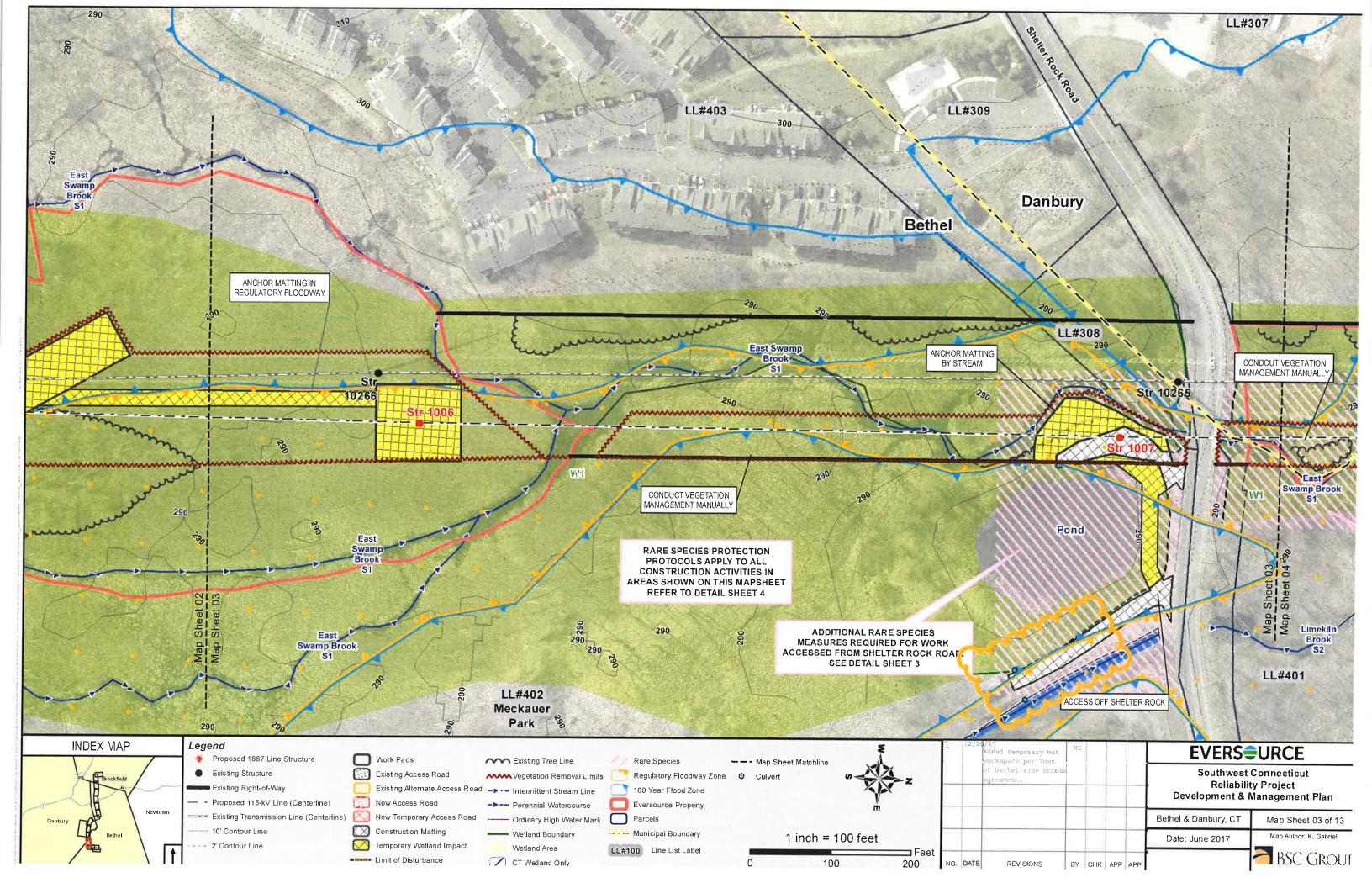
Construction Progress Report	port					Transmission	-				
12/31/2017										Wire Stringing (or	
		ROW Clearing	Work Area Preparation	Found	Foundation Installation	ition	Struct	Structure Installation		Cable Installation) Restoration	Restoration
Town	Length of Transmission ROW Clearing Line (Miles) (% Complete)	ROW Clearing (% Complete)	Access Roads/Work Pads (% Complete)	Foundations Total Installed Foundation	l ï	Foundations (% Complete)	Structures Total Structures	s	structures (% complete)	Stringing (% Complete)	(% Complete)
Bethel	2.2	53%			17			17			
Danbury	0.9	50%			9			9			
Brookfield	0.3	100%			5	%0	0	2	%0	%0	%0

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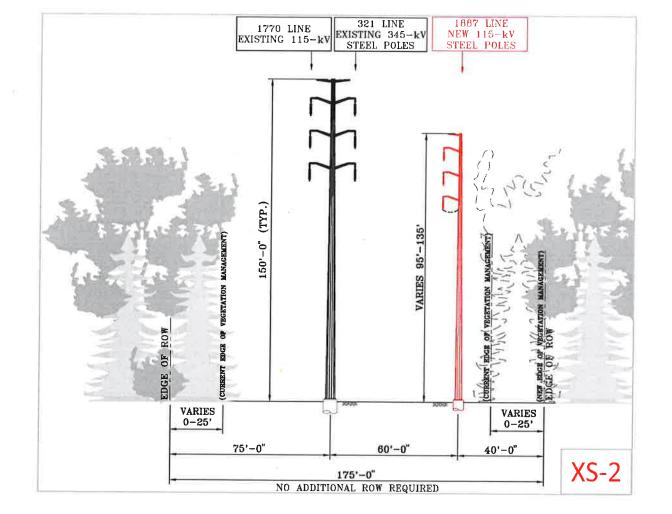
Table 2 Substation Construction Progress (December 31, 2017)

			Project A	Project Activity (% Complete)	mplete)		
Location (Substation)		Substation Work	Work		Line Re	Line Reconfiguration Work	ork
Substation	Construction Start Date	Site Preparation	Equipment Installation	Testing	Construction Start Date	Structure Installation	Wire Stringing
Plumtree					n/a	n/a	n/a
Stony Hill	9/18/2017	80%	25%	%0	9/18/2017	33%	%0

Docket No. 468 Monthly Construction Progress Report



SWCT Reliability Project Mapsheet 04 Notes



Str #	X-SEC	DESCRIPTION	HEIGHT (FT)	FINISH	FOUNDATIO	N
1008	2	VERTICAL TANGENT	103	WEATHERING STEEL	DRILLED SH	AFT
Line Lis	t	Owner Name		Site Address	Municipality	State
306	CITY O	F DANBURY LANDFILL		23 PLUMTREES RD	DANBURY	СТ
307	LAZY C	REEK MILLS LLC		25 PLUMTREES RD	DANBURY	СТ
401	In CTUE	LAND TOUCT INC	l.		DETUEI	

SITE SPECIFIC NOTES

- A. REFER TO DETAIL SHEETS 2 A&B FOR WORK IN OR NEAR WETLANDS, WATERCOURSES, OR FLOODPLAINS. KEY BMPS ARE BRIEFLY INCLUDED BELOW.
- B. ALL ACCESS AND WORK PAD AREAS IN THE REGULATORY FLOODWAY SHALL USE ANCHORED TEMPORARY CONSTRUCTION MATS. WITHIN THE 100-YEAR FLOODPLAIN, GRAVEL ACCESS/WORK AREAS SHALL BE CONSTRUCTED AT OR BELOW THE EXISTING GRADE (SEE DETAIL SHEET B AS SPECIFIED FOR FLOODPLAINS). EXCESS MATERIAL SHALL BE REMOVED FROM THE SITE OR SPREAD OUTSIDE OF THE 100-YEAR FLOODPLAIN AND WETLAND RESOURCE AREAS.
- C. NO OVERNIGHT PARKING OR STORAGE OF EQUIPMENT ALLOWED WITHIN THE 100-YEAR FLOODPLAIN OR REGULATORY FLOODWAY. NO REFUELING OR STORAGE OF FUELS OR HAZARDOUS MATERIALS IN THE FLOODPLAIN. EXCEPTIONS AND BMPS ALSO APPLY, SEE DETAIL SHEET 2 A&B.
- D. RARE SPECIES BMPS APPLY TO ALL AREAS DEPICTED ON THIS PAGE. CONTACT EVERSOURCE LICENSING AND PERMITTING FOR ADDITIONAL DETAILS AND SITE-SPECIFIC INFORMATION PRIOR TO INITIATION OF WORK IN THESE AREAS. BMPS AND TIMING RESTRICTIONS ARE DISCUSSED IN DETAIL SHEETS 3 AND 4, WHICH ALSO DEPICT GENERAL ARRANGEMENTS FOR MATTING IN WETLAND W1.
- ALL PROJECT CONSTRUCTION ACTIVITIES IN WETLANDS SHALL BE CONTAINED WITHIN THE LOCATION AND ALIGNMENT OF DEPICTED WORK PADS AND ACCESS ROADS. ALL ACCESS/WORK AREAS IN WETLANDS MUST USE TEMPORARY CONSTRUCTION MATTING. ACCESS OR WORK AREAS ACROSS ANY WATERCOURSES MUST SPAN THE FULL WIDTH OF ITS BANKS, TO THE EXTENT PRACTICABLE.
- F. IN WETLANDS, DEWATERING FLUIDS SHALL BE PUMPED INTO A FRAC TANK OR WATER TRUCK, OR AS SPECIFIED IN EVERSOURCE'S BMP MANUAL. DEWATERING FLUIDS SHALL BE HANDLED AS SPECIFIED IN EVERSOURCE'S BMP MANUAL.
- G. VEGETATION MANAGEMENT IN WETLANDS AND OTHER SENSITIVE AREAS SHALL FOLLOW LOW IMPACT TREE CLEARING METHODS DESCRIBED IN VOLUME 3 ATTACHMENT B. THIS MAY INCLUDE, WHERE PRACTICABLE, PRESERVING DESIRED SPECIES, LEAVING STUMPS AND ROOTS INTACT FOR SOIL STABILITY, AND SELECTIVELY REMOVING VEGETATION WITHIN 25-FT OF STREAM BANKS. ADDITIONAL BMPS ALSO APPLY FOR RARE SPECIES (SEE DETAIL SHEETS 3 AND 4).
- ALL PROJECT WETLANDS HAVE KNOWN POPULATIONS OF INVASIVE SPECIES, THEREFORE ADHERENCE TO THE WETLAND INVASIVE SPECIES CONTROL PLAN APPLIES FOR ALL Η. MATTING AND EQUIPMENT IN WETLANDS.
- SUBJECT TO ONGOING CONSULTATIONS WITH CT DEEP NDDB. ADDITIONAL RARE SPECIES BMPS APPLY TO AREAS ACCESSED FROM SHELTER ROCK ROAD. REFER TO DETAIL SHEETS 3 A&B FOR BMPS, INCLUDING TIMING RESTRICTIONS AND SITE-SPECIFIC MAPPING (REDACTED FROM PUBLIC DOCUMENTS).
- ACCESS TO CONDUCT VEGETATION MANAGEMENT BETWEEN STRUCTURES 1006 AND 1008 SHALL BE CONDUCTED MANUALLY. FELLED TIMBER MAY BE LEFT IN PLACE FOR SOME SMALL STANDS WHERE TIMBER REMOVAL IS NOT FEASIBLE WITHOUT IMPAIRING STREAM BANKS OR OTHER SENSITIVE RESOURCE AREAS SUCH AS RARE SPECIES
- REFER TO DETAIL SHEETS 9 A&B FOR THE SITE-SPECIFIC MAPPING AND GRADING PLAN FOR PROJECT FLOODPLAIN COMPENSATION. FLOODPLAIN COMPENSATION Κ. ACTIVITIES (EXCAVATION) SHALL BE INITIATED PRIOR TO OR CONCURRENT WITH THE INSTALLATION OF STRUCTURES 1000-1012. NOTE THAT THE CONSTRUCTION ACCESS ROAD THROUGH THIS AREA WILL BE CONSTRUCTED TO THE GRADES DEPICTED ON DETAIL SHEETS 9 A&B AND MAY BE LEFT IN PLACE POST-CONSTRUCTION.

GENERAL NOTES

NOTES BELOW PROVIDE A SUMMARY OF BMPS. REFER TO DETAIL SHEETS 2-5, D&M PLAN VOLUME 3, AND THE MAPSHEET SPECIFIC NOTES (BELOW) FOR ADDITIONAL INFORMATION. REFER TO DETAIL SHEETS 8 A&B FOR CROSS-SECTIONAL DEPICTIONS OF TYPICAL ACCESS ROADS, FILL IN FLOODPLAINS, AND (TEMPORARY) FILL MATERIAL IN RESIDENTIAL AREAS OR LAWNS.

- 1. THE LIMITS OF VEGETATION MANAGEMENT, AS SHOWN, DEFINE AREAS WHERE VEGETATION REMOVAL AND GRUBBING, GRADING, AND EXCAVATION MAY OCCUR. MINOR DEVIATIONS MAY BE REQUIRED IN SOME LOCATIONS. ADDITIONALLY, DANGER OR HAZARD TREE REMOVAL MAY BE REQUIRED OUTSIDE OF THE VEGETATION REMOVAL LIMITS. VEGETATION REMOVAL EQUIPMENT MAY OPERATE ANYWHERE WITHIN THE LIMITS OF VEGETATION MANAGEMENT IN UPLANDS. IN WETLANDS AND ACROSS WATER RESOURCES, TEMPORARY CLEARING ROUTES (CONSISTING OF TIMBER MATS OR EQUIVALENT) WOULD BE USED BY THE CLEARING CONTRACTOR ONLY (THESE ARE NOT DEPICTED ON THE MAPSHEETS AND WILL BE DETERMINED BASED ON FIELD CONDITIONS AT THE TIME OF CONSTRUCTION). REFER TO DETAIL SHEETS 2 A&B FOR ADDITIONAL MEASURES IN WETLAND RESOURCE AREAS.
- ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE RELEVANT PORTIONS OF EVERSOURCE'S "BEST MANAGEMENT PRACTICES MANUAL FOR MASSACHUSETTS AND 2. CONNECTICUT (SEPTEMBER 2016)" (BMP MANUAL), UNLESS MORE STRINGENT PROJECT-SPECIFIC MEASURES APPLY. ALL WORK WILL BE CONDUCTED IN ACCORDANCE WITH THE REQUIREMENTS OF SITING APPROVALS FROM THE COUNCIL AND REGULATORY APPROVALS FROM THE U.S. ARMY CORPS OF ENGINEERS AND THE CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION, AND WITH ALL PROJECT PROTOCOLS. REFER TO DETAIL SHEETS 2-5 AND D&M PLAN VOLUME 3.
- EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE INSTALLED DURING CONSTRUCTION, AS REQUIRED, TO COMPLY WITH THE PROVISIONS, AS APPLICABLE, OF 3. THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, EVERSOURCE'S BMP MANUAL, AND REGULATORY APPROVALS.
- 4. EXISTING CULVERTS WILL BE PROTECTED, AS DEEMED NECESSARY, TO PREVENT DAMAGE DURING CONSTRUCTION. INLET PROTECTION SHALL BE INSTALLED FOR ANY STORMWATER CATCH BASIN WITHIN THE WORK ZONE.
- ACCESS ROADS SHALL BE CONSTRUCTED AND CONFORM TO ADDITIONAL REQUIREMENTS AS INDICATED ON MAPPING WITHIN FLOODPLAINS, RESIDENTIAL AREAS, AND 5. LAWNS (SEE DETAIL SHEET 8 A&B). ACCESS ROADS SHALL HAVE A MAXIMUM TRAVEL SURFACE OF 16 FEET IN WIDTH WITH SHOULDERS OF UP TO 2-FEET IN WIDTH, UNLESS INCREASED WIDTH IS REQUIRED FOR SAFE CONSTRUCTION, AS INDICATED ON THE MAPPING (E.G. TO ALLOW EQUIPMENT TURNING RADII AT CURVES IN ROADS OR AT THE INGRESS/EGRESS POINTS FROM A PUBLIC ROAD OR WORK AREA).
- THE LIMIT OF DISTURBANCE DEPICTED ON THE MAPPING REFLECTS AREAS WHERE GRADING MAY BE NECESSARY DUE TO SITE CONSTRAINTS SUCH AS STEEP TOPOGRAPHY. 6.

PAVED SURFACES SHALL BE PROTECTED DURING CONSTRUCTION AS NECESSARY AND ANY DAMAGE TO SUCH SURFACES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR. SAFETY SIGNAGE TO INDICATE CONSTRUCTION WORK ZONES SHALL BE INSTALLED ALONG PUBLIC ROADS AS NECESSARY AND AS REQUIRED THROUGH COORDINATION WITH STATE AND LOCAL ENTITIES.

SPOILS RESULTING FROM CONSTRUCTION ACTIVITIES MAY BE SPREAD WITHIN THE LIMITS OF VEGETATION MANAGEMENT. SPOILS SHALL NOT BE PERMANENTLY SPREAD WITHIN EXISTING MAINTAINED YARDS/LAWNS OR SENSITIVE ENVIRONMENTAL RESOURCE AREAS. HOWEVER, TEMPORARY STOCKPILING OF SPOILS IS PERMISSIBLE PROVIDED SEDIMENT IS ADECIDATELY CONTAINED AND DISTURRED AREAS RESTORED TO PRE-EXISTING CONDITIONS

HABITAT. CONTACT EVERSOURCE LICENSING AND PERMITTING FOR ADDITIONAL DETAILS AND SITE-SPECIFIC INFORMATION PRIOR TO INITIATION OF WORK IN THESE AREAS.