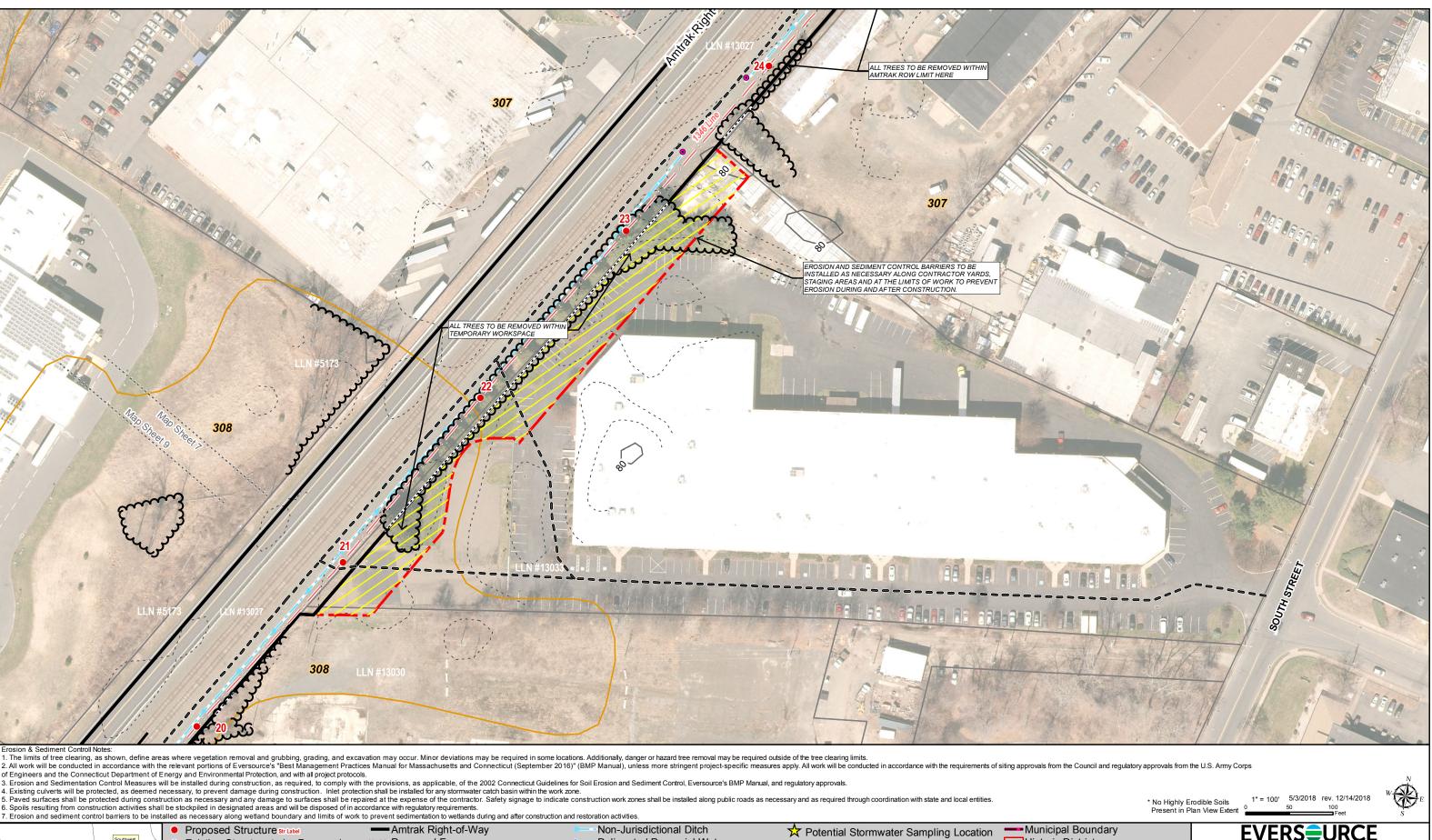
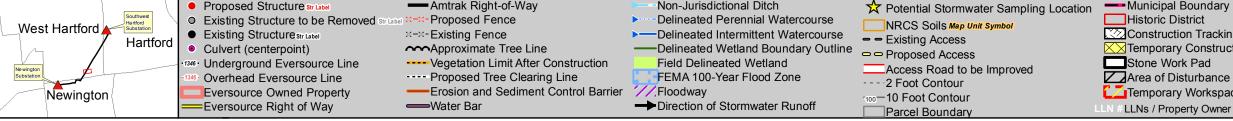
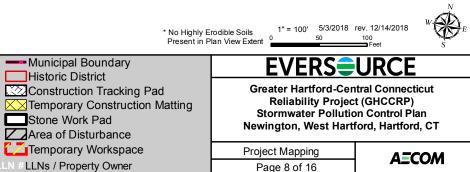
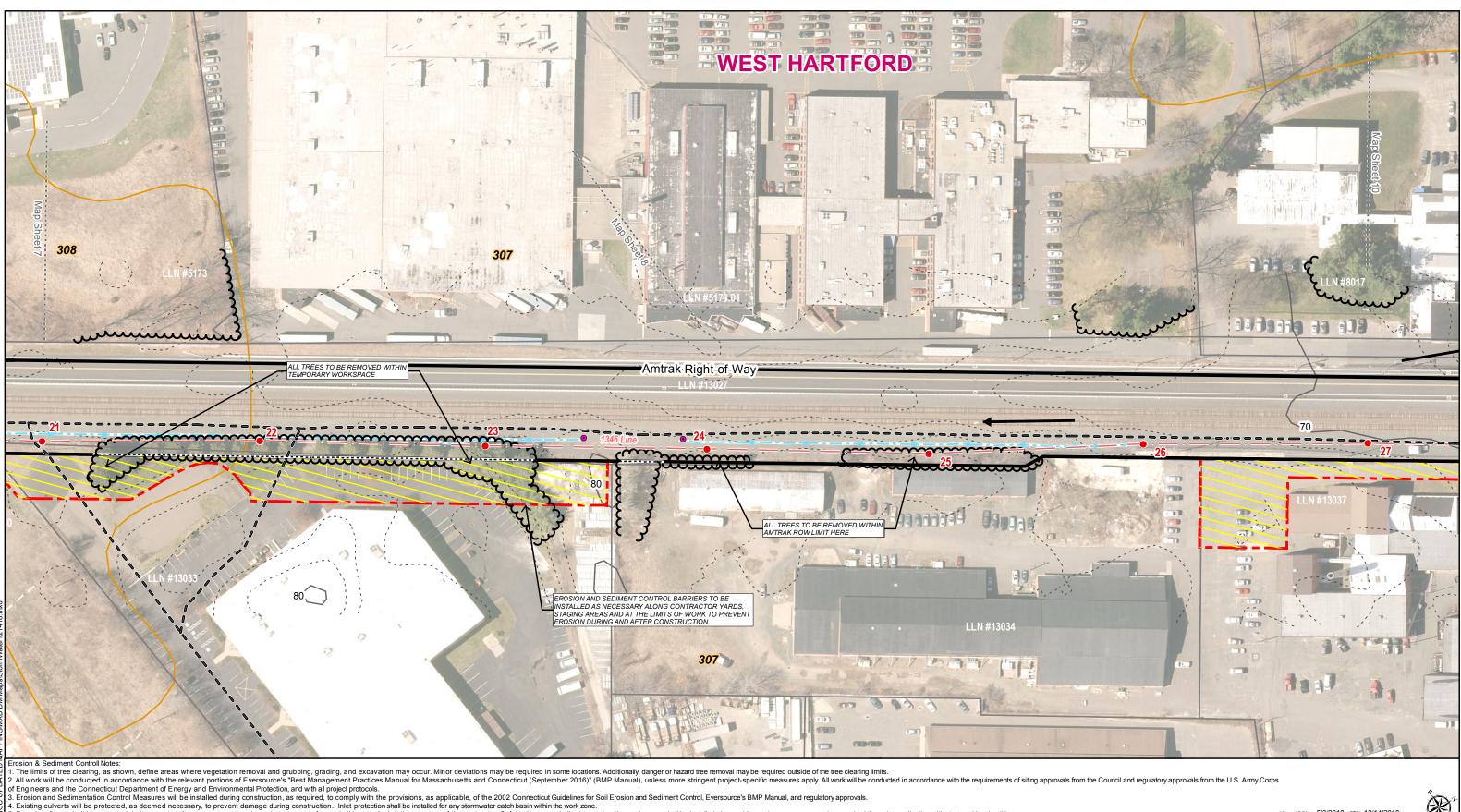


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5. Paved surfaces shall be protected during construction as necessary and any damage to surfaces shall be repaired at the expense of the contractor. Safety signage to indicate construction work zones shall be installed along public roads as necessary and as required through coordination with state and local entities. 5. Spoils resulting from construction activities shall be stockpiled in designated areas and will be disposed of in accordance with regulatory requirements.

. Erosion and sediment control barriers to be installed as necessary along wetland boundary and limits of work to prevent sedimentation to wetlands during and after construction and restoration activities.

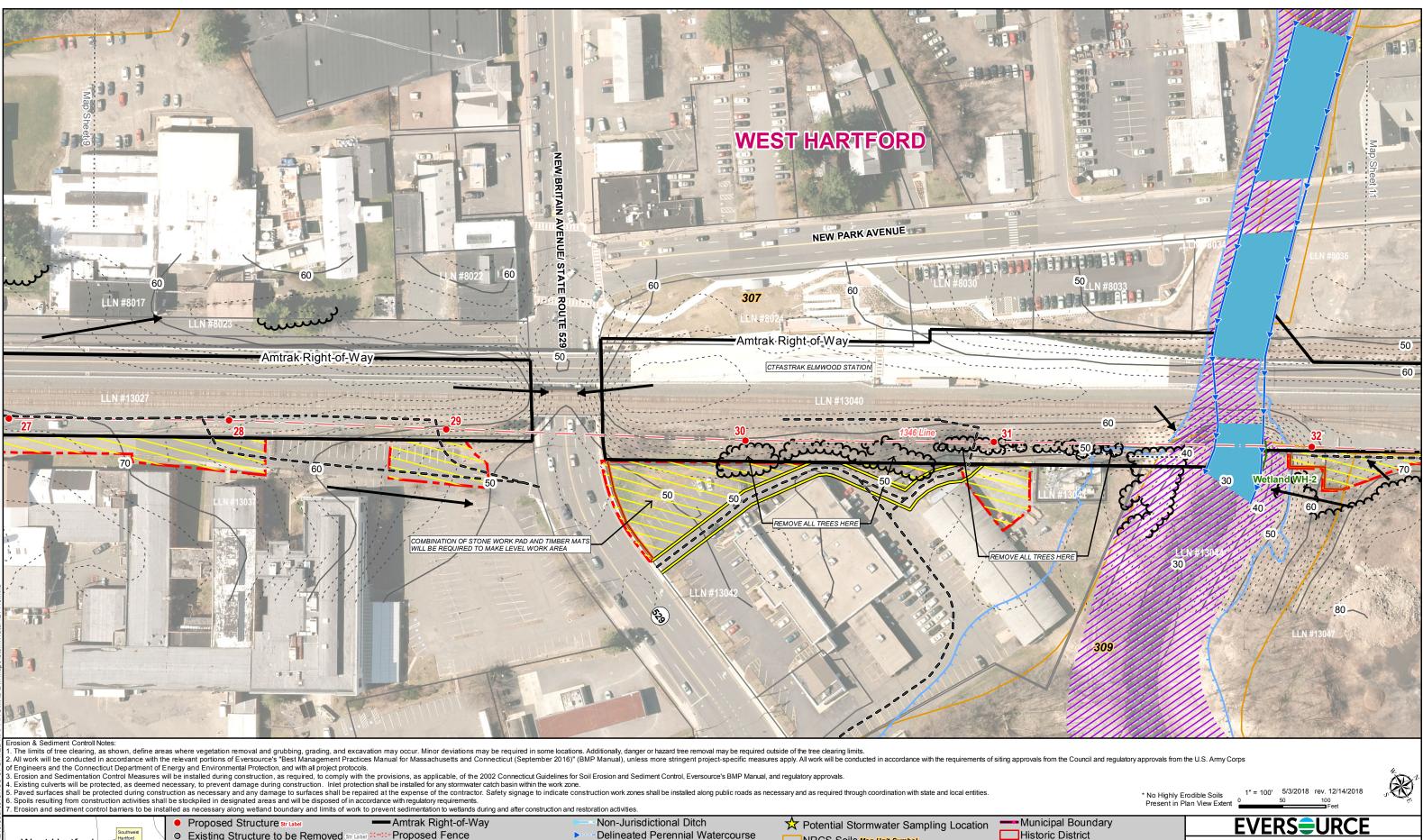
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s/Ev	Most Lortford	Southwest Hartford	<ul> <li>Existing Structure to be Removed structure</li> </ul>	ar ×=×-Proposed Fence	Delineated Perennial Watercourse	NRCS Soils Map Unit Symbol	Historia
jects	West Hartford		<ul> <li>Existing Structurestr Label</li> </ul>	≍=≍= Existing Fence	Delineated Intermittent Watercourse	= = Existing Access	Constr
\Pro		Hartford	<ul> <li>Culvert (centerpoint)</li> </ul>	Approximate Tree Line	Delineated Wetland Boundary Outline	□ □ Proposed Access	🔀 Tempo
ž	Newington		1346 Underground Eversource Line	Vegetation Limit After Construction	Field Delineated Wetland	Access Road to be Improved	Stone V
Path	Substation	T	-1346: Overhead Eversource Line	Proposed Tree Clearing Line	FEMA 100-Year Flood Zone		Area of
ent	Newington		Eversource Owned Property	Erosion and Sediment Control Barrier	Floodway	100 – 10 Foot Contour	<b>1</b> Tempo
cum	, in the second s		Eversource Right of Way		Direction of Stormwater Runoff	Parcel Boundary	LLN #LLNs / F

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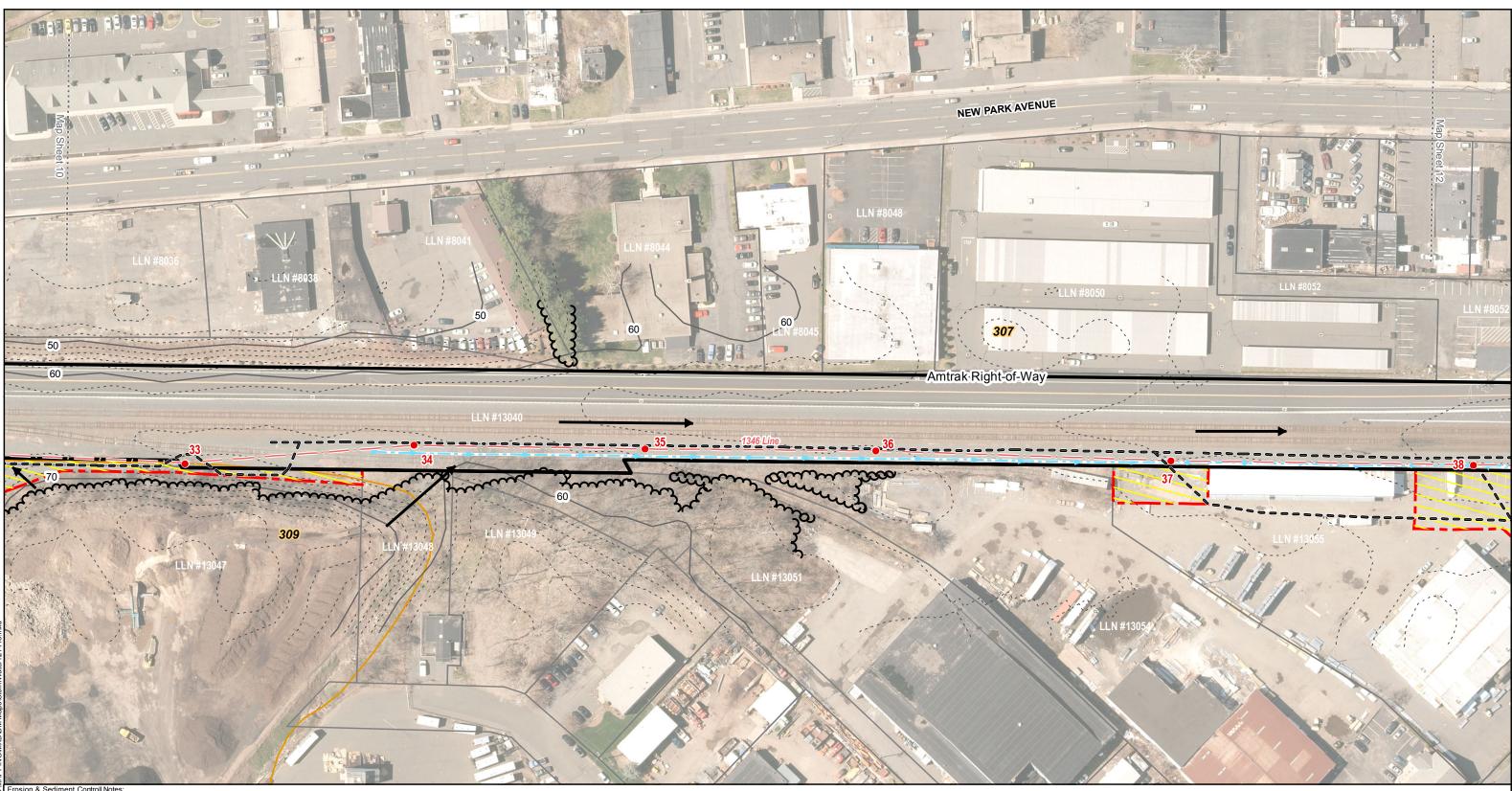
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/Pro		<ul> <li>Culvert (centerpoint)</li> </ul>	Approximate Tree Line	Delineated Wetland Boundary Outline	Proposed Access	<b>X</b> Tempol
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Greater Hartford-Central Connecticut Reliability Project (GHCCRP) Stormwater Pollution Control Plan Newington, West Hartford, Hartford, CT

Project Mapping Page 10 of 16

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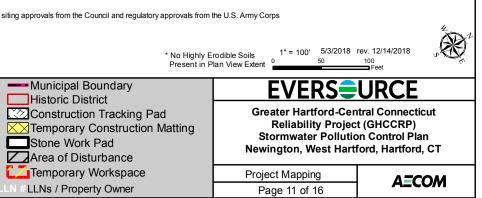


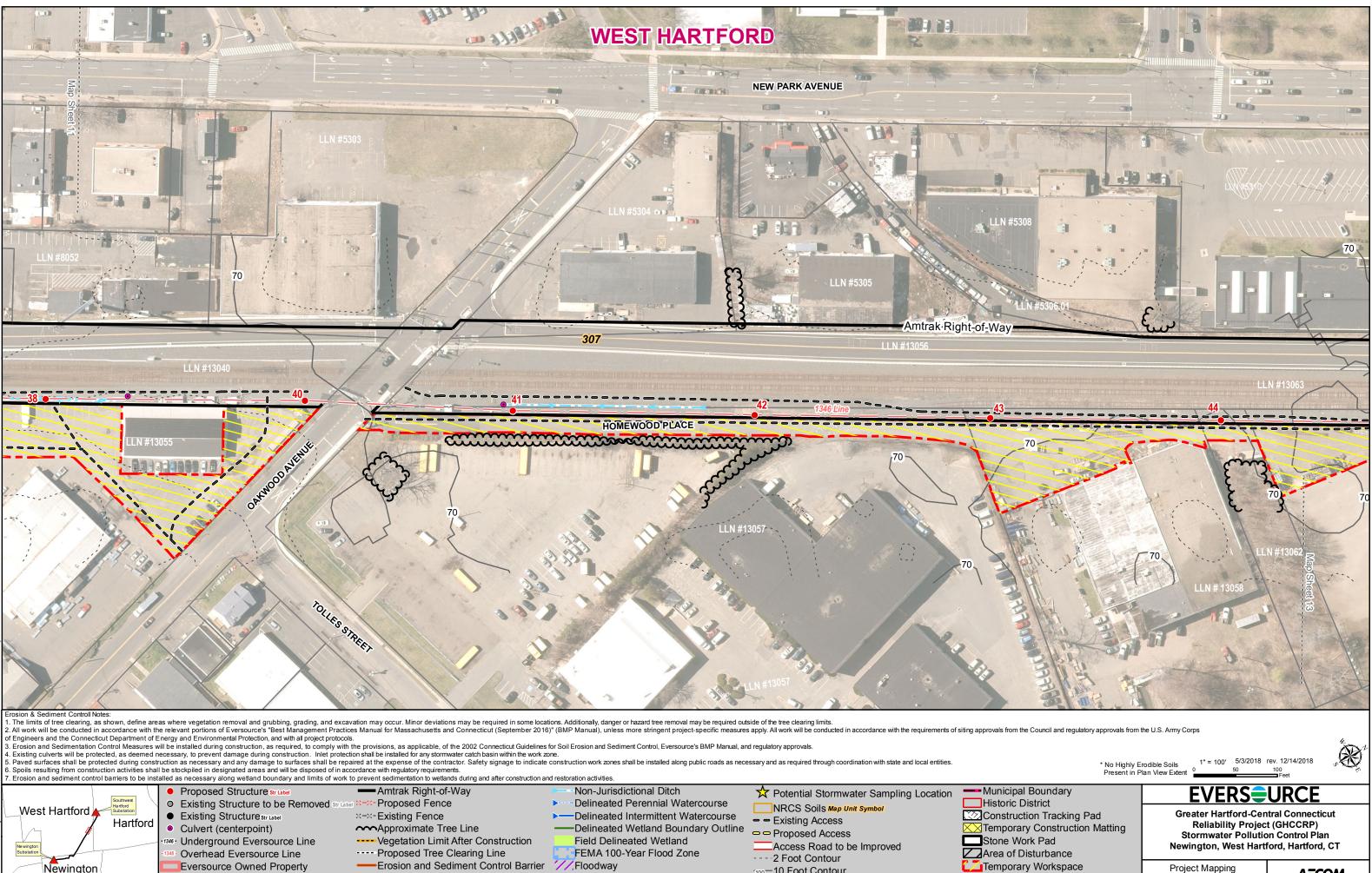
The limits of tree clearing limits. The limits of tree clearing limits. 2. All work will be conducted in accordance with the relevant portions of Eversource's "Best Management Practices Manual for Massachusetts and Connecticut (September 2016)" (BMP Manual), unless more stringent project-specific measures 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 f Engineers and the Connecticut Department of Energy and Environmental Protection, and with all project protocols.

3. Erosion and Sedimentation Control Measures will be installed during construction, are annual populations, are applicable, of 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. 5. Paved surfaces shall be protected during construction as necessary and any damage to 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. 6. Spoils resulting from construction activities shall be stockpiled in designated areas and will be disposed of in accordance with regulatory requirements.

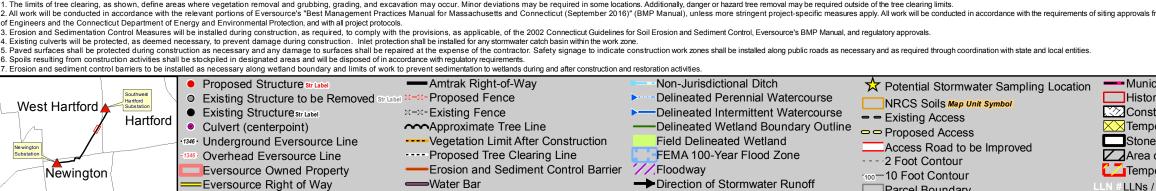
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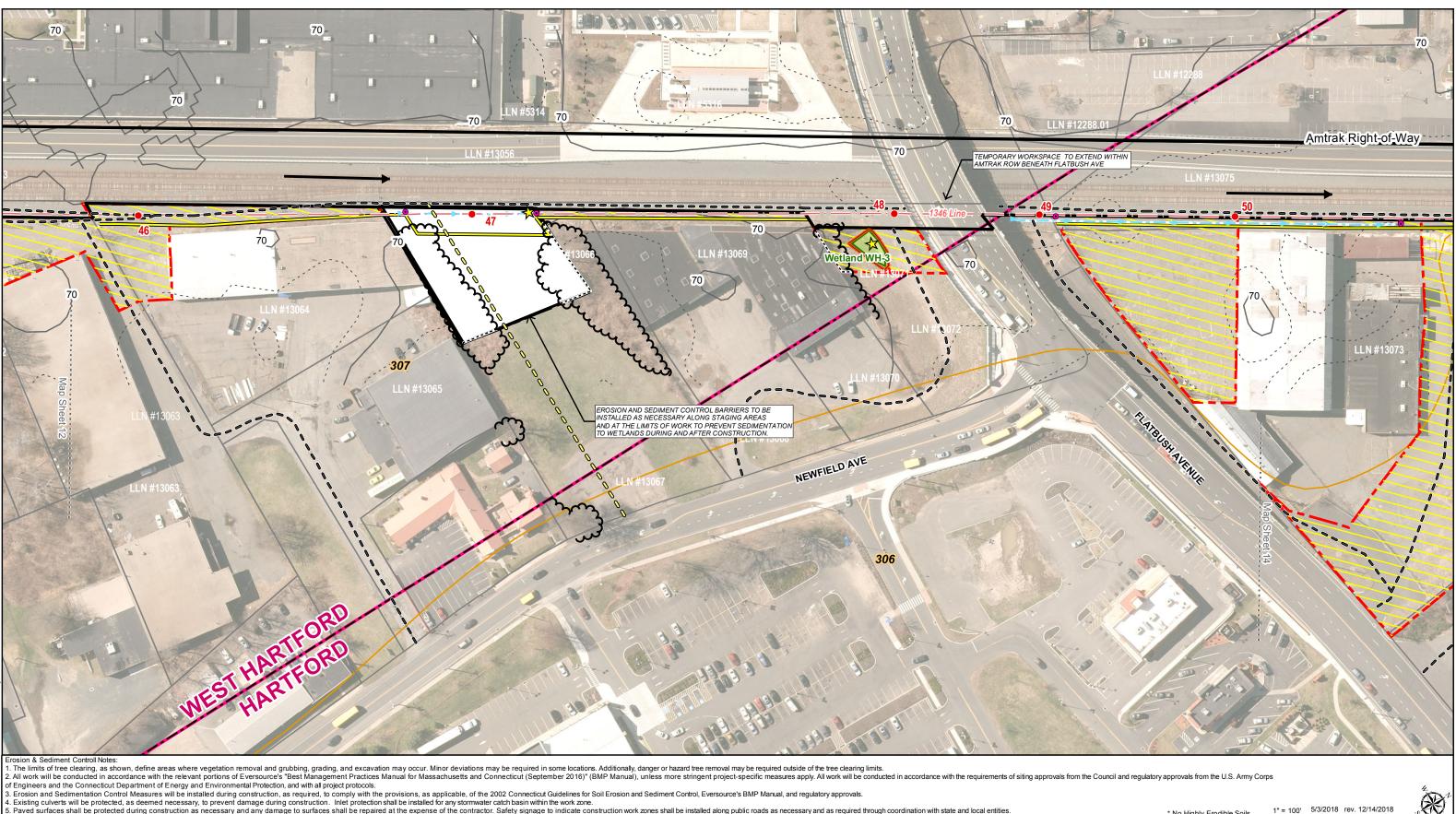
Parcel Boundary



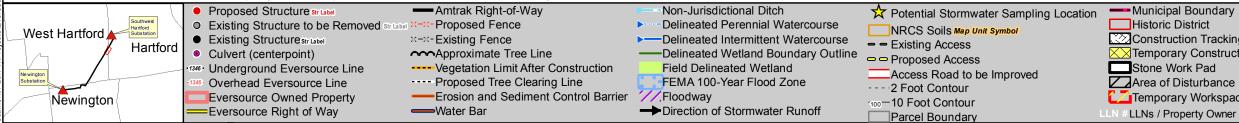
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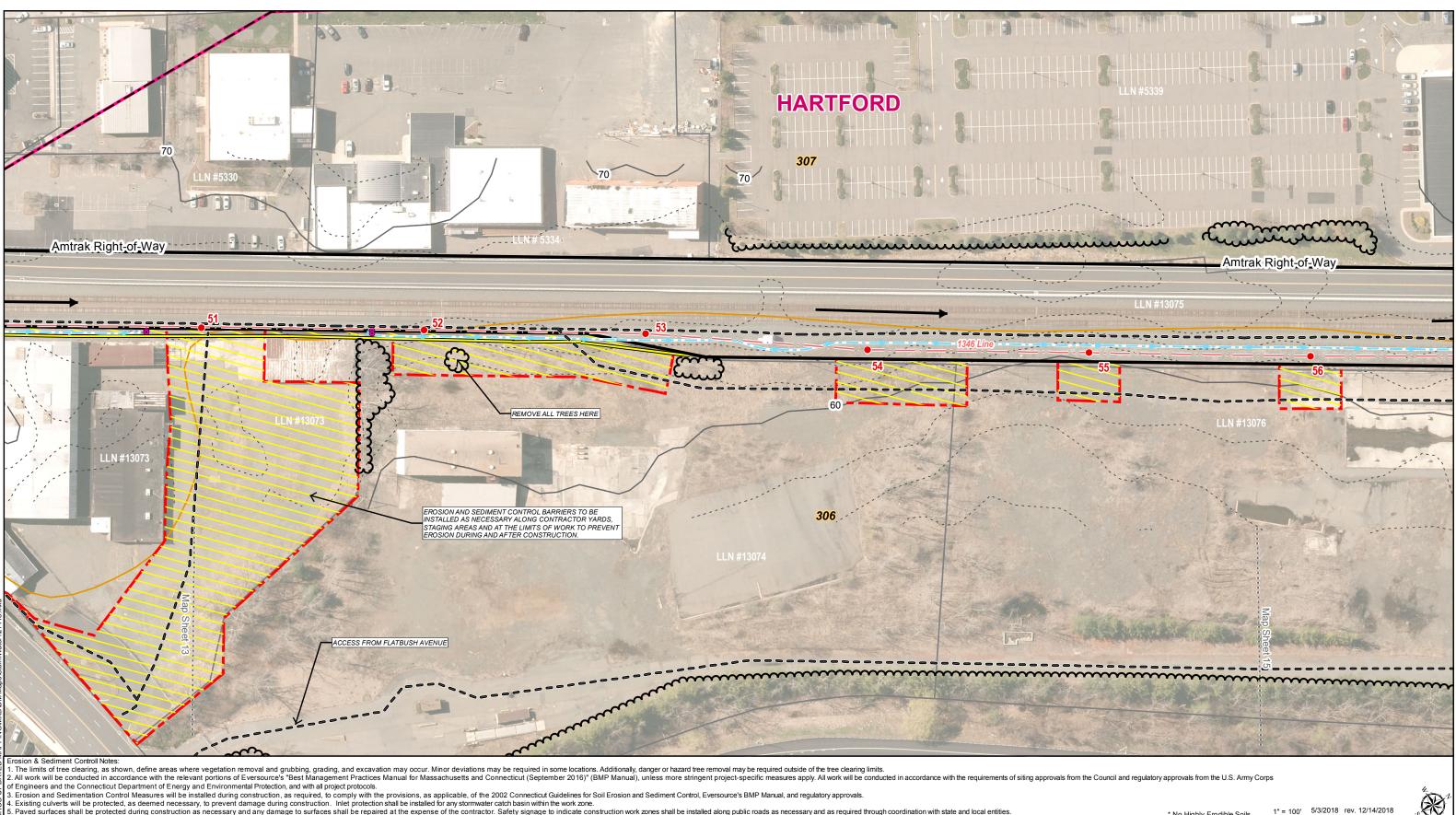
5. Paved surfaces shall be protected during construction as necessary and any damage to surface shall be repaired at the expense of the contractor. Safety signage to indicate construction work zones shall be installed along public roads as necessary and as required through coordination with state and local entities. 6. Spoils resulting from construction activities shall be stockpiled in designated areas and will be disposed of in accordance with regulatory requirements. 7. Erosion and sediment control barriers to be installed as necessary along wetland boundary and limits of work to prevent sedimentation to wetlands during and after construction and restoration activities.



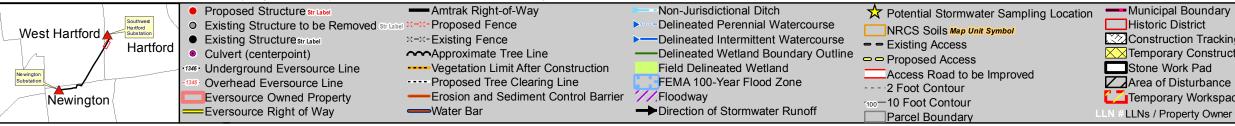
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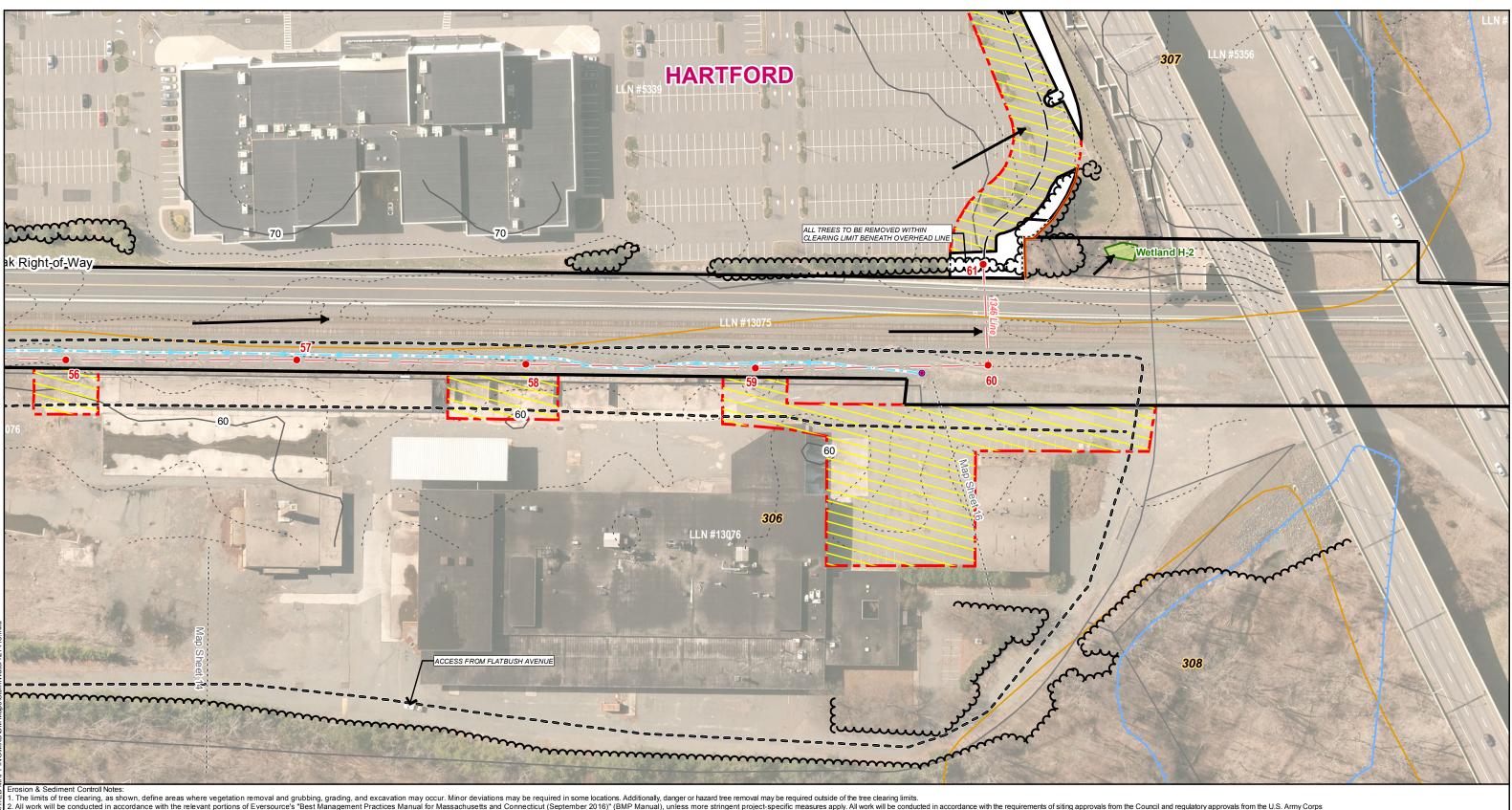


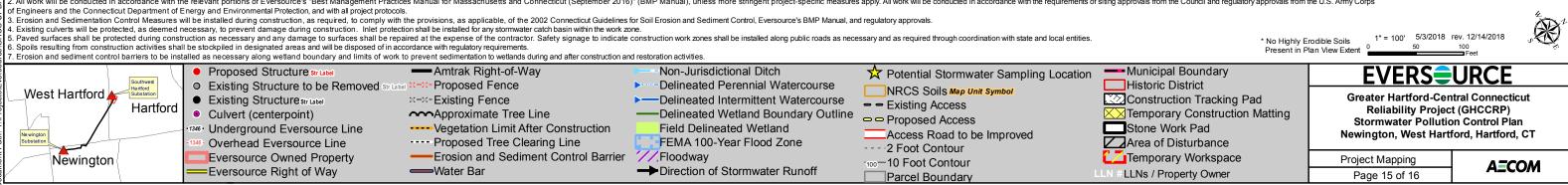
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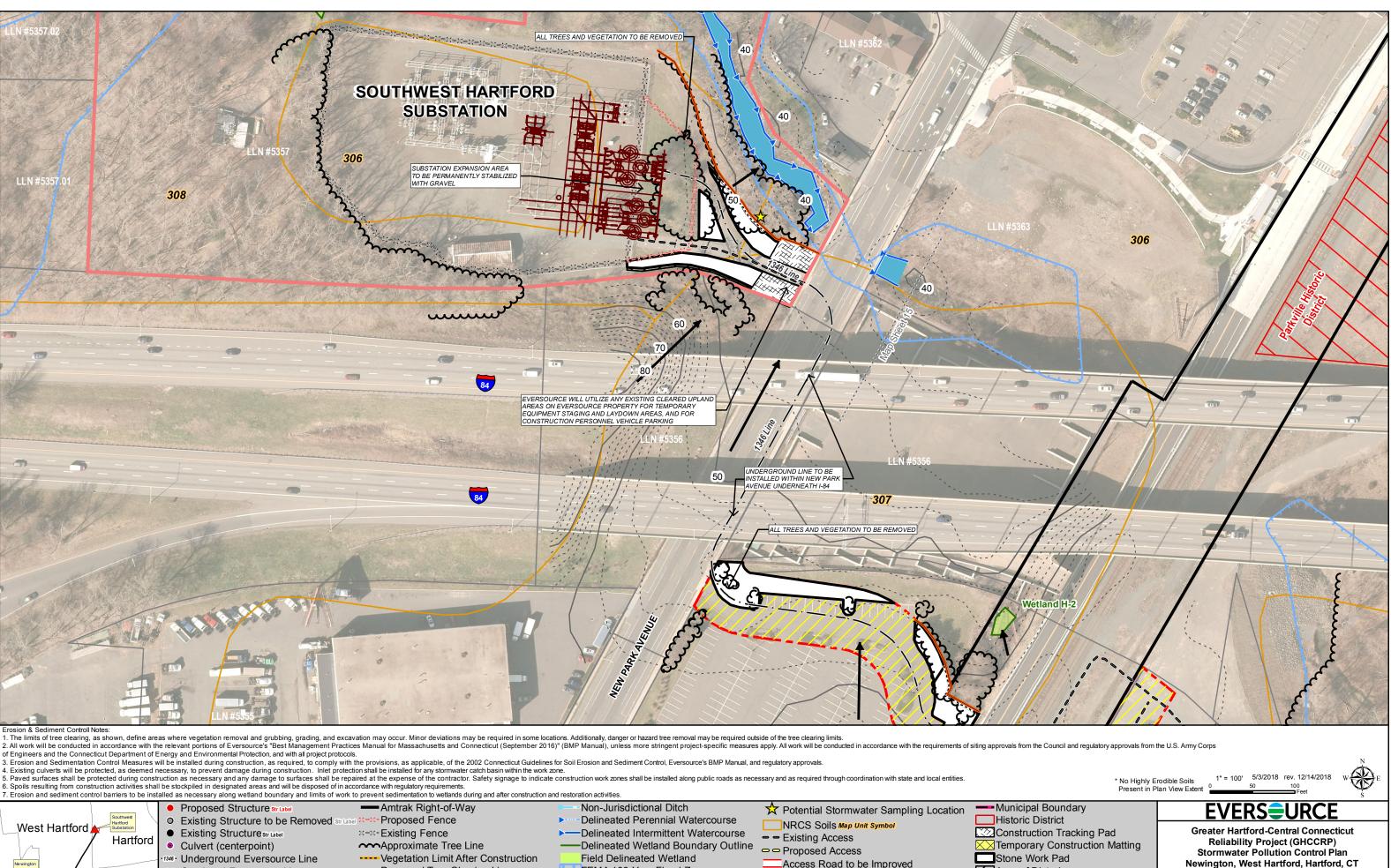


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Map Unit Symbol	Soil Series Map Unit Name	Highly Erodible Land	Drainage Class	Hydrological Soil Group	Wind Erodibility
5	Wilbraham silt loam	N	Poorly drained	C/D	5
9	Scitico, Shaker, and Maybid soils	Ν	Poorly drained	C/D	6
10	Raynham silt Ioam	Ν	Poorly drained	C/D	5
15	Scarboro muck	Ν	Very poorly drained	A/D	2
20A	Ellington silt loam, 0 to 5 percent slopes	Ν	Moderately well drained	В	5
27A	Belgrade silt loam, 0 to 5 percent slopes	Ν	Moderately well drained	С	5
29A	Agawam fine sandy loam, 0 to 3 percent slopes	Ν	Well drained	В	3
30B	Branford silt loam, 3 to 8 percent slopes	Ν	Well drained	В	5
33A	Hartford sandy loam, 0 to 3 percent slopes	Ν	Somewhat excessively drained	A	3
33B	Hartford sandy loam, 3 to 8 percent slopes	Ν	Somewhat excessively drained	A	3
41B	Ludlow silt loam, 2 to 8 percent slopes, very stony	Ν	Moderately well drained	С	5
87B	Wethersfield loam, 3 to 8 percent slopes	N	Well drained	С	5
104	Bash silt loam	Ν	Somewhat poorly drained	B/D	3
221A	Ninigret-Urban land complex, 0 to 5 percent slopes	Ν	Moderately well drained	В	3
225B	Brancroft-Urban land complex, 0 to 8 percent slopes	Ν	Moderately well drained	С	6
228B	Elmridge-Urban land complex, 0 to 8 percent slopes	Ν	Moderately well drained	С	3
230B	Branford-Urban land complex, 0 to 8 percent slopes	Ν	Well drained	В	5
287B	Wethersfield-Urban land complex, 3 to 8 percent slopes	N	Well drained	С	5
287C	Wethersfield-Urban land complex, 8 to 15 percent slopes	N	Well drained	С	5
302	Dumps	Ν	Not rated		
304	Udorthents, loamy, very steep	N	Well drained	В	5
306	Udorthents-Urban land complex	N	Well drained	В	5
307	Urban land	N	Not rated	D	
308	Udorthents, smoothed	N	Moderately well drained	С	5
309	Udorthents, flood control	Ν	Moderately well drained	С	5

# Soils Crossed by the Greater Hartford-Central Connecticut Reliability Project

Source: NRCS Soil Data Mart for Hartford County, CT

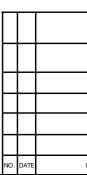
a: The Highly Erodible Land classification was determined by reviewing the NRCS Lists of Map Units that Qualify as Highly Erodible Land and Potentially Highly Erodible Land for Hartford County, Connecticut (Correlated and Published, 1980;

https://efotg.sc.egov.usda.gov/references/public/CT/highlyerodibleunits.pdf)

b: The Drainage Class was determined by reviewing the assigned drainage class provided by the NRCS's Soil Data Mart.

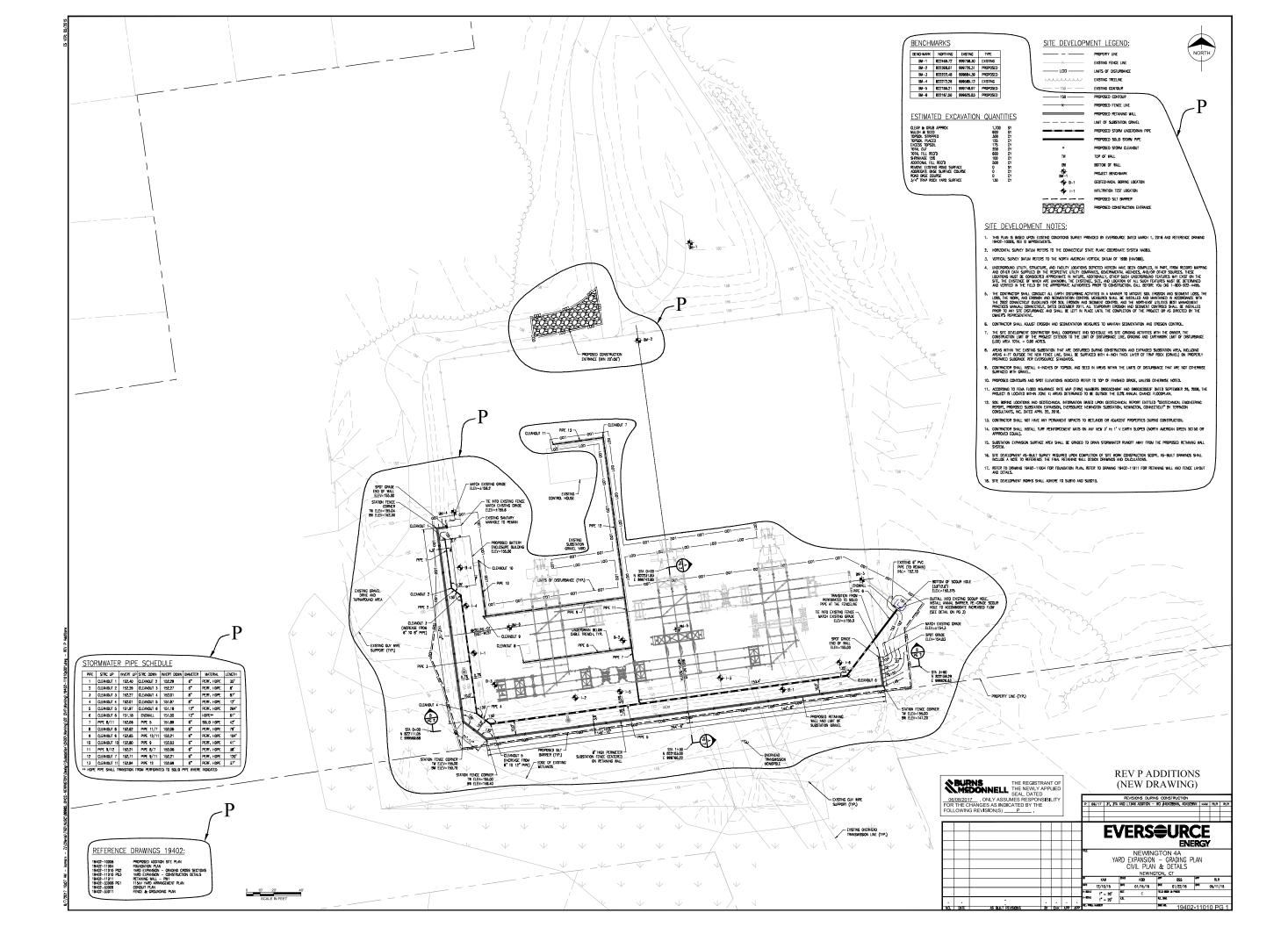
c: The Hydrologic Soil Group (HSG) was determined by reviewing the assigned HSG rating provided by the NRCS Soil Data Mart. Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation for long-duration storm s. Soils in Group A have a high infiltration rate (low runoff potential), while soils in Group D have a slow infiltration rate (high runoff potential).

d: The Wind Erodibility Group classification for each of the soils was determined by reviewing the physical soil properties data provided by the NRCS's Soil Data Mart. The NRCS has grouped soils that have similar properties affecting their susceptibility to wind erosion. The soils assigned to Group 1 are the most susceptible to wind erosion, and those assigned to Group 8 are the least susceptible. No Rating or None: There is no associated Erosion Potential, Capability Class, Drainage Characteristic or Wind Erodibility group associated with the soil map unit referenced in the NRCS's Soil Data Mart.



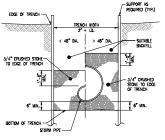
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SIDE ELEVATION

TEMPORARY STONE CONSTRUCTION\_ENTRANCE NOT TO SCALE

TEMPORARY STONE CONSTRUCTION ENTRANCE CONSTRUCTION SPECIFICATIONS

MAINTENANCE

2. SHE DEVELOPMENT CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL PUBLIC STREETS FREE OF CONSTRUCTION DEBRS AND SEDMEN

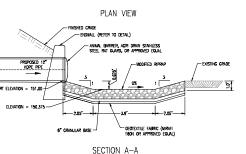
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STORMWATER PIPE TRENCH TYPICAL CROSS SECTION NOT TO SCALE



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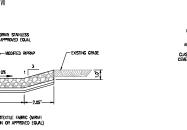
TYPE 1 PREFORMED SCOUR HOLE

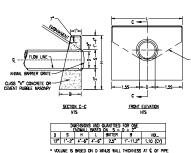
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-36" MIN. FENCE POST (NAX. SPACING 10")

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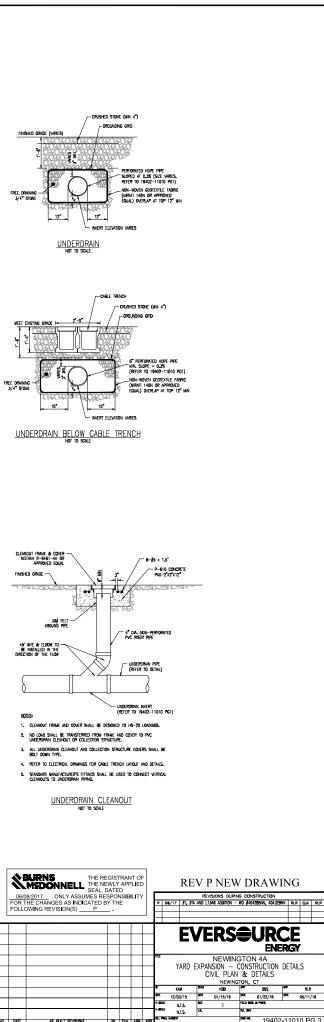


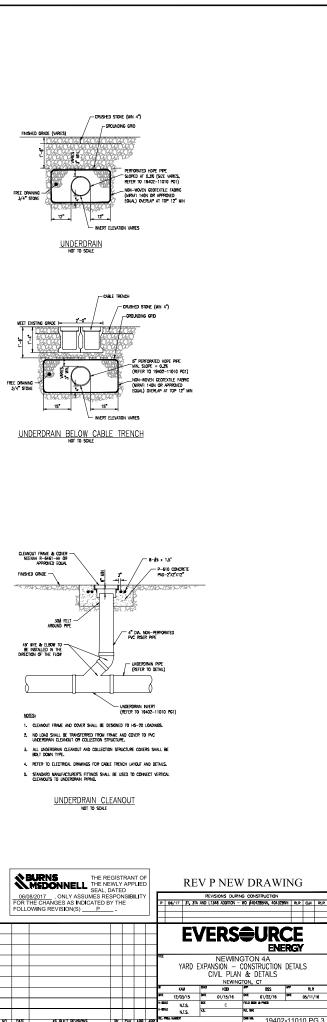
NOTE: SOURCE OF DETAIL IS THE CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD HIGHWAY DETAILS HW-506\_01

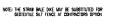
CONCRETE ENDWALL DETAIL

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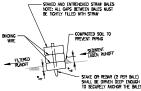


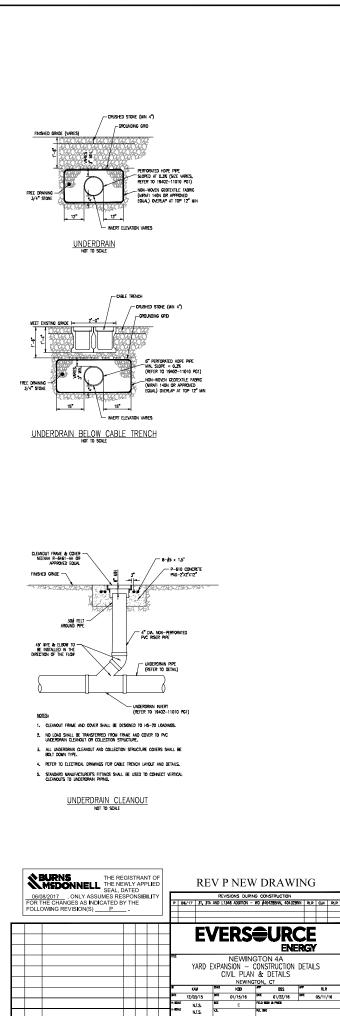
















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#### I. WETLANDS AVOIDANCE AND MINIMIZATION MEASURES

THE FOLLOWING MEASURES WILL BE TAKEN TO AVOID OR MINIMIZE IMPACTS TO WETLANDS DURING PROJECT ACTIVITIES. ALL WORK IN OR NEAR WETLANDS WILL BE IN ACCORDANCE WITH PROJECT MAPPING, EVERSOURCE'S BEST MANAGEMENT PRACTICES MANUAL FOR MASSACHUSETTS AND CONNECTICUT (9/2016; "BMP MANUAL"), AND THE 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL (CONNECTICUT GUIDELINES), AS APPLICABLE. NOTE THAT WETLAND AVOIDANCE AND MINIMIZATION MEASURES DO NOT PRECLUDE THE NEED FOR ADDITIONAL MEASURES FOR OVERLAPPING SENSITIVE RESOURCE AREAS SUCH AS RARE SPECIES HABITAT.

- A. COMPLY WITH THE CONDITIONS OF THE COUNCIL'S CERTIFICATE AND FEDERAL AND STATE PERMITS RELATED TO WETLANDS, INCLUDING THE IMPLEMENTATION OF WETLAND INVASIVE SPECIES CONTROL MEASURES DURING CONSTRUCTION. REFER TO WETLAND INVASIVE SPECIES CONTROL BMPS ON THIS DETAIL SHEET.
- B. USE LOW-IMPACT EQUIPMENT OR INSTALL TEMPORARY TIMBER MATS (OR EQUIVALENT) TO MINIMIZE RUTTING DURING VEGETATION REMOVAL ACTIVITIES IN WETLANDS.
- MINIMIZE THE REMOVAL OF STUMPS WITHIN WETLANDS. STUMPS WILL ONLY BE REMOVED С IF INTACT STUMPS POSE A SAFETY CONCERN FOR THE INSTALLATION OF ACCESS ROADS, WORK PADS, OR STRUCTURES, THE MOVEMENT OF EQUIPMENT, OR THE SAFETY OF PERSONNEL. ONLY REMOVE SCRUB-SHRUB VEGETATION AS NECESSARY TO ACCOMMODATE PROJECT ACCESS AND WORK AREAS. MATTING MAY BE PLACED DIRECTLY ATOP SHRUBS, WHERE FEASIBLE, TO REDUCE VEGETATION MANAGEMENT IMPACTS AND TO DECREASE COMPACTION FROM MATTING PLACEMENT.
- D. INSTALL EROSION AND SEDIMENTATION (E&S) CONTROLS AROUND WORK SITES IN OR NEAR WETLANDS TO DEFINE THE LIMITS OF CONSTRUCTION ACTIVITY AND TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENTATION. WHERE SILT FENCING IS NOT INSTALLED AROUND TEMPORARY MATTING IN WETLANDS, THE FOOTPRINT OF THE MATTING DEFINES THE LIMIT OF DISTURBANCE. NO CONSTRUCTION ACTIVITIES WILL BE ALLOWED IN WETLANDS OUTSIDE OF THE WORK LIMITS DEFINED BY THE EROSION AND SEDIMENTATION CONTROLS OR MATTING.
- E. INSPECT AND MAINTAIN EROSION AND SEDIMENTATION CONTROLS THROUGHOUT CONSTRUCTION. SEDIMENT THAT ACCUMULATES BEHIND THESE CONTROLS WILL PERIODICALLY BE REMOVED AND PLACED IN UPLAND AREAS, IN A MANNER THAT WILL PRECLUDE THE POTENTIAL FOR SUBSEQUENT DEPOSITION INTO WATERCOURSES OR OTHER WATERS OF THE U.S., OR WILL OTHERWISE BE DISPOSED OF OFF-SITE.
- INSTALL TEMPORARY CONSTRUCTION MATTING FOR ACCESS ROADS ACROSS WETLANDS OR F. TO ESTABLISH SAFE AND STABLE CONSTRUCTION WORK PADS WITHIN WETLANDS.
- G DURING INITIAL EXCAVATION FOR THE DUCT BANK TRENCH, CONTRACTOR WILL STRIP, SEGREGATE, AND STOCKPILE THE EXISTING WETLAND TOPSOIL LAYER FROM THE TRENCH LINE (DOWN TO A MAXIMUM OF 12-INCHES) FOR LATER RE-USE DURING TRENCH BACKFILL, AT WHICH TIME THE TOPSOIL WILL BE REPLACED AT THE SURFACE TO MATCH PRE-EXISTING GRADES AND CONTOURS.
- H. PROHIBIT STOCKPILING OF EXCESS SOIL GENERATED AS A RESULT OF TRENCH EXCAVATION WITHIN WETLANDS. EXCESS SOIL WILL BE REMOVED FROM WETLAND WORK AREAS AND STOCKPILED AT DESIGNATED UPLAND AREAS OR REMOVED FROM THE SITE FOR DISPOSAL IN ACCORDANCE WITH THE REGULATORY REQUIREMENTS.
- CONTRACTOR SHALL SCHEDULE CONSTRUCTION ACTIVITIES IN WETLANDS TO MINIMIZE THE AMOUNT OF TIME THAT AN OPEN TRENCH EXISTS WITHIN WETLANDS FROM INITIAL TRENCHING TO DUCT BANK INSTALLATION AND FINAL BACKFILL AND RESTORATION.
- IMPLEMENT PROCEDURES TO AVOID OR MINIMIZE THE POTENTIAL FOR SPILLS INTO 1. WETLANDS (REFER TO BMPS INCLUDED IN VOLUME 2 ATTACHMENTE AND TO THE MATERIALS SUBMITTED TO CT DEEP UNDER SEPARATE COVER: DISHCARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES). NO FUEL WILL BE STORED OR EQUIPMENT REFUELED WITHIN 25 FEET OF A WETLAND EXCEPT UNDER THE FOLLOWING CIRCUMSTANCES: ONLY EQUIPMENT THAT IS NOT READILY MOBILE OR MUST REMAIN ON-SITE FOR PROLONGED PERIODS TO SAFELY COMPLETE A CONSTRUCTION TASK MAY BE REFUELED IN WETLANDS, PROVIDING PROPER TEMPORARY SPILL PREVENTION, CONTROL, AND CONTAINMENT PROCEDURES ARE FOLLOWED.
- Κ PROHIBIT VEHICLES OR EQUIPMENT FROM BEING PARKED OVERNIGHT ON ACCESS ROADS OR WORK PADS IN WETLANDS, EXCEPT FOR EQUIPMENT THAT CANNOT BE PRACTICALLY MOVED.
- FOLLOWING THE COMPLETION OF TRANSMISSION LINE WORK, REMOVE TIMBER MATS USED FOR WORK PADS AND TEMPORARY ACCESS ROADS IN WETLANDS.
- M. AFTER TRANSMISSION LINE WORK IS COMPLETE, RESTORE WETLANDS TO PRE-CONSTRUCTION CONFIGURATIONS AND CONTOURS TO THE EXTENT PRACTICABLE. REVEGETATE WITH APPROPRIATE WETLAND SEED MIX.
- N. INSPECT AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROLS UNTIL RESTORATION HAS BEEN DETERMINED TO BE EFFECTIVE.

II. WATERBODIES AVOIDANCE AND MINIMIZATION MEASURES

THE FOLLOWING MEASURES WILL BE TAKEN TO AVOID OR MINIMIZE IMPACTS TO WATERCOURSES AND WATERBODIES DURING PROJECT ACTIVITIES. ALL WORK IN OR NEAR WATERCOURSES AND WATERBODIES WILL BE IN ACCORDANCE WITH PROJECT MAPPING, EVERSOURCE'S BMP MANUAL (2016), AND THE CONNECTICUT GUIDELINES.

- A. COMPLY WITH RELEVANT PORTIONS OF EVERSOURCE'S BMP MANUAL FOR MASSACHUSETTS AND CONNECTICUT CONSTRUCTION AND MAINTENANCE ENVIRONMENTAL REQUIREMENTS (9/2016). MANUAL CAN BE FOUND IN VOLUME 2 ATTACHMENTE.
- INSTALL AND MAINTAIN TEMPORARY EROSION AND SEDIMENTATION CONTROLS ALONG B. THE RIGHT-OF-WAY WHERE CONSTRUCTION ACTIVITIES DISTURB SOILS NEAR WATERCOURSES TO PREVENT SEDIMENTATION INTO WATER RESOURCES. SEDIMENT THAT ACCUMULATES BEHIND THESE CONTROLS WILL BE PERIODICALLY REMOVED AND PLACED IN UPLAND AREAS, IN A MANNER THAT WILL PRECLUDE THE POTENTIAL FOR SUBSEQUENT DEPOSITION INTO WATERCOURSES OR WATERS OF THE U.S., OR WILL OTHERS BE DISPOSED OF OFF-SITE.
- C. NO UNCONFINED IN-STREAM ACTIVITIES ARE PROPOSED OR AUTHORIZED. IN-STREAM WORK WILL NOT BE CONSTRUCTED DURING CONDITIONS OF PEAK FLOWS OR BANK-FULL CONDITIONS. CONSTRUCTION EQUIPMENT WILL BE PROHIBITED FROM FORDING STREAMS.
- D. ACCESS ACROSS WATERCOURSES WILL BE INSTALLED, WHERE PRACTICABLE, SO AS TO AVOID OR MINIMIZE DIRECT ADVERSE IMPACTS TO STREAM BANKS AND STREAM BOTTOM SEDIMENTS, AND TO PROVIDE UNOBSTRUCTED AMBIENT FLOW IN PERENNIAL STREAMS (E.G., SPAN CROSSINGS WILL PROVIDE ADEQUATE CLEARANCE ABOVE WATERCOURSES TO CONVEY FLOWS)
- E. MAT SPANS OR EQUIVALENT ACCESS ACROSS WATERCOURSES WILL BE PERIODICALLY SWEPT, AS APPROPRIATE TO MINIMIZE THE POTENTIAL FOR SOIL DEPOSITION INTO WATERCOURSES AS A RESULT OF VEHICLE/EQUIPMENT MOVEMENTS.
- F. CONTRACTOR WILL UTILIZE A CONVENTIONAL "DRY OPEN CUT" TRENCHING METHOD TO INSTALL THE UNDERGROUND CABLE AND DUCT BANK ACROSS THESE WATERCOURSES USING COFFER DAM AND STREAM BYPASS PUMPING METHOD ("DAM-AND-PUMP") OR A COFFERDAM AND STREAM BYPASS VIA GRAVITY METHOD ("DAM-AND-FLUME").
- G. EXCEPT FOR EQUIPMENT THAT IS NOT READILY MOBILE OR MUST REMAIN ON-SITE FOR PROLONGED PERIODS TO SAFELY COMPLETE A CONSTRUCTION TASK, CONSTRUCTION VEHICLES AND EQUIPMENT WILL NOT BE REFUELED WITHIN 25 FEET OF A WATERCOURSE. FOR REFUELING THAT MUST BE PERFORMED LESS THAN 25 FEET FROM A WATERCOURSE, APPROPRIATE SPILL PREVENTION MEASURES SHALL BE IMPLEMENTED. (REFER TO BMPS INCLUDED IN VOLUME 2 ATTACHMENTE AND TO THE MATERIALS SUBMITTED TO CT DEEP UNDER SEPARATE COVER: GERNERAL PERMIT FOR DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES).
- H. NO BULK PETROLEUM PRODUCTS WILL BE STORED WITHIN 25 FEET OF WATERCOURSE.
- TEMPORARY MAT SPANS WILL BE REMOVED AND WATERCOURSES WILL BE RESTORED AS 1 DETAILED IN VOLUME 2 ATTACHMENT E AND THE WETLAND AND WATERCOURSE TYPICAL DETAIL SHEET. BANKS WILL BE RESEEDED WITH APPROPRIATE UPLAND (ANNUAL RYE) OR WETLAND SEED MIX. EXCEPT OVER THE TRENCHLINE, NO GRUBBING WILL BE PREFORMED ON STREAM BANKS SO THAT WOODY ROOT SYSTEMS MAY REMAIN IN PLACE AND NATURALLY REVEGETATE FOLLOWING COMPLETION OF CONSTRUCTION. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REMOVED UPON THE STABILIZATION OF EXPOSED SOILS NEAR WATERCOURSES.
- 1. DURING INITIAL EXCAVATION FOR THE DUCT BANK TRENCH, IF SUITABLE GRAVEL/COBBLE STREAMBED SUBSTRATES ARE PRESENT OVER THE TRENCH LINE, CONTRACTOR WILL STRIP, SEGREGATE, AND STOCKPILE THE EXISTING STREAMBED SUBSTRATE FROM THE TRENCHLINE (DOWN TO A MAXIMUM OF 12-INCHES) FOR LATER RE-USE DURING TRENCH BACKFILL, AT WHICH TIME THE NATIVE STREAMBED SUBSTRATES WILL BE REPLACED AT THE SURFACE TO MATCH PRE-EXISTING STREAMBED GRADES AND CONTOURS.
- K. IF SUITABLE GRAVEL/COBBLE MATERIAL IS NOT PRESENT IN THE STREAMBED, CONTRACTOR WILL BACKFILL THE UPPER 12-INCHES OF TRENCH WITHIN THE STREAM WITH CLEAN GRAVEL/COBBLE MATERIAL TO MATCH PRE-EXISTING STREAMBED GRADES AND CONTOURS.

- Β. INTERACTION.
- C.
- D. COMPRESSED AIR.
- STREAM BANKS.
- F.
- G. FENCE.
- Α. B.

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						Water Resource	Protocols
						Detail Sheet 1 of 4	AECOM
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**III. WETLAND INVASIVE SPECIES BEST MANAGEMENT PRACTICES** TO CONTROL THE SPREAD OF WETLAND INVASIVE PLANT SPECIES, EVERSOURCE WILL REQUIRE CONSTRUCTION CONTRACTORS TO IMPLEMENT THE PROCEDURES DESCRIBED BELOW, AS APPROPRIATE TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED.

A. ALL CONSTRUCTION EQUIPMENT, VEHICLES, AND MATERIALS (E.G., TIMBER MATS, OR EQUIVALENT) MUST BE CLEAN AND FREE OF EXCESS SOIL, DEBRIS, AND VEGETATION BEFORE BEING MOBILIZED TO THE PROJECT RIGHTS-OF-WAY.

TIMBER MATS OR EQUIVALENT WILL BE USED TO INSTALL ACCESS ROADS AND WORK PADS IN WETLANDS SO CONSTRUCTION VEHICLES THAT FREQUENTLY TRAVEL ALONG ACCESS ROADS. SUCH AS PICKUPS CARRYING PERSONNEL OR MATERIAL DELIVERY TRUCKS, CAN AVOID DIRECT WETLAND

TIMBER MATS OR EQUIVALENT WILL BE USED IN WETLANDS DURING CLEARING OPERATIONS TO MINIMIZE THE SPREAD OF INVASIVE SPECIES WITHIN A WETLAND BY THE CLEARING EQUIPMENT. TO MINIMIZE THE POTENTIAL FOR SPREADING INVASIVE PLANT SPECIES FROM WETLAND-TO-WETLAND ALONG THE ROW, ANY EQUIPMENT WORKING IN A WETLAND CONTAINING INVASIVE PLANT SPECIES WILL BE CLEANED PRIOR TO RELOCATING TO A WORK SITE IN ANOTHER WETLAND. CLEANING OF VEHICLES AND OTHER EQUIPMENT THAT COME INTO CONTACT WITH WETLAND VEGETATION (INCLUDING VEHICLE TRACKS AND TIRES) WILL INVOLVE REMOVAL OF VISIBLE DIRT, DEBRIS, AND VEGETATION USING BROOMS, SHOVELS, AND, IF NEEDED,

E. TIMBER MATS (OR EQUIVALENT) USED IN WETLANDS CONTAINING INVASIVE SPECIES WILL BE CLEANED PRIOR TO RELOCATION TO OTHER WORK AREAS OR WETLANDS. MAT CLEANING WILL INVOLVE DROPPING MATS ONE ON TOP OF ANOTHER TO SHAKE LOOSE ANY SEDIMENT AND DEBRIS. WHEN USING THIS METHOD OF CLEANING MATS (AS OPPOSED TO USING A BROOM, SHOVEL, AND/OR COMPRESSED AIR), AVOID IMPACTS TO SENSITIVE RESOURCE AREAS, INCLUDING

SOILS EXCAVATED FROM WETLANDS OR RIPARIAN AREAS CONTAINING A PREDOMINANCE OF TARGET INVASIVE PLANTS WILL BE STOCKPILED SEPARATELY AND CONTAINED WITHIN STAKED BALES, SILT FENCE OR OTHER APPROVED EROSION AND SEDIMENT CONTROL DEVICE TO MINIMIZE THE POTENTIAL OF SPREADING THESE SOILS ELSEWHERE ONTO THE ROW.

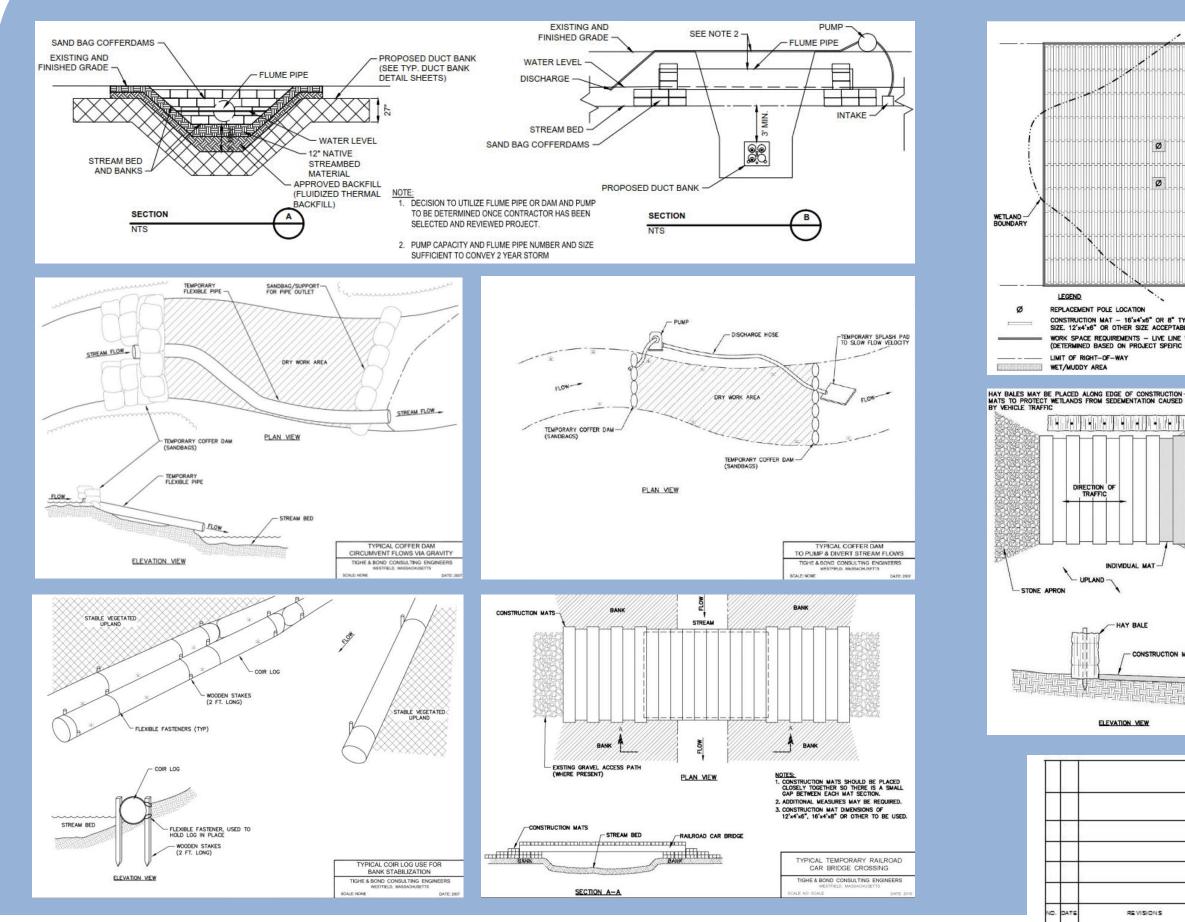
FINAL RESTORATION OF THE RIGHT-OF-WAY WILL BE PERFORMED IN ACCORDANCE WITH EVERSOURCE'S 2016 BMP MANUAL. IN LIEU OF "HAY BALE" EROSION CONTROLS (HAY BALES MAY CONTAIN NOXIOUS OR INVASIVE SEED STOCK OR PLANT MATTER), THE CONTRACTOR WILL BE REQUIRED TO USE ALTERNATIVE MEASURES, TO THE EXTENT PRACTICABLE AND IF LOCAL SOURCES ARE AVAILABLE, SUCH AS STRAW BALES, WATTLES, COCONUT ROLLS, WOOD CHIP BAGS OR SILT

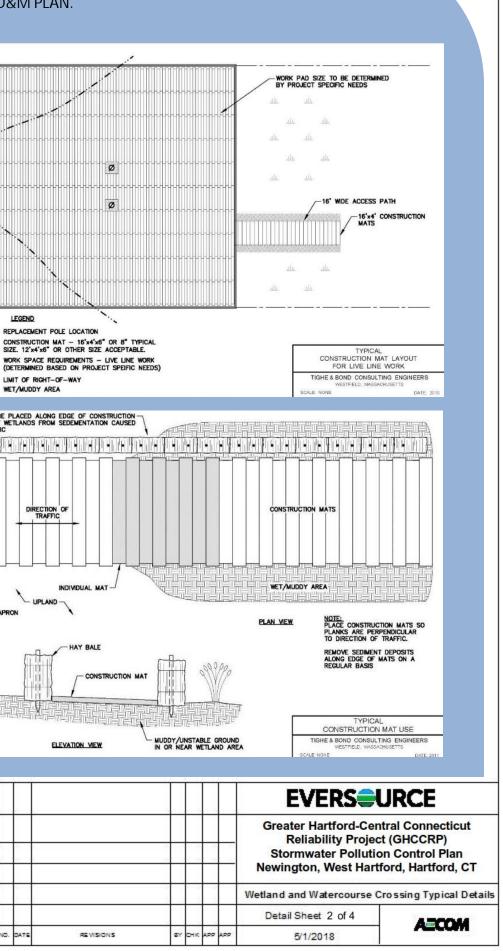
#### IV. WETLAND RESTORATION

IF NECESSARY, WETLAND AREAS AFFECTED BY CONSTRUCTION WILL BE STABILIZED WITH ANNUAL RYE GRASS, A WETLAND SEED MIX, OR AN EQUIVALENT MIX AT THE LABEL RECOMMENDED SEEDING RATE, WHICH WILL SERVE TO PROVIDE A TEMPORARY VEGETATIVE COVER UNTIL WETLAND SPECIES BECOME REESTABLISHED.

TEMPORARY EROSION AND SEDIMENT CONTROLS WILL BE LEFT IN PLACE AND MAINTAINED UNTIL FINAL STABILIZATION IS ACHIEVED. RESTORATION TYPICALLY WILL BE DEEMED SUCCESSFUL BASED ON THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER. BASED ON THE RESULTS OF INSPECTIONS OF RIGHT-OF-WAY STABILIZATION, EVERSOURCE WILL DETERMINE THE APPROPRIATE TIMEFRAME FOR REMOVING TEMPORARY EROSION CONTROLS.

## \*\*\*WETLAND WATERCOURSE CROSSING TYPICAL DETAILS SHOWN HERE ARE PROJECT-WIDE AND SHALL BE IMPLEMENTED AS APPLICABLE FOR THE AUTHORIZED WETLAND AND WATERCOURSE CROSSINGS AND DISTURBANCE AREAS DEPICTED ON THE AERIAL PHOTOGRAPH BASED MAPS INCLUDED IN EACH D&M PLAN.





#### SOIL EROSION AND SEDIMENT CONTROLS

EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES WILL BE INSTALLED IN CONJUCTION WITH VEGETATION CLEARING AND/OR ACCESS/WORK AREA CONSTRUCTION AND WILL BE MAINTAINED THROUGHOUT PROJECT CONSTRUCTION TO AVOID OR MINIMIZE THE POTENTIAL FOR SURFACE WATER RUNOFF, EROSION, AND SEDIMENTATION TO OCCUR OUTSIDE OF WORK LIMITS. THESE MEASURES WILL COMPLY WITH THE 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT (HTTP://WWW.CT.GOV/DEEP/LIB/DEEP/WATER INLAND CONTROL /SESC/SECS\_CHAPTER\_1\_5.PDF), WITH EVERSOURCE'S 2016 BMP MANUAL (SEE D&M PLAN VOLUME 2, ATTACHMENT E), AS WELL AS WITH CT DEEP AND USACE PERMIT CONDITIONS. THE FOLLOWING ARE OBJECTIVES OF THE E&S MEASURES:

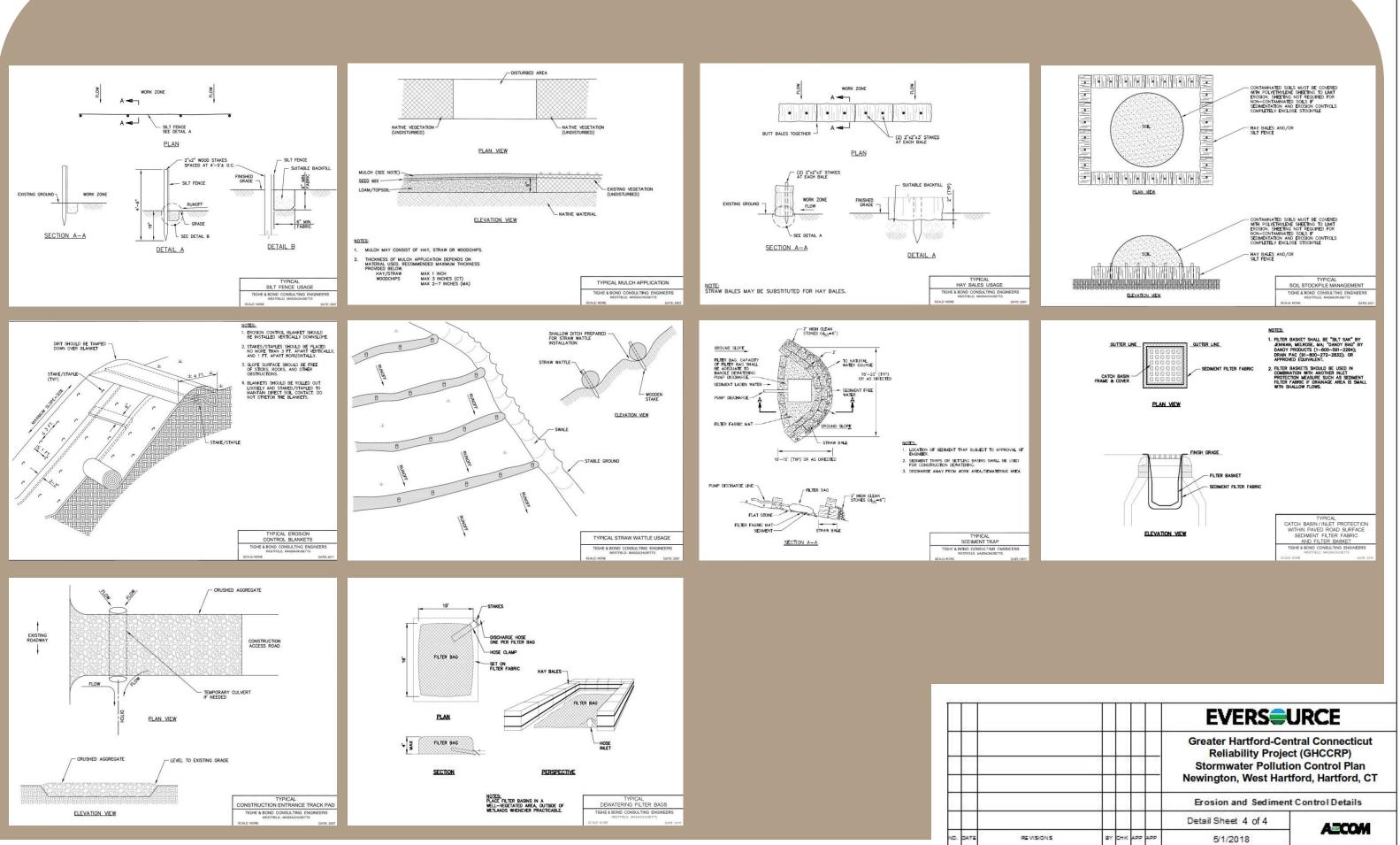
- A. INSTALL AND MAINTAIN E&S MEASURES DURING CONSTRUCTION;
- B. PROTECT WATER RESOURCE AREAS DURING CONSTRUCTION;
- C. MINIMIZE THE QUANTITY AND DURATION OF SOIL EXPOSURE (STABILIZE EXPOSED SOILS AS REQUIRED UPON COMPLETION OF GRADING OR STOCKPILING); AND,
- D. INSPECT THE WORK AREAS AND MAINTAIN E&S CONTROLS, AS NECESSARY, UNTIL FINAL STABILIZATION IS ACHIEVED.

THE APPLICATION OF THE TECHNIQUES IN THE FIELD WILL BE DETERMINED BY THE PROFESSIONAL JUDGEMENT OF COMPLIANCE MONITORS AND FIELD CONSTRUCTION PERSONNEL AND WILL DEPEND ON SITE-SPECIFIC CONDITIONS. FACTORS THAT MAY BE CONSIDERED IN THE SELECTION OF THE E&S CONTROLS FOR SITE-SPECIFIC AREAS MAY INCLUDE:

- A. SIZE OF THE AREA AFFECTED;
- B. TYPE OF PLANNED CONSTRUCTION ACTIVITIES;
- C. TYPE AND TEXTURE OF SOIL (E.G., PRESENCE OF HIGHLY ERODIBLE SOILS, WHERE APPLICABLE);
- D. AMOUNT OF ROCK PRESENT;
- E. STEEPNESS AND LENGTH OF SLOPE;
- F. AMOUNT AND TYPE OF VEGETATIVE COVER;
- G. PROXIMITY AND DIRECTION TO WATERCOURSES OR WETLANDS;
- H. ANTICIPATED WEATHER CONDITIONS AND GROUND CONDITIONS.

- SOIL EROSION AND SEDIMENT CONTROL NOTES
- 1. LAND DISTURBANCE SHALL BE KEPT TO THE MINIMUM NECESSARY FOR CONSTRUCTION, AS DEPICTED ON THE PROJECT MAPS.
- 2. INSTALL E&S CONTROLS AS NECESSARY, TO PREVENT SOIL EROSION AND SEDIMENT TRANSPORT TO WATER RESOURCE AREAS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASSESS THE NEED FOR, AND INSTALL ADDITIONAL CONTROLS THAT ARE WARRANTED BY SITE CONDITIONS.
- 3. EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. INSPECTIONS SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECT-SPECIFIC STORMWATER POLLUTION CONTROL PLAN (SWPCP) TO DETERMINE IF ALL CONTROL MEASURES ARE FUNCTIONING PROPERLY AND IF CORRECTIVE ACTIONS ARE REQUIRED. INSPECTIONS WILL CONTINUE UNTIL SITES ARE STABILIZED AND RESTORATION HAS BEEN DETERMINED TO BE EFFECTIVE AS DEFINED BY CONFORMANCE TO THE CT DEEP GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- 4. SEDIMENT COLLECTED BY E&S CONTROLS SHALL BE PERIODICALLY REMOVED AND PROPERLY DISPOSED OF IN AN APPROPRIATE UPLAND AREA.
- 5. STOCKPILE TOPSOIL IN LEVEL UPLAND AREAS AND CONTAIN USING APPROPRIATE E&S CONTROLS AROUND PERIMETER.
- 6. STOCKPILING OF EXCESS SOIL WITHIN WETLANDS IS PROHIBITED.
- 7. STABILIZATION OF BARE/UNVEGETATED SOIL SURFACES WILL BE IMPLEMENTED WITHIN 14 DAYS AFTER GRADING OR CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, UNLESS WEATHER PROHIBITS SEED GERMINATION. THIS MEASURE ALSO APPLIES TO AREAS THAT ARE TO BE PERMANENTLY STABILIZED WITH GRAVEL SURFACE.
- 8. WHERE NECESSARY, SUITABLE TOPSOIL, SEEDBED PREPARATION, AND WATER SHALL BE PROVIDED FOR EFFECTIVE ESTABLISHMENT OF VEGETATIVE COVER.
- 9. THE CONSTRUCTION CONTRACTOR SHALL KEEP ALL PAVED ROADWAYS CLEAN. CONSTRUCTION ENTRANCE TRACK PADS SHALL BE INSTALLED AT THE INGRESS/ EGRESS TO PAVED ROADWAYS EXCEPT IN WETLAND RESOURCE AREAS. TO REDUCE SEDIMENT TRACKING. TRACK PADS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION BY REPLACING OR REPLENSHING, AS NECESSARY, WITH CLEAN STONE. TRACKED SEDIMENT ON PAVED SURFACES SHALL BE SWEPT CLEAN BY THE END OF EACH WORK DAY.
- 10. EROSION AND SEDIMENT CONTROLS SHALL BE INSPECTED AND MAINTAINED UNTIL REVEGETATION AND STABILIZATION HAS BEEN DETERMINED TO BE EFFECTIVE AS DEFINED BY CONFORMANCE TO THE CT DEEP GENERAL PERMIT FOR THE DISCHARGE OR STORMWATER AND DEWATERING WASTEWATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES. BASED ON THE RESULTS OF POST-CONSTRUCTION INSPECTIONS OR RIGHT-OF-WAY STABILIZATION, EVERSOURCE WILL DETERMINE THE APPROPRIATE TIMEFRAME FOR REMOVING TEMPORARY EROSION CONTROLS.

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Eversource Energy Greater Hartford – Central Connecticut Reliability Project Stormwater Pollution Control Plan Newington, West Hartford, and Hartford, Connecticut

# ATTACHMENT G

# **Project Forms**



Eversource Energy Greater Hartford – Central Connecticut Reliability Project Stormwater Pollution Control Plan Newington, West Hartford, and Hartford, Connecticut

# ATTACHMENT G1

# Inspection and Maintenance Report Form

# Stormwater Pollution Prevention Plan Construction Site Inspection Report

General Information						
Project Name						
NPDES Tracking No.		Location				
Date of Inspection		Start/End Time				
Inspector's Name(s)						
Inspector's Title(s)						
Inspector's Contact Information						
Inspector's Qualifications						
Describe present phase of construction						
Type of Inspection:□ Regular□ Pre-storm event	During storm event	Dest-storm e	vent			
Weather Information						
Has there been a storm event since	the last inspection? The section with the section of the section o	□No				
If yes, provide: Storm Start Date & Time: S	torm Duration (hrs):	Approximate	Amount of Precipitation (in):			
Weather at time of this inspection?	? Sleet  Fog  Snov	ving 🛛 High Win	ds			
□ Other:	Temperature:					
Have any discharges occurred since the last inspection? If yes, describe:						
Are there any discharges at the tin If yes, describe:	ne of inspection? Tyes IN	10				

#### **Overall Site Issues**

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance	Notes
			Required?	
1	Are all slopes and	□Yes □No	□Yes □No	
	disturbed areas not			
	actively being worked			
	properly stabilized?			
2	Are natural resource	□Yes □No	□Yes □No	
	areas (e.g., streams,			
	wetlands, mature trees,			
	etc.) protected with			
	barriers or similar			
	BMPs?			

	BMP/activity	Implemented?	Maintenance Required?	Notes
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	□Yes □No	□Yes □No	
4	Are discharge points and receiving waters free of any sediment deposits?	□Yes □No	□Yes □No	
5	Are storm drain inlets properly protected?	□Yes □No	□Yes □No	
6	Is the construction exit preventing sediment from being tracked into the street?	□Yes □No	□Yes □No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	□Yes □No	□Yes □No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	□Yes □No	□Yes □No	
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	□Yes □No	□Yes □No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	□Yes □No	□Yes □No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	□Yes □No	□Yes □No	
12	(Other)	□Yes □No	□Yes □No	

Comments

#### **CERTIFICATION STATEMENT**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: \_\_\_\_\_

Signature:\_\_\_\_\_ Date:\_\_\_\_\_



Eversource Energy Greater Hartford – Central Connecticut Reliability Project Stormwater Pollution Control Plan Newington, West Hartford, and Hartford, Connecticut

# ATTACHMENT G2

# **CT DEEP Stormwater Monitoring Form**



**Connecticut Department of Energy & Environmental Protection** Bureau of Materials Management & Compliance Assurance Water Permitting & Enforcement Division

#### General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, issued 8/21/13, effective 10/1/13 Stormwater Monitoring Report

#### SITE INFORMATION

Permittee:		 _
Mailing Address:		_
Business Phone:		
Contact Person:	Title:	
Site Name:		
Site Address:		 
Receiving Water (name, basin):		
Stormwater Permit No. <u>GSN</u>		

#### SAMPLING INFORMATION (Submit a separate form for each outfall)

Outfall Designation:	Date/Time Collected:				
Outfall Location(s) (lat/lon or map link):					
Person Collecting Sample:					
Storm Magnitude (inches):	Storm Duration (hours):				
Size of Disturbed Area at any time:					

#### MONITORING RESULTS

Sample #	Parameter	Method	Results (units)	Laboratory (if applicable)
1	Turbidity			
2	Turbidity			
3	Turbidity			
4	Turbidity			
(provide an attachment	t if more than 4 samples	Avg =		

STATEMENT OF ACKNOWLEDGMENT

I certify that the data reported on this document were prepared under my direction or supervision in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities. The information submitted is, to the best of my knowledge and belief, true, accurate and complete.

Authorized Official:					
Signature:	Date:				
Please send completed form to:	DEPARTMENT OF ENERGY & ENVIRONMENTAL PROTECTION BUREAU OF MATERIALS MANAGEMENT AND COMPLIANCE ASSURANCE 79 ELM STREET HARTFORD, CT 06106-5127 ATTN: NEAL WILLIAMS				



Eversource Energy Greater Hartford – Central Connecticut Reliability Project Stormwater Pollution Control Plan Newington, West Hartford, and Hartford, Connecticut

# ATTACHMENT G3

# **CT DEEP Notice of Termination Form**



# General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities

# Notice of Termination Form

Please complete and submit this form in accordance with the general permit (DEP-PED-GP-015) in order to ensure the proper handling of your termination. Print or type unless otherwise noted.

Note: Ensure that for commercial and industrial facilities, registrations under the *General Permit for the Discharge* of Stormwater Associated with Industrial Activity (DEP-PED-GP-014) or the *General Permit for the Discharge* of Stormwater from Commercial Activities (DEP-PED-GP-004) have been filed where applicable. For questions about the applicability of these general permits, please call the Department at 860-424-3018.

### Part I: Registrant Information

1.	1. Permit number: <b>GSN</b>					
2.	2. Fill in the name of the registrant(s) as indicated on the registration certificate:	Fill in the name of the registrant(s) as indicated on the registration certificate:				
	Registrant:					
3.	3. Site Address:					
	City/Town: State: Zip	o Code:				
4.	4. Date all storm drainage structures were cleaned of construction sediment:	. Date all storm drainage structures were cleaned of construction sediment:				
	Date of Completion of Construction:					
	Date of Last Inspection (must be at least three months after final stabilization put the general permit):	ursuant to Section 6(b)(6)(D) of				
5.	5. Check the post-construction activities at the site (check all that apply):					
	Industrial Residential Commercial	Capped Landfill				
	Other (describe):					

### Part II: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Signature of Permittee

Date

Name of Permittee (print or type)

Title (if applicable)

Note: Please submit this Notice of Termination Form to:

STORMWATER PERMIT COORDINATOR BUREAU OF WATER MANAGEMENT DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106-5127