

NEW ENGLAND POWER COMPANY
Central to Western MA Energy Improvement Project
E5/F6 Transmission Lines Soil Boring Program

Notice of Intent

Shutesbury, MA
Conservation Commission
April 2024

Prepared for:
New England Power Company
170 Data Drive
Waltham, MA 02451

BSC Project No. 89599.46

APRIL 3, 2024

Shutesbury Conservation Commission
P. O. Box 276
1 Cooleyville Rd.
Shutesbury, MA 01072-0276

**RE: Notice of Intent
Central to Western MA Energy Improvement Project
E5/F6 Transmission Lines Soil Boring Program
Shutesbury, Massachusetts
New England Power Company**

Dear Members of the Shutesbury Conservation Commission:

BSC Group, Inc. (BSC) is filing this Notice of Intent (NOI) on behalf of the New England Power Company (NEP) for activities associated with exploratory geotechnical soil borings along the E5/F6 Transmission Lines Right-of-Way (ROW) in Shutesbury, Massachusetts (the Project). The proposed borings are necessary for the planning and design of future improvements to the line. Following guidance from MassDEP WERO, soil borings for planning and design of activities along an existing utility Transmission Line are considered exempt utility maintenance under the WPA and its implementing regulations 310 CMR 10.02(2)(a)(2). Therefore, this NOI is submitted solely under the Town of Shutesbury General Wetlands Protection Bylaw.

Project activities include soil borings at Structure 443 located off Pratt Corner Road and Structure 436 located off Sand Hill Road. Project activities will be located within an existing, managed ROW and along historically used access. Activities will be located within Bordering Vegetated Wetlands (BVW), Riverfront Area (RFA), the 100-foot Buffer Zone to BVW/Inland Bank, and the locally regulated 100-foot Adjacent Upland Resource Area (AURA) and 50-foot No Disturb Zone. Refer to **Attachment B** for the Site locus Map and Environmental Resource Map showing the locations of the boring and resource areas.

To access the soil boring locations across BVW, temporary construction mats will be used within wetlands to create a stable travel and work surface area. Although the Project will result in temporary impacts to BVWs, the areas will be restored, and no permanent wetland impacts are proposed.

Due to the nature and purpose of the proposed activities, there are no practical alternatives to the Project. However, no adverse impacts to wetland resource areas or values protected by the Shutesbury Wetlands Protection Bylaw are proposed. The approximate square footage of temporary impacts is included for reference within the narrative.

Best Management Practices (BMPs), including sediment and erosion controls, will be implemented during construction, further minimizing the likelihood of adverse impacts to resource areas. NEP has performed an analysis of alternatives, and the Project has been designed to avoid and minimize adverse impacts to wetland resource areas to the greatest extent practicable.

Therefore, this NOI serves as a request for an Order of Conditions for the activities described herein.

We respectfully request that this matter be heard at the next scheduled Conservation Commission hearing. If you have any questions regarding the enclosed information, please contact me at (806) 452-9136 or Mike Tyrrell of National Grid at (603) 801-4140. Thank you for your consideration in this matter.

Thank you,
BSC Group, Inc.



Erasme da Cruz
Ecological Project Manager, BSC Group, Inc.

cc: Michael Tyrrell, New England Power Company
Shutesbury Select Board (electronic copy)
Shutesbury Planning Board (electronic copy)
Shutesbury Zoning Board of Appeals (electronic copy)
Shutesbury Board of Health (electronic copy)
Franklin County Building Inspector (electronic copy)

Enclosed: WPA Form 3

	Site Authorization Form
Attachment A:	Project Narrative
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Shutesbury, Massachusetts
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Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Shutesbury

City/Town

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
 Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

<u>E5/F6 Transmission Lines Right-of-Way (ROW)</u>	<u>Shutesbury</u>	<u>01072</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	<u>42.41861 and</u>	<u>-72.45978 and -</u>
<u>2; & 10</u>	<u>42.42743</u>	<u>72.46770</u>
f. Assessors Map/Plat Number	<u>T-6; & N/A</u>	
	g. Parcel /Lot Number	

2. Applicant:

<u>Michael</u>	<u>Tyrrell</u>	
a. First Name	b. Last Name	
<u>New England Power Company (NEP)</u>		
c. Organization		
<u>170 Data Drive</u>		
d. Street Address		
<u>Waltham</u>	<u>MA</u>	<u>02451</u>
e. City/Town	f. State	g. Zip Code
<u>(603) 801-4140</u>	<u>michael.tyrrell@nationalgrid.com</u>	
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

NEP has easement rights

a. First Name _____ b. Last Name _____

c. Organization _____

d. Street Address _____

e. City/Town _____ f. State _____ g. Zip Code _____

h. Phone Number _____ i. Fax Number _____ j. Email address _____

4. Representative (if any):

<u>Erasm</u>	<u>da Cruz</u>	
a. First Name	b. Last Name	
<u>BSC Group, Inc.</u>		
c. Company		
<u>One Mercantile Street, Suite 610</u>		
d. Street Address		
<u>Worcester</u>	<u>MA</u>	<u>01608</u>
e. City/Town	f. State	g. Zip Code
<u>806-452-9136</u>	<u>edacruz@bscgroup.com</u>	
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

_____	_____	_____
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:

NEP is proposing to conduct exploratory soil borings for planning and design purposes, associated with future improvements to the E5/F6 transmission line. Borings and/or associated access will located within BVW, RFA or 100-ft Buffer Zone.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

- 1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)
- 310 CMR 10.53(3)(d) - the construction, reconstruction, operation and maintenance of underground and overhead public utilities

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Franklin

a. County

570 & 570

c. Book

b. Certificate # (if registered land)

280 & 402

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet	2. linear feet
b. <input checked="" type="checkbox"/> Bordering Vegetated Wetland	4,831 temporary 1. square feet	2. square feet
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input checked="" type="checkbox"/> Riverfront Area	Nurse Brook (Inland) 1. Name of Waterway (if available) - specify coastal or inland	

2. Width of Riverfront Area (check one):

- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: 1,480,731
square feet

4. Proposed alteration of the Riverfront Area:

<u>3</u>	<u>0</u>	<u>3</u>
a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.

5. Has an alternatives analysis been done and is it attached to this NOI? Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996? Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment

	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	

4. Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

_____ a. square feet of BVW _____ b. square feet of Salt Marsh

5. Project Involves Stream Crossings

_____ a. number of new stream crossings _____ b. number of replacement stream crossings



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C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. Yes No

If yes, include proof of mailing or hand delivery of NOI to:

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

- August 2021
b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:

(a) within wetland Resource Area _____
percentage/acreage

(b) outside Resource Area _____
percentage/acreage

2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

(a) Project description (including description of impacts outside of wetland resource area & buffer zone)

(b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

Make check payable to “Commonwealth of Massachusetts - NHESP” and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site
- (e) Project plans showing Priority & Estimated Habitat boundaries
- (f) OR Check One of the Following

1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. Separate MESA review completed.
Include copy of NHESP “no Take” determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

- a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Bourne to Rhode Island border, and the Cape & Islands:

North Shore - Plymouth to New Hampshire border:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP’s Boston Office. For coastal towns in the Southeast Region, please contact MassDEP’s Southeast Regional Office.

- c. Is this an aquaculture project? d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



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C. Other Applicable Standards and Requirements (cont'd)

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
- a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
- b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
- a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
- a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
- a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 2. A portion of the site constitutes redevelopment
 3. Proprietary BMPs are included in the Stormwater Management System.
- b. No. Check why the project is exempt:
1. Single-family house
 2. Emergency road repair
 3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.



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D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

Central to Western MA Energy Improvement Project E5/F6 Transmission Lines Soil Boring Program

BSC Group, Inc.

N/A

b. Prepared By

c. Signed and Stamped by

03/04/24

1"=40'

d. Final Revision Date

e. Scale

USGS Site Locus Map

02/26/24

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

WPA NOI Filing Fee N/A

2. Municipal Check Number

3. Check date

N/A

4. State Check Number

5. Check date

6. Payor name on check: First Name

7. Payor name on check: Last Name



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F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

4/05/2024

1. Signature of Applicant

2. Date

3. Signature of Property Owner (if different)

4. Date

04/05/24

5. Signature of Representative (if any)

6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Town of Shutesbury, Massachusetts 01072

**TOWN OF SHUTESBURY
Conservation Commission**

SITE ACCESS AUTHORIZATION

Date: 04/05/24

Project: Central to Western MA Energy Improvement Project Soil Boring Program

Location: E5/F6 Transmission Lines ROW

Property Owner: New England Power Company has easement rights

I (We) hereby authorize the individual members of the Shutesbury Conservation Commission and its agents to enter upon the referenced property for the purpose of gathering information regarding the application filed with the Commission pursuant to the Wetlands Protection Act (MGL Ch 131, s. 40) and/or the Shutesbury General Wetlands Protection Bylaw.

Additionally, if an Order of Condition or other Permit is issued for the project, I (we) grant permission for Commission members and the Commission's agents to enter the above referenced property for the purpose of inspecting for compliance with the Order or Permit. This site access authorization is valid until a Certificate of Compliance is issued by the Conservation Commission or the Permit has expired.

Authorized Signature:  NEP **Date** 02/05/24

Please Print New England Power Company

(If other than owner, please state whether tenant, agent or other)

Mailing Address: 170 Data Drive, Waltham, MA 02451

Phone: 603-801-4140 **Email:** michael.tyrrell@nationalgrid.com

Cell: _____ **Fax:** _____

Attachment A

Central to Western MA Energy Improvement Project
E5/F6 Transmission Lines Soil Boring Program
Shutesbury, Massachusetts
Notice of Intent

PROJECT NARRATIVE

1 INTRODUCTION

BSC Group, Inc. (BSC) is filing this Notice of Intent (NOI) on behalf of the New England Power Company (NEP) for activities associated with exploratory geotechnical soil borings along the E5/F6 Transmission Lines Right-of-Way (ROW) in Shutesbury, Massachusetts (the Project). The proposed borings are necessary for the planning and design of future improvements to the line. Following guidance from MassDEP WERO, soil borings for planning and design of activities along an existing utility Transmission Line are considered exempt utility maintenance under the WPA and its implementing regulations 310 CMR 10.02(2)(a)(2). Therefore, this NOI is submitted solely under the Town of Shutesbury General Wetlands Protection Bylaw.

Project activities include soil borings at Structure 443 located off Pratt Corner Road and Structure 436 located off Sand Hill Road. Project activities will be located within an existing, managed ROW and along historically used access. Activities will be located within Bordering Vegetated Wetlands (BVW), Riverfront Area (RFA), the 100-foot Buffer Zone to BVW/Inland Bank, and the locally regulated 100-foot Adjacent Upland Resource Area (AURA) and 50-foot No Disturb Zone. Refer to **Attachment B** for the Site locus Map and Environmental Resource Map showing the locations of the boring and resource areas.

To access the soil boring locations across BVW, temporary construction mats will be used within wetlands to create a stable travel and work surface area. Although the Project will result in temporary impacts to BVWs, the areas will be restored, and no permanent wetland impacts are proposed.

Due to the nature and purpose of the proposed activities, there are no practical alternatives to the Project. However, no adverse impacts to wetland resource areas or values protected by the Shutesbury Wetlands Protection Bylaw are proposed. The approximate square footage of temporary impacts is included for reference within the narrative.

Best Management Practices (BMPs), including sediment and erosion controls, will be implemented during construction, further minimizing the likelihood of adverse impacts to resource areas. NEP has performed an analysis of alternatives, and the Project has been designed to avoid and minimize adverse impacts to wetland resource areas to the greatest extent practicable. Therefore, this NOI serves as a request for an Order of Conditions under the local bylaw for the activities described herein.

2 EXISTING CONDITIONS

Project activities are proposed at structures along the E5/F6 Transmission Lines ROW in Shutesbury, MA. The ROW is oriented northwest to southeast and is currently used for overhead electric utility transmission operations. Vegetation within the ROW is regularly maintained for compatibility with the facilities. The upland and wetland areas within the ROW are dominated by scrub-shrub/herbaceous communities, typical of transmission line ROWs. Dominant land uses adjacent to the ROW primarily include forested land and single-family properties.

2.1 Resource Area Summary

BSC conducted both a desktop analysis (using MassGIS data layers, FEMA Firmette, and other publicly available data), and wetland field delineations, to assess permitting requirements pursuant to the WPA. Wetland delineations were conducted in 2023, in accordance with the methodology described in the MassDEP *Handbook for Delineating Bordering Vegetated Wetlands* (Published in March 1995) and the updated MassDEP *Handbook for Delineation of Bordering Vegetated Wetlands* (Published in September 2022).

The Environmental Resources Map in **Attachment B** depicts existing conditions, wetland resource areas, and buffer zones, in relation to the proposed activities. Temporary impacts, including soil borings and construction matting are proposed within Outstanding Resource Waters (ORW) BVW, RFA, and the 100-foot Buffer Zone to BVW/Inland Bank.

2.2 Bordering Vegetated Wetland (BVW)

BVW within the E5/F6 ROW is a mixture of scrub/shrub and emergent wetland types, typical of managed ROWs.

2.3 Riverfront Area

Structure 443 and its associated access are located within the outer RFA associated with Nurse Brook, located south of the structure.

2.4 Shutesbury 100-foot AURA and 50-foot No Disturb Zone

Structures 436, 443 and associated access are located within the locally regulated 100-foot AURA and 50-foot No Disturb Zone.

2.5 Other Resource Areas

Other resource areas identified within or near the Project area include NHESP Designated Priority and Estimated Habitat, Surface Water Protection Zone, and Outstanding Resource Waters (ORW). Soil boring activities at Structure 443 are located within Priority and Estimated Habitat for rare species. NEP is planning to perform this work in accordance with the Massachusetts Endangered Species Act regulations (321 CMR 10.14(11)), which exempts Projects and activities from review that include routine operation and maintenance that are part of an operation and maintenance plan approved by the Division of Fisheries and Wildlife. Work will be performed per the conditions and BMPs of the established Operation and Maintenance Plan which National Grid and NHESP have agreed to.

No other resource areas were identified within or near the Project area, including Bordering Land Subject to Flooding (BLSF), Certified Vernal Pools, or Areas of Critical Environmental Concern (ACEC).

3 PROJECT ACTIVITIES AND ANTICIPATED IMPACTS

The Project activities include exploratory boring at two (2) structures along the E5/F6 Transmission Lines requiring temporary construction matting for work pads and access within BVW. Temporary Project impacts are associated with soil boring activities and the use of construction matting within BVW for access.

The purpose of the borings is to evaluate subsurface conditions for foundation design associated with the future replacement of these structures. A small drill rig will be used to perform the soil borings, each boring hole will be approximately four (4) to six (6) inches in diameter. Each soil boring is typically completed within 1-2 days, further minimizing the likelihood of adverse impacts to resource areas. Soils from the boring hole will be temporarily stored adjacent to the boring location. Within wetlands, it will be placed on construction mats, underlain with filter fabric. If the soil remains overnight, they will be properly contained (fiber rolls, etc.). Upon completion of the work, bored-out soil will be used to backfill the hole. The soil boring contractor has the discretion to shift the boring site within 10 feet of the staked location based on site/field conditions.

Access roads along the ROW allow NEP and contractor personnel to construct, inspect, and maintain the existing transmission line facilities. After careful planning and field investigations, NEP has determined that existing and previously used access routes can be utilized to complete the proposed soil boring activities.

Approximately 4,828 sf of temporary construction mats will be used to provide access through and a stable work area within BVW. No permanent impacts are proposed to BVW.

4 CONFORMANCE WITH SHUTESBURY WETLANDS PROTECTION BYLAW REGULATIONS PERFORMANCE STANDARDS

4.1 Banks

1.4.1. No activity, other than the maintenance of an already existing structure or Resource Area Enhancement, shall be allowed which will result in the building within or upon, removing, filling, or altering of a Bank.

Temporary construction matting will be installed within the work area of boring B-436 to create a stable workpad. In accordance with National Grid BMPs, stream banks will be spanned; therefore, no impacts to bank are anticipated.

4.2 Freshwater Wetlands

2.4.2. No activity, other than maintenance of an already existing structure, so long as such maintenance does not involve ground disturbance or alteration of the footprint, which will result in the building within or upon, removing, filling, or altering a freshwater wetland, shall be permitted by the Commission.

The boring B-436 and the installation of wetland construction matting to access borings B-436 and B-443 are located within a freshwater wetland. Due to the location of the existing utility structures, some work within this area is unavoidable; however, impacts will be minimized to the extent practicable.

Approximately 4,831 square sf of temporary impacts are anticipated within BVW, including approximately 3 sf for the soil boring at Structure 436 and 4828 sf of temporary construction to provide access through and a stable work area to the soil boring locations within BVW. Appropriate BMPs, including sediment and erosion controls, will be employed to minimize impacts to resource areas and their buffer zones. No permanent impacts in freshwater wetlands are proposed.

4.3 Locally Regulated 100-foot AURA

6.4.3. The first inner fifty (50) feet of the 100-foot AURA (measured horizontally from a Resource Area specified in Article I is considered a "No Disturb" Protection Area. No activities or work, other than passive passage, Resource Area enhancement, and construction of Title 5 septic systems as set forth in Article III, Section 10 above, are permitted within the first fifty (50) feet of the AURA.

Borings B-436 and B-443 are located within the locally regulated 100-foot AURA and 50-foot No Disturb Zone; less than 6 sf of temporary impacts from the borings are proposed. Due to the location of the existing utility structure, some work within this area is unavoidable, however, impacts will be minimized to the extent practicable. Appropriate

BMPs, including sediment and erosion controls, will be employed to minimize impacts to resource areas and their buffer zones. No permanent impacts to the 100-foot AURA and 50-Foot No Disturb Zone are proposed, and the area will be restored to pre-existing conditions following the completion of the soil borings.

4.4 Surface and Subsurface Streams, Intermittent Streams and Rivers

7.4.1. For the AURA of perennial streams and Type I intermittent streams, rivers, the Commission accepts and adopts the definitions, requirements, and Performance Standards for the inner one hundred (100) feet of Riverfront Area as specified in 310 CMR 10.58.

7.4.2. For the AURA of Type II intermittent streams, the Commission accepts and adopts the definitions, requirements, and Performance Standards for the outer one hundred (100) feet of Riverfront Area as specified in 310 CMR 10.58.

NEP recognizes that maintaining/re-establishing the natural vegetation within the 100-foot RFA is critical to protecting water supplies, providing flood control, preventing pollution, and protecting wildlife and fisheries habitat. Temporary impacts where unavoidable for installation of linear site-related utilities are allowed within the 100-foot RFA, provided the area is restored to its natural conditions (310 CMR 10.58 (4) (d)(1)(a)). Protective measures and BMPs will be in place to avoid and minimize impacts. No permanent alteration within 100-foot RFA is anticipated within the Project area. The only proposed work within RFA outside of using access routes is for the proposed Boring B-443; and the bore site will be restored to pre-existing conditions following the completion of the boring.

4.5 Vegetation Removal and Replacement

8.3.3. No vegetation in a Resource Area shall be damaged, extensively pruned, or removed without written approval by the Commission.

Prior to the commencement of work, upland vegetation within the ROW will be mowed to provide access for vehicles and personnel. The removal of trees is not anticipated for this part of the project.

5 PROPOSED MITIGATION TECHNIQUES

NEP has established procedures that are to be followed by all employees and contractors performing construction and maintenance activities on transmission ROWs. These procedures, or BMPs, are outlined in National Grid’s Environmental Guidance document Access, Maintenance and Construction Best Management Practices (EG-303NE) to ensure that all NEP projects are completed in accordance with all applicable environmental laws and regulations as well as company policies and compliance objectives. The following sections provide a summary of BMPs that will be implemented for this Project. See **Attachment E** for an excerpt of National Grid’s Environmental Guidance Document, Access, Maintenance and Construction Best Management Practices, Sediment and Erosion Controls.

5.1 Sediment and Erosion Controls

Erosion and sediment control measures will be installed prior to the commencement of work, as necessary. These controls will function to mitigate work-related erosion and sedimentation, and to serve as a physical boundary that delineates work areas and contains construction activities within approved locations. Erosion and sediment control measures may include silt fence, weed-free straw bale barriers, straw wattles, or similar treatment.

BMPs will be inspected and maintained in working order until all disturbed areas are stabilized. Please refer to **Attachment E** for erosion and sediment control details.

5.2 Construction Access

Existing and historically used access routes will be utilized to the greatest extent practicable, as shown on the Environmental Resources Map in **Attachment B**. Temporary construction mats will be used for access and to provide a stable workpad within BVW. Construction mats are a typical BMP used by NEP to protect the wetland substrate, root systems/seed banks and existing vegetation. Construction mats will be placed on top of existing vegetation and will be removed upon completion of work. If necessary, the wetland area will be restored through seeding and stabilization.

5.3 Mowing and Vegetation Management

Prior to the commencement of work, upland vegetation within the ROW will be mowed to provide access for vehicles and personnel.

5.4 Restoration of Disturbed Areas

Disturbed areas, outside the footprint of the access routes, will be returned to pre-construction elevations and conditions to the extent practicable. In areas of vegetated

ground, disturbed areas will be seeded with an appropriate conservation seed mixture and/or mulched and allowed to re-vegetate.

Temporary soil erosion and sediment control devices will be removed following the stabilization of disturbed areas. Temporary construction mats will be removed from wetlands. In addition, construction debris and non-biodegradable controls will be removed from the site following construction and site stabilization.

6 CONCLUSION

Although portions of the Project will occur within wetland resource areas, the proposed Project will:

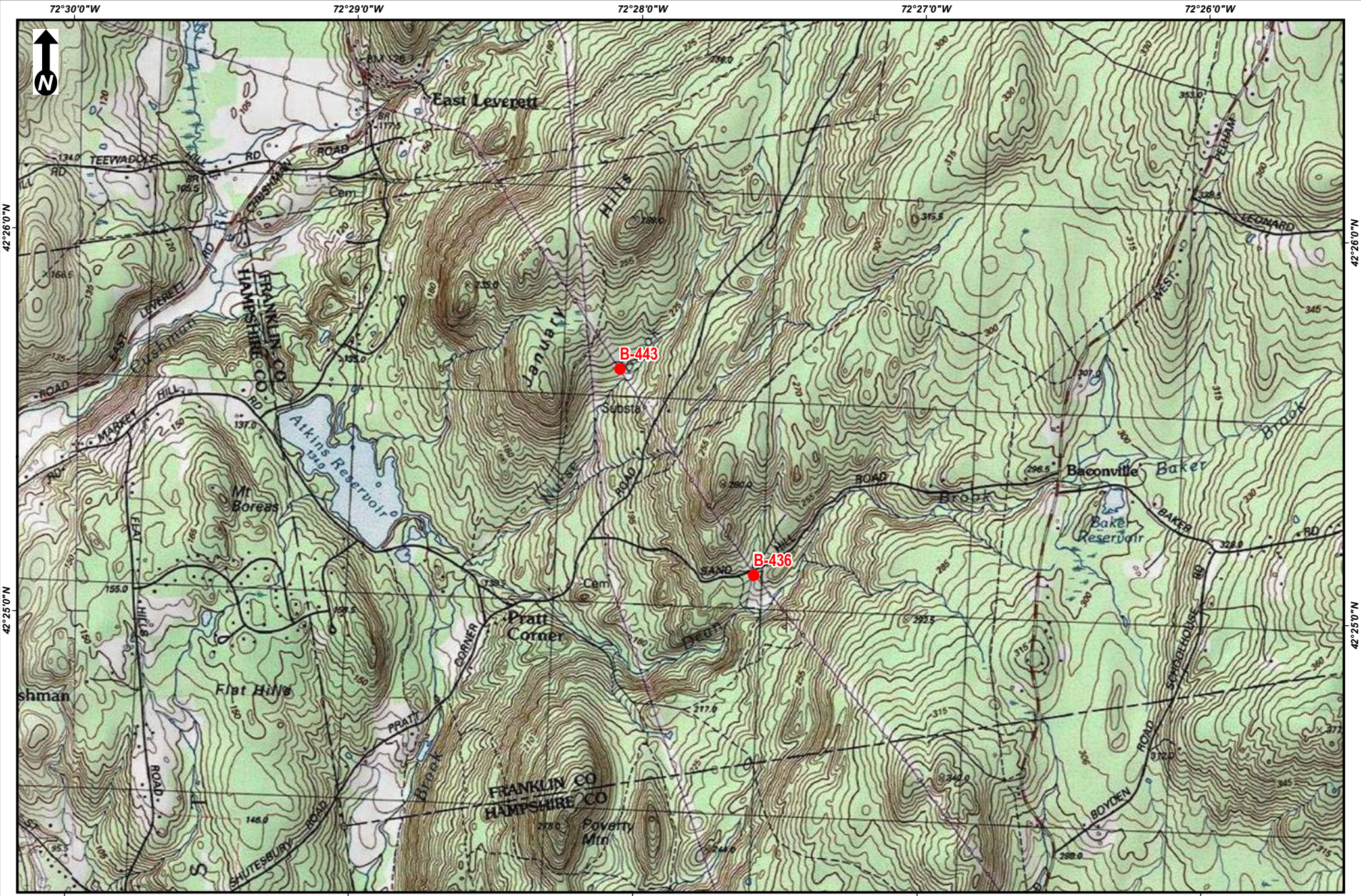
- Minimize disturbance by utilizing an existing disturbed ROW to the greatest extent practicable.
- Maximize use of upland access roads to the greatest extent practicable.
- Result in only minor and temporary impacts to BVW, RFA, the 100-foot Buffer to BVW/Inland Bank/AURA, and the 50-foot No Disturb Zone.
- And utilize appropriate BMPs to protect wetland resource areas from sedimentation and soil disturbance during boring activities.

Therefore, NEP requests the Shutesbury Conservation Commission find this proposal adequately protective of the public interests identified in the Shutesbury Wetlands Protection Bylaw and Regulations and issue an Order of Conditions for the activities described in this narrative.

Attachment B

Central to Western MA Energy Improvement Project
E5/F6 Transmission Lines Soil Boring Program
Shutesbury, Massachusetts
Notice of Intent

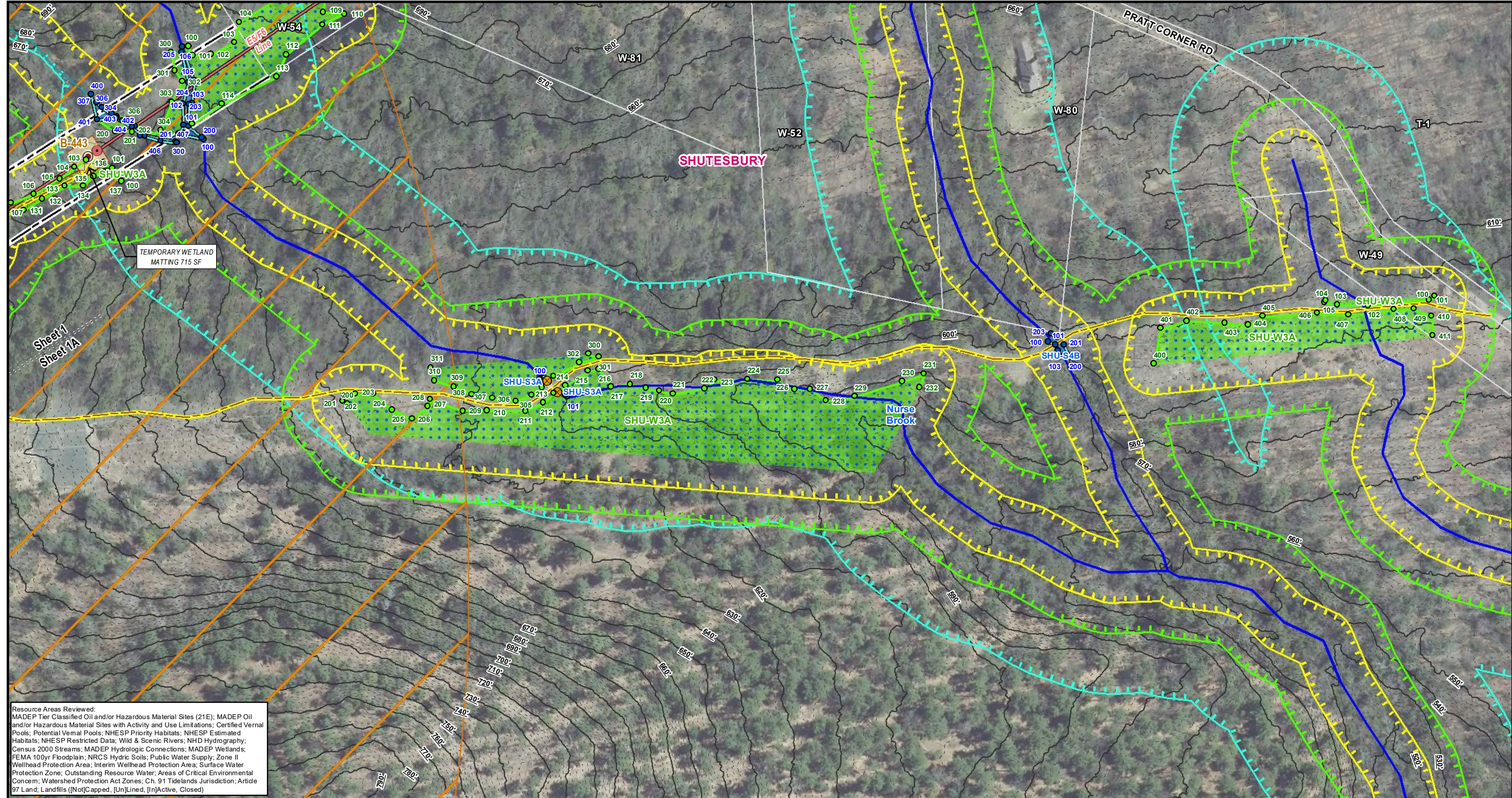
USGS SITE LOCUS MAP
ENVIRONMENTAL RESOURCES MAP



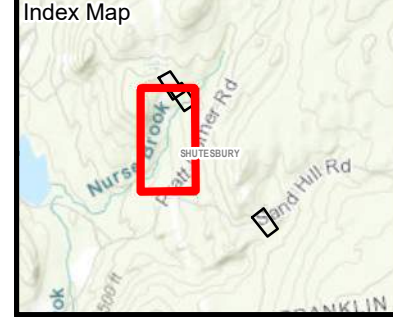
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CENTRAL TO WESTERN MA ENERGY IMPROVEMENT PROJECT
E5/F6 TRANSMISSION LINES SOIL BORING PROGRAM
USGS Site Location Map
Shutesbury, MA

Source: Copyright ©
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Geographic Society, Incubed



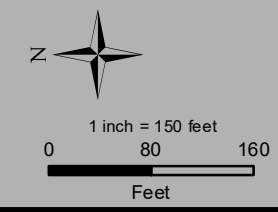
Resource Areas Reviewed:
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Legend

Soil Boring	Field Delineated Wetland Lines	NHESP Priority & Estimated Habitats	2ft Contour
Existing Structure	Field Delineated Wetlands*	Outstanding Resource Water	10ft Contour
Existing Overhead Line	Perennial Stream	Town Boundary	Parcel Boundaries
Edge of ROW	MADEP Hydrologic Connections	Wetland Flags	
Preferred Access Road	MADEP Wetlands*	Stream Flags	
Construction Matting	50ft No Disturb Zone	Access Gate	
Work Envelope*	AURA / 100ft Buffer to BVW and Streams	Culvert	
Field Delineated Inland Bank	200ft Riverfront Area		
Field Delineated Stream Area*			

*Indicates Layers Set to Transparency

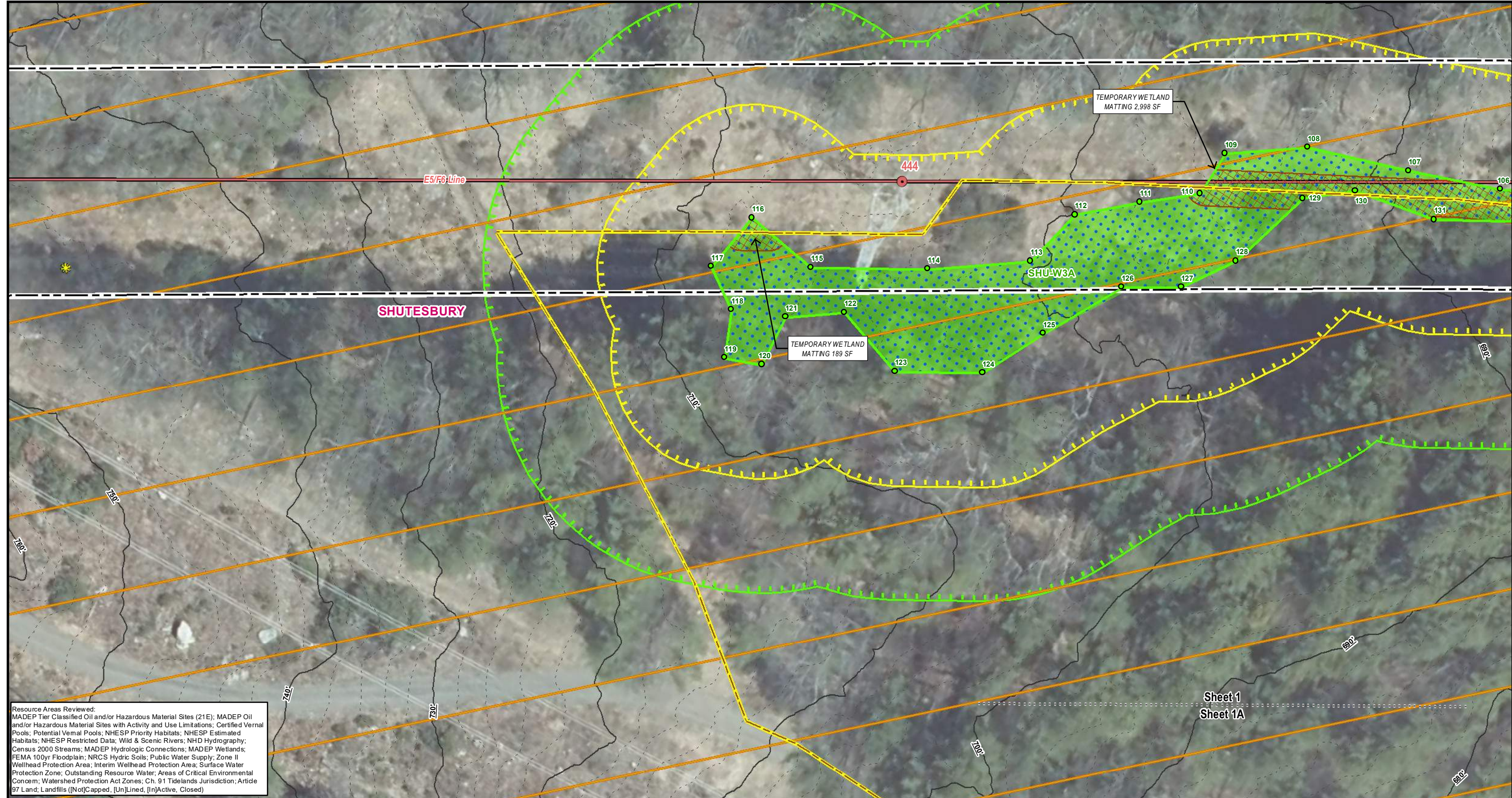


CENTRAL TO WESTERN MA ENERGY IMPROVEMENT PROJECT
E5/F6 TRANSMISSION LINES
SOIL BORING PROGRAM

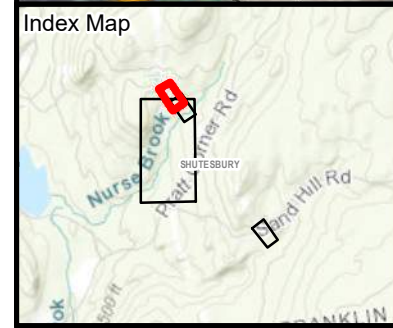
Environmental Resources Map

Shutesbury, MA
 Page 1A of 3
 Date: March 4, 2024

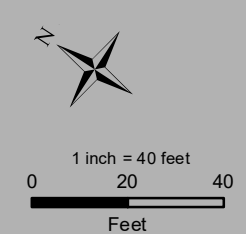
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



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Legend		*Indicates Layers Set to Transparency	
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Existing Structure	Field Delineated Wetlands*	Outstanding Resource Water	10ft Contour
Existing Overhead Line	Perennial Stream	Town Boundary	Parcel Boundaries
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Construction Matting	50ft No Disturb Zone	Access Gate	
Work Envelope*	AURA / 100ft Buffer to BVW and Streams	Culvert	
Field Delineated Inland Bank	200ft Riverfront Area		
Field Delineated Stream Area*			

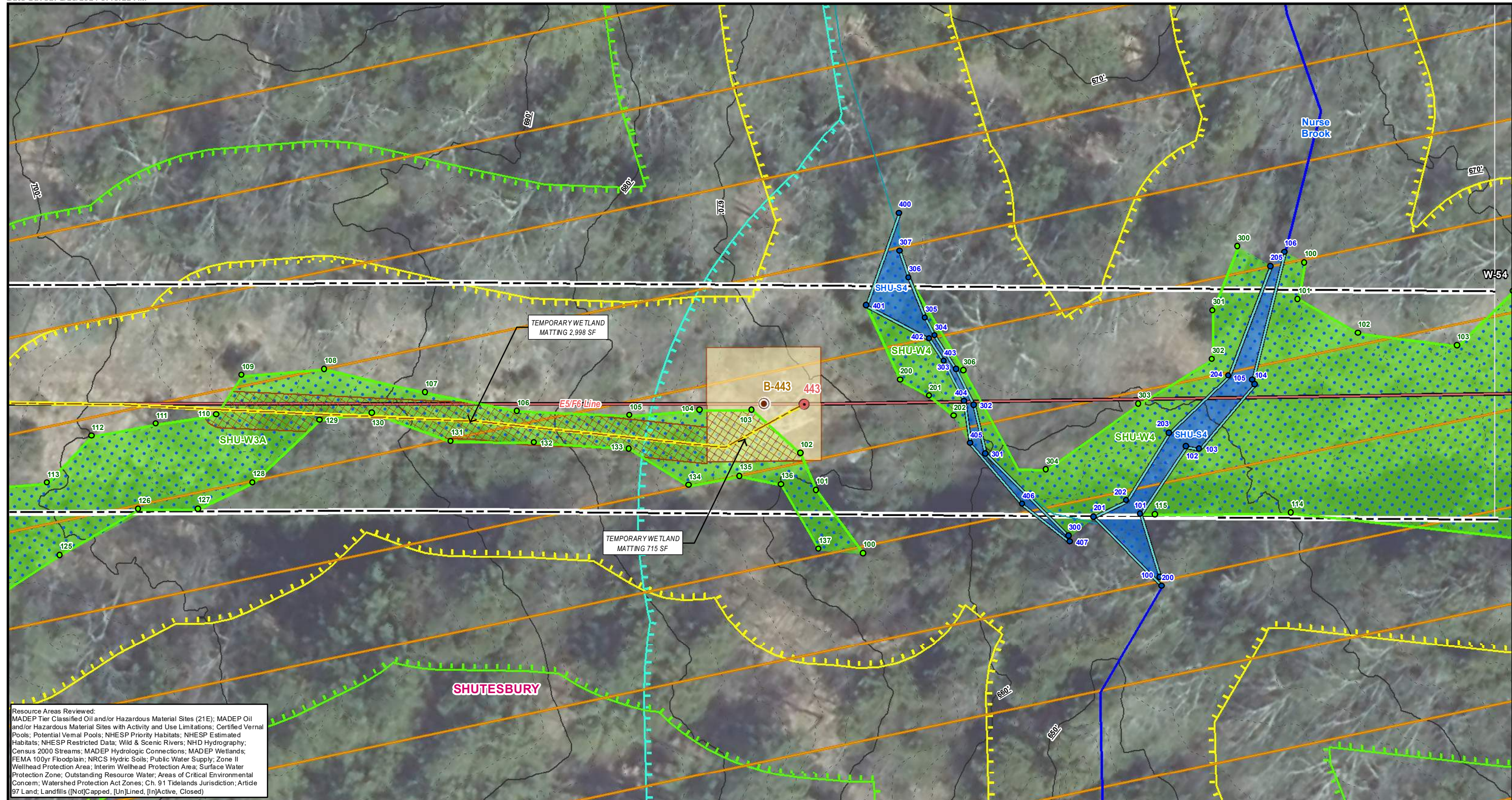


**CENTRAL TO WESTERN MA
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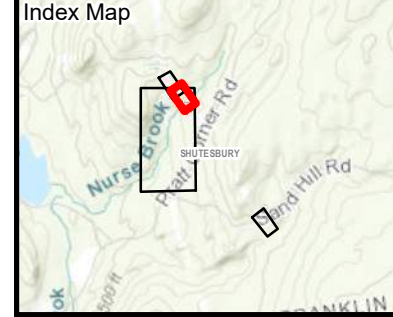
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Legend	<ul style="list-style-type: none"> Soil Boring Existing Structure Existing Overhead Line Edge of ROW Preferred Access Road Construction Matting Work Envelope* Field Delineated Inland Bank Field Delineated Stream Area* Field Delineated Wetland Lines Field Delineated Wetlands* Perennial Stream MADEP Hydrologic Connections 50ft No Disturb Zone AURA / 100ft Buffer to BVW and Streams 200ft Riverfront Area NHESP Priority & Estimated Habitats Outstanding Resource Water Town Boundary Wetland Flags Stream Flags Access Gate Culvert 2ft Contour 10ft Contour Parcel Boundaries 	<p>*Indicates Layers Set to Transparency</p> <p>1 inch = 40 feet</p> <p>0 20 40 Feet</p>
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**CENTRAL TO WESTERN MA
 ENERGY IMPROVEMENT PROJECT
 E5/F6 TRANSMISSION LINES
 SOIL BORING PROGRAM**

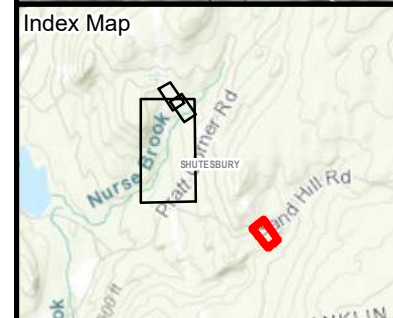
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Shutesbury, MA
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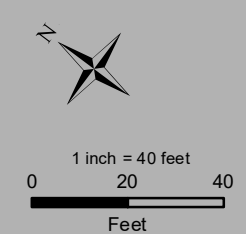


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Legend	
	Soil Boring
	Existing Structure
	Existing Overhead Line
	Edge of ROW
	Preferred Access Road
	Construction Matting
	Work Envelope*
	Field Delineated Inland Bank
	Field Delineated Stream Area*
	Field Delineated Wetland Lines
	Field Delineated Wetlands*
	Perennial Stream
	MADEP Hydrologic Connections
	MADEP Wetlands*
	50ft No Disturb Zone
	AURA / 100ft Buffer to BVW and Streams
	200ft Riverfront Area
	NHESP Priority & Estimated Habitats
	Outstanding Resource Water
	Town Boundary
	Wetland Flags
	Stream Flags
	Access Gate
	Culvert
	2ft Contour
	10ft Contour
	Parcel Boundaries
	Article 97 Lands
	Municipal

*Indicates Layers Set to Transparency

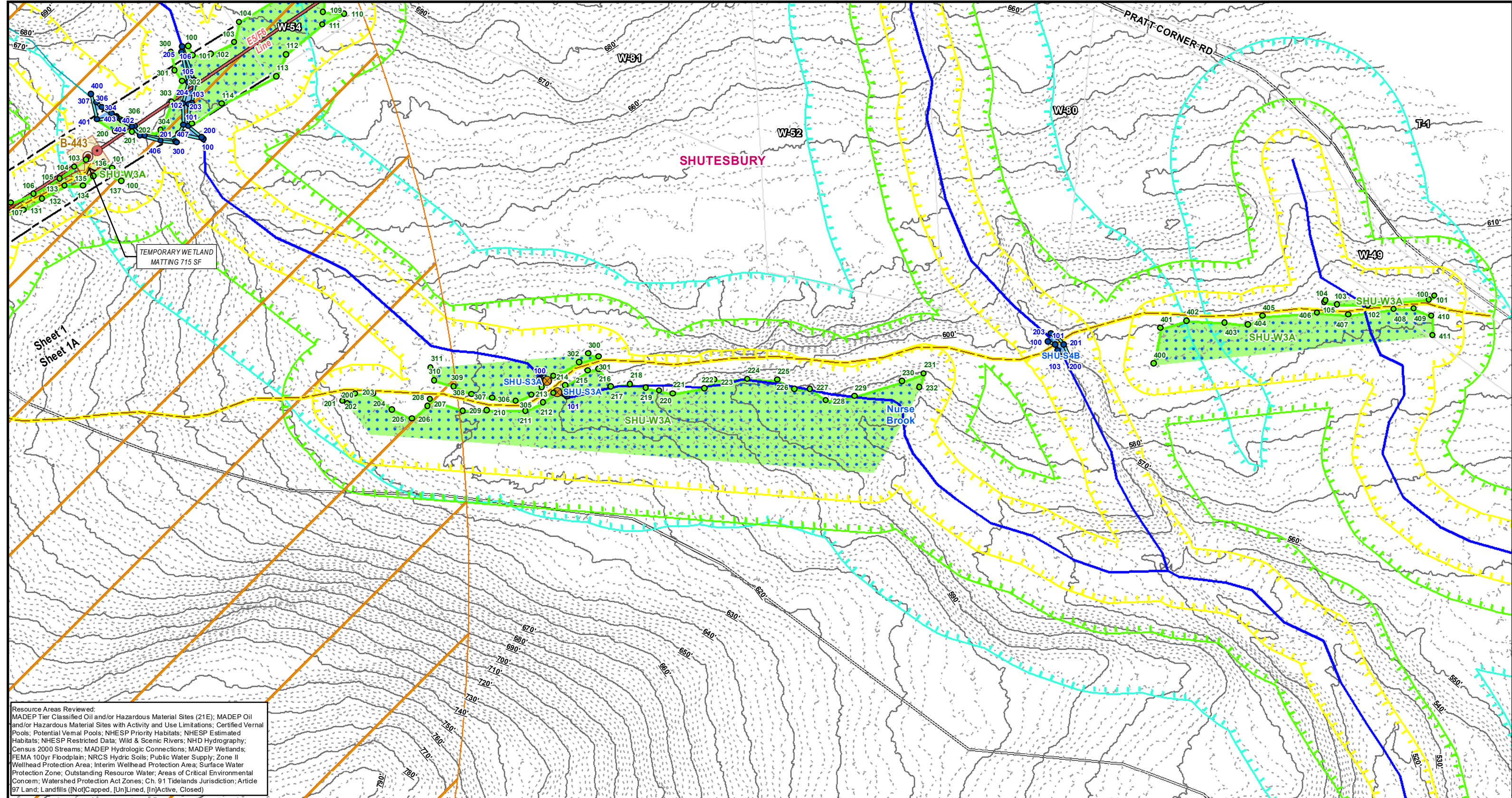


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 ENERGY IMPROVEMENT PROJECT
 E5/F6 TRANSMISSION LINES
 SOIL BORING PROGRAM**

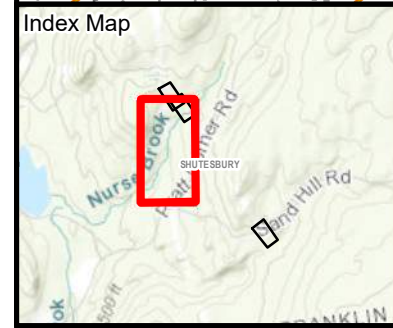
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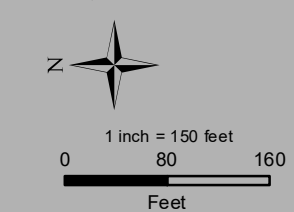


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Legend	
	Soil Boring
	Existing Structure
	Existing Overhead Line
	Edge of ROW
	Preferred Access Road
	Construction Matting
	Work Envelope*
	Field Delineated Inland Bank
	Field Delineated Stream Area*
	Field Delineated Wetland Lines
	Field Delineated Wetlands*
	Perennial Stream
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	Town Boundary
	Wetland Flags
	Stream Flags
	Access Gate
	Culvert
	2ft Contour
	10ft Contour
	Parcel Boundaries

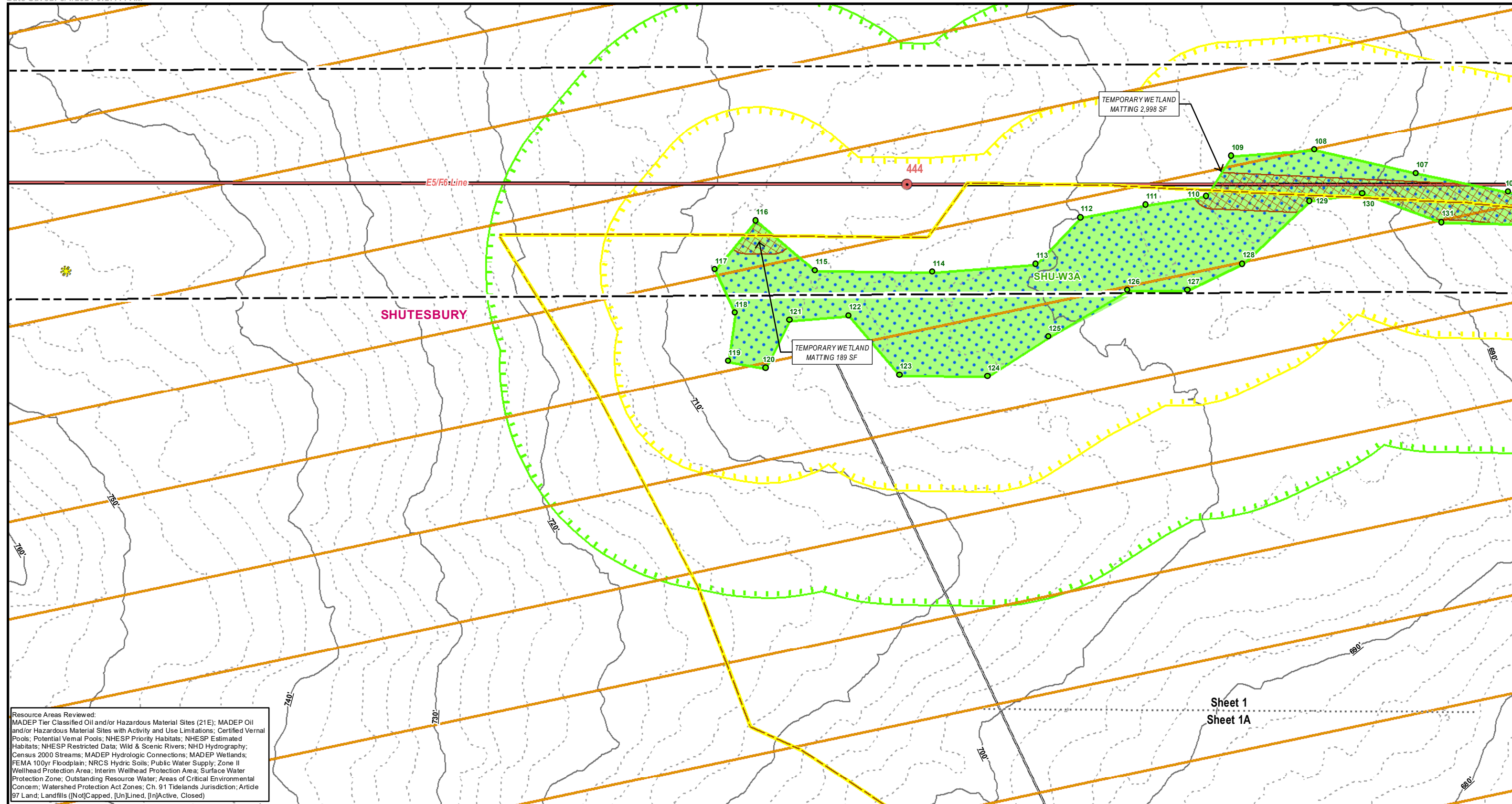
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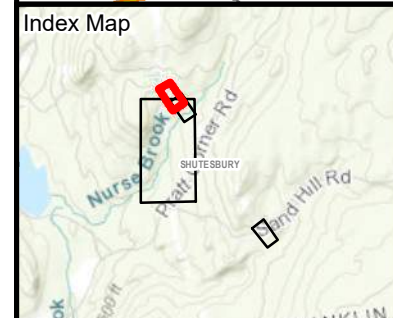
**CENTRAL TO WESTERN MA
 ENERGY IMPROVEMENT PROJECT
 E5/F6 TRANSMISSION LINES
 SOIL BORING PROGRAM**

Environmental Resources Map

Shutesbury, MA
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Legend	
	Soil Boring
	Existing Overhead Line
	Edge of ROW
	Preferred Access Road
	Construction Matting
	Work Envelope*
	Field Delineated Inland Bank
	Field Delineated Stream Area*
	Field Delineated Wetland Lines
	Field Delineated Wetlands*
	Perennial Stream
	MADEP Hydrologic Connections
	50ft No Disturb Zone
	AURA / 100ft Buffer to BVW and Streams
	200ft Riverfront Area
	NHESP Priority & Estimated Habitats
	Outstanding Resource Water
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	Wetland Flags
	Stream Flags
	Access Gate
	Culvert
	2ft Contour
	10ft Contour
	Parcel Boundaries

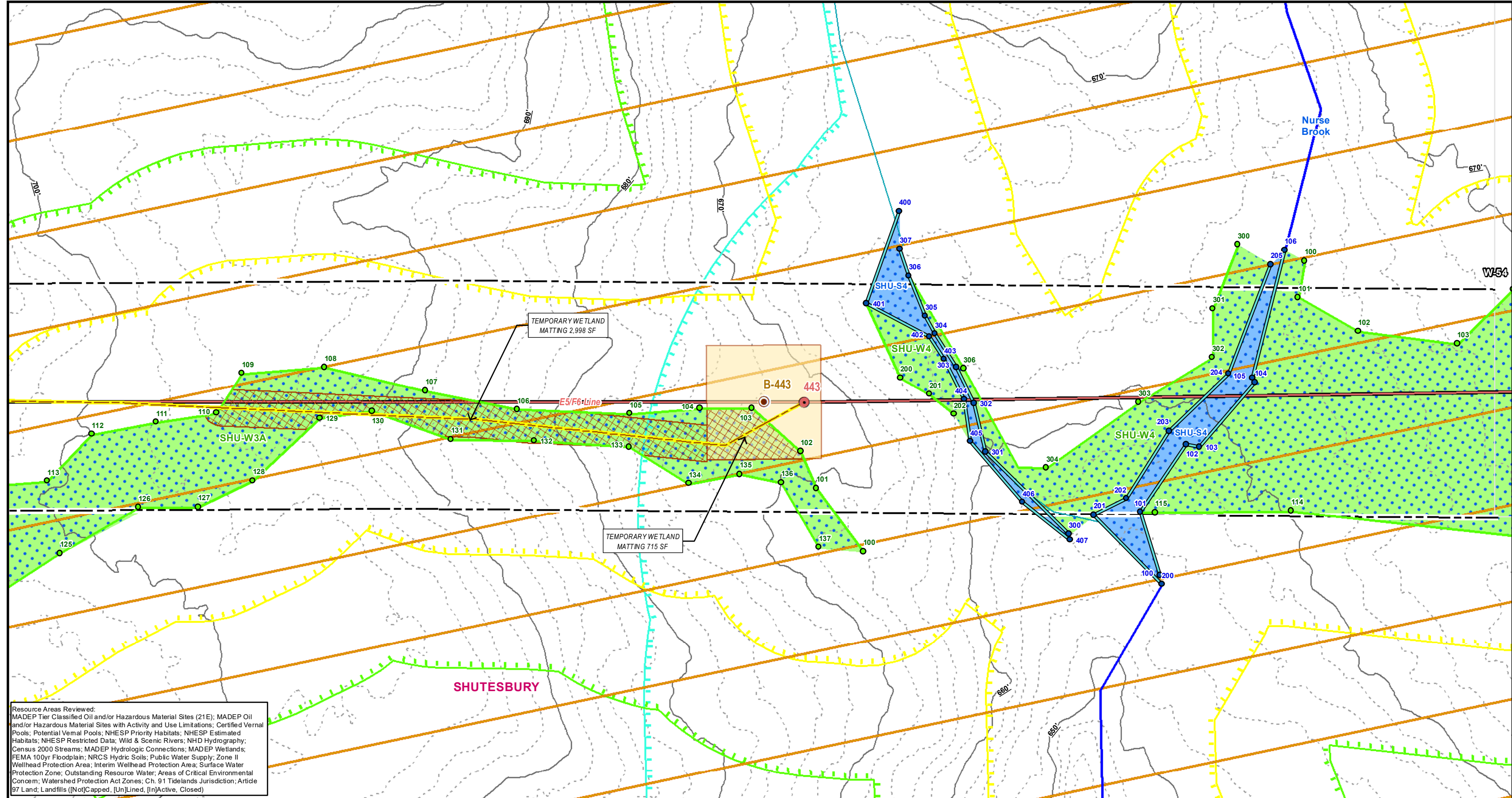
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Sheet 1A

**CENTRAL TO WESTERN MA
 ENERGY IMPROVEMENT PROJECT
 E5/F6 TRANSMISSION LINES
 SOIL BORING PROGRAM**

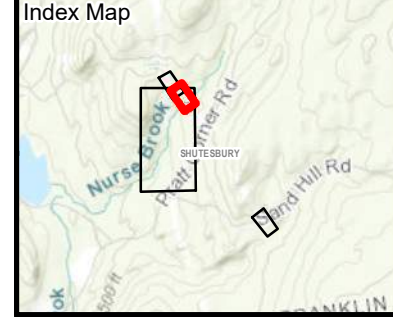
Environmental Resources Map

Shutesbury, MA
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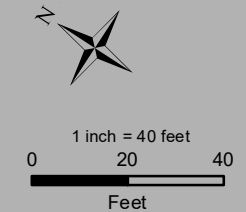


Resource Areas Reviewed:
 MADEP Tier Classified Oil and/or Hazardous Material Sites (21E); MADEP Oil and/or Hazardous Material Sites with Activity and Use Limitations; Certified Vernal Pools; Potential Vernal Pools; NHESP Priority Habitats; NHESP Estimated Habitats; NHESP Restricted Data; Wild & Scenic Rivers; NHD Hydrography; Census 2000 Streams; MADEP Hydrologic Connections; MADEP Wetlands; FEMA 100yr Floodplain; NRCS Hydric Soils; Public Water Supply; Zone II Wellhead Protection Area; Interim Wellhead Protection Area; Surface Water Protection Zone; Outstanding Resource Water; Areas of Critical Environmental Concern; Watershed Protection Act Zones; Ch. 91 Tidelands Jurisdiction; Article 97 Land; Landfills ([Not]Capped, [Un]Lined, [In]Active, Closed)



Legend	<ul style="list-style-type: none"> ● Soil Boring Existing Structure Existing Overhead Line Edge of ROW Preferred Access Road Construction Matting Work Envelope* Field Delineated Inland Bank Field Delineated Stream Area* 	<ul style="list-style-type: none"> Field Delineated Wetland Lines Field Delineated Wetlands* Perennial Stream MADEP Hydrologic Connections MADEP Wetlands* 50ft No Disturb Zone AURA / 100ft Buffer to BVW and Streams 200ft Riverfront Area 	<ul style="list-style-type: none"> NHESP Priority & Estimated Habitats Outstanding Resource Water Town Boundary ● Wetland Flags ● Stream Flags Access Gate ⊗ Culvert 	<ul style="list-style-type: none"> 2ft Contour 10ft Contour Parcel Boundaries
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*Indicates Layers Set to Transparency

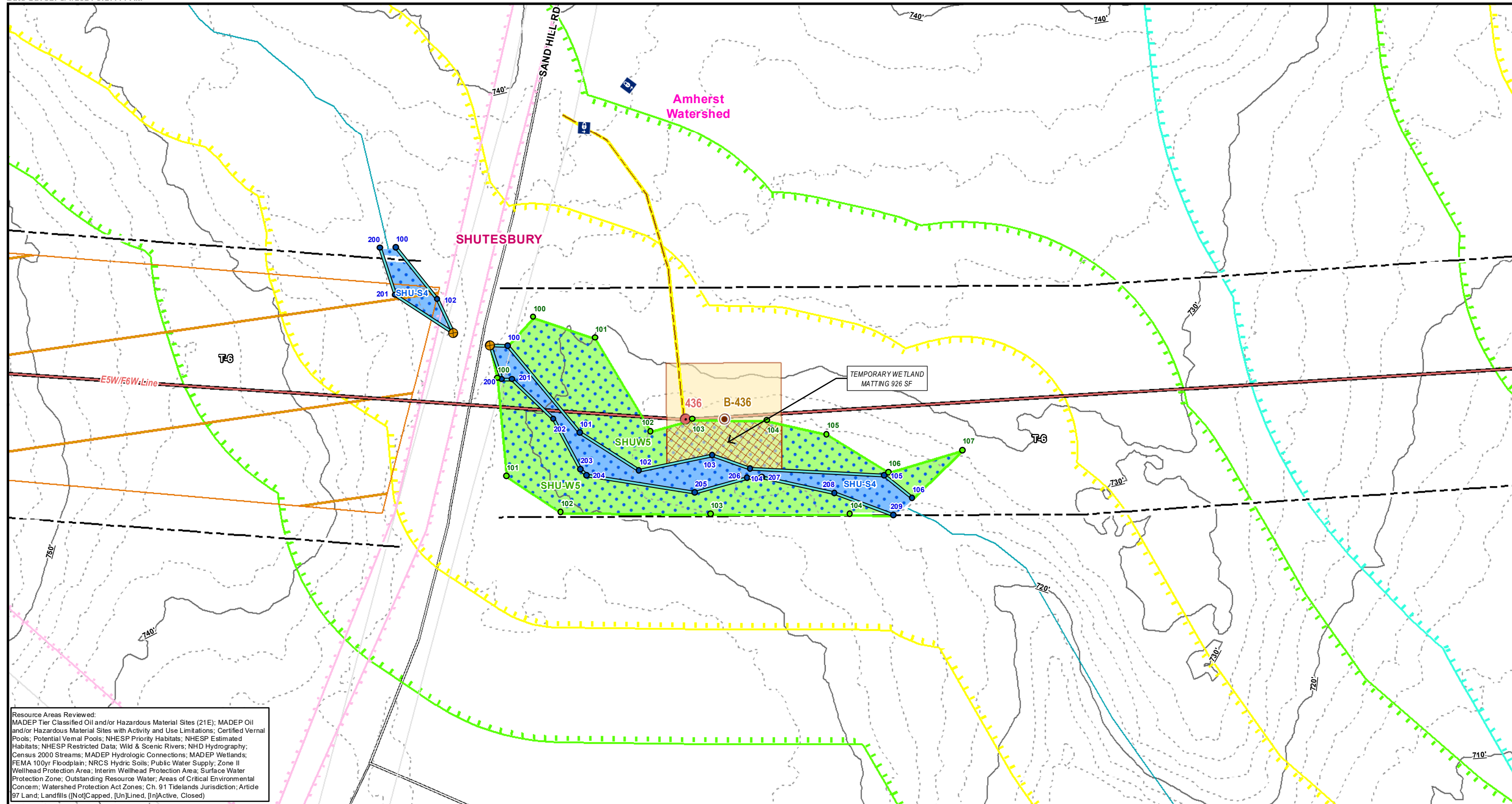


**CENTRAL TO WESTERN MA
 ENERGY IMPROVEMENT PROJECT
 E5/F6 TRANSMISSION LINES
 SOIL BORING PROGRAM**

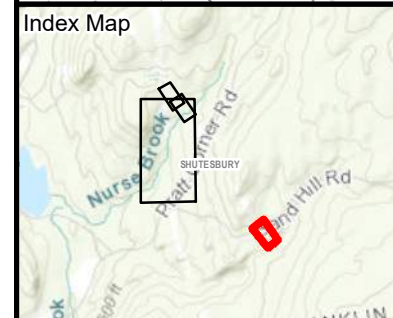
Environmental Resources Map

Shutesbury, MA
 Page 2 of 3
 Date: March 4, 2024

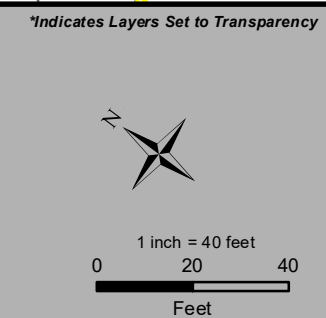
Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community



Resource Areas Reviewed:
 MADEP Tier Classified Oil and/or Hazardous Material Sites (21E); MADEP Oil and/or Hazardous Material Sites with Activity and Use Limitations; Certified Vernal Pools; Potential Vernal Pools; NHESP Priority Habitats; NHESP Estimated Habitats; NHESP Restricted Data; Wild & Scenic Rivers; NHD Hydrography; Census 2000 Streams; MADEP Hydrologic Connections; MADEP Wetlands; FEMA 100yr Floodplain; NRCS Hydric Soils; Public Water Supply; Zone II Wellhead Protection Area; Interim Wellhead Protection Area; Surface Water Protection Zone; Outstanding Resource Water; Areas of Critical Environmental Concern; Watershed Protection Act Zones; Ch. 91 Tidelands Jurisdiction; Article 97 Land; Landfills ([Not]Capped, [Un]Lined, [In]Active, Closed)



Legend	
	Soil Boring
	Existing Structure
	Existing Overhead Line
	Edge of ROW
	Preferred Access Road
	Construction Matting
	Work Envelope*
	Field Delineated Inland Bank
	Field Delineated Stream Area*
	Field Delineated Wetland Lines
	Field Delineated Wetlands*
	Perennial Stream
	MADEP Hydrologic Connections
	MADEP Wetlands*
	50ft No Disturb Zone
	AURA / 100ft Buffer to BVW and Streams
	200ft Riverfront Area
	NHESP Priority & Estimated Habitats
	Outstanding Resource Water
	Town Boundary
	Wetland Flags
	Stream Flags
	Access Gate
	Culvert
	2ft Contour
	10ft Contour
	Parcel Boundaries
	Article 97 Lands
	Municipal



CENTRAL TO WESTERN MA ENERGY IMPROVEMENT PROJECT
E5/F6 TRANSMISSION LINES
SOIL BORING PROGRAM

Environmental Resources Map

Shutesbury, MA
 Page 3 of 3
 Date: March 4, 2024

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

Attachment C

Central to Western MA Energy Improvement Project
E5/F6 Transmission Lines Soil Boring Program
Shutesbury, Massachusetts
Notice of Intent

SITE PHOTOGRAPHS



Photo #1: View of existing Structure 436 located within BVW SHU-W5. Boring B-436 is proposed approximately 18 feet southeast of the existing structure. Temporary construction matting in BVW is required in order to access and create a workpad for the work. *Facing southwest.*



Photo #2: View of existing Structure 443 located within BVW SHU-W3A . Boring B-443 is proposed approximately 18 feet northeast of the existing structure and is located within the 100-foot Buffer Zone and Riverfront Area. Temporary construction matting in BVW SHU-W3A is required in order to access B-443. *Facing northwest.*

Attachment D

Central to Western MA Energy Improvement Project
E5/F6 Transmission Lines Soil Boring Program
Shutesbury, Massachusetts
Notice of Intent

CERTIFIED ABUTTERS LIST

TOWN OF SHUTESBURY CERTIFIED 100' ABUTTERS LIST FOR BSC GROUP, SAND HILL RD, MAP T PARCEL 6

MAP	LOT	OWNER	CO-OWNER	MAILING ADDRESS	TOWN	ST	ZIP	LOCATION
T	6	TOWN OF AMHERST		4 BOLTWOOD AVENUE	AMHERST	MA	01002	ATKINS RESERVOIR
T-7 IS PART OF ZG-2		W D COWLS INC		P O BOX 9677	NORTH AMHERST	MA	01059	PRATT CORNER RD
T	8	GAGE, MARGARET R. ESTATE OF	C/O GAGE DAVID	95 READE ST	NEW YORK	NY	10013	SAND HILL RD
U	8	TOWN OF AMHERST		4 BOLTWOOD AVENUE	AMHERST	MA	01002	PRATT CORNER RD
ZT	3	TOWN OF AMHERST	ATKINS RESERVOIR	4 BOLTWOOD AVENUE	AMHERST	MA	01002	SAND HILL RD
ZT-4 IS PART OF ZT-3		TOWN OF AMHERST	ATKINS RESERVOIR	4 BOLTWOOD AVENUE	AMHERST	MA	01002	SAND HILL RD
ZU-12 IS PART OF ZU9		TOWN OF AMHERST	ATKINS RESERVOIR	4 BOLTWOOD AVENUE	AMHERST	MA	01002	SAND HILL RD
ZU	9	TOWN OF AMHERST	ATKINS RESERVOIR	4 BOLTWOOD AVENUE	AMHERST	MA	01002	SAND HILL RD

FOR: ERASME da CRUZ, CESSWI
BSC GROUP
1 MERCANTILE ST
WORCESTER MA 01608
806.452.9136
EDaCruz@bscgroup.com

Leslie Bracebridge, Assessors Clerk for
 David W. Burgess, Administrative Assessor
 Shutesbury Board of Assessors
 3/18/2024



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0\$3 7~ 6\$1' +, // 5' & 58 =)25 %6& *5283

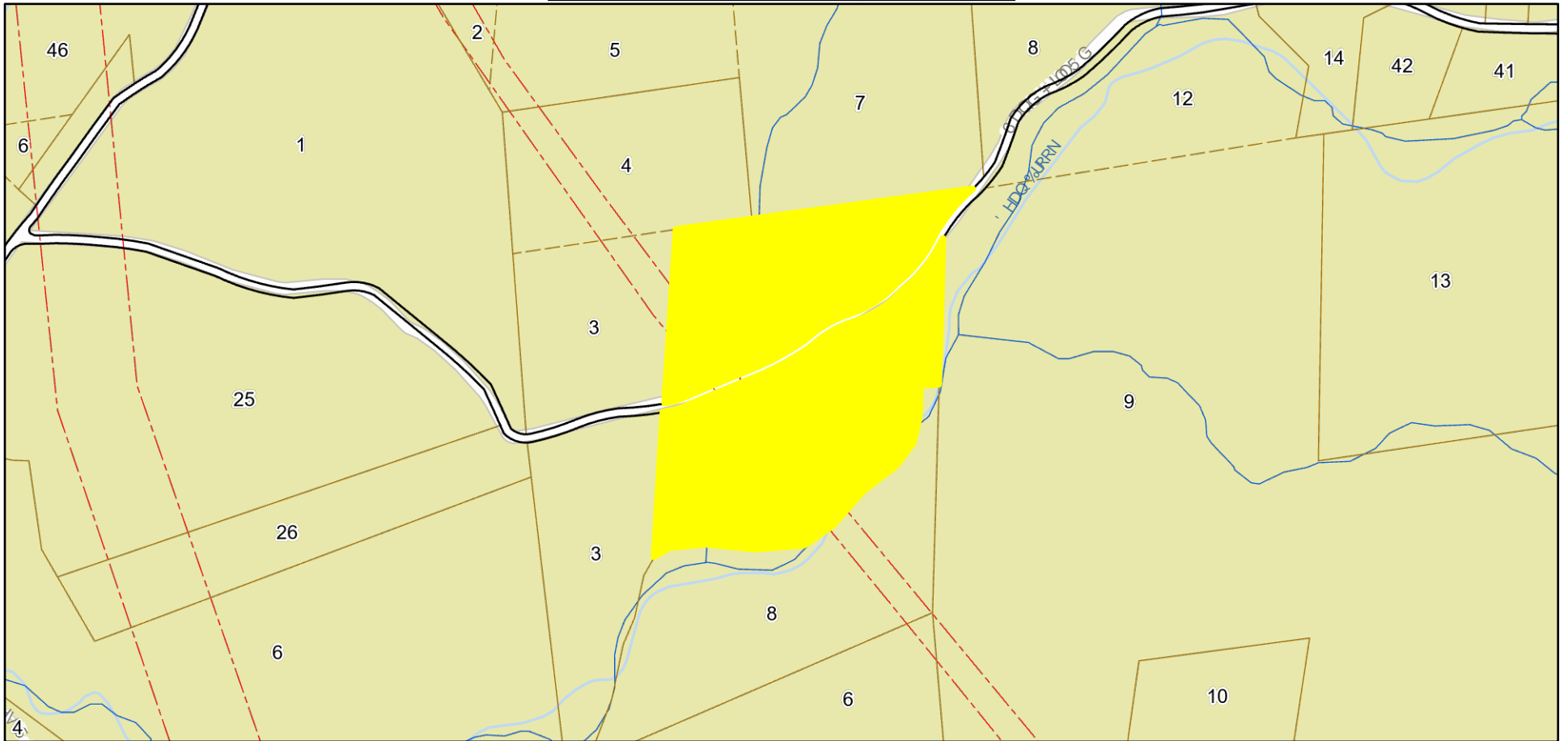
7RZQ RI 6KXWHVEXU\ 0\$

LQFK ~~~)HHW



0DUFK

ZZZ FDL WHFK



---	&RPPRQ /LQ 3XEOLF 5RDGDWHU/LQHV
---	3URSHUW\ /LQHWLQW\

'DWD VKRZQ RQ WKLV PDS LV SURYLGHG IRU SODQQLQJ DQG LQIRUPDWLRQDO SXUSRVHV RQ\ 7KH PXQLFLSDOLW\ DQG &\$, 7HFKQRORJLHV DU

TOWN OF SHUTESBURY CERTIFIED 100' ABUTTERS LIST FOR BSC GROUP, PRATT CORNER RD, MAP W PARCEL 44 OF MAP PARCEL ZW 6

MAP	LOT	OWNER	CO-OWNER	MAILING ADDRESS	TOWN	ST	ZIP	LOCATION
W-44		IS PA RT OF ZW-6 W D COWLS INC		P O BOX 9677	NORTH AMHERST	MA	01059	PRATT CORNER RD
T	126	PRATT CORNER REALTY TRUST	GULA STEPHEN & DIANE M TRUSTEES	480 PRATT CORNER RE	AMHERST	MA	01002	480 PRATT CORNER RD
W	54	NEW ENGLAND POWER COMPANY		40 SYLVAN RD	WALTHAM	MA	02451	PRATT CORNER RD
W	76	HARLOW JEANNE L TRUSTEE	The JEANNE L HARLOW IRREVOCABLE T	461 PRATT CORNER RC	AMHERST	MA	01002	461 PRATT CORNER RD
W	81	WOLF STEVEN C	WOLF MICHELE M	505 PRATT CORNER RE	AMHERST	MA	01002	505 PRATT CORNER RD
W-81		IS PA RT OF ZT-3 TOWN OF AMHERST	ATKINS RESERVOIR	4 BOLTWOOD AVENUE	AMHERST	MA	01002	SAND HILL RD
W-34		IS PA RT OF ZW-6 W D COWLS INC		P O BOX 9677	NORTH AMHERST	MA	01059	PRATT CORNER RD
W-37		IS PA RT OF ZW-6 W D COWLS INC		P O BOX 9677	NORTH AMHERST	MA	01059	PRATT CORNER RD
W-38		IS PA RT OF ZW-6 W D COWLS INC		P O BOX 9677	NORTH AMHERST	MA	01059	PRATT CORNER RD
W-42		IS PA RT OF ZW-6 W D COWLS INC		P O BOX 9677	NORTH AMHERST	MA	01059	PRATT CORNER RD
W-43		IS PA RT OF ZW-6 W D COWLS INC		P O BOX 9677	NORTH AMHERST	MA	01059	PRATT CORNER RD

FOR: ERASME da CRUZ, CESSWI
BSC GROUP
1 MERCANTILE ST
WORCESTER MA 01608
806.452.9136
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Leslie Bracebridge, Assessors Clerk for
 David W. Burgess, Administrative Assessor
 Shutesbury Board of Assessors
 3/18/2024

Attachment E

Central to Western MA Energy Improvement Project
E5/F6 Transmission Lines Soil Boring Program
Shutesbury, Massachusetts
Notice of Intent

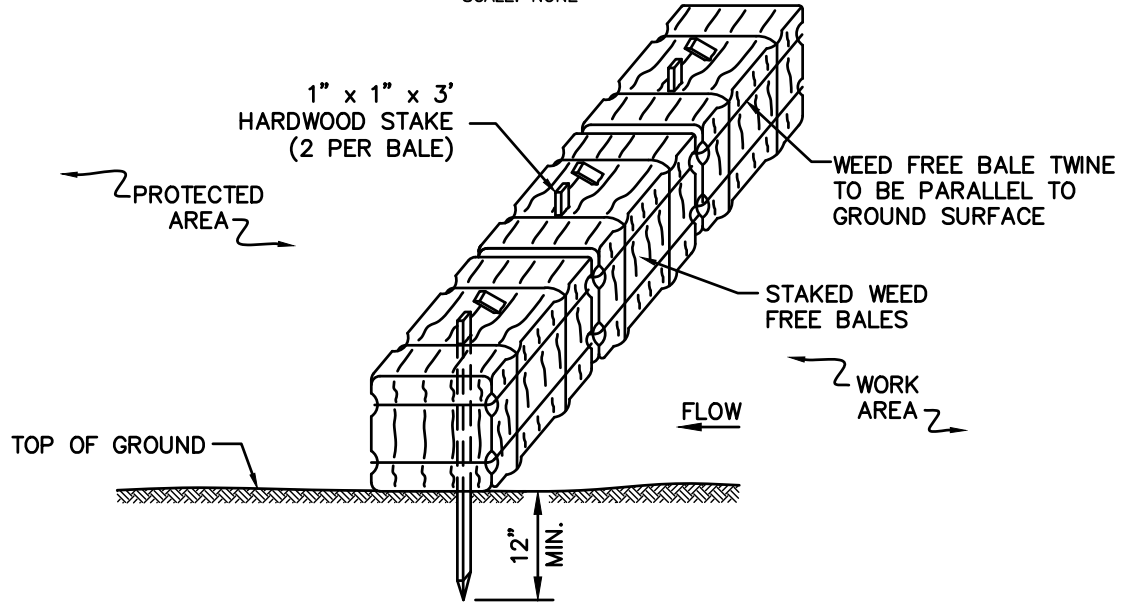
NATIONAL GRID'S BEST MANAGEMENT PRACTICES

SUBJECT
Access, Maintenance and Construction
Best Management Practices

Reference
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



NOTES:

1. THE GROUND SHALL BE PREPARED TO PROVIDE COMPLETE CONTACT WITH THE BALES.

BMP PICTURE



File: BALE_BARRIER.DWG

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SEC-1
WEED FREE BALE BARRIER

SUBJECT

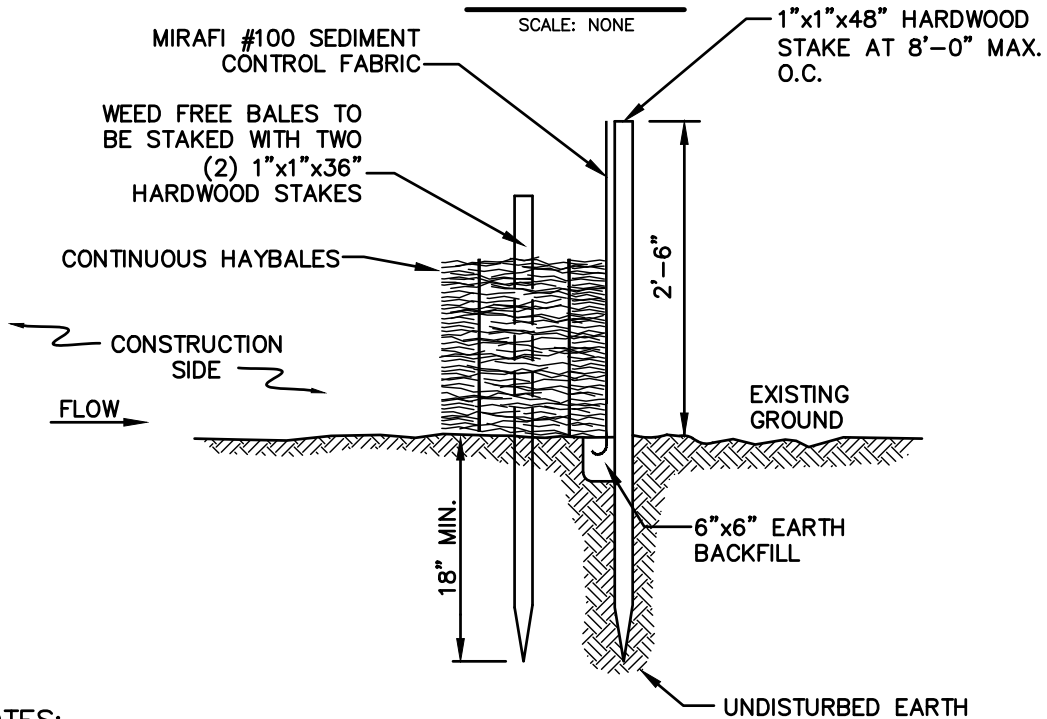
Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



NOTES:

1. BALES SHALL BE PLACED IN A ROW WITH THE ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. BALES SHALL BE SECURELY ANCHORED IN PLACE BY TWO (2) 1"x1"x36" HARDWOOD STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.
3. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
4. BALES SHALL BE REMOVED AND REPLACED WHEN THEY BECOME FILLED WITH SEDIMENT AND BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
5. BALES SHALL BE REMOVED WHEN THE EMBANKMENTS STABILIZE.
6. BALES TO BE TWINE BOUND.

BMP PICTURE



File: Silt_Fence_&_Barrier.dwg

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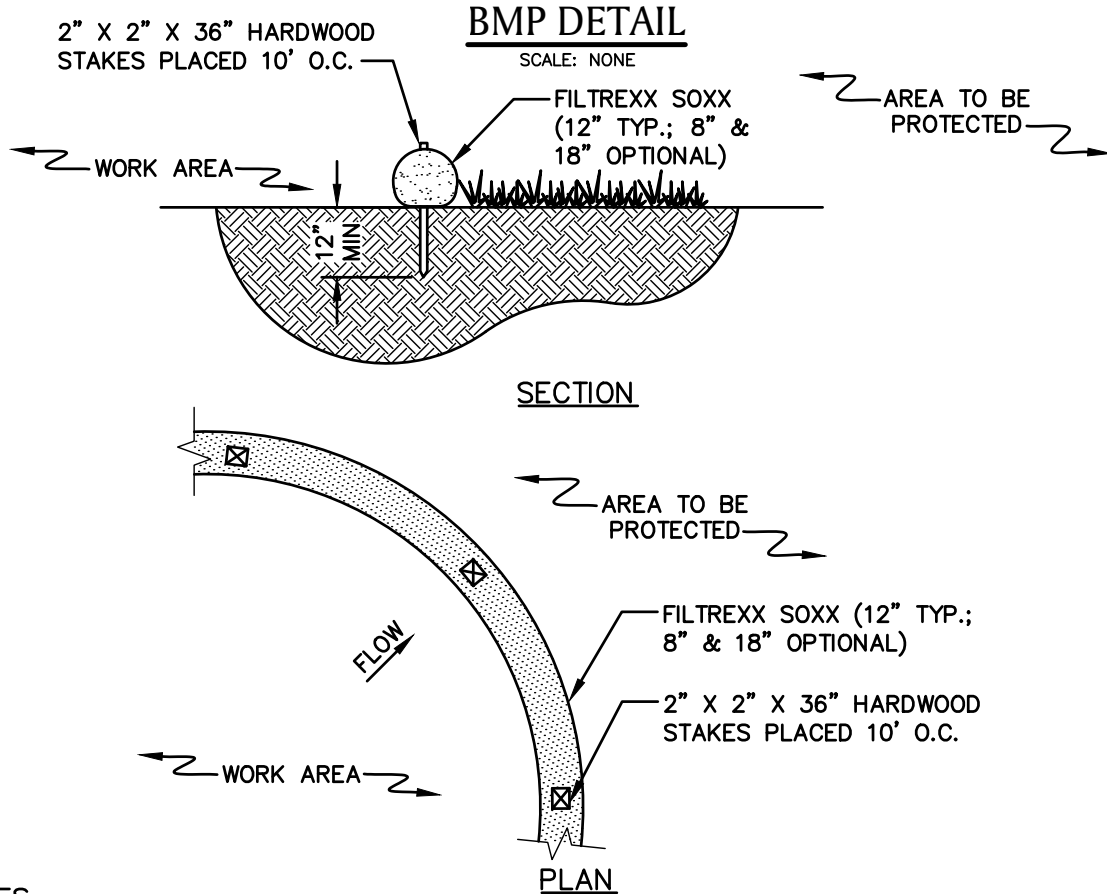
SEC-3
SILT FENCE /
WEED FREE BARRIER

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)



NOTES

1. PRODUCT TO BE FILTREXX SILT SOXX OR APPROVED EQUAL BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
2. ALL MATERIAL TO MEET FILTREXX SPECIFICATIONS.
3. FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
4. MESH CONTAINMENT MATERIAL SHOULD BE KNITTED PHOTODEGRADABLE OR BIODEGRADABLE MATERIAL, WITH OPENING SIZES BETWEEN 1/8" - 3/8".
5. COMPOST MEDIA SHOULD HAVE PARTICLE SIZE WHERE 99% < 2", 50% > 1/2".
6. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.

BMP PICTURE



* PICTURE AND DETAIL PROVIDED BY FILTREXX LAND IMPROVEMENT SYSTEMS
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SEC-4
SILT SOXX *

SUBJECT

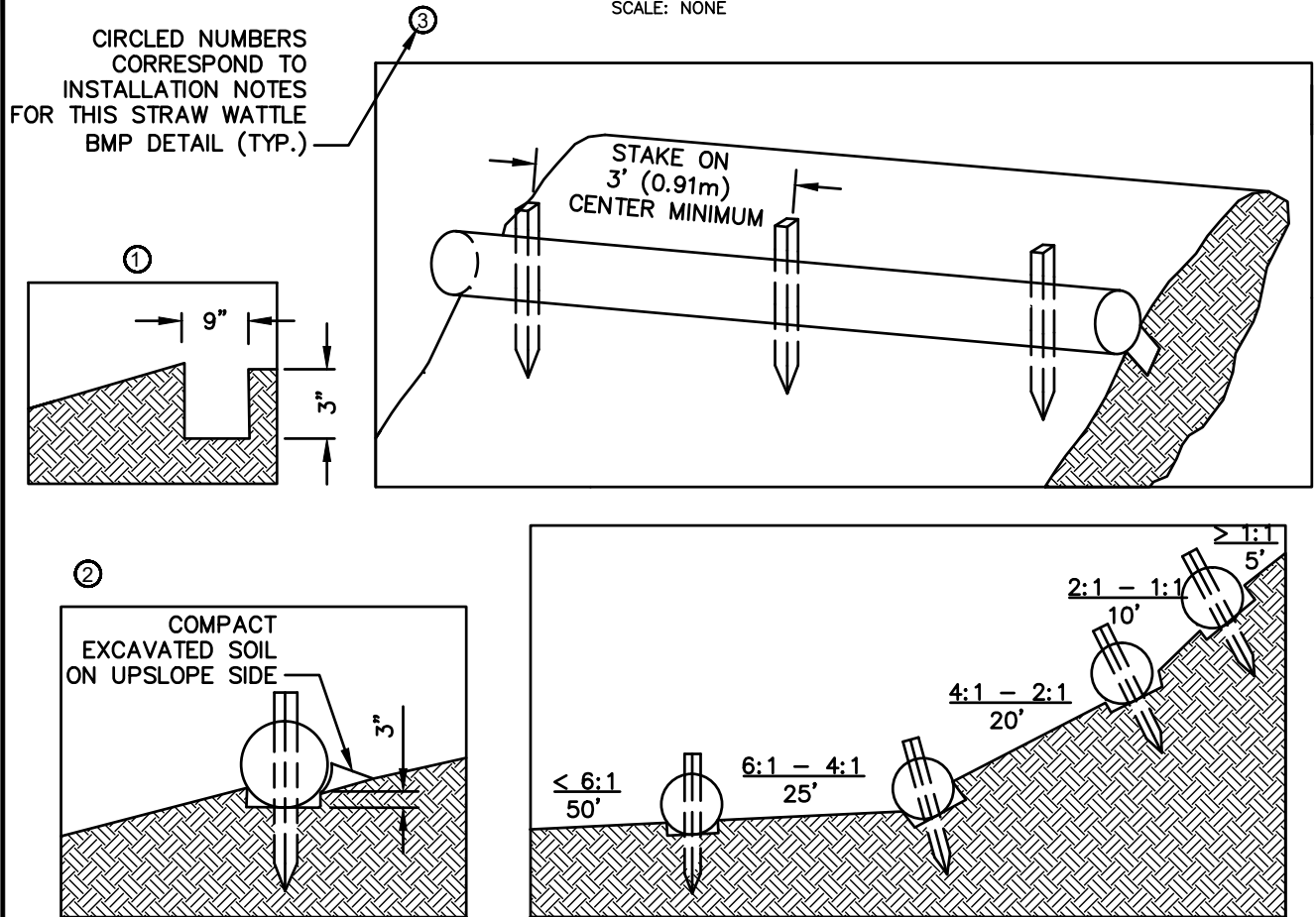
Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



TYPICAL WATTLE SPACING DETAIL

NOTES:

1. PRODUCT TO BE TENSAR NORTH AMERICAN GREEN STRAW WATTLE OR APPROVED EQUAL BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
2. TYPICAL WATTLE SPACING BASED ON SLOPE GRADIENT. COORDINATE SPACING AND LOCATION WITH NATIONAL GRID ENVIRONMENTAL SCIENTIST.
3. MINIMUM 12" DIAMETER WATTLES SHOULD BE USED FOR HIGHLY DISTURBED AREAS (I.E., HEAVILY USED ACCESS ROAD WITH ADJACENT WETLAND) AND MINIMUM 9-10" WATTLES SHOULD BE USED FOR LESS DISTURBED SOILS.

INSTALLATION NOTES:

1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2-3" DEEP X 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UPSLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD TIGHTLY ABUT.
3. SECURE THE WATTLE WITH 18-24" HARDWOOD STAKES EVERY 3-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKES SHOULD BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.

* DETAIL AND PICTURE PROVIDED BY TENSAR NORTH AMERICAN GREEN
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SEC-5
STRAW WATTLE * (1 OF 2)

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP PICTURE



**STRAW WATTLE – SHALLOW SLOPE ($\leq 4:1$)
(ALTERNATE STAKING)**

ALTERNATE STAKING INSTALLATION NOTES:

1. ON SHALLOW SLOPES ($\leq 4:1$), STRAW WATTLE MAY BE SECURED WITH 18–24” HARDWOOD STAKES DRIVEN AGAINST THE SIDES OF THE WATTLE INSTEAD OF THROUGH. STAKES SHALL ALTERNATE SIDES, AND BE SPACED 3–4’ MAX.
2. TWINE SHALL BE TIED FROM STAKE TO STAKE, CRISS–CROSSING THE STRAW WATTLE. TIE TWINE TO STAKES BELOW THE HEIGHT OF THE WATTLE.

*** DETAIL AND PICTURE PROVIDED BY TENSAR NORTH AMERICAN GREEN
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**SEC-5
STRAW WATTLE * (2 OF 2)**

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP

Definition

Applying coarse plant residue or chips, or other suitable materials, to cover the soil surface.

Purpose

The primary purpose is to provide initial erosion control while a seeding or shrub planting is establishing. Mulch will conserve moisture and modify the surface soil temperature and reduce fluctuation of both. Mulch will prevent soil surface crusting and aid in weed control. Mulch is also used alone for temporary stabilization in non-growing months.

Conditions Where Practice Applies

On soils subject to erosion and on new seedings and shrub plantings. Mulch is useful on soils with low infiltration rates by retarding runoff.

Criteria

Site preparation prior to mulching requires the installation of necessary erosion control or water management practices and drainage systems.

Slope, grade and smooth the site to fit needs of selected mulch products.

Remove all undesirable stones and other debris to meet the needs of the anticipated land use and maintenance required.

Apply mulch after soil amendments and planting is accomplished or simultaneously if hydroseeding is used.

Select appropriate mulch material and application rate or material needs. Determine local availability.

Select appropriate mulch anchoring material.

NOTE: The best combination for grass/legume establishment is straw (cereal grain) mulch applied at 2 ton/acre (90 lbs./1000sq.ft.) and anchored with wood fiber mulch (hydromulch) at 500 – 750 lbs./acre (11 – 17 lbs./1000 sq. ft.). The wood fiber mulch must be applied through a hydroseeder immediately after mulching.



NOTE:

1. PICTURE DEPICTS STRAW MULCH APPLICATION (FROM MULCH SPREADER) ON STEEP SLOPE WITH AN IMPROVED DRAINAGE SWALE.
2. COORDINATE MULCH MATERIALS AND RATES WITH NATIONAL GRID ENVIRONMENTAL SCIENTIST.

* BMP INFORMATION FROM "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AUGUST, 2005)." INFORMATION OBTAINED VIA WEBSITE: <http://www.dec.ny.gov/chemical/29086.html>
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SEC-9
MULCH MATERIALS, RATES AND USES (FROM NY) *

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

UPLAND ROW RESTORATION MIX – GENERAL

Species Composition Options:

- Andropogon gerardii; Niagra Big Bluestem
- Schizachyrium scoparium; Little Bluestem
- Elymus Canadensis; Canada Wild Rye
- Elymus virginicus; Virginia Wildrye
- Lolium multiflorum; Annual Ryegrass
- Sorghastrum nutans; Indiangrass
- Chamaecrista fasciculata; Partridge Pea
- Desmodium canadense; Showy Tick Trefoil
- Heliopsis helianthoides; Ox–Eye Sunflower
- Panicum virgatum; Switchgrass
- Rudbeckia hirta; Black Eyed Susan
- Poa palustris; Fowl Bluegrass
- Agrostis perennans; Upland Bentgrass
- Agrostis alba; Redtop
- Festuca rubra; Red Fescue
- Lotus corniculatus; Birds–Foot Trefoil
- Chrysanthemum leucanthem; Ox–Eye Daisy
- Aster novae–angliae; New England Aster

Example Seed Mixes:

1. Native Upland wildlife forage and Cover Meadow Mix – Ernst Conservation Seeds (ERNMX–123)
2. Eastern Ecotype Native Grass Mix– Ernst Conservation Seeds (ERNMX–177)
3. New England Native Warm Season Grass Mix – New England Wetland Plants, Inc.
4. New England Logging Road Mix – New England Wetland Plants, Inc.
5. Northeast Upland Wildflower/Restoration Erosion Mix – Southern Tier Consulting (STCMX–2)

UPLAND ROW RESTORATION MIX – DRY/ROCKY SITES

Species Composition Options:

- Festuca rubra; Red Fescue
- Schizachyrium scoparium; Little Bluestem
- Elymus Canadensis; Canada Wild Rye
- Bouteloua gracillis; Blue Grama
- Lolium multiflorum; Annual Ryegrass
- Lolium perenne; Perennial Ryegrass
- Agrostis scabra; Rough Bentgrass
- Agrostis perennans; Upland Bentgrass
- Sorghastrum nutans; Indiangrass

Example Seed Mixes:

1. New England Erosion Control/ Restoration Mix for Dry Sites – New England Wetland Plants, Inc.
2. Ernst Conservation Seeds and similar companies can create a custom seed mix matching the composition above (with site specific additions if necessary).

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

WETLAND ROW RESTORATION MIX

Species Composition Options:

- Agrostis stolonifera; Creeping Bentgrass
- Poa trivialis; Rough Bluegrass
- Alopecurus arundinaceus; Creeping Meadow Foxtail
- Lolium multiflorum; Annual Ryegrass
- Festuca rubra; Creeping Red Fescue
- Elymus virginicus; Virginia Wildrye
- Schizachyrium scoparium; Little Bluestem
- Andropogon gerardii; Niagra Big Bluestem
- Carex vulpinoidea; Fox sedge
- Panicum virgatum; Switchgrass
- Agrostis scabra; Rough Bentgrass
- Aster novae-angliae; New England Aster
- Eupatorium perfoliatum; Boneset
- Euthamia graminifolia; Grass Leaved Goldenrod
- Scirpus atrovirens; Green Bulrush
- Verbena hastata; Blue Vervain
- Juncus effusus; Soft Rush
- Scirpus cyperinus; Wool Grass
- Panicum clandestinum; Deertongue

Example Seed Mixes

1. New England Erosion Control/Restoration Mix for Detention Basins and Moist Sites – New England Wetland Plants, Inc.
2. Northeast Wetland Grass Seed Mix – Southern Tier Consulting (STCMX-7)
3. Ernst Conservation Seeds and similar companies can create a custom seed mix matching the composition above (with site specific additions if necessary).

GERNERAL NOTES:

1. Seed mixes described herein are intended to cover a variety of typical new england landscapes. However, site specific seed mixes will need to be evaluated in coastal or mountainous regions.
2. Seed mixes described herein are intended for general ROW restoration. Site specific wetland seed mixes may be required by local, state and/or federal regulators for certain impacts to wetlands.
3. All seed mixes are to be approved by National Grid Environmental Scientist prior to construction and must conform with all project permits.
4. Seedbed preparation and maintenance as well as temporary erosion and sediment controls are crucial to the establishment of newly seeded areas. Coordinate with National Grid Environmental Scientist on seed bed preparation and maintenance as well as temporary erosion and sediment controls prior to construction.

APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES

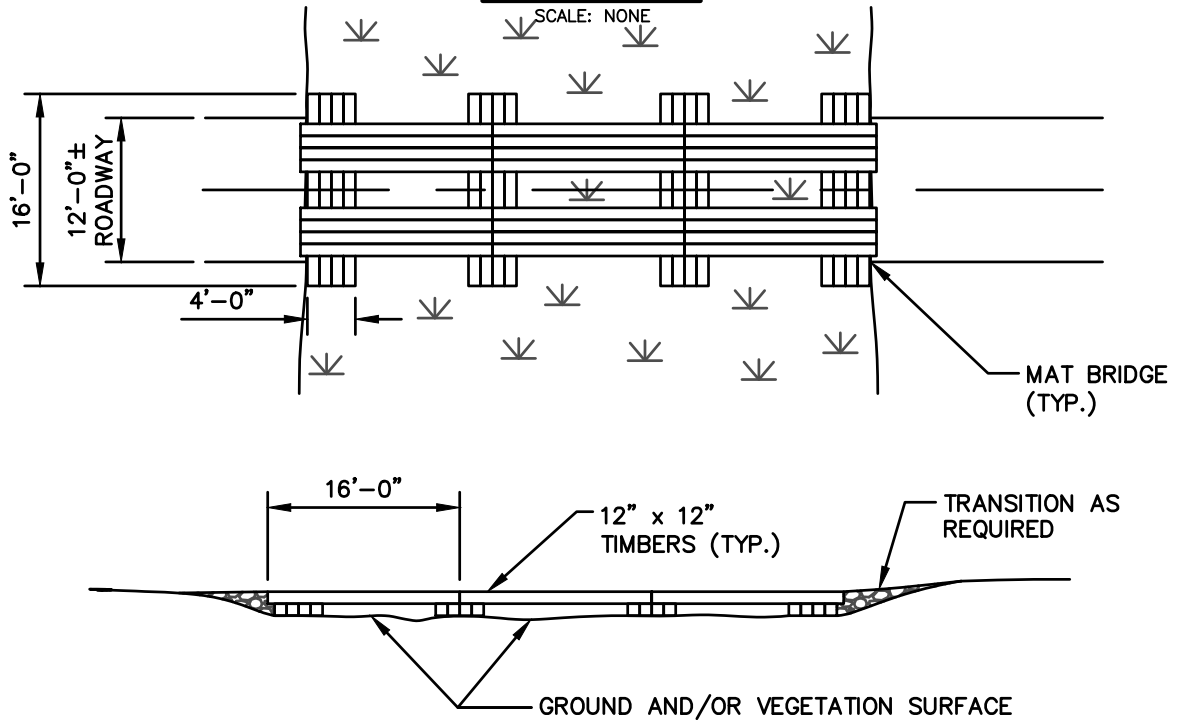
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SEC-11
SEEDING OPTIONS -
WETLAND SEED MIX

SUBJECT
Access, Maintenance and Construction
Best Management Practices

Reference
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL



NOTES:

1. IF MATS ARE INSTALLED IN A WETLAND AREA, INSTALL EROSION CONTROLS TO CONTAIN MATERIAL UTILIZED IN THE MAT TRANSITIONS.

BMP PICTURE



File: Mat_Bridge.dwg

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CM-2
CONSTRUCTION MAT BRIDGE
(1 OF 2)

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP PICTURE - SINGLE SPAN

SCALE: NONE



NOTES:

1. WHERE STREAM WIDTH ALLOWS, INSTALL CONSTRUCTION MATS TO SPAN THE WATERCOURSE IN ITS ENTIRETY WITHOUT STRINGER PLACEMENT IN THE WATER OR ANY RESTRICTION OF STREAM FLOW.
2. INSTALLATION OF THE CONSTRUCTION MAT BRIDGE SHALL NOT DAMAGE THE STREAM BED AND BANKS. WHERE POSSIBLE, FOOTERS SHALL BE PLACED PARALLEL TO THE TOP OF THE STREAM BANKS, WITH ACCESS MATTING PLACED ACROSS THE TOP OF THE STRINGERS DISTRIBUTING THE WEIGHT OF THE CONSTRUCTION EQUIPMENT.
3. AT STREAM CROSSINGS THAT CANNOT BE SPANNED BY A SINGLE SECTION OF CONSTRUCTION MATTING, AND WHERE PERMITS ALLOW, STRINGERS SHALL BE PLACED ATOP THE STREAM BED PARALLEL TO THE FLOW OF WATER.

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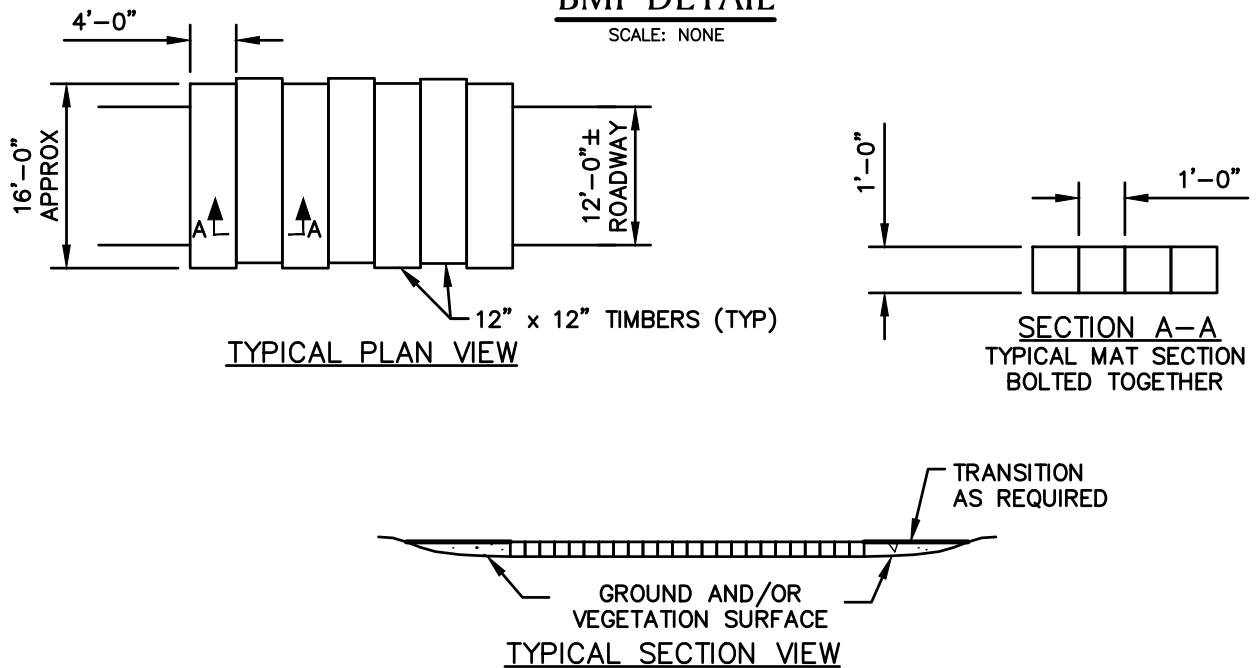
CM-2
CONSTRUCTION MAT BRIDGE
(2 OF 2)

SUBJECT
Access, Maintenance and Construction
Best Management Practices

Reference
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



NOTES:

1. TO BE INSTALLED IF NECESSARY TO PREVENT RUTTING, TO ACCESS STRUCTURES.
2. THIS DETAIL SHOWS TYPICAL DIMENSIONS. SOME CONTRACTOR'S CONSTRUCTION MATS ARE DIMENSIONALLY DIFFERENT FROM WHAT IS SHOWN HERE.
3. DEPENDENT ON SITE CONDITIONS, MULTIPLE LAYERS OF CONSTRUCTION MATS MAY BE INSTALLED.

BMP PICTURE



File: Swamp_Mat_Layout.dwg

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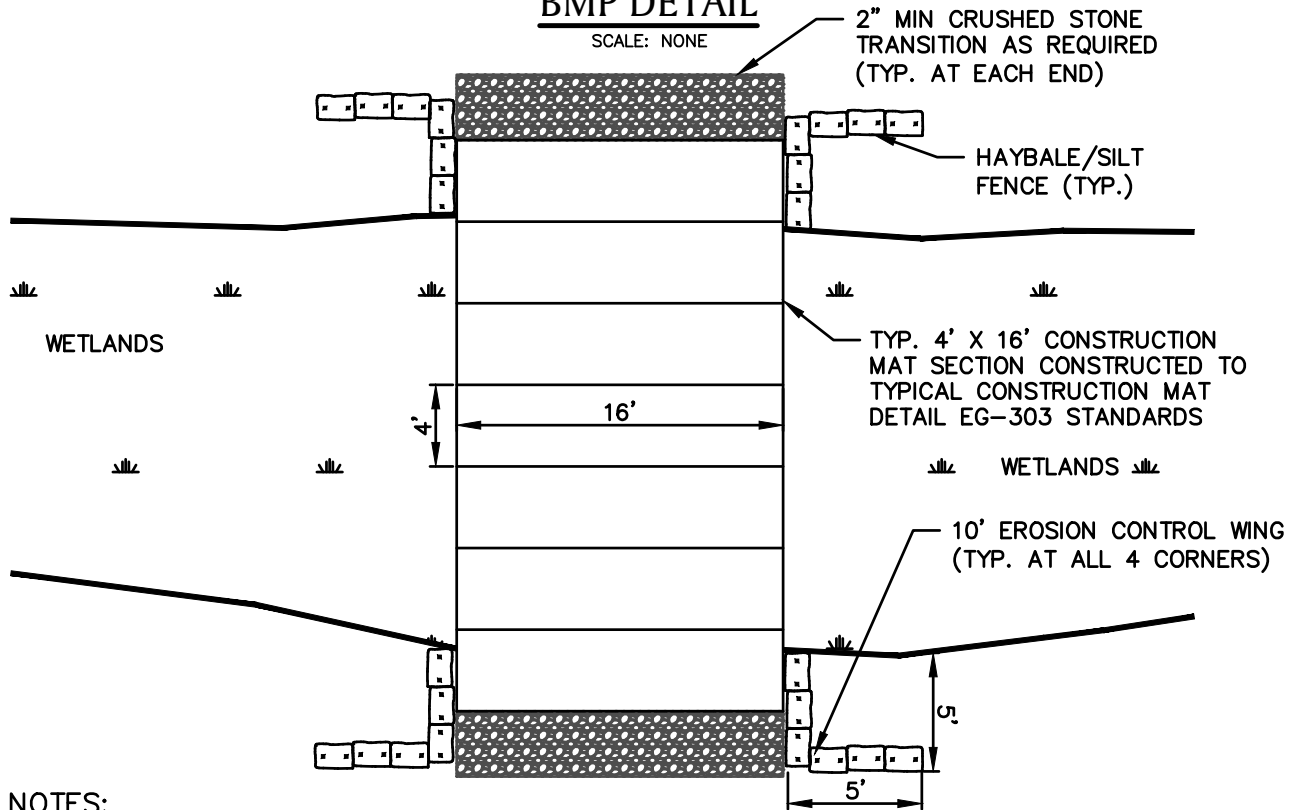
CM-3
CONSTRUCTION MAT LAYOUT
(WITH TRANSITION)

SUBJECT
Access, Maintenance and Construction
Best Management Practices

Reference
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



NOTES:

1. ADD FILTER FABRIC AS NEEDED UNDER STONE TRANSITION RAMPS.
2. ALL MEASUREMENTS AND LOCATIONS ARE APPROXIMATE.

BMP PICTURE



CM-4

**CONSTRUCTION MAT LAYOUT
(WITH TRANSITION AND BMPs)**

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SUBJECT

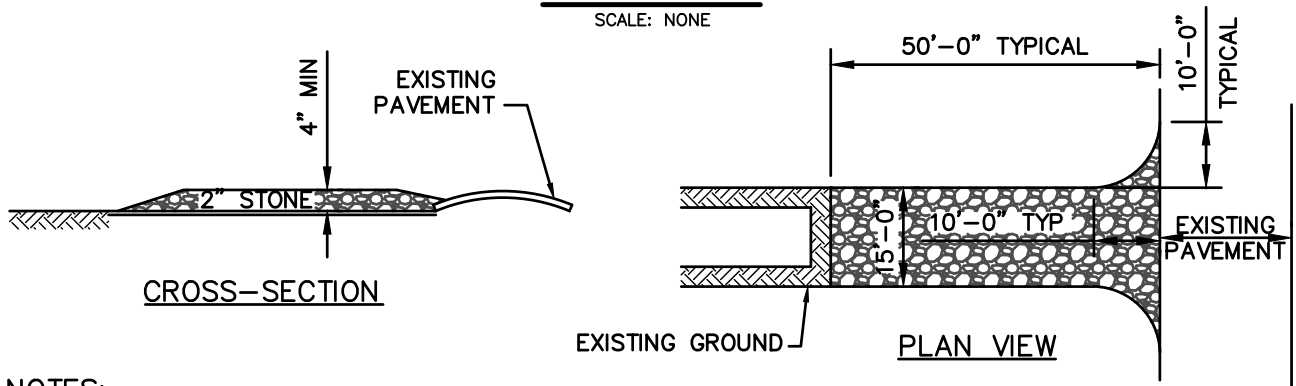
Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



NOTES:

1. STONE SIZE – USE 2" STONE (MINIMUM) TO 6" STONE (MAXIMUM)
2. LENGTH – GREATER THAN OR EQUAL TO 50 FEET
3. THICKNESS – 4"
4. WIDTH – FIFTEEN (15) FOOT TYP., BUT NOT LESS THAN FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS ENTRANCE. IF PIPING IS IMPRACTICAL, MOUNTABLE BERM SHALL BE PERMITTED.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
7. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED.
8. THE CLEAN STONE SHOULD BE INSTALLED OVER A GEOTEXTILE FABRIC. GEOTEXTILE FABRIC MAY BE OMITTED FOR PERMANENT CONSTRUCTION ENTRANCES/EXITS ON A CASE-BY-CASE BASIS WITH THE APPROVAL OF THE NATIONAL GRID ENVIRONMENTAL SCIENTIST.
9. FOLLOWING CONSTRUCTION, THE CONSTRUCTION ENTRANCE/EXIT SHALL BE REMOVED AND THE AREA GRADED, SEEDED, AND MULCHED AS NEEDED. ENTRANCE/EXITS MAY REMAIN DEPENDING UPON FUTURE ACCESS NEEDS AND/OR PROJECT-SPECIFIC APPROVALS BUT REQUIRES APPROVALS FROM THE NATIONAL GRID ENVIRONMENTAL SCIENTIST AND PROPERTY LEGAL.

BMP PICTURE



File: Temp_Construction_Ent.dwg

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CM-8
TEMPORARY CONSTRUCTION
ENTRANCE/ EXIT

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP PICTURE



NOTE:

1. PICTURE SHOWS VIEW OF ACCESS WAY STABILIZATION ADJACENT TO A WETLAND.
2. COORDINATE STABILIZATION DESIGN AND PRODUCT WITH NATIONAL GRID ENVIRONMENTAL SCIENTIST.

File: Access_Stabilization.dwg

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CM-10
ACCESS WAY STABILIZATION

SUBJECT

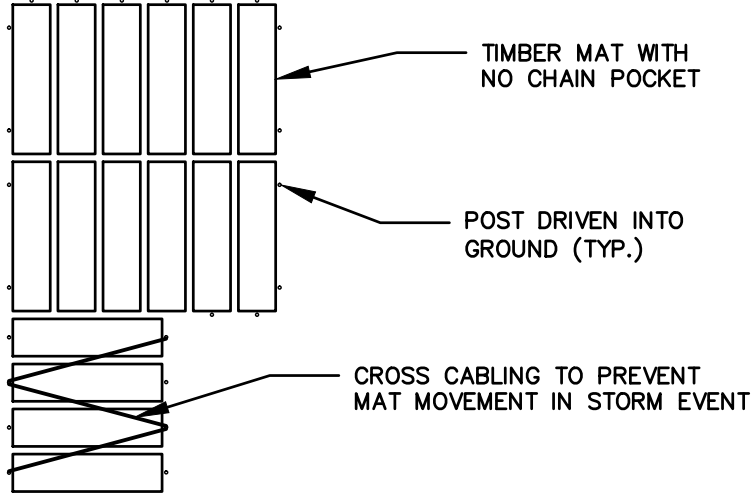
Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL 1

SCALE: NONE



TYPICAL PLAN VIEW

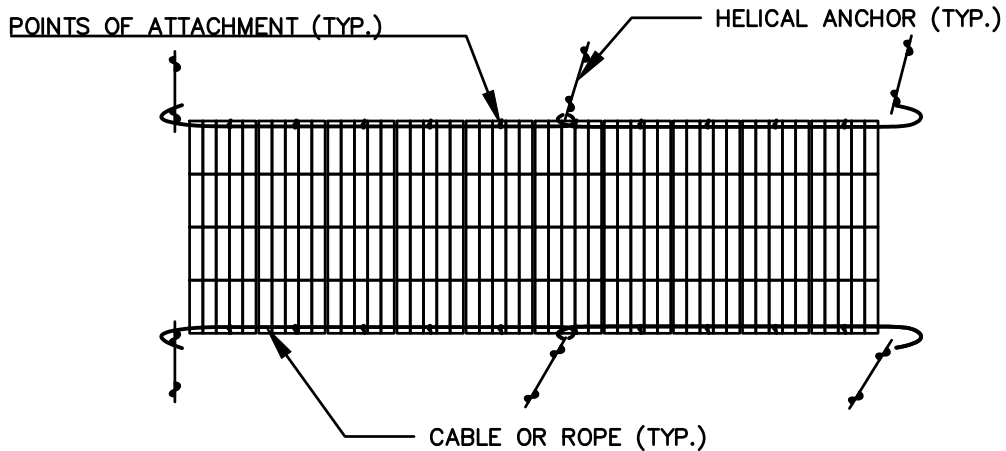
NOTES:

1. EXAMPLES OF ANCHORING ONLY. MATTING CONTRACTOR SHALL PROPOSE THE METHOD OF ANCHORING BASED ON FIELD CONDITIONS.
2. ANCHORING METHOD TO BE APPROVED BY THE NATIONAL GRID ENVIRONMENTAL SCIENTIST AND TRANSMISSION LINE CONSTRUCTION SUPERVISOR.

BMP DETAIL 2

NOTES:

1. TYPICAL HELICAL ANCHOR AND CABLE CONFIGURATION FOR MAT CONTAINMENT IN FLOODPLAINS/LAND SUBJECT TO FLOODING.
2. TYPICAL POINTS OF ATTACHMENT HEAVY STAPLES, EYE BOLTS OR OTHER SUITABLE HARDWARE TO SECURE ATTACHMENT OF MAT TO LINEAR CABLE. IF CHAIN POCKETS ARE PRESENT IN THE MATS CABLE OR ROPE CAN BE LOOPED THROUGH RODS.



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CM-12
EXAMPLE OF CONSTRUCTION MAT
ANCHORING (1 OF 2)

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP PICTURE 1



BMP PICTURE 2



File: Const_Mat_Anchoring.dwg

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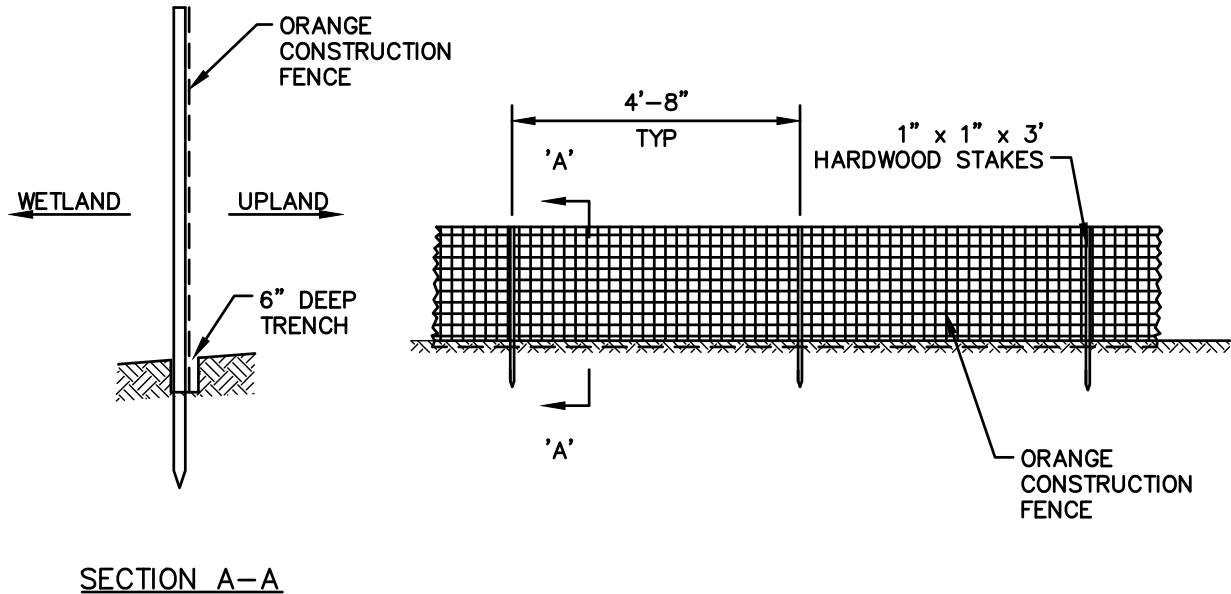
CM-12
**EXAMPLE OF CONSTRUCTION MAT
ANCHORING (2 OF 2)**

SUBJECT
Access, Maintenance and Construction
Best Management Practices

Reference
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



BMP PICTURE



File: Barrier_Fence.dwg

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AA-15
BARRIER FENCE
(CONSTRUCTION FENCE)

SUBJECT
Access, Maintenance and Construction
Best Management Practices

Reference
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP



Vegetative Cover – For disturbed areas not subject to traffic, vegetation provides the most practical method of dust control (see Section 3).

Mulch (including gravel mulch) – Mulch offers a fast effective means of controlling dust. This can also include rolled erosion control blankets.

Spray adhesives – These are products generally composed of polymers in a liquid or solid form that are mixed with water to form an emulsion that is sprayed on the soil surface with typical hydroseeding equipment. The mixing ratios and application rates will be in accordance with the manufacturer’s recommendations for the specific soils on the site. In no case should the application of these adhesives be made on wet soils or if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators and others working with the material.

B. Driving Areas – These areas utilize water, polymer emulsions, and barriers to prevent dust movement from the traffic surface into the air.

Sprinkling – The site may be sprayed with water until the surface is wet. This is especially effective on haul roads and access routes.

Polymer Additives – These polymers are mixed with water and applied to the driving surface by a water truck with a gravity feed drip bar, spray bar or automated distributor truck. The mixing ratios and application rates will be in accordance with the manufacturer’s recommendations. Incorporation of the emulsion into the soil will be done to the appropriate depth based on expected traffic. Compaction after incorporation will be by vibratory roller to a minimum of 95%. The prepared surface shall be moist and no application of the polymer will be made if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators working with the material.

Barriers – Woven geotextiles can be placed on the driving surface to effectively reduce dust throw and particle migration on haul roads. Stone can also be used for construction roads for effective dust control.

Windbreak – A silt fence or similar barrier can control air currents at intervals equal to ten times the barrier height. Preserve existing wind barrier vegetation as much as practical.

Definition

The control of dust resulting from land-disturbing activities.

Purpose

To prevent surface and air movement of dust from disturbed soil surfaces that may cause off-site damage, health hazards, and traffic safety problems.

Conditions Where Practice Applies

On construction roads, access points, and other disturbed areas subject to surface dust movement and dust blowing where off-site damage may occur if dust is not controlled.

Design Criteria

Construction operations should be scheduled to minimize the amount of area disturbed at one time. Buffer areas of vegetation should be left where practical. Temporary or permanent stabilization measures shall be installed. No specific design criteria is given; see construction specifications below for common methods of dust control.

Water quality must be considered when materials are selected for dust control. Where there is a potential for the material to wash off to a stream, ingredient information must be provided to the local permitting authority.

Construction Specifications

A. Non-driving Areas – These areas use products and materials applied or placed on soil surfaces to prevent airborne migration of soil particles.

* **BMP INFORMATION FROM "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL (AUGUST, 2005)." INFORMATION OBTAINED VIA WEBSITE: <http://www.dec.ny.gov/chemical/29086.html> APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES PRINTED COPIES ARE NOT DOCUMENT CONTROLLED. FOR LATEST AUTHORIZED VERSION PLEASE REFER TO THE NATIONAL GRID ENVIRONMENTAL INFONET SITE.**

SUBJECT

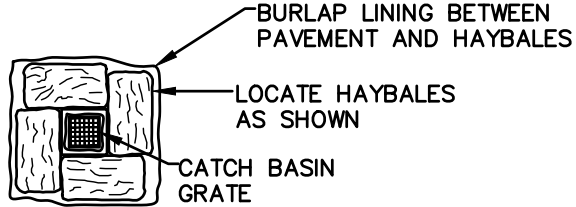
Access, Maintenance and Construction
Best Management Practices

Reference

EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



TIE HAYBALES TOP &
BOTTOM WITH 14
GAUGE WIRE



NOTES:

1. SURROUND STREET DRAINAGE STRUCTURE INLET WITH HAY BALES PRIOR TO CONSTRUCTION AND MAINTAIN UNTIL CONSTRUCTION IS COMPLETED. ACCUMULATED SEDIMENTS SHALL BE REMOVED.
2. HAYBALES PLACED ON PAVEMENT SHALL HAVE BURLAP PLACED BETWEEN PAVEMENT AND HAYBALE

BMP PICTURE



File: CB_Inlet_Protection.dwg

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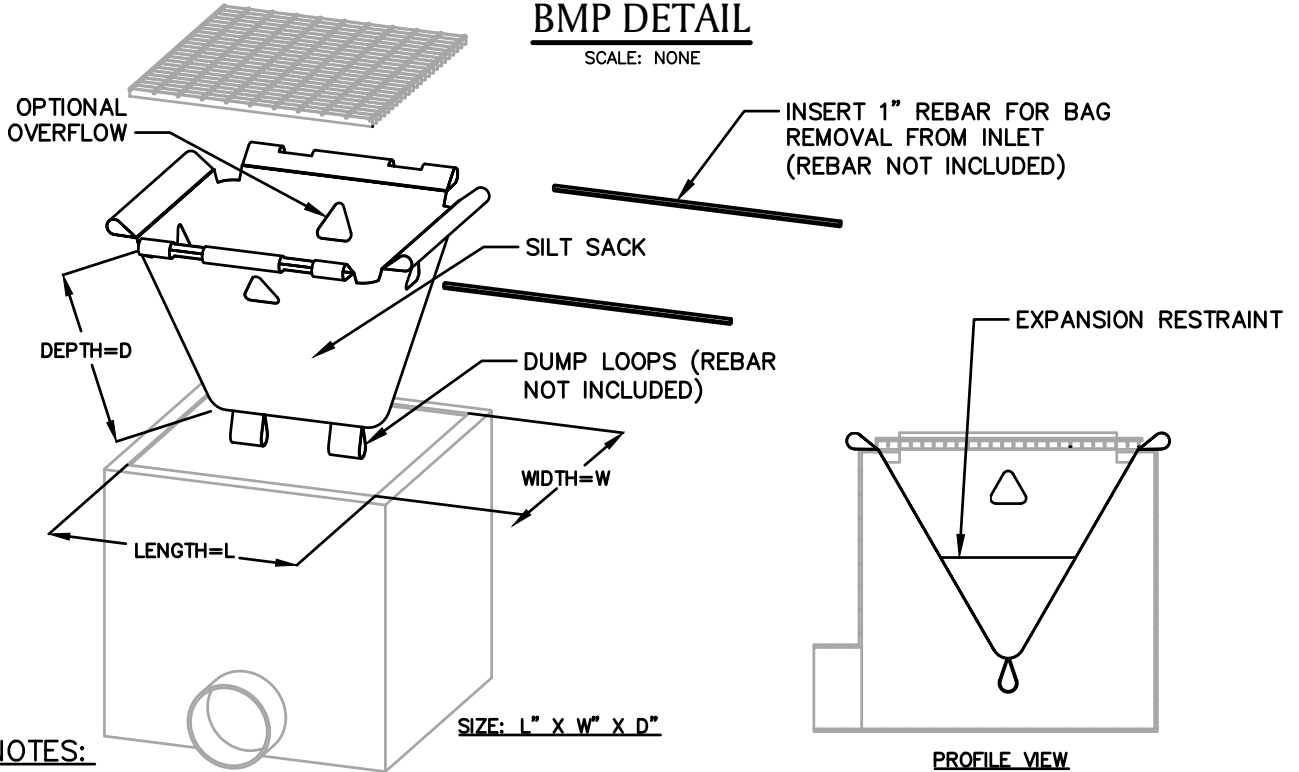
AA-19
CATCH BASIN INLET PROTECTION

SUBJECT
Access, Maintenance and Construction
Best Management Practices

Reference
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

SCALE: NONE



NOTES:

1. PRODUCT TO BE SILT SACK OR APPROVED EQUAL BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
2. THE USE OF A SILT SACK OPTIONAL OVERFLOW AND OVERALL DIMENSIONS ARE TO BE COORDINATED WITH A NATIONAL GRID ENVIRONMENTAL SCIENTIST.

BMP PICTURE



* DETAIL PROVIDED BY ACF ENVIRONMENTAL
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AA-20
 SILT SACK *