

November 22, 2021

Ayer Conservation Commission
Attn: Jon Schmalenberger
Ayer Town Hall
1 Main Street
Ayer, MA 01432

RE: Notice of Intent
337/K137E & L138E Line Geotechnical Soil Borings Project
Ayer, Massachusetts
New England Power Company

Dear Members of the Ayer 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 337/K137E/L138E Transmission Line Right-of-Way (“ROW”) in Ayer, MA (The Project). This NOI is being submitted in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch.131, S.40) (“WPA”), its implementing regulations (310 CMR 10.00), and the Town of Ayer Wetlands Protection Bylaws and Regulations. The proposed borings are necessary for planning and design of future utility maintenance work.

The exploratory borings at Structures 2, 3 and 4 require a temporary crossing within Bordering Vegetated Wetlands (“BVWs”). Construction mats or the use of low-ground pressure (“LPG”) equipment will be required for access through BVWs. Structure 4 is also located within Natural Heritage and Endangered Species Program (“NHESP”) Priority & Estimated Habitat of Rare Species. This filing is a request for approval at these locations under the WPA and the Town of Ayer Wetlands Protection Bylaw.

Additional exploratory borings are proposed within the 100-foot Buffer Zone to BVW and NHESP Priority & Estimated Habitat of Rare species at Structures 8, 9 and 10. While these borings are exempt from the WPA (10.02(2)(b)(2)(g)) which allows for “activities that are temporary in nature, have negligible impacts, and are necessary for planning and design purposes.... provided that resource areas are not crossed for site access”, the Town of Ayer Wetlands Protection Bylaw does not specifically acknowledge the minor buffer zone exemptions in the WPA. Therefore, this filing is a request for approval at these locations under the Town of Ayer Wetlands Protection Bylaw only.

One soil boring will be conducted at each structure. Each soil boring is approximately four (4) to six (6) inches in diameter, resulting in approximately one (1) square foot of temporary impact per boring. In total, approximately 3 square feet of temporary impacts are proposed within 100-ft Buffer Zone. Any excess soils resulting from the exploratory boring activities will be backfilled into the same boring location. Existing and historically used access routes within the ROW off Bryan Way in Ayer and Great Road in Littleton will serve as the primary means of access. Since access to boring locations will require temporary wetland crossing, approximately 646 square feet of construction mats leading up to the boring sites may be necessary to complete the work. Alternatively, LGP equipment may be used.

33 Waldo Street
Worcester, MA 01608

Tel: 508-792-4500
800-288-8123

www.bscgroup.com

Engineers

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Best Management Practices (“BMPs”), including sediment and erosion controls, will be implemented to ensure adjacent resource areas are adequately protected and impacts to the surrounding areas are reduced. Upon completion of the Project activities, all temporarily disturbed areas will be restored to pre-existing conditions to the maximum extent practicable.

The soil borings are necessary for engineering design and construction planning of future work. NEP does not anticipate any adverse impacts to wetland resource areas. Construction mats associated with utility projects are regulated by the Comprehensive Water Quality Certification (“CWQC”) between National Grid and the Massachusetts Department of Environmental Protection (“MassDEP”) under the 401 Water Quality Certification Program. As such, and as requested by MassDEP, construction mats are not included in the attached WPA Form 3. The approximate square footage of temporary impacts associated with construction matting are however included for reference within the cover letter and narrative.

We respectfully request that this matter be heard at the next scheduled Conservation Commission hearing. A copy of this application has also been sent to the Northeast Regional Office of the Department of Environmental Protection. If you have any questions regarding the enclosed information, please contact me at (401) 742-0487 or Andrew Cole of National Grid at (508) 948-9376. Thank you for your consideration in this matter.

Truly yours,
BSC Group, Inc.

Project Manager

cc: Andrew Cole, National Grid
MassDEP Northeast Regional Office

Enclosures:

WPA Form 3 – Notice of Intent, NOI Fee Transmittal Form, and Copy of Filing Fee Checks

Attachment A Project Narrative

Attachment B USGS Site Locus Map, Environmental Resources Map

Attachment C Site Photographs

Attachment D Abutters Notification Letter and Certified List of Abutters

Attachment E National Grid’s Best Management Practices Manual (EG-303)

NEW ENGLAND POWER COMPANY

337/K137E & L138E Lines

Soil Borings

Notice of Intent

**Town of Ayer
Conservation Commission
November 2021**

Prepared for:

New England Power Company (NEP)
40 Sylvan Road
Waltham, MA 02451

BSC Project No. 89599.02

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337/K137E & L138E Lines
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Notice of Intent
Ayer, Massachusetts

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ATTACHMENT A	PROJECT NARRATIVE
ATTACHMENT B	USGS SITE LOCUS MAP ENVIRONMENTAL RESOURCE MAP
ATTACHMENT C	SITE PHOTOGRAPHS
ATTACHMENT D	CERTIFIED LIST OF ABUTTERS ABUTTERS NOTIFICATION LETTER AFFIDAVIT OF SERVICE
ATTACHMENT E	NATIONAL GRID'S BEST MANAGEMENT PRACTICES



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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Provided by MassDEP:

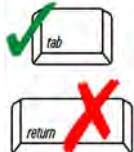
MassDEP File Number

Document Transaction Number

Ayer

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>K137/L138 & 337 Transmission lines ROW</u>	<u>Ayer</u>	<u>01432</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	<u>From: 42.567430</u>	<u>From: -71.529893</u>
<u>Various - see mapping</u>	<u>To: 42.568207</u>	<u>To: -71.513409</u>
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Andrew</u>	<u>Cole</u>	
a. First Name	b. Last Name	
<u>New England Power Company (NEP)</u>		
c. Organization		
<u>40 Sylvan Road</u>		
d. Street Address		
<u>Waltham</u>	<u>MA</u>	<u>02451</u>
e. City/Town	f. State	g. Zip Code
<u>781.907.4768</u>	<u>Andrew.Cole@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

<u></u>	<u></u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Street Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Alison</u>	<u>Milliman</u>	
a. First Name	b. Last Name	
<u>BSC Group, Inc.</u>		
c. Company		
<u>PO Box 60658</u>		
d. Street Address		
<u>Worcester</u>	<u>MA</u>	<u>01606</u>
e. City/Town	f. State	g. Zip Code
<u>(617) 896-4532</u>	<u>amilliman@bscgroup.com</u>	
h. Phone Number	i. Fax Number	j. Email address

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

<u>\$500</u>	<u>\$237.50</u>	<u>\$262.50</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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A. General Information (continued)

6. General Project Description:

NEP is proposing to conduct exploratory soil borings and access for planning and design purposes associated with future utility work on the K137/L138 and 337 Transmission Lines. Borings will take place within 100-ft Buffer Zone to Bordering Vegetated Wetland (BVW) and NHESP Priority Habitat Areas. Access will also be required through BVWs.

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 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:

Middlesex South	_____	_____
a. County		b. Certificate # (if registered land)
Easement rights	_____	_____
c. Book		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	0 (covered under CWQC) 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 type="checkbox"/> Riverfront Area	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: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.
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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. <input type="checkbox"/> 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. <input type="checkbox"/> 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

- 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**

- 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*

- Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage
- Assessor's Map or right-of-way plan of site

- 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 - Cohasset to Rhode Island border, and
the Cape & Islands:

North Shore - Hull 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)

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

- 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.



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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.

<u>Environmental Resources Map</u>	
a. Plan Title	
<u>BSC Group, Inc.</u>	<u>N.A</u>
b. Prepared By	c. Signed and Stamped by
<u>11/19/2021</u>	<u>1" = 100'</u>
d. Final Revision Date	e. Scale
<u>USGS Locus Map</u>	<u>10/20/21</u>
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:

<u>34442</u>	<u>10/28/2021</u>
2. Municipal Check Number	3. Check date
<u>eDEP online payment</u>	
4. State Check Number	5. Check date
<u>BSC Companies, Inc.</u>	
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.

	11/23/2021
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
	11/23/2021
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:

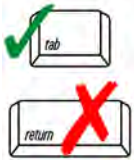
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

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.



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 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

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



A. Applicant Information

1. Location of Project:

K137/L138 & 337 Transmission lines ROW Ayer
 a. Street Address b. City/Town
eDEP online payment \$237.50
 c. Check number d. Fee amount

2. Applicant Mailing Address:

Alison Milliman
 a. First Name b. Last Name
BSC Group, Inc.
 c. Organization
PO Box 60658
 d. Mailing Address
Worcester MA 01606
 e. City/Town f. State g. Zip Code
(617) 896-4532 amilliman@bscgroup.com
 h. Phone Number i. Fax Number j. Email Address

3. Property Owner (if different):

NEP has easement rights
 a. First Name b. Last Name

 c. Organization

 d. Mailing Address

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

 h. Phone Number i. Fax Number j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2(e)	1	\$500	\$500
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Step 5/Total Project Fee: \$500

Step 6/Fee Payments:

Total Project Fee:	\$500
State share of filing Fee:	\$262.50
City/Town share of filing Fee:	\$287.50
	a. Total Fee from Step 5
	b. 1/2 Total Fee less \$12.50
	c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

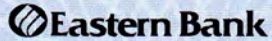
- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

34442



Boston, MA 02110
easternbank.com
1-800-EASTERN

Check No. 34442



BSC COMPANIES, INC.

803 SUMMER STREET
BOSTON, MA 02127

53-179/113

Two Hundred Sixty Two and 50/100 Dollars

DATE

AMOUNT

10/28/2021

\$262.50

PAY
TO THE
ORDER
OF

Town of Ayer
Ayer Conservation Commission
Town Hall
1 Main Street
Ayer, MA 01432

TWO SIGNATURES REQUIRED OVER \$2,500



Jan J. [Signature]
NOT VALID AFTER 180 DAYS
AUTHORIZED SIGNATURE



⑈034442⑈ +⑈011301798⑈ 0600659304⑈

Security features. Details on back.

Attachment A

337/K137E & L138E Lines
Soil Borings
Notice of Intent
Ayer, Massachusetts

PROJECT NARRATIVE

1.0 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 K137, L138 & 337 Transmission Lines Right-of-Way (ROW) in Ayer, Massachusetts (the Project). This NOI is being submitted in accordance with the Massachusetts Wetlands Protection Act (M.G.L. Ch.131, S.40) (WPA), its implementing regulations (310 CMR 10.00), and the Town of Ayer General Bylaws: Wetland Protection Article, and Regulations for Administering the town of Ayer Wetland Bylaw (the “Ayer Wetland Bylaw”).

Exploratory soil borings are proposed at ten (10) Structures on the 337/K137E/L138E Transmission Line ROW, of which three (3) are within areas subject to Conservation Commission jurisdiction. This section of the ROW is located between the Sandy Pond Substation (west of Bryan Way), and the Ayer/Littleton Town Line (west of Great Rd, Littleton). Exploratory borings at Structures 2, 3 and 4 require a temporary crossing within Bordering Vegetated Wetland (BVW). Construction mats or the use of low ground pressure (LGP) equipment will be required for access through BVW to conduct soil boring activities at these Structures. In addition, soil borings at Structures 4, 9 and 10 are located within 100-ft Buffer Zone to BVW. These borings may be considered an exempt minor activity, in accordance with WPA (10.02(2)(b)(2)(g)), and the Ayer Wetland Bylaw (Section 4.C). Each soil boring will be approximately four (4) to six (6) inches in diameter, resulting in approximately 1 square foot (sf) of temporary impact per boring (3 sf in total). Any excess soils resulting from the exploratory boring activities will be backfilled into the same boring location.

The Environmental Resource Map (**Attachment B**), outlines existing and historically used access roads, which will be used to access the soil boring locations from Bryan Way (Ayer) and Great Rd (Littleton). NEP is proposing a cumulative temporary impact of 3 sf associated with soil boring activities. In order to access soil boring locations across BVW, approximately 646 sf of construction mats may be required to complete the work. Additional Best Management Practices (“BMPs”), including sediment and erosion controls, will be implemented to ensure the protection of resource areas. Upon completion of Project activities, all temporarily disturbed areas will be restored to pre-existing conditions to the maximum extent practicable.

While this Project qualifies as a Limited Project in accordance with the WPA regulations (310 CMR 10.53(3)(d)), and Ayer Wetland Bylaw (Section 4.A), the Project has been designed to meet the performance standards of the WPA and Ayer Bylaw as far as practicably possible, as outlined in Section 4 of this narrative. However, due to the location of existing transmission line infrastructure, it is not entirely possible to avoid all impacts within resource areas and the locally-regulated 50-ft No Disturbance Zone. As such, and in conformance with the Regulations for Administering the town of Ayer Wetland Bylaw (Section 3 Waivers), NEP respectfully requests a waiver from the requirements for the 50-ft No Disturbance Zone.

Due to the nature and purpose of the proposed activities, there are no practicable alternatives to the Project. However, no adverse impacts to wetland resource areas or values protected by the WPA or the Ayer Bylaw are anticipated. Construction mats associated with utility projects are regulated by the Comprehensive Water Quality Certification for Utility Maintenance (Transmittal #X272791), between National Grid and the Massachusetts Department of Environmental Protection (“MassDEP”), which provides permit coverage under the 401 Water Quality

Certification Program. As such, and as requested by MassDEP, construction mats are not included in the attached WPA Form 3. However, NEP understands construction mats may be regulated under the Ayer Bylaw. Therefore, the approximate square footage of temporary impacts is included for reference within the cover letter and narrative.

2.0 EXISTING CONDITIONS

The 337/K137E/L138E Transmission Line ROW is generally oriented west to east 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 available mapping), and wetland field delineations, to confirm wetland boundaries within the ROW. Wetland delineations were conducted in April 2020, in accordance with the methodology described in the MassDEP *Handbook on Delineating Bordering Vegetated Wetlands* (Published in March 1995).

Existing conditions, wetland resource areas, and buffer zones, in relation to the proposed activities, are shown on the Environmental Resources Map in **Attachment B**. Soil boring activities are proposed within the 100-ft Buffer Zone to BVW, and NHESP Priority/Estimated Habitat Areas. Access to soil boring locations will require crossing BVW and the 50-ft No Disturbance Zone to BVW.

2.2 Other Resource Areas

No other resource areas were identified within or near the Project area, including; Certified Vernal Pools, Riverfront Area, Areas of Critical Environmental Concern (ACEC), Outstanding Resource Waters (ORW), or Zone II Wellhead Protection Areas. Bordering Land Subject to Flooding (BLSF) is located in proximity to the soil boring at Structure 9, but outside of the limit of disturbance.

3.0 PROJECT ACTIVITIES AND ANTICIPATED IMPACTS

The Project will consist of exploratory soil borings at Structures 1-10 on the 337 Line. The purpose of the borings is to evaluate subsurface conditions for foundation design associated with the future replacement of these structures. Soil borings are temporary in nature, and at the conclusion of work, the area will be restored to the furthest extent practicable. Existing and historically used access roads within the ROW will serve as the primary means of access to the work areas. A small track-mounted drill rig will be used to perform the soil borings. Each boring hole will be approximately four (4) to six (6) inches in diameter. Erosion and sedimentation controls will be used, as discussed in Section 6.0 of this narrative, to ensure wetland areas are protected.

4.0 CONFORMANCE WITH PERFORMANCE STANDARDS OF THE WPA

The proposed activities meet the performance standards of the WPA at 310 CMR 10.55(4). Due to the nature and purpose of the proposed activities, there are no practicable alternatives to the Project. However, no significant adverse impacts on wetland resource areas or values protected by the WPA are anticipated. Three square feet of *temporary* impacts only are proposed within Buffer Zones, and BMPs will be implemented to protect resource areas. Following the completion of work, temporarily disturbed areas will be restored the pre-existing conditions, as required for Limited Projects by the WPA regulations (310 CMR 10.53(3)(d)).

Portions of the Project are located within areas of NHESP Priority/Estimated Habitat. However, the proposed activities are exempt from Massachusetts Endangered Species Act (MESA) review under 321 CMR 10.04(14). Notwithstanding this exemption, 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.” The work will be performed (to the maximum practicable extent) per the conditions and best management practices of the established Operation and Maintenance Plan (O&M Plan) which National Grid and the NHESP have agreed to.

5.0 CONFORMANCE WITH PERFORMANCE STANDARDS OF THE AYER WETLAND PROTECTION BYLAW AND REGULATIONS

Due to the nature and purpose of the proposed activities, there are no practicable alternatives to the Project. However, no significant adverse impacts to wetland resource areas or values protected by the Ayer Bylaw are anticipated. The project will result in three (3) square feet of *temporary* impacts (associated with soil boring activities), and the use of 646-sf of temporary construction matting to provide a wetland crossing. There will be no loss of BVW. BMPs will be implemented to protect resource areas, and following the completion of work, the areas will be restored to pre-construction conditions to the extent practicable (see Section 7.0 of this narrative).

The proposed activities meet the performance standards of the Ayer Bylaw to the extent practicable. Requests for waivers in the Ayer Wetland Bylaw are described below.

Per Regulations for Administering the Town of Ayer Wetlands Bylaws; Section 3, NEP requests a waiver for activities within the 50-foot no disturbance zone within the BVW resource area. While all soil boring activities will occur outside this 50-foot buffer, exploratory borings at Structures 2, 3 and 4 require a temporary crossing within BVW, and across the 50-ft No Disturbance Zone. Due to the locations of existing transmission line structures, there are no practicable alternatives that would avoid access through the 50-ft No Disturbance Zone. Construction mats or the use LPG equipment will be required for access through BVW and the 50-ft No Disturbance Zone, minimizing temporary impacts to the area. Construction mats are a BMP approved by MassDEP and 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.

6.0 PROPOSED MITIGATION TECHNIQUES

NEP has established procedures that are to be followed by all employees 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. Please see **Attachment F** for these BMPs that may be used during the project.

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 delineate work areas and contain 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 F** for erosion and sediment control details.

Construction Access

Existing and historically used access routes (when present within the ROW), will be utilized to the greatest extent practicable, as shown on the Environmental Resources Map in **Attachment B**. Access to all Structures will be from Bryan Way or Great Road. Temporary construction mats or LGP equipment will be used to provide access through 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.

Restoration of Disturbed Areas

Disturbed areas will be returned to pre-construction conditions to the extent practicable. As necessary, disturbed areas will be seeded with an appropriate conservation seed mixture and/or mulched and allowed to re-vegetate.

Erosion and sediment control devices will be removed following stabilization of disturbed areas. Temporary construction mats will be removed following the work. In addition, construction debris and non-biodegradable controls will be removed from the site during restoration.

7.0 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;
- Result in only minor and temporary impacts to BVW;

- Utilize appropriate BMPs to protect wetland resource areas from sedimentation and soil disturbance during boring activities; and,
- Qualify as a Limited Project under the WPA provisions for public utilities [310 CMR10.53(3)(d)].

Therefore, NEP requests the Ayer Conservation Commission find this proposal adequately protective of the public interests identified in the WPA and the Ayer Wetland Bylaw, and issue both a waiver for activities within the 50-foot No Disturbance Zone, and an Order of Conditions for the activities described in this narrative.

Attachment B

337/K137E & L138E Lines
Soil Borings
Notice of Intent
Ayer, Massachusetts

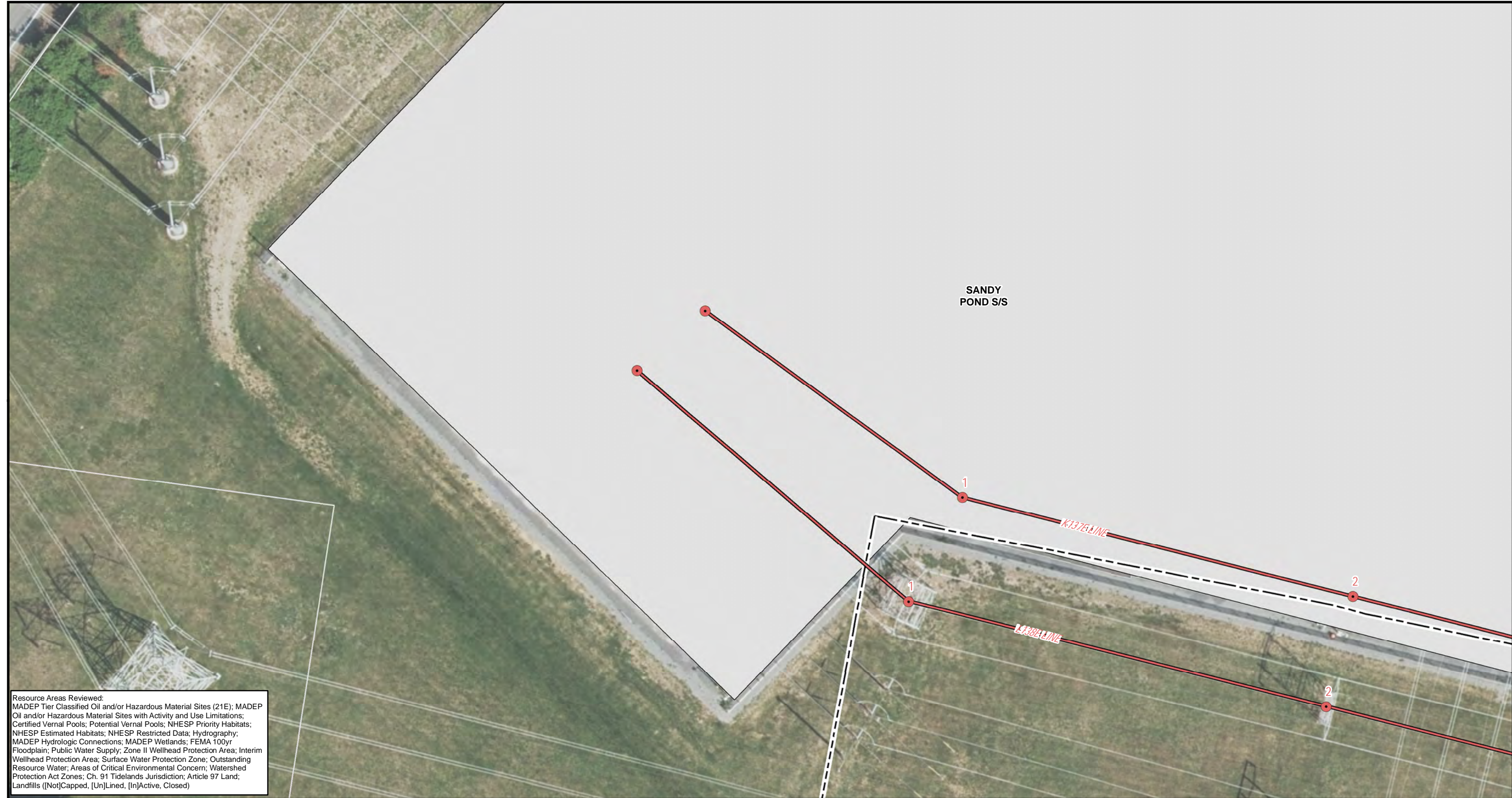
USGS SITE LOCUS MAP
ENVIRONMENTAL RESOURCE MAP



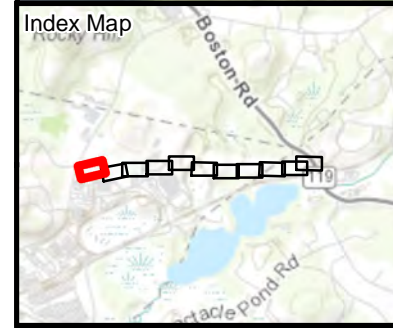
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K137/L138 AND 337 LINES ACR PROJECT - SOIL BORINGS
USGS Site Location Map
Ayer, MA

Source: Copyright:©
2013 National
Geographic Society, i-
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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; Hydrography; MADEP Hydrologic Connections; MADEP Wetlands; FEMA 100yr Floodplain; 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 Location	Work Envelope*	25ft Buffer to Wetlands & Streams	Culvert
Existing Structure	Wetland Flag	50ft No Disturb Zone	
Existing Overhead Lines	Field Delineated Wetland Line	100ft Buffer to Wetlands & Streams	
Approx. Edge of ROW	Field Delineated Wetlands*	NHESP Priority & Estimated Habitats	
Preferred Access	Drainage Ditch	Town Boundary	
Alternate Access	MADEP Wetlands*	Parcels	
Off-ROW Access Road	MADEP Open Water*	Potential Vernal Pools	
Construction Mats	FEMA 100yr Floodplain*	Railroad	

*Indicates Layers Set to Transparency

1 inch = 40 feet

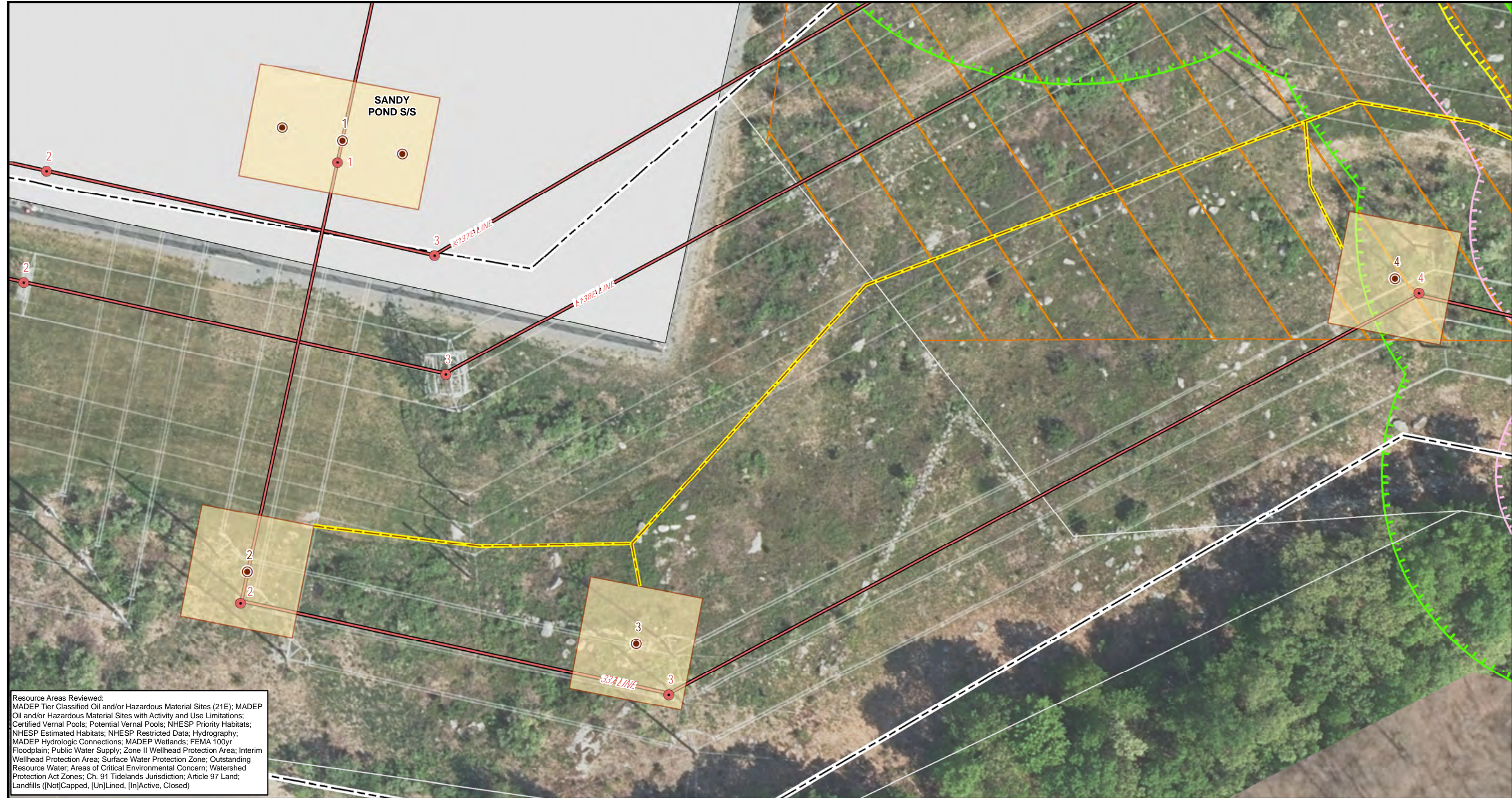
K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

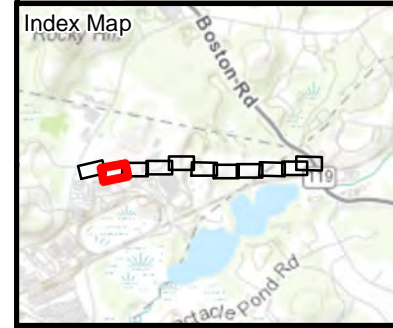
Ayer, MA
Page 1 of 11

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; Hydrography; MADEP Hydrologic Connections; MADEP Wetlands; FEMA 100yr Floodplain; 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 Location		Work Envelope*
	Existing Structure		Wetland Flag
	Existing Overhead Lines		Field Delineated Wetland Line
	Approx. Edge of ROW		Field Delineated Wetlands*
	Preferred Access		100ft Buffer to Wetlands & Streams
	Alternate Access		NHESP Priority & Estimated Habitats
	Off-ROW Access Road		Town Boundary
	Construction Mats		Parcels
			Potential Vernal Pools
			Railroad
			Culvert

*Indicates Layers Set to Transparency

K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

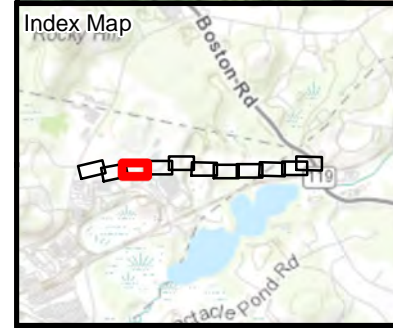
Ayer, MA
 Page 2 of 11

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:
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Legend

Soil Boring Location	Work Envelope*	25ft Buffer to Wetlands & Streams	Culvert
Existing Structure	Wetland Flag	50ft No Disturb Zone	
Existing Overhead Lines	Field Delineated Wetland Line	100ft Buffer to Wetlands & Streams	
Approx. Edge of ROW	Field Delineated Wetlands*	NHESP Priority & Estimated Habitats	
Preferred Access	Drainage Ditch	Town Boundary	
Alternate Access	MADEP Wetlands*	Parcels	
Off-ROW Access Road	MADEP Open Water*	Potential Vernal Pools	
Construction Mats	FEMA 100yr Floodplain*	Railroad	

*Indicates Layers Set to Transparency

1 inch = 40 feet
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Feet

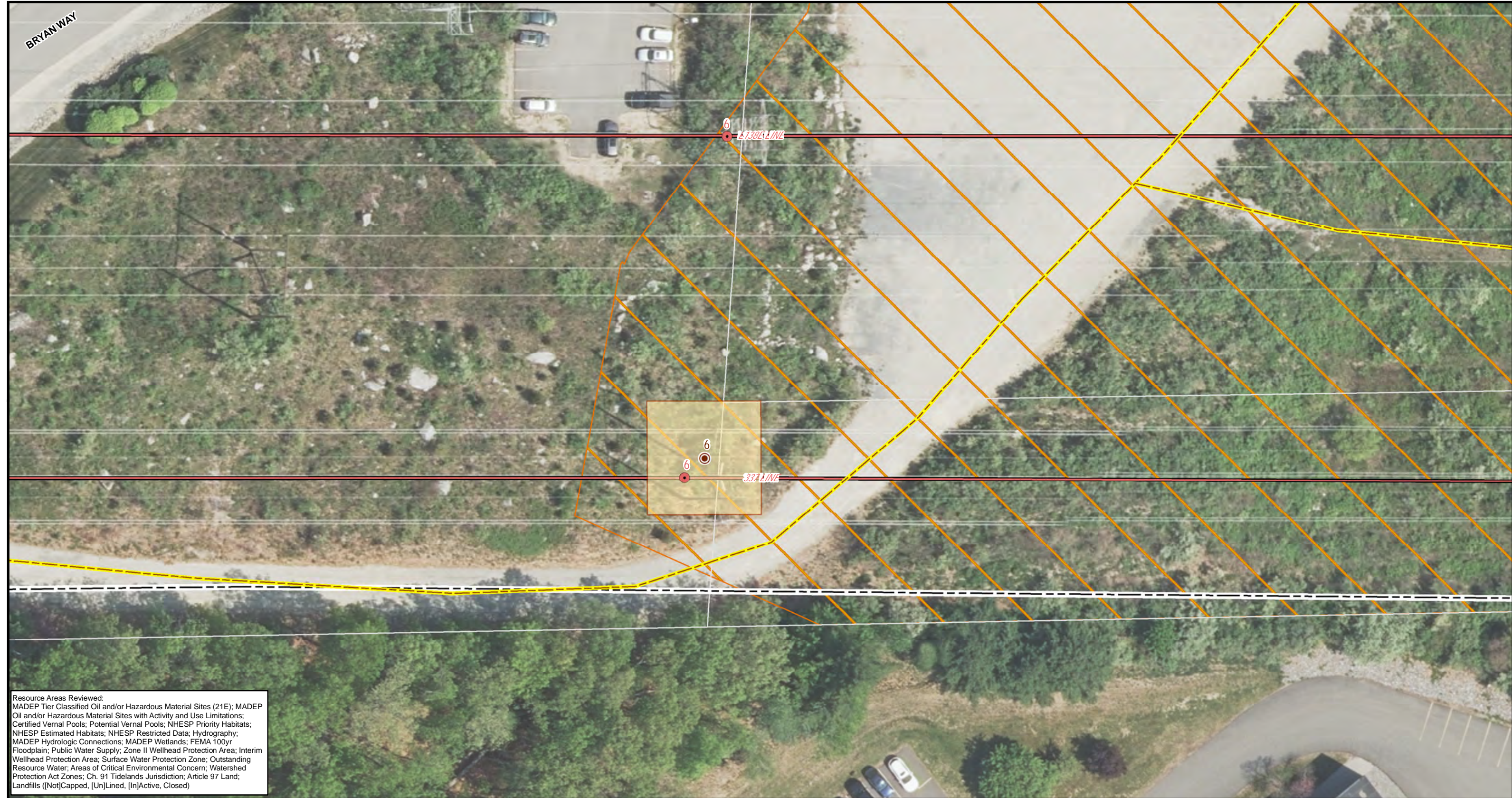
K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

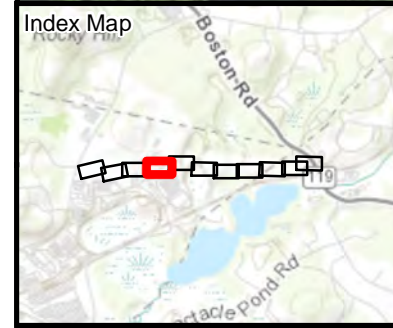
Ayer, MA
Page 3 of 11

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:
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Legend

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Preferred Access	Drainage Ditch	Town Boundary	
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*Indicates Layers Set to Transparency

1 inch = 40 feet

Feet

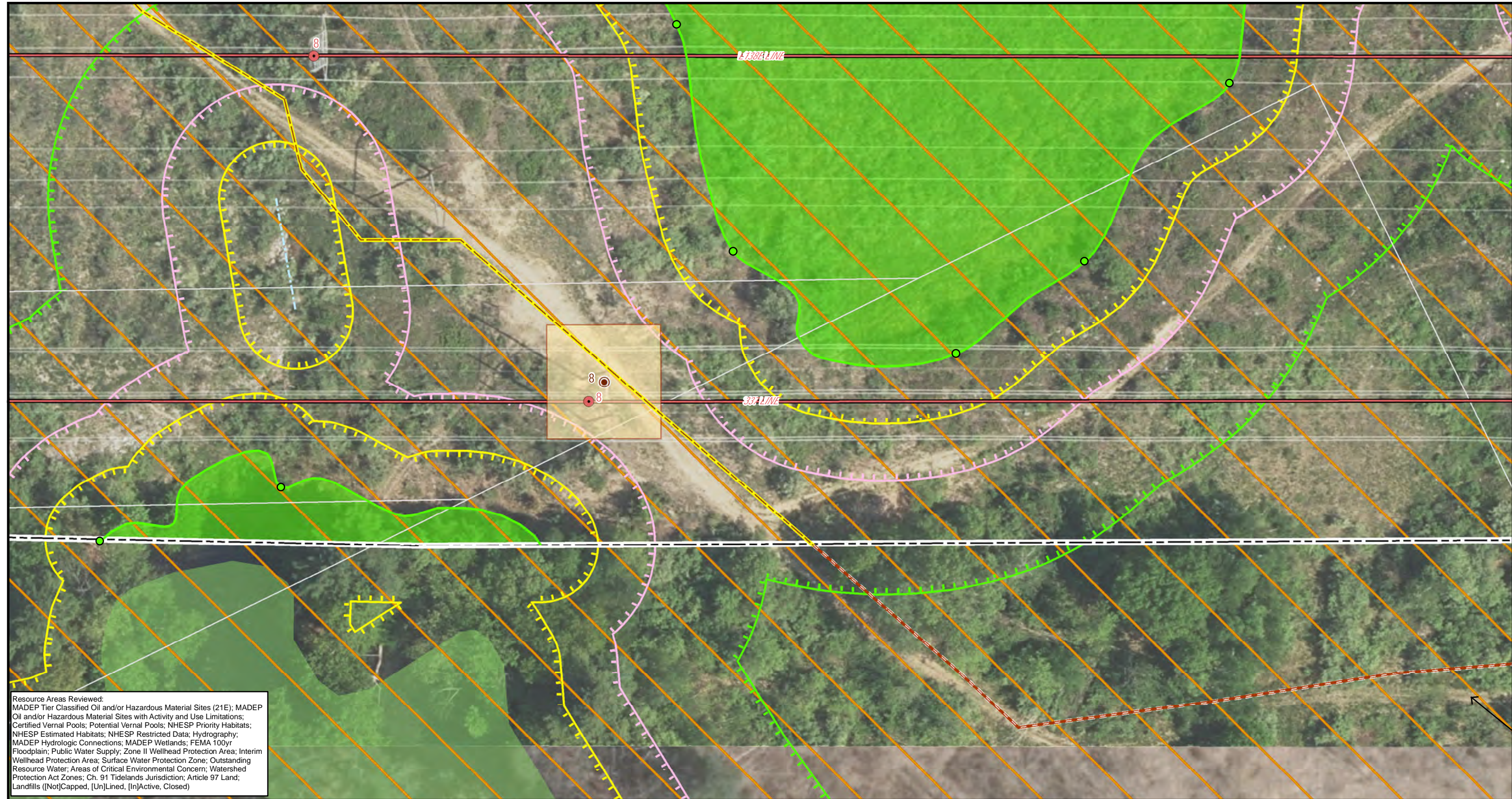
K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

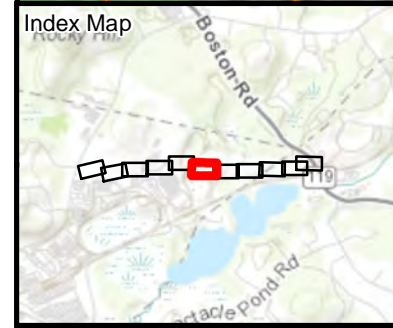
Ayer, MA
Page 4 of 11

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





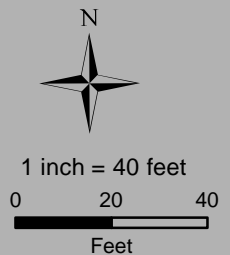
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Off-ROW Access Road	MADEP Open Water*	Potential Vernal Pools	
Construction Mats	FEMA 100yr Floodplain*	Railroad	

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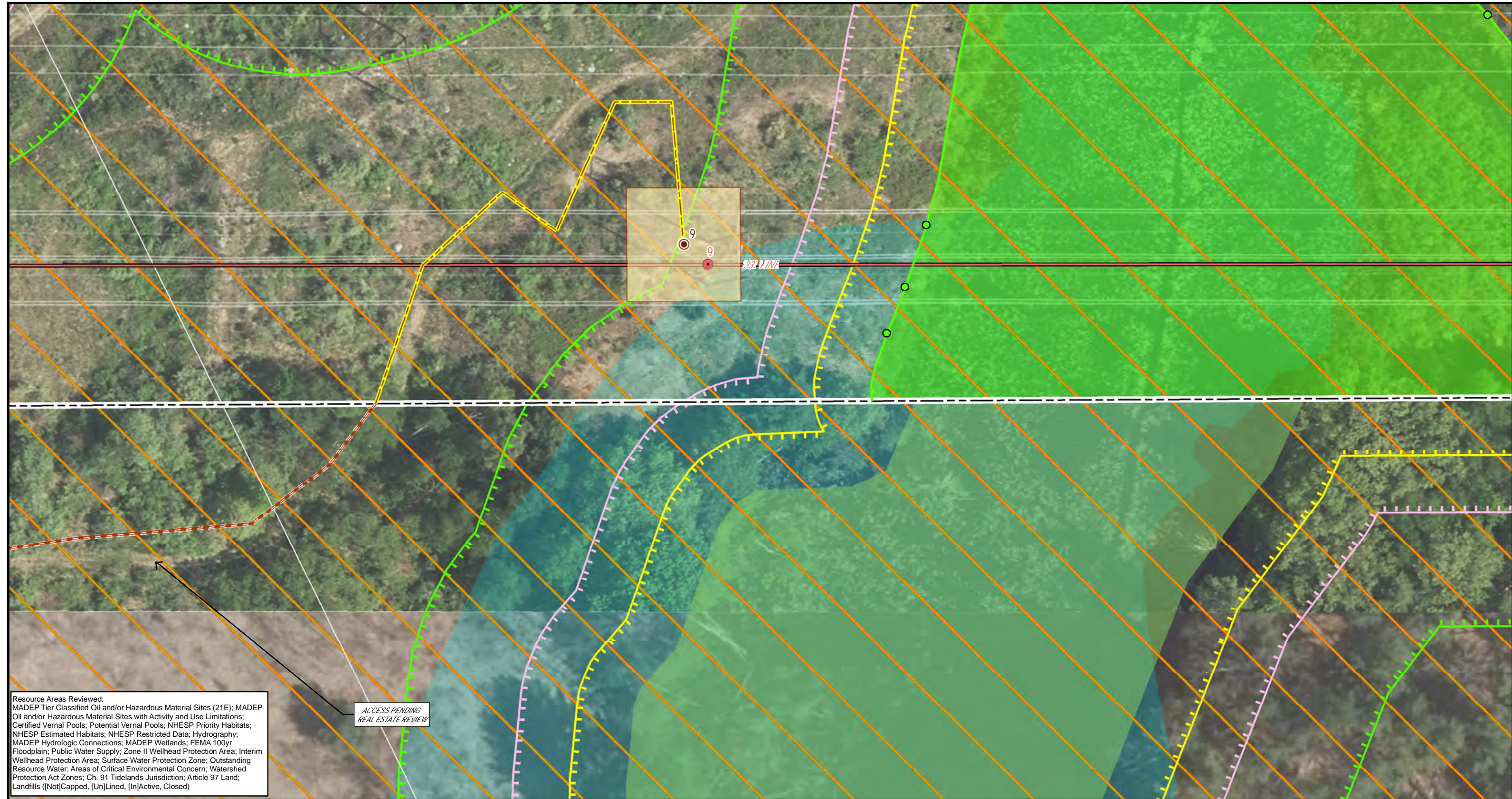
K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

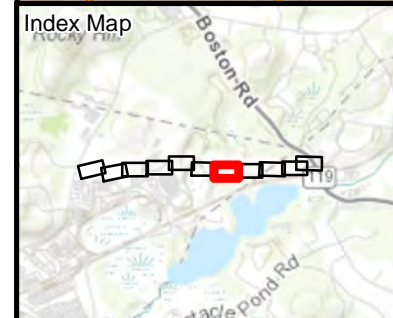
Ayer, MA
 Page 6 of 11

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





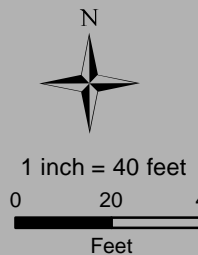
Resource Areas Reviewed:
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Legend

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Off-ROW Access Road	MADEP Open Water*	Potential Vernal Pools	
Construction Mats	FEMA 100yr Floodplain*	Railroad	

*Indicates Layers Set to Transparency



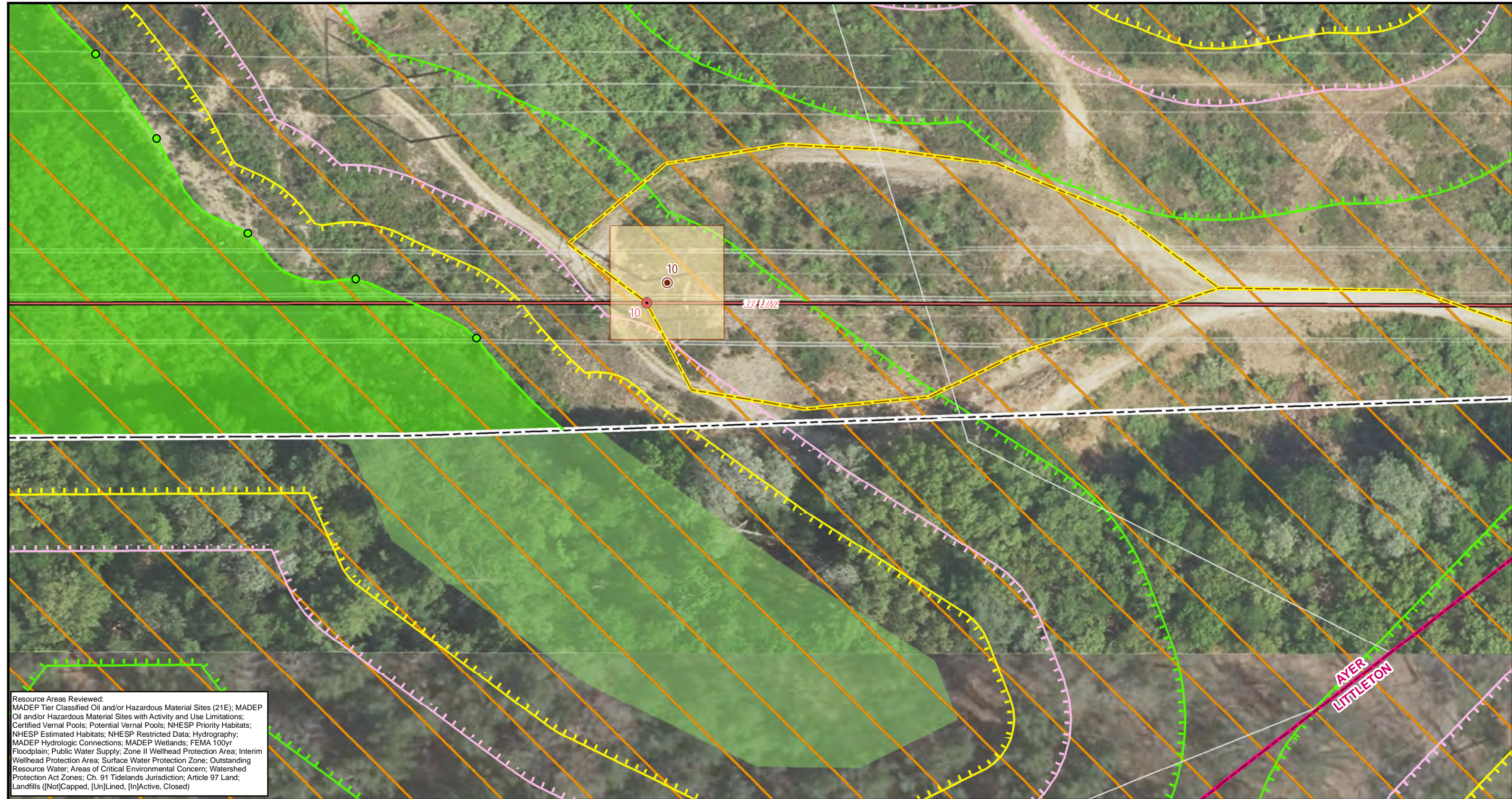
K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

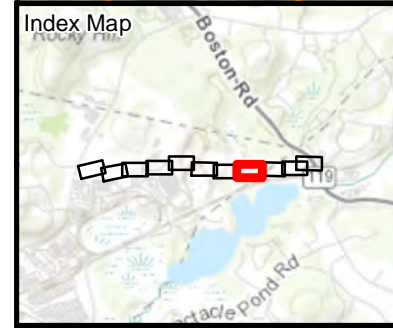
Ayer, MA
 Page 7 of 11

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





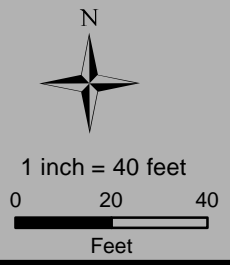
Resource Areas Reviewed:
 MADEP Tier Classified Oil and/or Hazardous Material Sites (21E); MADEP Oil and/or Hazardous Material Sites with Activity and Use Limitations; Certified Vernal Pools; Potential Vernal Pools; NHESP Priority Habitats; NHESP Estimated Habitats; NHESP Restricted Data; Hydrography; MADEP Hydrologic Connections; MADEP Wetlands; FEMA 100yr Floodplain; 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 Location	Work Envelope*	25ft Buffer to Wetlands & Streams	Culvert
Existing Structure	Wetland Flag	50ft No Disturb Zone	
Existing Overhead Lines	Field Delineated Wetland Line	100ft Buffer to Wetlands & Streams	
Approx. Edge of ROW	Field Delineated Wetlands*	NHESP Priority & Estimated Habitats	
Preferred Access	Drainage Ditch	Town Boundary	
Alternate Access	MADEP Wetlands*	Parcels	
Off-ROW Access Road	MADEP Open Water*	Potential Vernal Pools	
Construction Mats	FEMA 100yr Floodplain*	Railroad	

*Indicates Layers Set to Transparency



K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

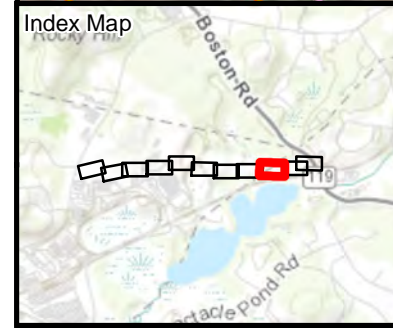
Ayer, MA
 Page 8 of 11

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; Hydrography; MADEP Hydrologic Connections; MADEP Wetlands; FEMA 100yr Floodplain; 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)



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*Indicates Layers Set to Transparency

1 inch = 40 feet

Feet

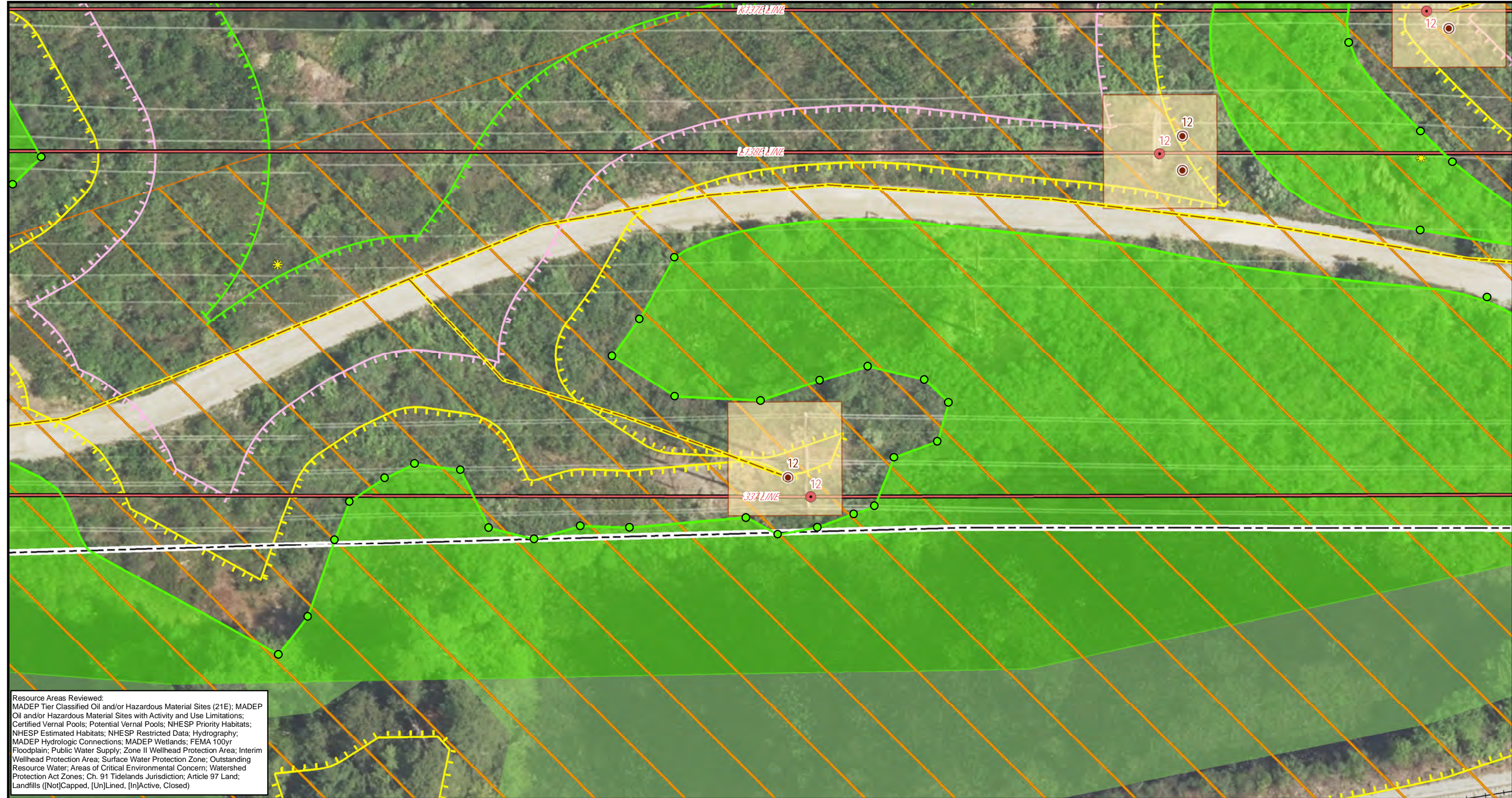
K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

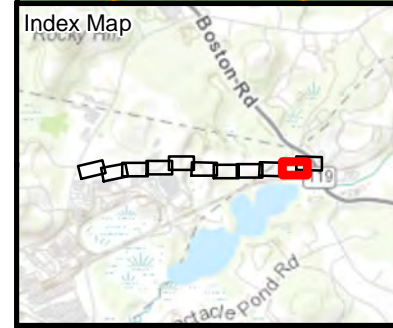
Ayer & Littleton, MA
Page 9 of 11

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





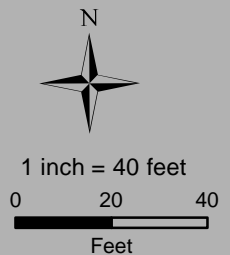
Resource Areas Reviewed:
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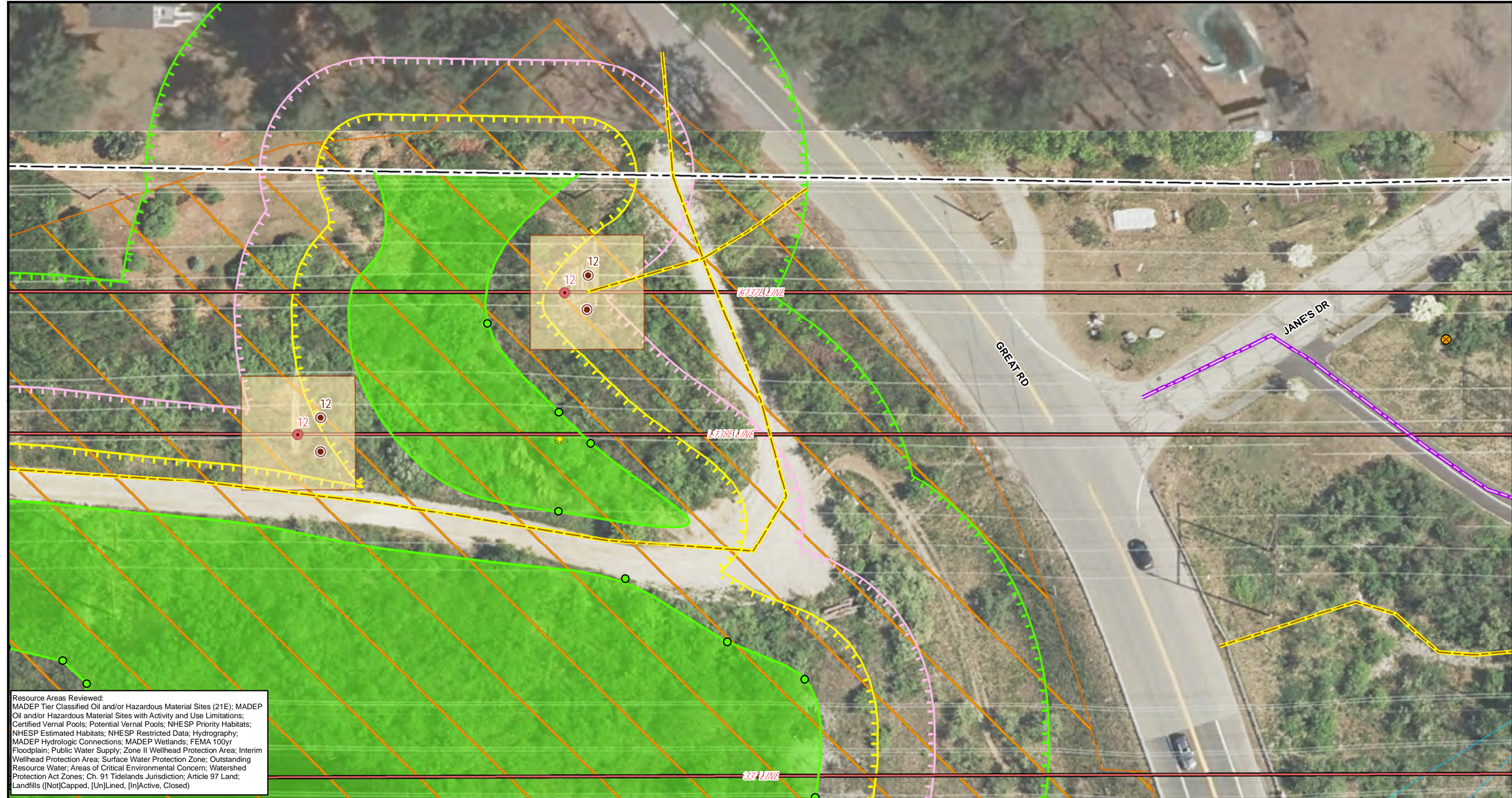
K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

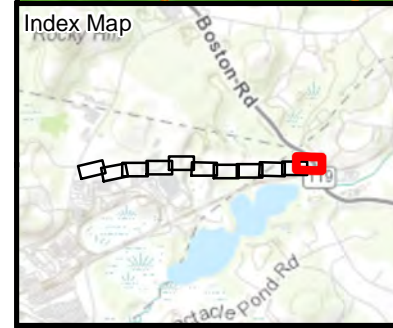
Littleton, MA
 Page 10 of 11

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





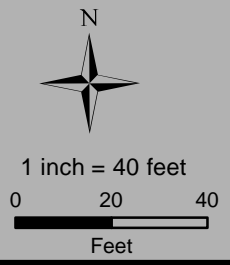
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K137/L138 & 337 LINES ACR PROJECT EXPLORATORY BORINGS

Environmental Resources Map

Littleton, MA
 Page 11 of 11

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

337/K137E & L138E Lines
Soil Borings
Notice of Intent
Ayer, Massachusetts

SITE PHOTOGRAPHS



Photo #1: View of the access road to Structure 10, off Great Rd in Littleton, MA.



Photo #2: View of the K137/L138/337 Lines ROW from Great Rd in Littleton, MA. *Facing west into Ayer.*



Photo #3: View of the K137/L138/337 Lines ROW near Sandy Pond Substation in Ayer, MA.
Facing north east.



Photo #4: View of the K137/L138/337 Lines ROW near Sandy Pond Substation in Ayer, MA.
Facing south west.

Attachment D

337/K137E & L138E Lines
Soil Borings
Notice of Intent
Ayer, Massachusetts

CERTIFIED LIST OF ABUTTERS
ABUTTERS NOTIFICATION LETTER
AFFIDAVIT OF SERVICE

**Notification to Abutters per the Massachusetts Wetlands Protection Act
and the Town of Ayer Wetlands Protection Bylaw**

In accordance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, you are hereby notified of the following:

A. The name of the applicant is: New England Power Company (NEP) Attn: Andrew Cole

B. The name of the land owner is Various - NEP electrical utility easement

C. The address of the lot where the resource area is located or activity is proposed is:
K137, L138 & 337 Transmission Lines right-of-way between Sandy Point substation (Bryan Way), and the Ayer/
Littleton Town Line (west of Great Rd).

D. The applicant has filed: (check one)

- Notice of Intent Request for an Amendment to an Order of Conditions
 Abbreviated Notice of Intent Abbreviated Notice of Resource Area Delineation

The applicant has filed the above application with the Ayer Conservation Commission and is seeking:

- confirmation of resource area delineation, or
 permission to remove, fill, dredge or alter an Area Subject to Protection under the
Wetlands Protection Act (Massachusetts General Law Chapter 131, Section 40).

E. Copies of the above referenced document/filing may be examined at the Conservation Commission Office, Town Hall, 1 Main Street, Ayer, MA, between the hours of 10:00 a.m. and 1:00 p.m., Wednesdays and Fridays. Please schedule an appointment by calling (978) 772-8249.

F. Copies of the above referenced document/filing may be obtained from: (check one)

- Applicant (contact information: _____)
 Owner (contact information: _____)
 Applicant's Representative (contact information: Alison Milliman: amilliman@bscgroup.com; (617) 896-4532)
 Ayer Conservation Administrator 978-772-8249 (Wednesdays & Fridays 9:30a.m.-1:30p.m.)

G. Project Description:

NEP is proposing to conduct exploratory soil borings at various structures along the 337/K137E & L138E Transmission Lines, in order to inform future design of replacement structure foundations. Four (4) soil borings are proposed within jurisdictional resource areas, including 100-ft Buffer Zone to Bordering Vegetated Wetland (BVW) and 50-ft No Disturb Zone, as well as NHESP Priority Habitat. Each soil boring will result in ~1 square foot of temporary impact. No permanent impacts are proposed, and all activities will be within the existing, disturbed ROW.

H. Information regarding the date, time, and place of the hearing may be obtained from the Ayer Conservation Office by calling 978-772-8249 between the hours of 9:30 a.m. and 1:30 p.m., Wednesdays and Fridays.

Note: Notice of the public hearing, including its date, time, and place, will be published at least five (5) business days prior to the hearing date in either *The Public Spirit* or *The Lowell Sun* newspapers. Such notice will also be posted at the Ayer Town Hall no fewer than forty-eight (48) hours in advance of the meeting.

Note: You also may contact the Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act at (508) 792-7650.

**Board of Assessors
Town Hall
1 Main Street
Ayer, MA 01432**

Tel: (978) 772-8220 ext. 140
Email: assessor@ayer.ma.us

October 14, 2021

ABUTTERS LIST FOR PARCEL(s): 8-10, 8-23 & 8-17

OWNER(s): NEW ENGLAND POWER CO. & NEW ENGLAND HYDRO TRANS CO.

#	Parcel ID	Stno	Stno2	Property Location	Owners Name1	Owners Name2	Address1	Address2	City/Town	State	Zip Code
1	17-17	0		NEMCO WAY	TOWN OF AYER		1 MAIN ST		AYER	MA	01432
2	17-9	0		NEMCO WAY (OFF)	BOUSQUET ANN R	LEON J WEAVER	PO BOX 2297		LITTLETON	MA	01460
3	7-5	0		WESTFORD ROAD	ORION PARK LLC		1 ORION PARK DRIVE		AYER	MA	01432
4	7-6	100		WESTFORD ROAD	SEALED AIR HOLDINGS V, INC	C/O SEALED AIR CORPORATION	100 WESTFORD ROAD		AYER	MA	01432
5	8-14	90		NEMCO WAY (OFF)	EIP NEMCO WAY OWNER LLC		90 NEMCO WAY		AYER	MA	01432
6	8-15	0		NEMCO WAY (OFF)	NEW ENGLAND POWER CO		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
7	8-16	0		LITTLETON ROAD	TOWN OF AYER	WATER DEPT	MAIN STREET		AYER	MA	01432
8	8-19	3		NEMCO WAY	3 NEMCO REALTY CORP		3 NEMCO WAY		AYER	MA	01432
9	8-20	20		NEMCO WAY	PUEBLO REALTY LLP		185 BUTLER ROAD		MONSON	MA	01057
10	8-22	0		NEMCO WAY (OFF)	NEW ENGLAND POWER CO		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
11	8-3	0		WESTFORD ROAD	N E HYDRO TRANS ELECTRIC CO INC		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
12	8-4	0		WESTFORD ROAD (REAR)	N E HYDRO TRANS ELECTRIC CO INC		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
13	8-6	0		WESTFORD ROAD	NEW ENGLAND POWER CO		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
14	8-7	81		WESTFORD ROAD	JASR LLC		81 WESTFORD ROAD		AYER	MA	01432
15	8-8	0		WESTFORD ROAD	NEW ENGLAND POWER CO		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
16	8-9	0		WESTFORD ROAD	NEW ENGLAND POWER CO		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
17	9-10	0		STONY BROOK LINE	BOSTON & MAINE RAILROAD	C/O GUILFORD TRANSPORTATION INDUS	IRON HORSE PARK	TAX DEPT - 67 HIGH STREET	N BILLERICA	MA	01862
18	9-11	0		STONY BROOK LINE	BOSTON & MAINE RAILROAD	C/O GUILFORD TRANSPORTATION INDUS	IRON HORSE PARK	TAX DEPT - 67 HIGH STREET	N BILLERICA	MA	01862
19	9-3	0		ROUTE 119 (OFF)	TIDAN CORP		21 VOSE ROAD		WESTFORD	MA	01886
20	9-5	0		WESTFORD ROAD	OWNER UNKNOWN						
21	9-7	0		ROUTE 119 (OFF)	SUBRAMANIAN VARUN	SWAPNA BALAKRISHNAN	724 GREAT ROAD		LITTLETON	MA	01460
22	9-8	0		ROUTE 119 (OFF)	NEW ENGLAND POWER CO		PROPERTY TAX DEPT	40 SYLVAN ROAD	WALTHAM	MA	02451
23	9-9	0		STONY BROOK LINE	BOSTON & MAINE RAILROAD	C/O GUILFORD TRANSPORTATION INDUS	IRON HORSE PARK	TAX DEPT - 67 HIGH STREET	N BILLERICA	MA	01862

of the records as of September 30, 2021 in the Town of Ayer
known names and addresses of owners of land abutting the
t to MGL Chapter 131 Sec. 40 (300 feet)

Certified: Board of Assessors

John Kilian
Edward Carlin
Nick P. Lopez

AFFIDAVIT OF SERVICE

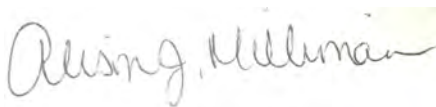
Under the Massachusetts Wetlands Protection Act
and
Town of Ayer Wetlands Bylaw and Regulations

To be submitted to the Massachusetts Department of Environmental Protection (MassDEP) and the Ayer Conservation Commission when filing a Notice of Intent.

I, Alison Milliman, BSC Group, Inc., herby certify under the pains and penalties of perjury that
on November 29, 2021 I gave notification to abutters in compliance with the second
(Name)
(Date)
paragraph of the Massachusetts General Laws Chapter 131, Section 40, and the MassDEP Guide to
Abutter Notification dated April 8, 1994, in connection with the following matter:

Exploratory soil borings along the K137/L138 & 337 Transmission Lines right-of-way (ROW),
between Sandy Pond Substation and the Ayer/Littleton Town Line. Four (4) soil borings are
proposed within jurisdictional resource areas.

The form of notification, and a list of the abutters to whom it was given and their addresses, are
attached to this Affidavit of Service.



Name (Sign)

Alison Milliman

Name (Print)

11/22/2021

Date

Attachment E

337/K137E & L138E Lines
Soil Borings
Notice of Intent
Ayer, Massachusetts

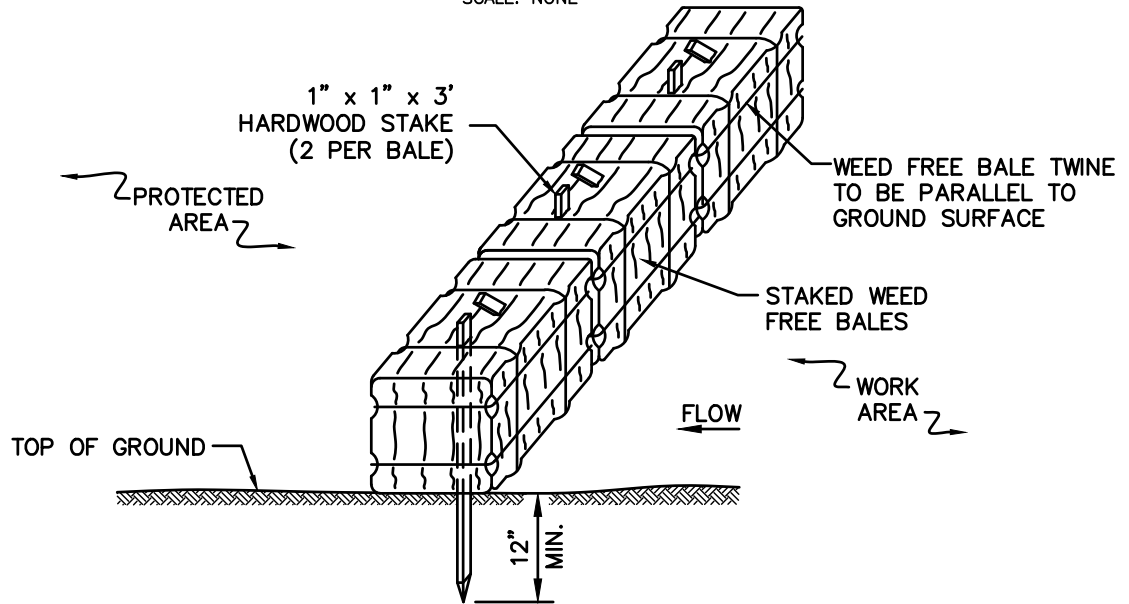
NATIONAL GRID'S BEST MANAGEMENT PRACTICES

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

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.

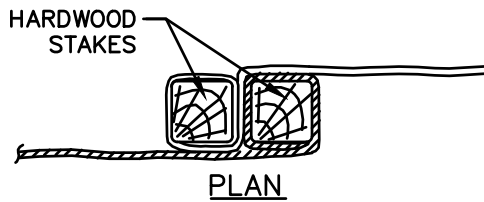
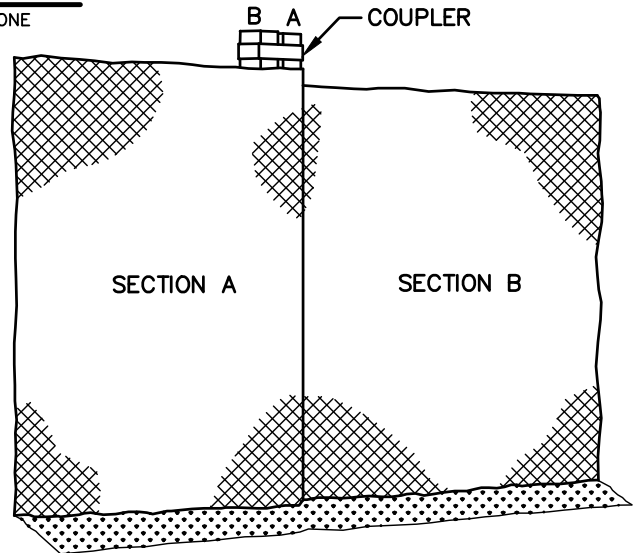
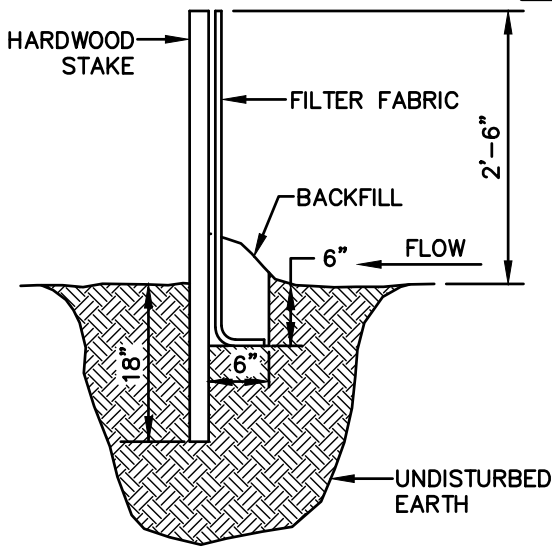
SEC-1
WEED FREE BALE BARRIER

SUBJECT
Access, Maintenance and Construction
Best Management Practices

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

BMP DETAIL

SCALE: NONE



BMP PICTURE



File: Sediment_Fence.dwg

APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES
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VERSION PLEASE REFER TO THE NATIONAL GRID ENVIRONMENTAL INFONET SITE.

SEC-2
SEDIMENT CONTROL FENCE

SUBJECT

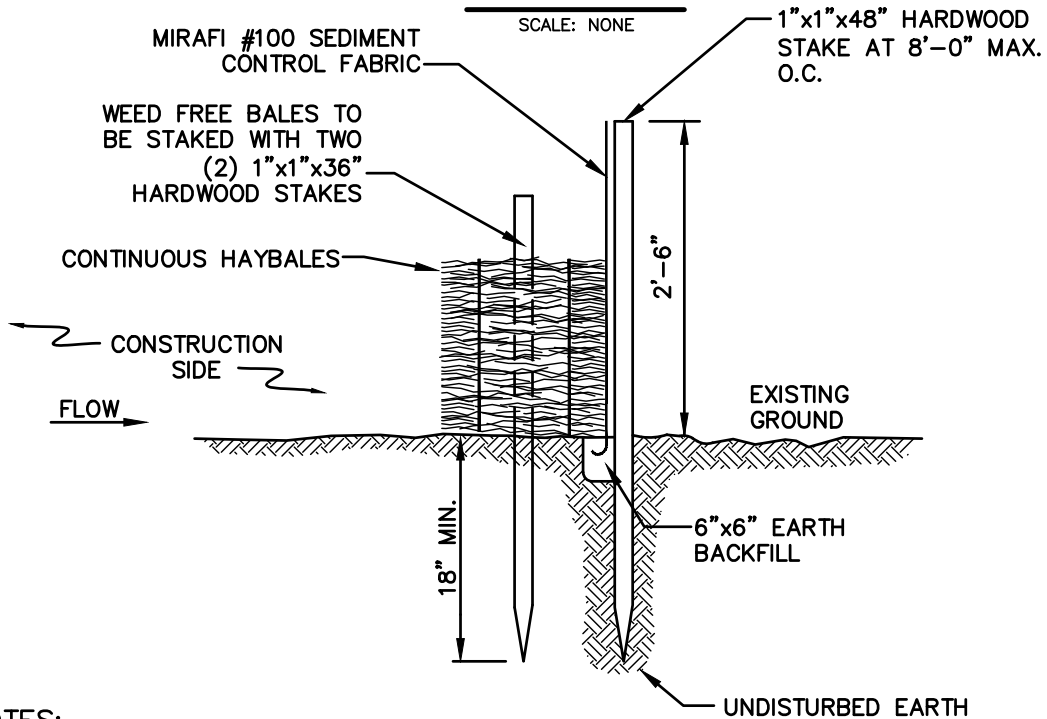
Access, Maintenance and Construction
Best Management Practices

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

APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES
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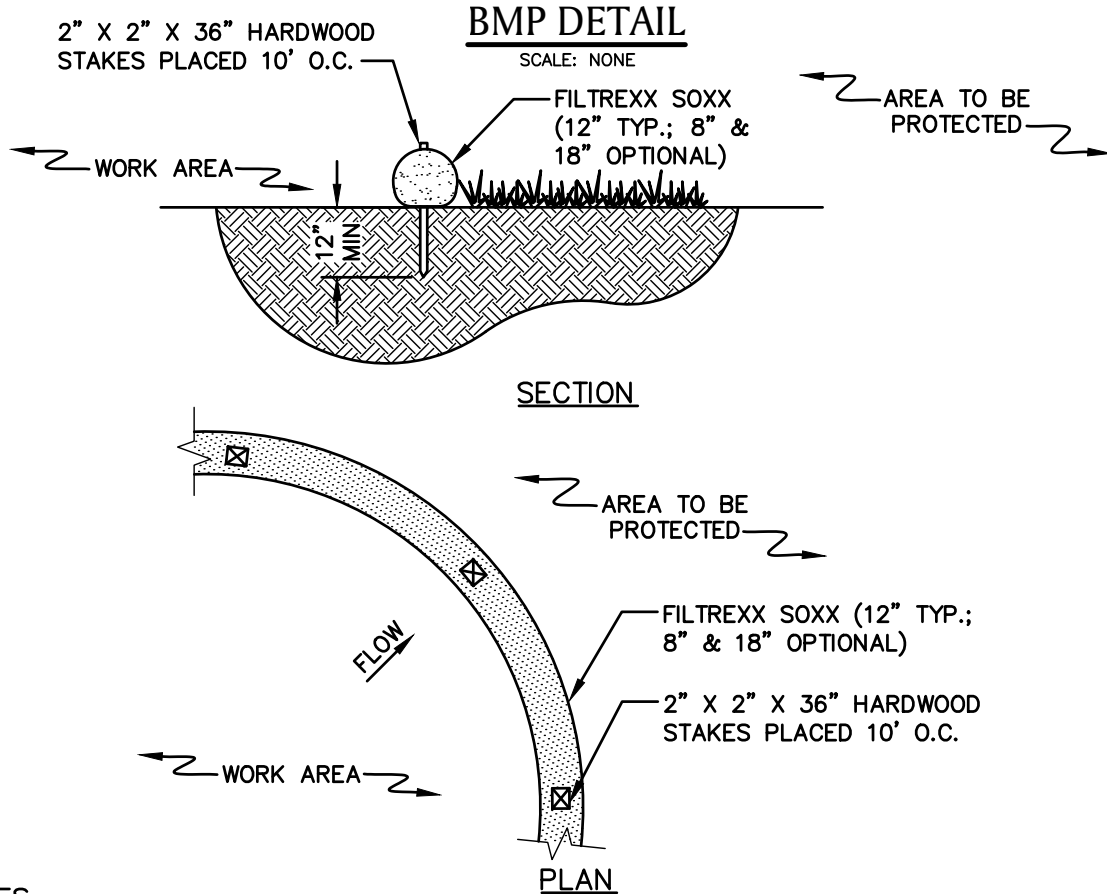
SEC-3
SILT FENCE /
WEED FREE BARRIER

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
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.

SEC-4
SILT SOXX *

SUBJECT

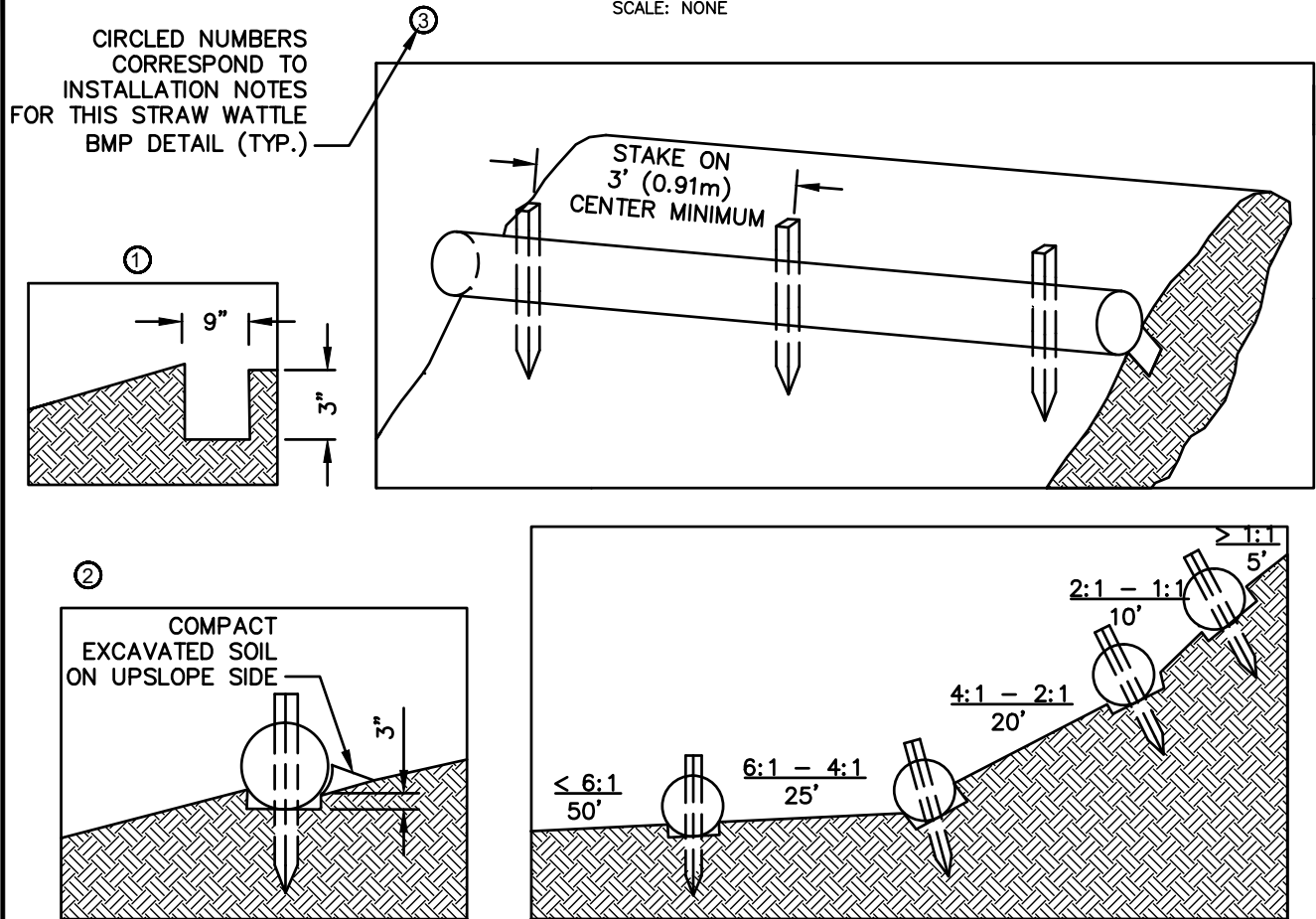
Access, Maintenance and Construction
Best Management Practices

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
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.

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
APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES
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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.

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SEC-11
SEEDING OPTIONS -
WETLAND SEED MIX

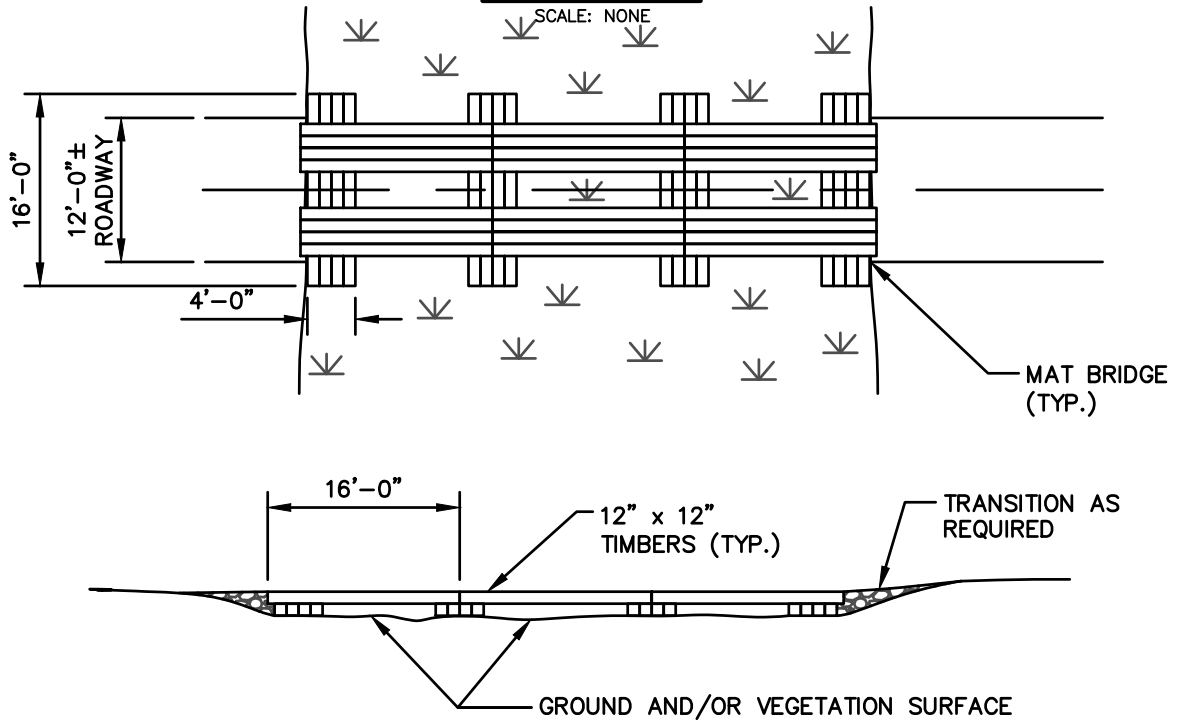
SUBJECT

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



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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

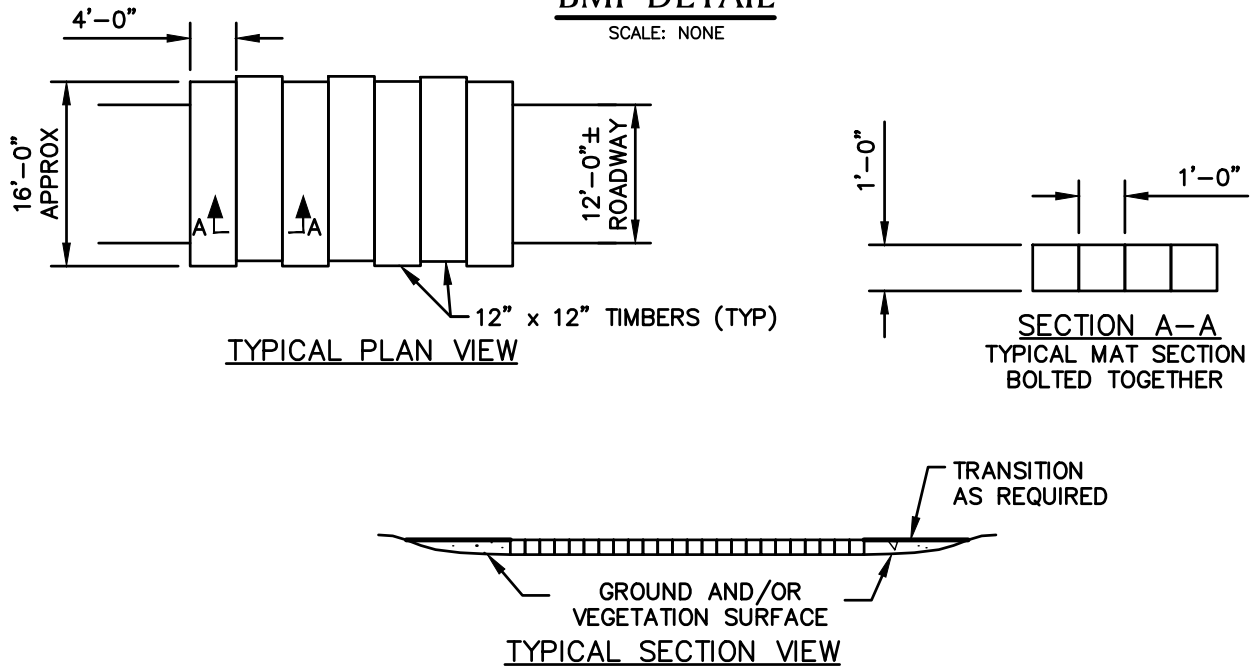
Access, Maintenance and Construction
Best Management Practices

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

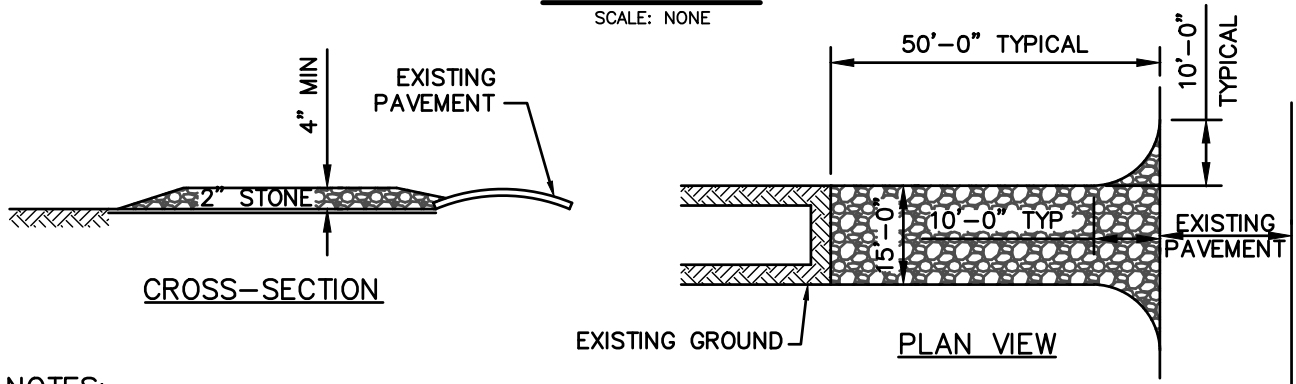
Access, Maintenance and Construction
Best Management Practices

Reference

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

BMP DETAIL

SCALE: NONE



NOTES:

1. 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, SEED, 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 PICTURE



NO ACCESS – WETLAND/STREAM CROSSING MATS REQUIRED



**NO ACCESS – A.) PROJECT LIMITS E.G. ROW LIMITS
B.) HISTORICAL/CULTURAL
C.) ENVIRONMENTALLY SENSITIVE E.G. THREATENED & ENDANGERED
D.) OTHER**



APPROVED ACCESS

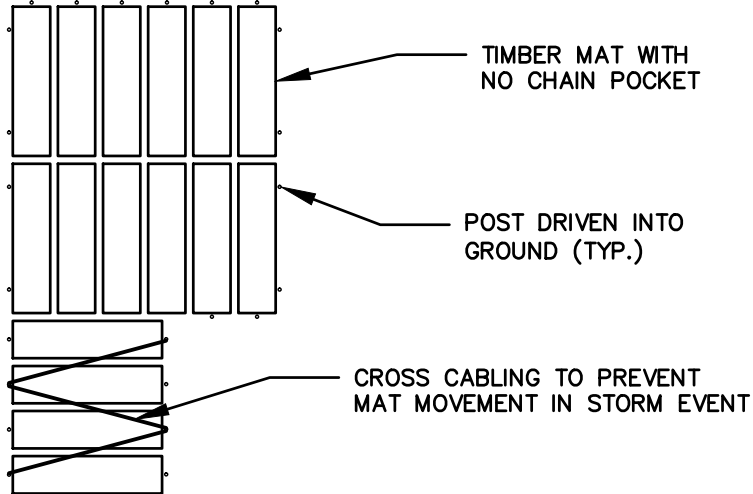
File: Construction_Signage.dwg

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

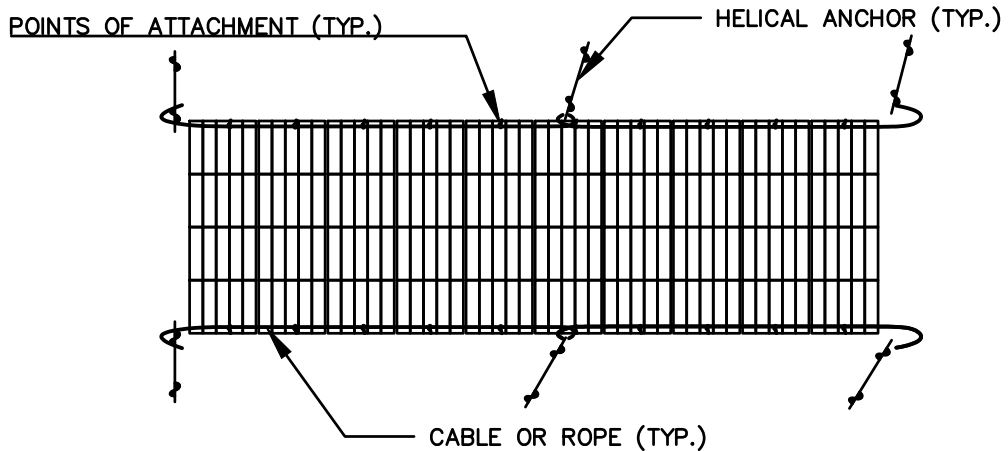
NOTES:

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.



File: Const_Mat_Anchoring.dwg

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

SUBJECT

Access, Maintenance and Construction
Best Management Practices

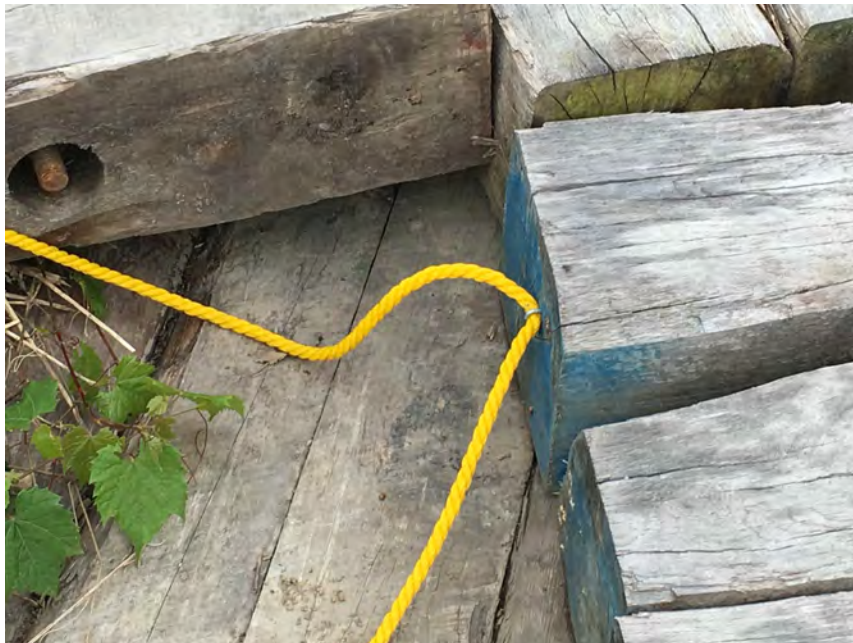
Reference

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

WIRE BACKED SILT FENCE**MUTUAL INDUSTRIES WIRE BACKED SILT FENCE**

PART # 1776-14-24

36" X 100'

36" MISF 1776 FABRIC

24" 14GA WIRE MESH

OPENING OF MESH 2" X 4"

FABRIC HOG RINGED EVERY 12"-18" ALONG THE TOP OF THE FENCE

ROLL WEIGHT 40 LBS

32 ROLLS PER PALLET

NOTES:

1. PRODUCT TO BE MUTUAL INDUSTRIES' WIRE BACKED SILT FENCE OR APPROVED EQUAL BY NATIONAL ENVIRONMENTAL SCIENTIST.
2. COORDINATE INSTALLATION METHOD AND LOCATION WITH NATIONAL GRID ENVIRONMENTAL SCIENTIST.

* PICTURE AND DETAIL PROVIDED BY MUTUAL INDUSTRIES

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AA-1

REINFORCED SILT FENCE *

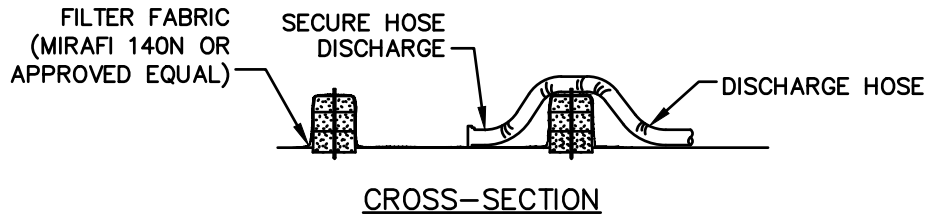
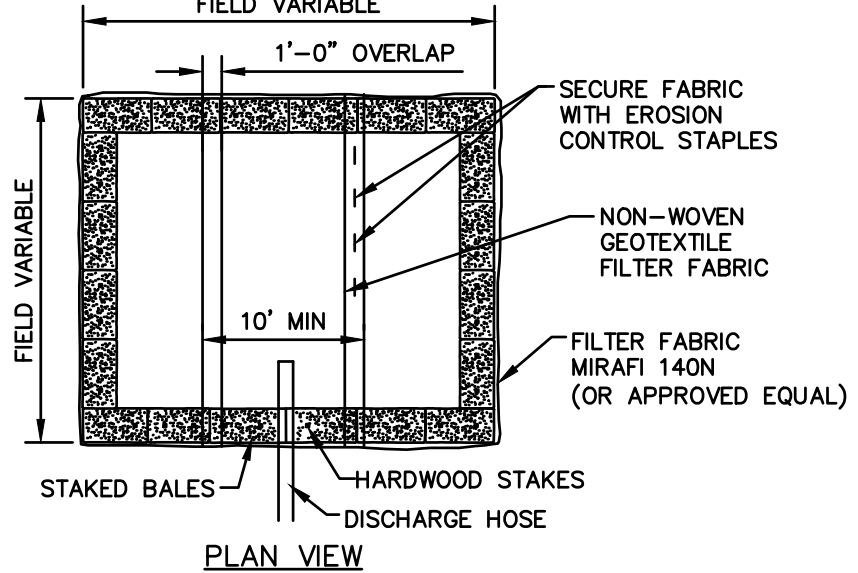
SUBJECT
Access, Maintenance and Construction
Best Management Practices

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

BMP DETAIL

SCALE: NONE

FIELD VARIABLE



NOTES:

1. NUMBER OF BALES MAY VARY DEPENDING ON SITE CONDITIONS,
2. THE BASIN TO BE SIZED TO PREVENT DISCHARGE WATER FROM OVERTOPPING BASIN.
3. KEEP AS FAR FROM WETLANDS AS PRACTICAL.
4. CLEAN AND REMOVE AS SOON AS DEWATERING IS COMPLETE.

BMP PICTURE

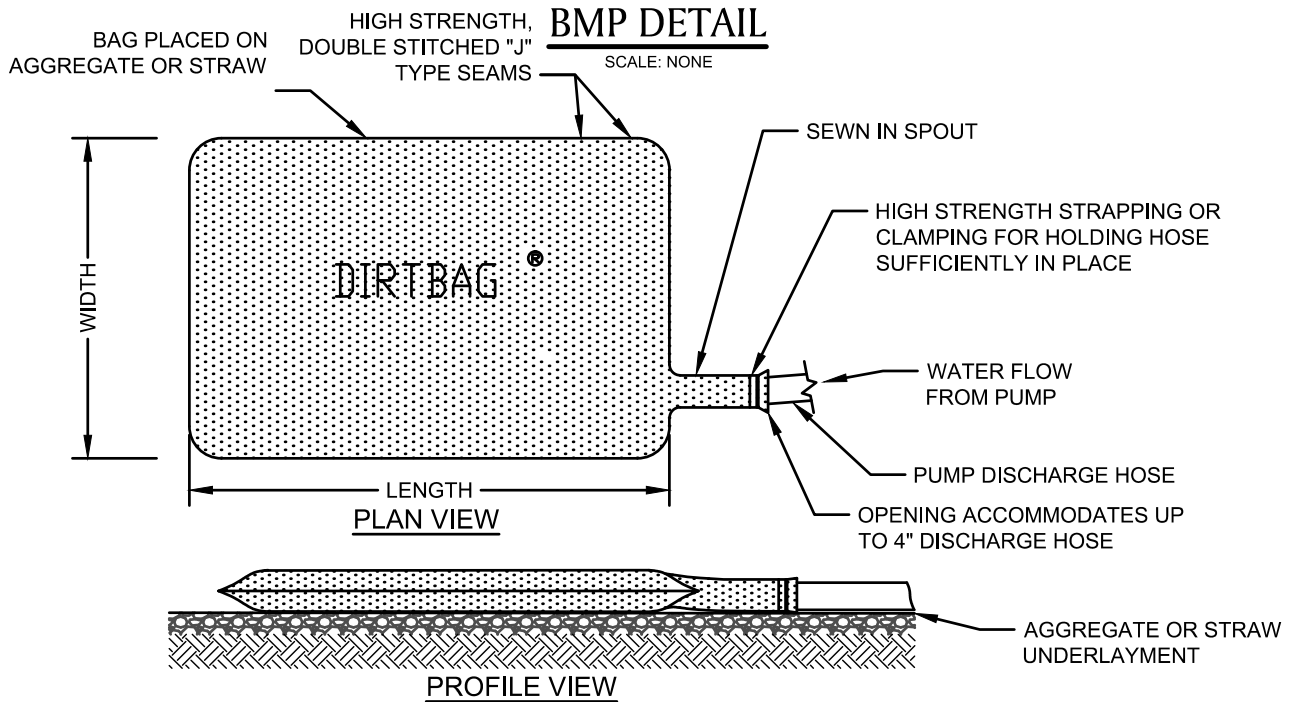


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AA-10
DEWATERING BASIN
(SMALL SCALE)

SUBJECT
Access, Maintenance and Construction
Best Management Practices

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



NOTE:
ONCE PUMPING COMMENCES, THE DIRT BAG SHALL BE MONITORED FREQUENTLY TO ASSURE THAT THE CONNECTIONS ARE SECURELY FASTENED AND THE RATE OF WATER DELIVERY TO THE STRUCTURE IS LOW ENOUGH TO PREVENT UNFILTERED WATER FROM FLOWING FROM THE HOSE CONNECTIONS OR BAG.

BMP PICTURE



* PICTURE AND DETAIL PROVIDED BY ACF ENVIRONMENTAL
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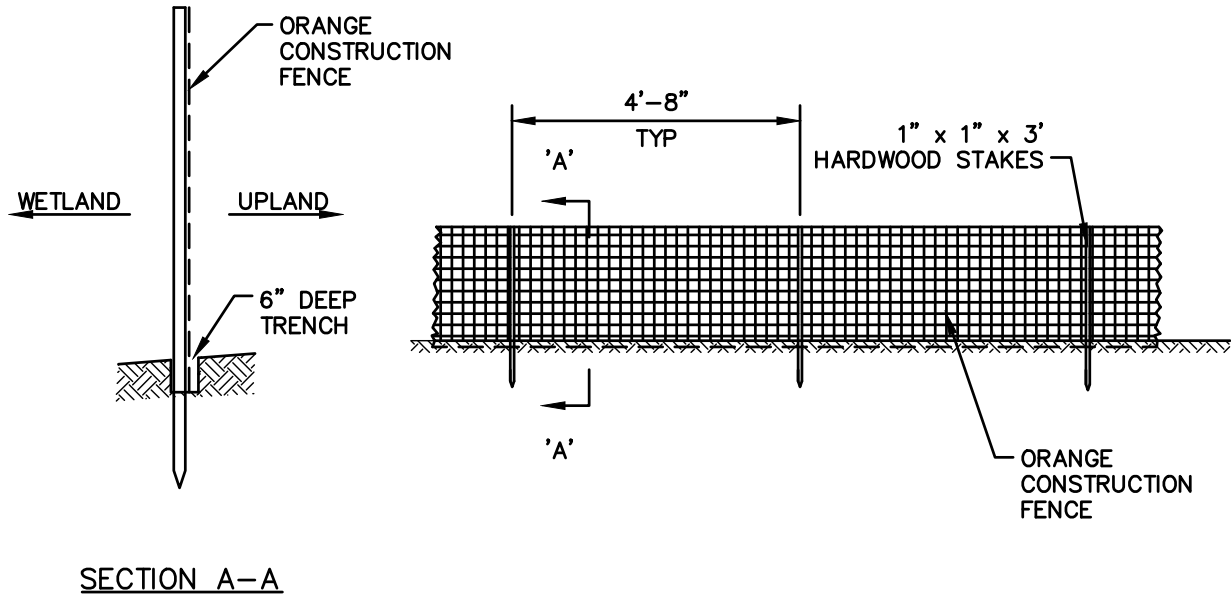
AA-12
DIRTBAG *

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

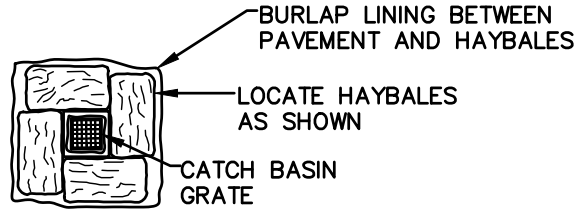
Access, Maintenance and Construction
Best Management Practices

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

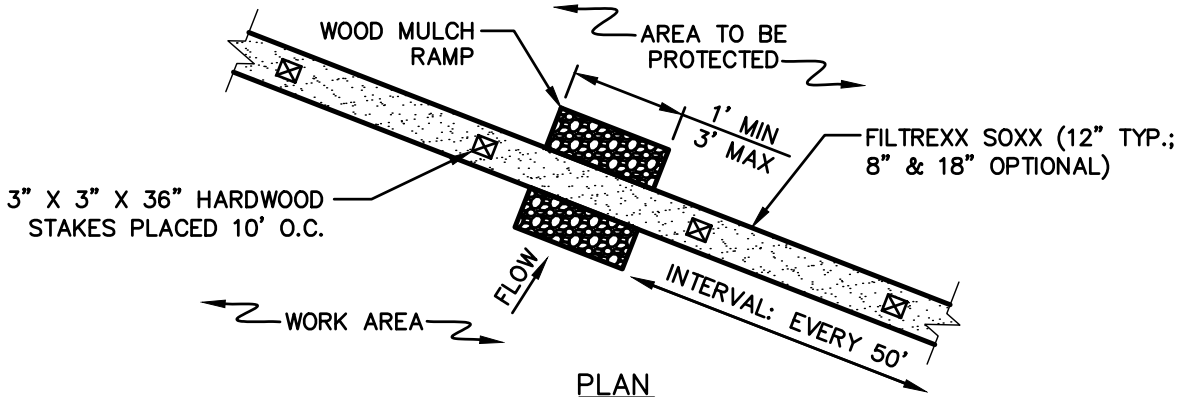
Access, Maintenance and Construction
Best Management Practices

Reference

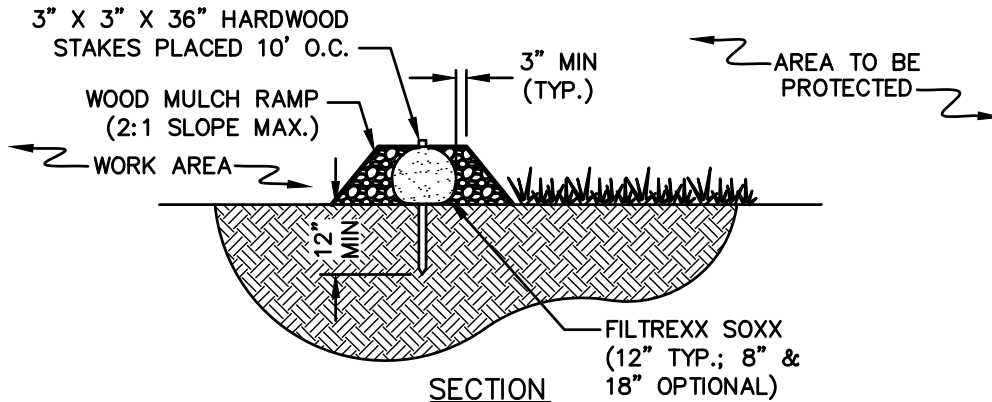
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

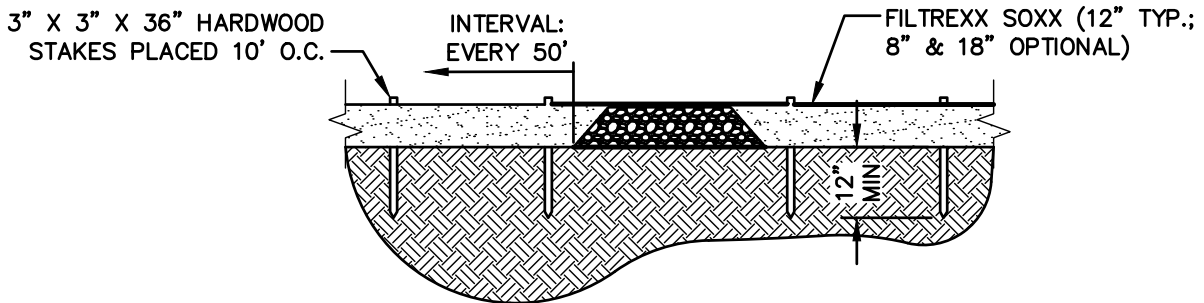
SCALE: NONE



PLAN



SECTION



PROFILE

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 TO MEET APPLICATION REQUIREMENTS.
4. NON-MONOFILAMENT CONTAINMENT MATERIAL SHOULD BE KNITTED PHOTODEGRADABLE OR BIODEGRADABLE MATERIAL, WITH OPENING SIZES BETWEEN 1/8" - 1/4".
5. COMPOST MEDIA SHOULD HAVE PARTICLE SIZE WHERE 99% < 2", 50% > 1/2".
6. COMPOST MATERIAL TO BE DISPOSED OF ON-SITE, OR IN ACCORDANCE WITH ENVIRONMENTAL PERMITS AS APPROVED BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
7. WOOD MULCH RAMP IS OPTIONAL DEPENDING ON SUBSTRATE/SITE CONDITIONS, AND TO BE APPROVED BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.

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BMP # AA-22
SILTSOXX AMPHIBIAN & REPTILE
CROSSING #1 (1 OF 2)

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

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

BMP PICTURE



SALAMANDER AND SNAKE CROSSING #1

ALTERNATE WOOD MULCH RAMP SILTSOXX NOTES:

1. SILTSOXX, BY FILTREX INTERNATIONAL, OR APPROVED EQUAL PRODUCT SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES.
2. BMP SHOULD ONLY BE UTILIZED IN AREAS WHERE RARE SALAMANDER AND SNAKE HABITAT OCCURS, OR AT THE DIRECTION OF THE NATIONAL GRID ENVIRONMENTAL SCIENTIST.

File: Alternate_Mulch_Ramp_Siltsoxx.dwg

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BMP # AA-22
SILTSOXX AMPHIBIAN & REPTILE
CROSSING #1 (2 OF 2)

SUBJECT

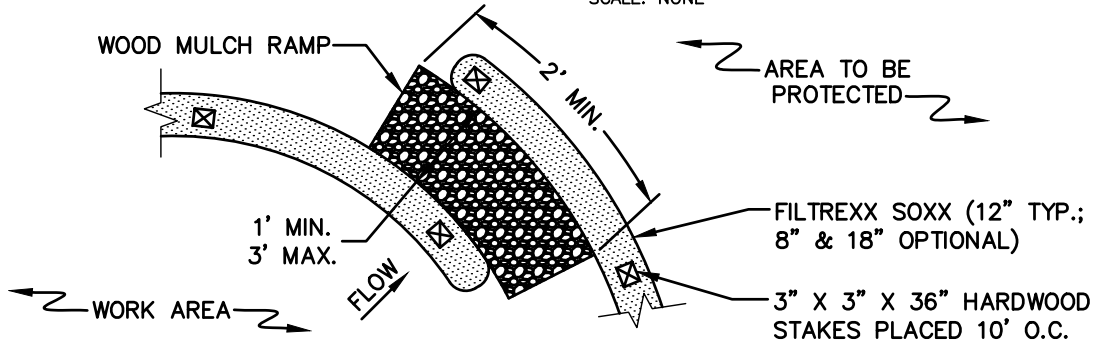
Access, Maintenance and Construction
Best Management Practices

Reference

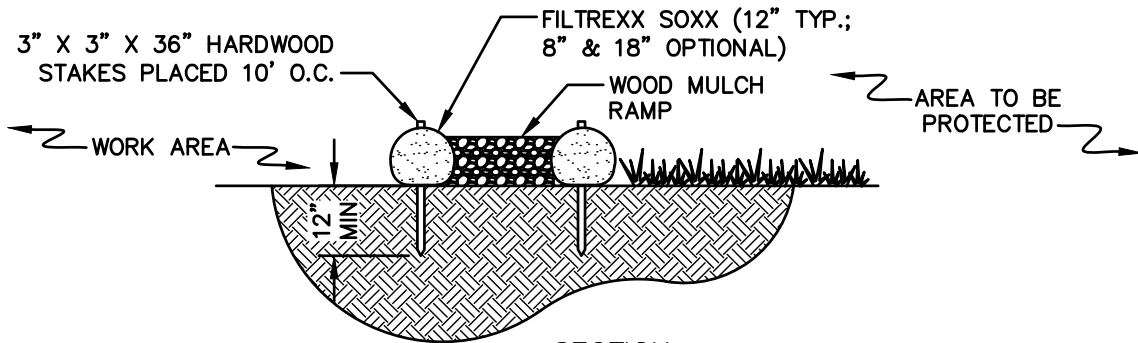
EP No. 3 - Natural Resource
Protection (Chapter 6)

BMP DETAIL

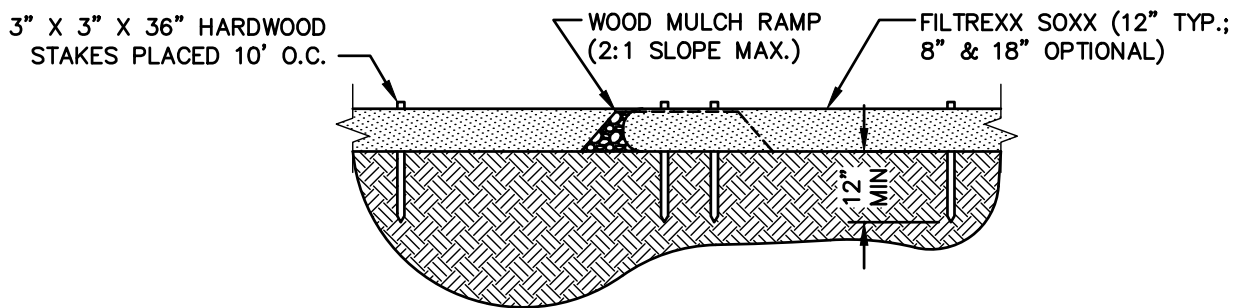
SCALE: NONE



PLAN



SECTION



PROFILE

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. NON-MONOFILAMENT CONTAINMENT MATERIAL SHOULD BE KNITTED PHOTODEGRADABLE OR BIODEGRADABLE MATERIAL, WITH OPENING SIZES BETWEEN 1/8" - 1/4".
5. COMPOST MEDIA SHOULD HAVE PARTICLE SIZE WHERE 99% < 2", 50% > 1/2".
6. COMPOST MATERIAL TO BE DISPOSED OF ON-SITE, OR IN ACCORDANCE WITH ENVIRONMENTAL PERMITS AS APPROVED BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
7. WOOD MULCH RAMP IS OPTIONAL DEPENDING ON SUBSTRATE/SITE CONDITIONS, AND TO BE APPROVED BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
8. GAPS TO BE SPACED EVERY 50 FT, IF POSSIBLE GIVEN WETLAND PERMIT CONDITIONS.

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**BMP # AA-23
SILTSOXX AMPHIBIAN & REPTILE
CROSSING #2 (1 OF 2)**

SUBJECT

Access, Maintenance and Construction
Best Management Practices

Reference

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

BMP PICTURE



SILTSOXX AMPHIBIAN & REPTILE CROSSING #2

ALTERNATE WOOD MULCH RAMP SILTSOXX NOTES:

1. SILTSOXX, BY FILTrex INTERNATIONAL, OR APPROVED EQUAL PRODUCT SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURER'S GUIDELINES.
2. BMP SHOULD ONLY BE UTILIZED IN AREAS WHERE RARE SALAMANDER AND SNAKE HABITAT OCCURS OR AT THE DIRECTION OF THE NATIONAL GRID ENVIRONMENTAL SCIENTIST.

File: Alternate_Siltsoxx.dwg

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BMP # AA-23
SILTSOXX AMPHIBIAN & REPTILE
CROSSING #2 (2 OF 2)

SUBJECT

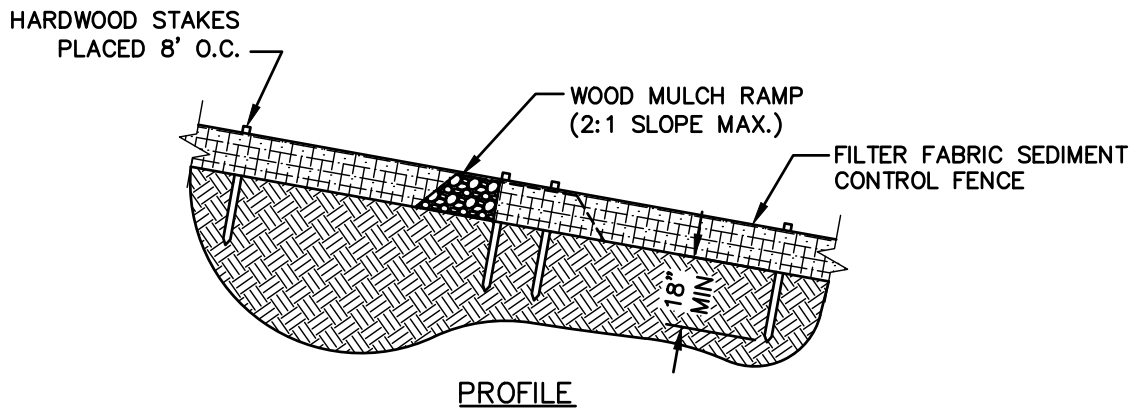
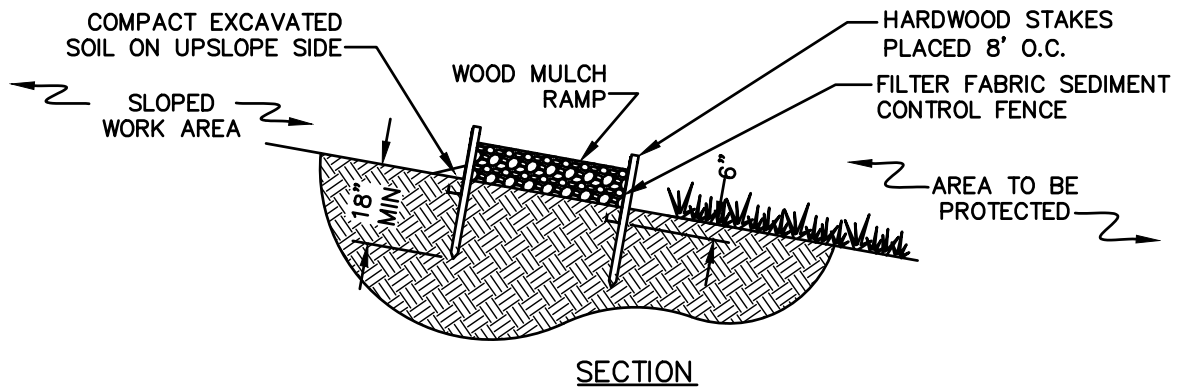
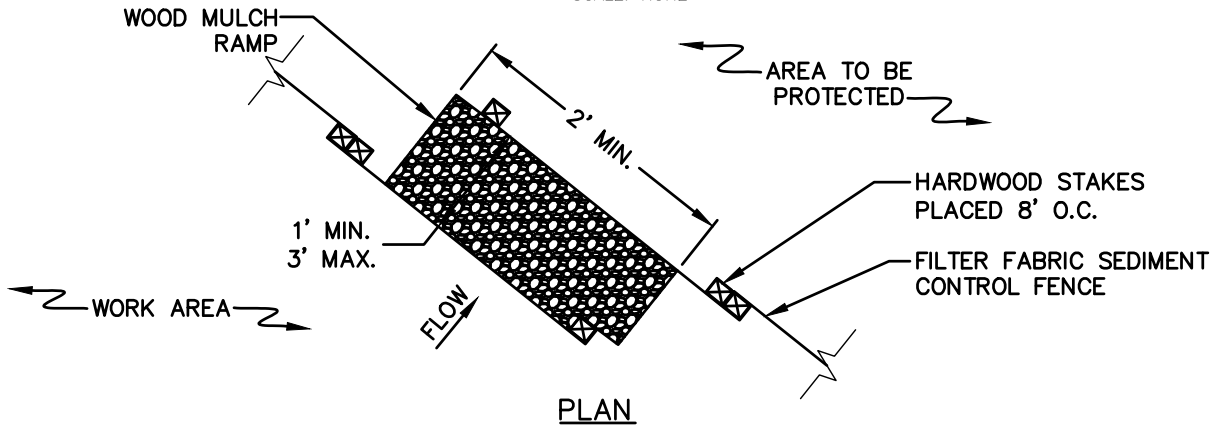
Access, Maintenance and Construction
Best Management Practices

Reference

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

BMP DETAIL

SCALE: NONE



NOTES

1. IN AREAS WHERE SLOPES OR RUN-OFF VOLUME PROHIBIT USE OF SILTSOXX, CROSSINGS CAN BE PROVIDED THROUGH TRENCHED SILT FENCE.
2. INTALL SILT FENCE TO SPECIFICATIONS IN EG303 APPENDIX 7 "SEC-2 SEDIMENT CONTROL FENCE."
3. WOOD MULCH RAMP IS OPTIONAL DEPENDING ON SUBSTRATE/SITE CONDITIONS, AND TO BE APPROVED BY NATIONAL GRID ENVIRONMENTAL SCIENTIST.
4. GAPS TO BE SPACED EVERY 50 FT, IF POSSIBLE GIVEN WETLAND PERMIT CONDITIONS.

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BMP # AA-24
SILT FENCE AMPHIBIAN & REPTILE
CROSSING #3