

BOSTON GAS COMPANY

Mill Road Gas Main Replacement Project
Littleton, MA

Notice of Intent

Town of Littleton
Conservation Commission
November 2023

Prepared for:
Boston Gas Company
170 Data Drive
Waltham, MA 02451

BSC Project No. 89840.68

Prepared by:



1 Mercantile Street, Suite 610 Worcester, MA 01608

NOVEMBER 13, 2023

Littleton Conservation Commission
33 Shattuck St
Littleton, MA 01460

**RE: Mill Road Gas Line Replacement Project
Littleton, Massachusetts
Notice Of Intent
Boston Gas Company**

Dear Conservation Commission Members,

BSC Group, Inc. (BSC) is filing this Notice of Intent (NOI) on behalf of the Boston Gas Company (BGC) for portions of a utility replacement project involving the replacement of existing gas mains within the roadway of Mill Road in Littleton, MA ("The Project"). BGC is proposing to replace the existing underground steel gas main which crosses Mill Pond, with a new, underground plastic gas line. This NOI is being submitted in accordance with the Massachusetts Wetlands Protection Act (*M.G.L. Ch.131, S.40*) (WPA), and its implementing regulations (*310 CMR 10.00*), and the Town of Littleton's Wetland Protection Bylaw (*Chapter 171*). The location of the proposed activities is shown on the USGS Site Locus Map in **Attachment B**.

Specifically, activities which are the subject of this NOI include the installation of approximately 350 feet of new Horizontal Directional Drilling (HDD) gas main beneath Mill Road at the Mill Pond crossing, which include approximately 6-ft beneath Land Under Water and Waterways at a concrete culvert. The staging areas associated with the HDD equipment will include two (2) entry/exit pits that will be located within Riverfront Area and the 100-ft Buffer Zone associated with Mill Pond. The existing main within roadway crossing over Mill Road and beneath the Mill Pond will be abandoned in place, and the new gas main will be installed deeper under the road via Horizontal Directional Drilling (HDD) methodology. While no impacts are anticipated as a result of the work as the gas main will be below ground level, this NOI is being submitted as a contingency measure in the event of an inadvertent return of drilling fluid during HDD installation. Exempt maintenance activities (restricted to the paved roadway within 100-ft Buffer Zone, 200-ft Riverfront Area and BLSF), are also proposed, and are described within **Attachment A** - Project Narrative. Please also refer to the enclosed USGS Site Locus Map and Environmental Resources Map in **Attachment B**, and Site Photographs in **Attachment C**.

The proposed work is necessary to address the long-term reliability and resilience of the existing gas main crossing over Mill Pond. This NOI serves as a request for an Order of Conditions for the proposed underground gas main installation activities within resource areas which are jurisdictional under the WPA.

Throughout the Project, 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 minimized. Upon completion of the Project activities, all

temporarily disturbed areas will be restored to pre-existing conditions to the maximum extent practicable.

We respectfully request that this matter be heard at the next scheduled Conservation Commission hearing. A copy of this application has been sent concurrently to the Central Regional Office of the Department of Environmental Protection (CERO), via eDEP. Hard copies will be provided to the Conservation Commission. If you have any questions regarding the enclosed information, please contact me at (617) 896-4341 or Jaime Walker of BGC at (978) 551-1156. Thank you for your consideration in this matter.

Thank you,
BSC Group, Inc.



Carolyn Gorss
Ecological Project Manager

cc: Jaime Walker, BGC
MassDEP Central Regional Office (CERO)

Enclosures:

- WPA Form 3** – Notice of Intent, NOI Fee Transmittal Form, Waiver Form, and Copy of Filing Fee Checks
- Attachment A** Project Narrative
- Attachment B** USGS Site Locus Map, Environmental Resources Map, FEMA Firmette
- Attachment C** Site Photographs
- Attachment D** Abutters Notification Letter, Certified List of Abutters
- Attachment E** National Grid's Best Management Practices Manual (EG-303)
- Attachment F** HDD Contingency Plan

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Littleton, Massachusetts
Notice of Intent

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ATTACHMENT C	SITE PHOTOGRAPHS
ATTACHMENT D	EG-303NE BEST MANAGEMENT PRACTICES
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Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Littleton

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):

Mill Road

a. Street Address

Littleton

b. City/Town

01460

c. Zip Code

Latitude and Longitude:

42.533772

d. Latitude

-71.503993

e. Longitude

N/A- Public Road

N/A- Public Road

f. Assessors Map/Plat Number

g. Parcel /Lot Number

2. Applicant:

Jaime

a. First Name

Walker

b. Last Name

Boston Gas Company (BCG)

c. Organization

170 Data Drive

d. Street Address

Waltham

e. City/Town

MA

f. State

02451

g. Zip Code

(978) 551-1156

h. Phone Number

i. Fax Number

jaime.walker@nationalgrid.com

j. Email Address

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

N/A Public Roadway

a. First Name

b. Last Name

c. Organization

d. Street Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

Carolyn

a. First Name

Gorss

b. Last Name

BSC Group, Inc.

c. Company

One Mercantile Street

d. Street Address

Worcester

e. City/Town

MA

f. State

01608

g. Zip Code

508-561-7000

h. Phone Number

i. Fax Number

cgorss@bscgroup.com

j. Email address

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

\$750.00

a. Total Fee Paid

\$362.50

b. State Fee Paid

\$387.50

c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:

Boston Gas Company (BGC) proposes to replace existing gas mains within Mill Road and install a new plastic main via HDD installation under Mill Pond.

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

- | | |
|---|---|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Commercial/Industrial | 4. <input type="checkbox"/> Dock/Pier |
| 5. <input checked="" type="checkbox"/> Utilities | 6. <input type="checkbox"/> Coastal engineering Structure |
| 7. <input type="checkbox"/> Agriculture (e.g., cranberries, forestry) | 8. <input type="checkbox"/> Transportation |
| 9. <input type="checkbox"/> Other | |

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

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

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR 10.24(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:

N/A - Public Roadway

a. County

N/A

c. Book

b. Certificate # (if registered land)

N/A

d. Page Number

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

- ☐ 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.
- ☒ 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 type="checkbox"/> Bordering Vegetated Wetland	1. square feet	2. square feet
c. <input checked="" type="checkbox"/> Land Under Waterbodies and Waterways	6 1. square feet 0 3. cubic yards dredged	0 2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet 3. cubic feet of flood storage lost	2. square feet 4. cubic feet replaced
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet 2. cubic feet of flood storage lost	3. cubic feet replaced
f. <input checked="" type="checkbox"/> Riverfront Area	Beaver Brook / Mill Pond 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: ~13,000
square feet

4. Proposed alteration of the Riverfront Area:

<u>350</u>	<u>350</u>	<u>0</u>
a. total square feet	b. square feet within 100 ft.	c. square feet between 100 ft. and 200 ft.

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

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

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

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



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

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

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

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	1. square feet	
	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	1. square feet	2. cubic yards dune nourishment
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet	
h. <input type="checkbox"/> Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet	
	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet	
4. <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 checked="" 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

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

a. ☐ Yes ☒ No

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

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

August 2021

b. Date of map

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

- c. Submit Supplemental Information for Endangered Species Review*

1. ☐ Percentage/acreage of property to be altered:

(a) within wetland Resource Area

percentage/acreage

(b) outside Resource Area

percentage/acreage

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

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

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

(b) ☐ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/ma-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.

Environmental Resources Map

a. Plan Title

BSC Group,

b. Prepared By

d. Final Revision Date

N/A

c. Signed and Stamped by

e. Scale

USGS Locus Map

f. Additional Plan or Document Title

11/9/2023

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:

2. Municipal Check Number

eDEP Payment

4. State Check Number

6. Payor name on check: First Name

3. Check date

5. Check date

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.

1. Signature of Applicant		11/13/23
		2. Date
3. Signature of Property Owner (if different)		4. Date
		11/13/23
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.



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

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:

Mill Road

a. Street Address

eDEP payment

c. Check number

Littleton

b. City/Town

\$362.50

d. Fee amount

2. Applicant Mailing Address:

Jaime

a. First Name

Walker

b. Last Name

Boston Gas Company

c. Organization

170 Data Drive

d. Mailing Address

Waltham

e. City/Town

MA

f. State

02451

g. Zip Code

978-551-1156

h. Phone Number

i. Fax Number

jaime.walker@nationalgrid.com

j. Email Address

3. Property Owner (if different):

N/A Public Roadway

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).



Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2e	1 (x 1.5)	\$750.00	\$750.00
Step 5/Total Project Fee:			\$750.00

Total Project Fee:	<u>\$750.00</u>
	a. Total Fee from Step 5
State share of filing Fee:	<u>\$362.50</u>
	b. 1/2 Total Fee less \$12.50
City/Town share of filling Fee:	<u>\$387.50</u>
	c. 1/2 Total Fee plus \$12.50

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.

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.

noifeetf.doc • Wetland Fee Transmittal Form • rev. 10/11



Littleton Conservation Commission

37 Shattuck Street / Room 303

Phone: 978 540-2428

Fax: 978 952-2321

Filing Procedure Summary **Submit this checklist with application** **(rev August 15, 2023)**

The following procedures must be followed when filing under M.G.L. c. 131, §40 or the Littleton Wetlands Protection, Chapter 171 for a wetland permit. The procedure applies to Notice of Intents, Abbreviated Notice of Intents, Request for Determinations, and Abbreviated Notice of Resource Area Determinations.

This summary is not to be considered all inclusive and in no way should an applicant misconstrue its contents to replace any part of M.G.L. c. 131, §40 or the Littleton Wetlands Protection, Chapter 171.

____ (1) one electronic file of complete submittal emailed to the Conservation Agent and 2 hard copies (with full sized, color plans) filed with the Conservation Commission hand delivered or mailed and received in the office before noon of filing deadline. Additional copies may be required of some projects. Please call ahead to determine meeting dates and filing deadlines.

____ (1) one complete copy of the application (paper or by eDEP) must be filed with Department of Environmental Protection at:

Department of Environmental Protection
8 New Bond Street
Worcester, Massachusetts 01608

It is also helpful if MADEP gets an electronic file sent to
CERO_NOI@mass.gov (underscore between CERO and NOI)

With the Subject line based on this format "LITTLETON -xxx-STREET ADDRESS -
APPLICANT NAME. The "xxx" will be NOI, ANRAD or RDA

____ The applicant must include a certified list of abutters (including those in adjacent Towns) located within 100 feet of the property boundaries, according to the most recent records of the Town Assessors, or as determined by MADEP policy on abutter notification. If a Town line is within 300 feet of the Limit of Work, then that Town's Conservation Commission must also be notified.

____ The applicant, at the applicant's expense, shall post to each abutter (and owner if owner is not applicant) by Certificated Mail (Return Receipt Requested), or by hand delivery with signature of abutter a copy of the Abutter Notification Form. An Affidavit of Service of such notification shall also be provided. Abutters' signed acknowledgement of notification (ie, green Return Receipt cards) shall be provide at the first public meeting/hearing. See the Littleton Conservation Commission website for the Abutter Notification Form or call the Agent.

PROJECT NAME/ADDRESS: _____ **DATE:** _____

____ At the applicant's expense, the Commission shall publish a legal notice in a newspaper of local circulation announcing the public hearing. The Notice will be published at least five (5) working days prior to the meeting and will include the date, time and location of the public hearing. The newspaper will bill the applicant directly. This bill must be paid before the legal notice will be published. **Please provide information on who will pay the newspaper (owner, applicant and/or representative) with the application.**

Name	<u>Carolyn Gorss</u>
Company (if applicable)	<u>BSC Group, Inc.</u>
Mailing Address	<u>1 Mercantile Street, Suite 610, Worcester MA, 01608</u>
E-mail	<u>cgorss@bscgroup.com</u>
Phone	<u>508-561-7000</u>

____ Filing fees for MADEP and Town of Littleton under the MA Wetlands Protection Act regulations, as well as the Littleton Wetlands Protection ByLaw filing fee.

PROJECT NAME/ADDRESS: Mill Road Gas Main Replacement Project, Mill Road, Littleton MA **DATE:** 10/13/2023

Plans Checklist to accompany application for Notice of Intent (NOI). This is a Bylaw Supplemental form to aid you in submitting complete and appropriate information on your plans. These are suggested/expected items to be shown on the plans but will not necessarily be applicable to all projects. Note that the Commission requires a colored plan for presentation purposes.

All lines must be marked X or identified as Not Applicable ("N/A"), or noted as to where the information can be found.

(1) ☒ North arrow ☒ Locus insert ☒ Bar scale (preferably 1 in = 20 to 40 ft.)

(2) Title Block with Following Information:

☒ Plan Title

☒ Applicant's Name(s), address & phone

N/A - Public Roadway Property Owner Name(s), address & phone

☒ Location/street name & number

Provided in Attachment D Assessor map, lot, Registry book, page on all lots w/activity

☒ Plan preparer's name, title, stamp, company name, address phone & fax

☒ Date plan prepared, last revised, and revision notes

Provided in USGS Locus

(3) ☐ Existing contours

(4) ☐ Existing structure(s) with natural and man-made features, including stone walls and trails

(5) ☐ Trees over 8-inch diameter breast height within resource areas and buffer zones

Provided in Attachment D

(6) ☐ Property lines; clearly mark limits of review area if entire property is not under review

(7) ☒ Existing utilities, rights-of-way, easements, ancient ways or other deeded ways

(8) ☐ Name of wetland scientist responsible for identifying wetland boundaries

Provided in Narrative

(9) ☐ Date wetland was flagged (must be no more than 3 years prior to current date)

(10) ☒ Wetland resource area boundaries with flag numbers

(11) ☒ 100 foot buffer zone limits and 50-foot No Disturb limit

Provided in Narrative

(12) ☐ Notations identifying all wetland types and delineation methodology

(13) ☐ Shortest distance to all resource areas from closest proposed structure (use arrow)

PROJECT NAME/ADDRESS: Mill Road Gas Main Replacement Project, Mill Road, Littleton MA **DATE:** 10/13/2023

- (14) _____ Shortest distance to all resource areas from closest point of erosion control materials
- (15) _____ Proposed contours (one foot increments)
- (16) ☒ Proposed location of utility lines
- (17) _____ Proposed structure(s) (including driveway work, septic components, etc)
- (18) _____ Existing and proposed stormwater management features (including temporary controls)
- (19) _____ Watersheds and drainage areas
- (20) _____ Test pit, boring holes and logs
- (21) _____ Conservation post detail and plaque detail
- (22) _____ Location of temporary stockpiles w/notation of content (e.g. excavated soils)
- (23) _____ Location of snow storage areas
- (24) _____ Location of dumpster(s)
- (25) _____ Cross-sections, particularly at key areas of slopes near wetland resource areas
- (26) _____ Mitigation plans as needed
- (27) _____ Construction sequencing
- (28) ☒ Details as applicable, including type of erosion controls

One full sized color plans (and presentation plan) should be colored as follows.

Check if present	Feature	Line Type
	Existing tree line	Green solid
	Proposed tree line	Green dashed
x	Bordering Vegetated Wetlands*	Dark blue solid Bright Green
x	Bank/Land Under Water	Light blue dashed
x	100 foot buffer from BVW and/or Bank	Yellow solid Bright Green hashed line
	50 foot No Disturb limit from BVW and/or Bank	Yellow dashed
	Vernal Pool	Purple solid
	Vernal Pool 100 foot	Purple dashed
	Bordering Lands Subject to Flooding	Orange solid
	Isolated Lands Subject to Flooding	Orange dashed
	Mean Annual High Water	Light red solid
x	100 foot and 200 foot Riverfront Area	Light red dashed Bright Blue hashed line
x	Bank, Wetland, Land Under Water, Riverfront Area and Floodplain	Red solid with differentiated stippling/cross hatching Various Colors, labelled
	Mitigation Area	Red dashed line with differentiated stippling/cross hatching
x	Erosion controls	Brown dashed Red hashed
x	Limit of work	Brown solid Various Colors, labelled

*Note locations of any federal, non-state isolated vegetated wetlands

Form Center

By [signing in or creating an account](#), some fields will auto-populate with your information and your submitted forms will be saved and accessible to you.

Waiver Request Form

[Sign in to Save Progress](#)

First Name*

Carolyn

Last Name*

Gorss

Date*

10/13/2023

Map/Lot*

N/A - Public Roadway Mill Road

Project Address*

Mill Road, at the Mill Pond crossing

Project purpose and need*

Replacement of gas main infrastructure.

In order to request a waiver, this provides a guidance for required information

Attach additional text, plans, photos, or graphics if needed

[Choose File](#) No file chosen

What specific action(s) is the waiver being asked for?*

Waiver for work within 50-ft of Inland Bank/BVW

How is the action(s) in the public interest, necessary to prevent a safety hazard or water dependent?*

Routine maintenance to ensure the integrity of public utilities.

How is the action(s) consistent with the intent and purpose of the bylaw?*

No impacts to resource areas, limit of work within existing disturbed roadway.

Existing and proposed site conditions (ie, impervious, lawn & disturbed areas) (square feet;show on plan)*

Existing paved roadway surface, proposed paved roadway surface. No change in site conditions after proposed maintenance. Approximately 350 feet of new gas main installation.

Existing and proposed distances of land uses from wetland resource areas (show on plan)*

Distances vary - most within 10-ft of wetland resource areas, but within the roadway.

Analysis of less environmentally damaging practicable alternative*

Provided in the Narrative of the submitted NOI.

Proposed short term and long term protection of wetland resource areas*

BMPs will include erosion and sedimentation controls.

Is the site in a Zone I, II, or III (groundwater) or Zone A, B, or C (surface water) water supply area*

No

Are there critical, unique, or sensitive resource areas in the area (ie, NHESP mapped habitat, vernal pools, unusual wetland types, cold water fisheries, outstanding resource waters, core habitat, conservation land, etc); show on plan*

No

Other factors for consideration

Electronic Signature Agreement*

By checking the "I agree" box below, you agree and acknowledge that 1) your application will not be signed in the sense of a traditional paper document, 2) by signing in this alternate manner, you authorize your electronic signature to be valid and binding upon you to the same force and effect as a handwritten signature, and 3) you may still be required to provide a traditional signature at a later date.

☒ I agree.

Electronic Signature

Carolyn Gorss

Project*

Mill Road Gas Main Replacement

Print Only

* indicates a required field

Attachment A

Mill Road Gas Main Replacement Project
Littleton, Massachusetts
Notice of Intent

PROJECT NARRATIVE

1 INTRODUCTION

BSC Group, Inc. (BSC) is filing this Notice of Intent (NOI) on behalf of the Boston Gas Company (BGC) for portions of a utility maintenance project involving the replacement of existing natural gas mains constructed in 1960 from 49 to 80 King Street and 2 to 72 Mill Road in Littleton, MA (“The Project”). The purpose of the Project is to upgrade an existing natural gas distribution network within King Street and Mill Road and at the current gas to meet current standards, so that BGC may continue to provide reliable gas service to customers in Littleton, MA. At the Mill Pond crossing, BGC proposes to replace the existing line further below the surface with a new, underground plastic gas line, using Horizontal Directional Drilling (HDD) methodology. The existing, exposed pipeline at the Mill Street Bridge will be abandoned in place.

This NOI is being submitted in accordance with the Massachusetts Wetlands Protection Act (*M.G.L. Ch.131, S.40*)(WPA), and its implementing regulations (*310 CMR 10.00*), and the Town of Littleton’s Wetland Protection Bylaw (*Chapter 171*), as well as to satisfy the requirements of Section 401, in accordance with *314 CMR 9.03(3)*. The location of the proposed activities is shown on the USGS Site Locus Map in **Attachment B**.

1.1 Jurisdictional Activities

Activities which are the subject of this NOI include the installation of approximately 6-ft of new gas main within Land Under Water and Waterways (LUWW) associated with the culvert on Mill Road. The total length of the HDD installation is 350-ft long, within RFA and buffer zone to BVW/Inland Bank. While no impacts to resource areas are anticipated as a result of the HDD, as the replacement gas main will be pulled through a drilled hole well below ground level, this NOI is being submitted as a contingency measure in the event of an inadvertent return. An “Inadvertent Return” (IR) Contingency Plan is provided in **Attachment F**. Please refer to the enclosed Environmental Resources Map in **Attachment B**, and Site Photographs in **Attachment C**, for depictions of the work site.

HDD involves a specialized drill rig that creates a tunnel along a pre-determined path under waterways or other impediments. This specialized rig then then “pulls” the new pipeline through the drilled tunnel. During construction, BGC will stage HDD equipment on temporary work areas within the roadway on each side of the river. Crews will primarily operate equipment from the entry pit work area in Littleton. The new gas main will be welded together and pulled through the bore from the exit pit and stringing area. General guidance for “Inadvertent Return” (IR) Contingency Plans is provided in **Attachment F**, however, the contractor will be responsible for providing a site-specific IR Contingency Plan prior to construction.

All equipment will be located within the roadway, Best Management Practices (BMPs) will be

¹ MassDEP typically asserts discretionary authority under the 401 Water Quality Certification Program over HDD projects crossing waterbodies based on the “dredge” of Land Under Water and potential for inadvertent release into the waterbody.

in place prior to and during the ground-disturbing work, and the area will be restored to preexisting conditions to the extent practicable, including repaving of roadway surfaces.

1.2 Exempt Activities

Portions of the proposed Project are exempt utility maintenance activities in accordance with 310 CMR 10.02(2)(a)(2), as they involve the in-kind replacement and abandonment of existing infrastructure and work within the existing roadway footprint along King Street and Mill Road. These activities include the maintenance of existing mains within the paved roadways and roadway shoulders of King Street and Mill Road where these activities are within Riverfront Area (RFA), Bordering Land Subject to Flooding (BLSF), and the 100-ft Buffer to BVW/Inland Bank. This NOI serves as courtesy notice to the Conservation Commission of the following work associated with these exempt activities.

The larger project involves gas line replacement activities from 49 to 80 King Street and 2 to 72 Mill Road. These exempt, routine maintenance activities include abandonment of sections of the existing gas line, installation of replacement line via trenching within the roadway, and restoration of the roadway surface following installation. For the entirety of this project, BGC is proposing to replace a total of 805 feet of 2-inch coated steel and plastic with 4-inch plastic, and 2,005 feet of 2-inch coated steel and 1-inch plastic with 4-inch plastic along King Street and Mill Road.

BMPs will be installed prior to work beginning, and there are no anticipated impacts to the Bank or the waterway.

2 EXISTING CONDITIONS

The jurisdictional portions of the Project are located within the existing paved roadway of Mill Road, specifically where the road crosses Mill Pond. Land use immediately adjacent to the Project area is comprised of the open water areas of Mill Pond and low-density residential use, with areas of mixed forest and other impervious areas.

2.1 Resource Area Summary

BSC conducted both a desktop analysis (using MassGIS data layers and publicly available data), and field investigations of the proposed Project area, to assess permitting requirements pursuant to the WPA. BSC Wetland Scientists delineated adjacent wetland resource areas in July 2023, in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ed. J.S. Wakely, R.W. Lichvar, and C. C. Noble. ERDC/EL TR-12-1.

Existing conditions, wetland resource areas, and buffer zones (in relation to the proposed activities), are shown on the Environmental Resources Map in **Attachment B**. Representative photographs of site conditions are provided in **Attachment C**. The proposed activities are within 100-ft Buffer Zone to BVW and Inland Bank, BLSF, and the 200-ft

Riverfront Area, all associated with Mill Pond and the nearby Beaver Brook. No impacts to resource areas are proposed within Bordering Vegetated Wetland (BVW). Gas lines will all be constructed underground, and no permanent impacts are proposed within any of the affected resource areas.

Given that the gas line installation will involve HDD under the Mill Pond, no temporary or permanent impacts are anticipated to LUWW or Bank. In the unlikely event of an inadvertent return (i.e. drilling fluid release to the ground surface/river bottom), BGC and its contractor will implement immediate response actions as outlined in the attached Inadvertent Release Contingency Plan that will address the methods, materials, and equipment that would be used to stop, contain, and clean up an inadvertent return. Please see below for a description of response and restoration actions, as well as **Attachment F** for the IR Contingency Plan.

3 PROJECT ACTIVITIES & ASSOCIATED IMPACTS

The Project has been designed to avoid adverse impacts to the greatest possible extent. Project impacts to the ground surface and topography are temporary in nature and will be restored upon completion of the Project. While no impacts to resource areas are anticipated from the HDD activities, this NOI is being filed as a contingency (in the even or an IR), and to fulfill the Section 401 requirements for work underneath LUWW. Details on the proposed activities are discussed further in the following sections. The work will begin as soon as the project is permitted.

3.1 HDD Installation

For the HDD, the bore hole will be drilled in a predetermined path using a surface-launched drilling rig staged on Mill Road over Mill Pond. BGC will establish two HDD staging areas at the exit and entry locations of the replacement section of pipeline and mobilize equipment into these areas. BGC is proposing to excavate the exit pit within the existing road layout to the east (Littleton) side of Mill Pond. The exit pit will require a work area of approximately 45-ft by 10-ft, surrounded by erosion controls. The entry pit will be established within the existing road layout to the west (King Street) side of Mill Pond. The entry pit will also require a work area of 45-ft x 10-ft, surrounded by erosion controls. Each pit will be excavated using a mini excavator from within the paved roadway. Excavated material will either be removed from the Project site or stored in an upland area for use as backfill upon completion of the Project. Once the gas line has been installed and connections made, the entry/exit pits will be backfilled to their pre-existing grade. Where applicable, the area will be repaved. No increase in impervious surfaces or changes in fill/grade are proposed.

Entry and Exit pits will help start the bore, receive the guided bore on the other side, and contain the drilling fluid returns. To complete the HDD bore, a pilot hole is drilled using a small-diameter (3 to 5-inch) drill string and a drill bit entering the ground through the “entry pit.” Bentonite drilling fluid, composed of bentonite clay and water, is delivered to the cutting head through the drill string to cool the drill bit, provide hydraulic cutting action, and remove cutting spoils as the drilling fluid returns to the entry point of the pilot hole. A completed pilot

hole and subsequent drilling will end with the drill head resurfacing at the “exit pit.” The pilot hole is then enlarged with one or more reaming passes, until the desired hole diameter is obtained based on the proposed pipeline diameter. Once the bore hole is appropriately sized, machinery will pull the replacement pipeline through the bore hole, test the pipe for integrity (to ensure there was no damage to the pipe during the pull), and tie the replacement pipeline into the existing lines.

HDD is done with the help of a viscous fluid known as drilling fluid, comprised of a non-toxic colloidal clay called bentonite. Bentonite absorbs water which causes it to swell, creating a viscous fluid. This fluid is used to remove cut borings, stabilize the bore hole, and cool the drill head. Fresh drilling fluid is expelled through a nozzle at the tip of the drill head. Throughout the process, the fluid is cycled through a reclaimer, a machine which removes the drill cuttings, and allows the fluid to be recycled for continuous use within the project. The entry and exit pits will also ensure that the drilling fluid is collected and contained.

At the end of the installation, any the drilling fluid remaining in the drill pits or on-site will be collected and transported to an appropriate location offsite. Once the bore hole has been drilled and stabilized, the gas line will be pulled through.

The gas main will be installed at an appropriate depth to avoid any negative impacts to the existing bridge structure. Approximately 180-ft of the underground HDD-drilled gas main will be within BLSF. As the activities are below ground, no alteration of BLSF is anticipated, and no impacts to flood storage capacity are proposed. Work will be occurring under mapped floodplain, however no impacts are anticipated to this resource as a result of the work being subsurface. The alignment of the HDD drill path will be approximately 350 feet long. Because the pipeline is installed underneath the bed of the river, no alteration to LUWW is anticipated.

3.2 HDD Contingency Plan

Since the HDD gas line installation method involves the use of drilling fluid that is slightly pressurized during the drilling process in order to function properly, there is potential with any HDD that some drilling fluid may migrate out of the drill hole through existing cracks or fissures in the ground and escape to the surface. However, the design of the HDD, including length and depth of the drill path, takes into consideration the nature of the underlying soil and bedrock geology to be drilled through, as well as the presence of sensitive resources, in order to minimize the potential for an inadvertent return. Details of the IR Contingency Plan are included as **Attachment F**.

BGC’s drilling contractor will prepare an IR Contingency Plan prior to the commencement of construction. This plan will set forth the methodologies, monitoring activities, and procedures to be followed to prevent an inadvertent release of drilling fluid and will establish the process and procedures to be followed if an inadvertent release of drilling fluid occurs. Response and restoration actions will include:

- Continuous resource area monitoring during installation and stop work procedures if an IR is observed.
- Detailed descriptions and locations of containment devices such as booms, curtains, or sediment and erosion controls
- Materials removal and disposal procedures both in resource areas and in uplands
- Reporting procedures and timelines

4 ALTERNATIVES ANALYSIS

The initial design for the Mill Pond was the attachment of the replacement gas line to the existing road/culvert crossing the Mill Pond. However, BGC's/the Town's structural engineer deemed attachment infeasible due to the condition of the existing culvert and roadway.

4.1 Utility Bridge Alternative

The utility bridge alternative would require an extensive engineering effort to design a bridge that would fully span Mill Pond and support the new gas pipeline. A utility bridge would require excavation in the 100-ft Buffer Zone and 200-ft Riverfront Area for bridge foundations on either side of Mill Pond. The bridge would then cross above Inland Bank and LUWW. As a new over-the-water crossing of a navigable waterway, a new Ch 91 License would be required, and the bridge would represent a permanent aboveground alteration to the 100-ft Buffer Zone and 200-ft Riverfront Area, as well as introduce a new visual intrusion into the environment of Beaver Brook and the Mill Pond. Because of permanent impacts to resource areas, the need for a new Ch 91 License, more challenging engineering design, higher costs, and the visual alteration of Mill Pond, this alternative was not selected.

4.2 HDD Alternative

As described above, the HDD Alternative will not involve any permanent impacts to jurisdictional resource areas, will not include any aboveground facilities, and requires less cost and time since it does not involve design and installation of a secondary utility bridge over the Mill Pond or Beaver Brook. For these and other reasons, the HDD Alternative is the preferred alternative.

In conclusion, the HDD installation method is less impactful to wetland resources, involves less permitting, will not result in a permanent aboveground facility (the utility bridge) that would be visible to the public, is less costly, and is a simpler engineering design. No significant adverse impacts on wetland resource areas or values protected by the WPA are anticipated with the HDD method.

5 CONFORMANCE WITH THE PERFORMANCE STANDARDS OF THE WPA

The Project has been designed to meet all applicable performance standards for each affected resource area under the WPA. In accordance with general condition 310 CMR

10.57(4), BGC will implement BMPs to ensure the adjacent resource areas are adequately protected, and impacts to the surrounding area are reduced, minimized, and restored to the maximum extent practicable. Project-specific BMPs are further discussed in Section 6.0.

5.1 Land under Water Bodies and Waterways [310 CMR 10.56(4)]

a) *Where the presumption set forth in 310 CMR 10.56(3) is not overcome, any proposed work within Land under Water Bodies and Waterways shall not impair the following:*

1. The water carrying capacity within the defined channel, which is provided by said land in conjunction with the banks.

No impacts to water carrying capacity are anticipated as part of the Project – all activities within LUWW will be located below the bottom elevation of the stream bed.

2. Ground and surface water quality.

No impacts to water quality are anticipated as part of the Project – all activities within LUWW will be located below ground and shall comply with all applicable regulatory standards. We have included an Inadvertent release contingency plan with this filing and will implement sediment and erosion controls on an as needed basis.

3. The capacity of said land to provide breeding habitat, escape cover and food for fisheries; and

No impacts to aquatic habitat functions are anticipated as part of the Project – all activities within LUWW will be located below ground.

4. The capacity of said land to provide important wildlife habitat functions. A project or projects on a single lot, for which Notice(s) of intent is filed on or after November 1, 1987, that (cumulatively) alter(s) up to 10% or 5,000 square feet (whichever is less) of land in this resource area found to be significant to the protection of wildlife habitat, shall not be deemed to impair its capacity to provide important wildlife habitat functions. Additional alterations beyond the above threshold may be permitted if they will have no adverse effects on wildlife habitat, as determined by procedures established under 310 CMR 10.60.

No impacts to wildlife habitat functions are anticipated as part of the Project – all activities within LUWW will be located below ground.

5. Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.56(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing Standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and the structure spans the channel width by a minimum of 1.2 times the bankfull width. This

presumption is rebuttable and may be overcome by the submittal of credible evidence from a competent source. Notwithstanding the requirements of 310 CMR 10.56(4)(a)4., the impact on Land under Water Bodies and Waterways caused by the installation of a stream crossing is exempt from the requirement to perform a habitat evaluation in accordance with the procedures established under 310 CMR 10.60.

This standard is not applicable to the project – all activities within LUWW will be located below ground and will change the existing roadway crossing for the stream.

6 PROPOSED BEST MANAGEMENT PRACTICES

BGC has established procedures that are to be followed by all employees and its contractors for accessing sites and performing construction and maintenance activities on natural gas transmission ROWs. These procedures, discussed in National Grid's Environmental Guidance Document (EG-303NE) Access, Maintenance and Construction Best Management Practices, ensure that BGC's projects are completed in accordance with all applicable environmental laws and regulations as well as company policies and compliance objectives.

6.1 Sediment and Erosion Controls

Erosion and sediment control measures will be installed prior to the commencement of work, around the limits of excavation for the entry and exit pits. Additional erosion controls may be added based on site conditions. These controls will function to mitigate work-related erosion and sedimentation, and to serve as a physical boundary to delineate work areas to contain construction activities within approved locations. Proposed erosion and sediment control measures may include a turbidity curtain, straw wattles, weed free bale barriers, fiber rolls, or similar treatment.

Erosion and sediment controls will be inspected on a regular basis and maintained in working order until all disturbed areas are stabilized. Please refer to **Attachment E** for erosion and sediment control details.

6.2 Construction Access

Construction access will be from the existing paved roadway of Mill Road. The last crew to leave the site each day would be responsible for regularly sweeping the roadways, if and when sediment and/or rock have been tracked onto the street. No off-road vehicle or equipment access is anticipated for the Project.

6.3 Dewatering

Dewatering may be necessary during construction of the entry/exit pits or pipeline trench. If there is adequate vegetation in upland areas to function as a filter medium, the water will be discharged into a filter bag, or a dewatering basin consisting of a filter bag with straw bale or silt fence perimeter controls which will be located in approved areas outside wetland resource areas. The pump intake hose will not be allowed to set on the bottom of the

excavation throughout dewatering. The basin and all accumulated sediment will be removed following dewatering operations and the area will be seeded and mulched with straw. The bag will be surrounded with additional sediment filtration such as fiber rolls, straw bales, or other appropriate containment.

6.4 Stormwater Management

There will be no change in grade or increase in impervious area as a result of this Project. Therefore, permanent designed stormwater management appurtenances will not be required. BGC will implement sediment and erosion control BMPs to manage stormwater during the construction phase of the project.

6.5 Inadvertent Return Contingency Plan

In the unlikely event of an inadvertent return of drilling fluid during HDD operations, BGC will implement their IR Contingency Plan, a copy of which is provided in **Attachment E**.

6.6 Restoration

Disturbed areas will be stabilized, and the construction site will be returned to existing conditions to the maximum extent practicable. All construction materials, vehicles, and non-biodegradable sediment controls will be removed from the site upon completion of work.

7 CONCLUSION

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

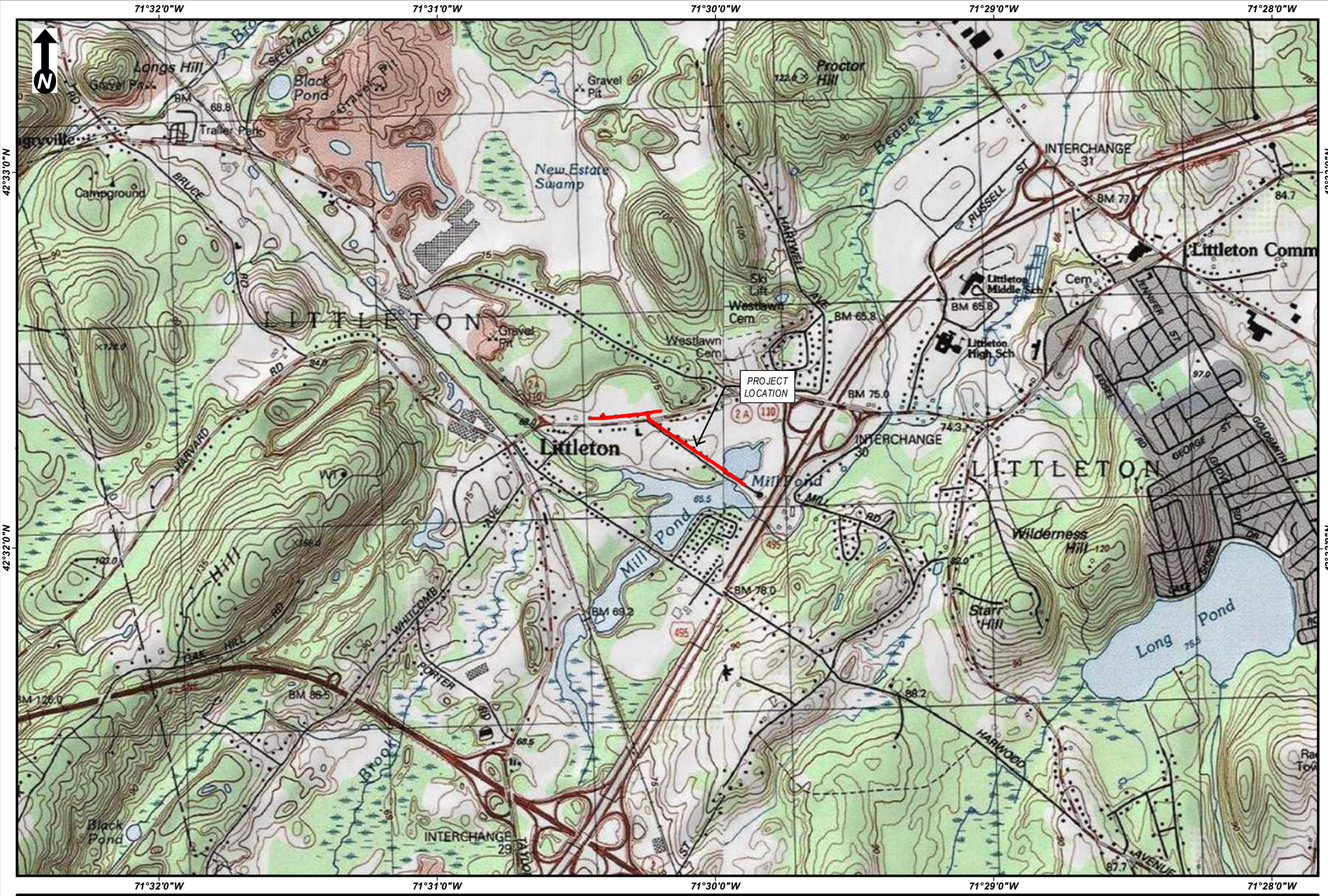
- Result in no impacts to LUWW, BLSF, RFA or Buffer Zones as all activities will be underground or involve the abandonment In-place of existing infrastructure;
- Utilize appropriate BMPs to protect wetland resource areas from sedimentation and soil disturbance during Project activities; and,
- Implement an IR Contingency Plan in the event of an inadvertent return.

Therefore, BGC respectfully requests the Littleton Conservation Commission find this proposal adequately protective of the public interests identified in the WPA and issue an Order of Conditions for the proposed Project as currently designed.

Attachment B

Mill Road Gas Main Replacement Project
Littleton, Massachusetts
Notice of Intent

USGS SITE LOCUS MAP
ENVIRONMENTAL RESOURCES MAPS
FEMA FIRMETTE

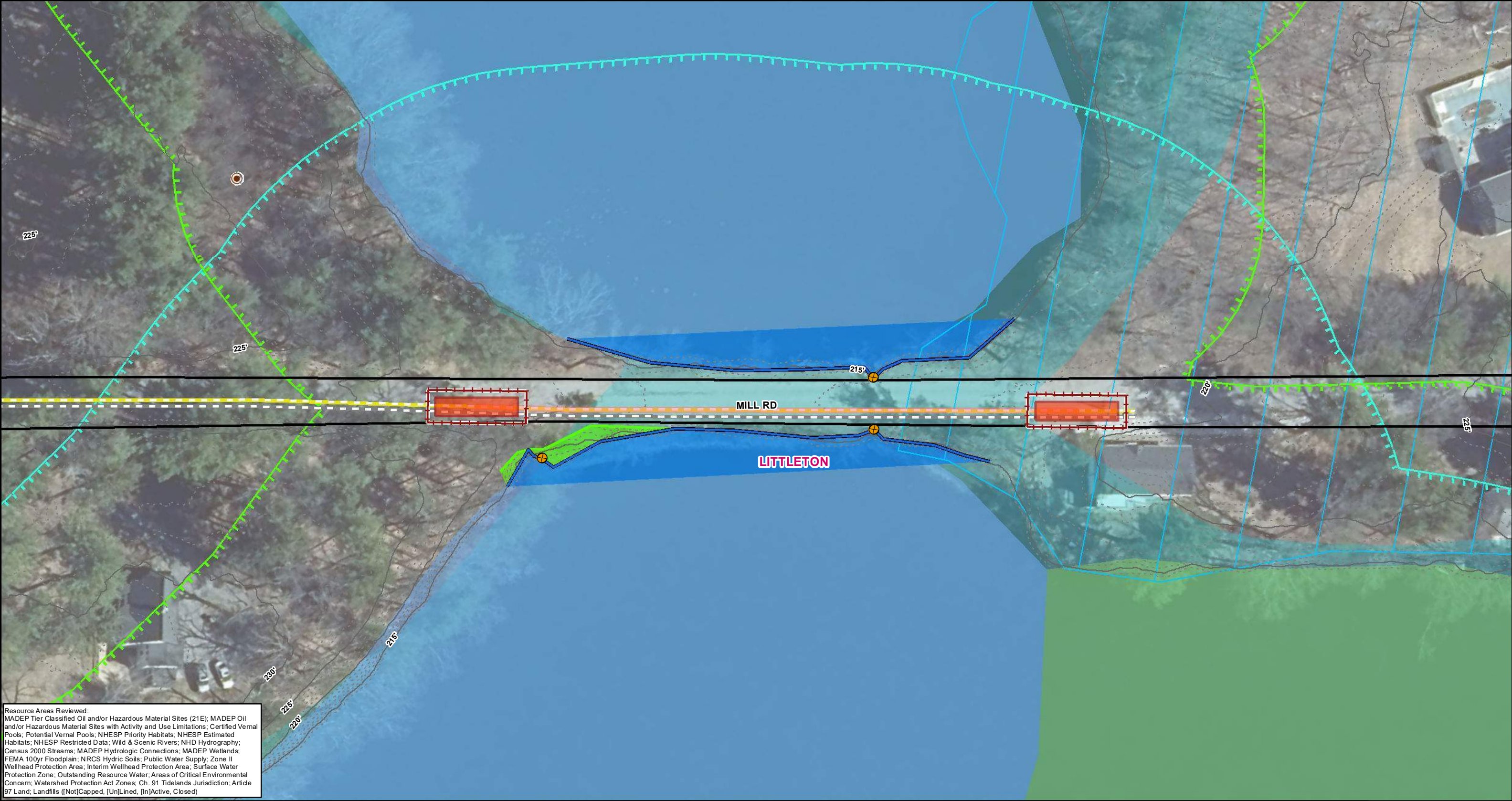


Scale: 1:24,000
1 inch = 2,000 feet
0 1,000 2,000
Feet
(Page Size 8.5 x 11)

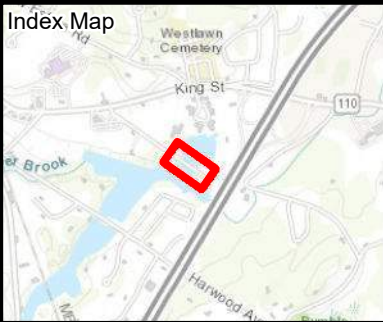
KING ST & MILL RD GAS MAIN REPLACEMENT
USGS Site Location Map
Littleton, MA

Source: Copyright©
2013 National
Geographic Society, i-
cubed

nationalgrid
BSC GROUP



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



Legend

HDD Entry/Exit Pits	Field Delineated Open Water*	200ft Riverfront Area
Existing Gas Main	Field Delineated Wetland Boundary	FEMA 100yr Floodplain*
Existing Gas Main to be Abandoned	Field Delineated Wetland*	Zone II Wellhead Protection Area
Proposed Gas Main	Perennial Stream	MHC Historic Point
Erosion Controls	MADEP Hydrologic Connections	Culvert
HDD Location	MADEP Wetlands*	1 Ft Contours
Pavement Limits	MADEP Open Water*	5 Ft Contours
Field Delineated Pond Bank	100ft Buffer to Wetlands & Streams	

1 inch = 50 feet
0 25 50
Feet
**Indicates Layers Set to Transparency*

**KING ST & MILL RD
GAS MAIN REPLACEMENT**

Environmental Resources Map

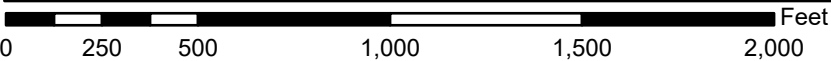
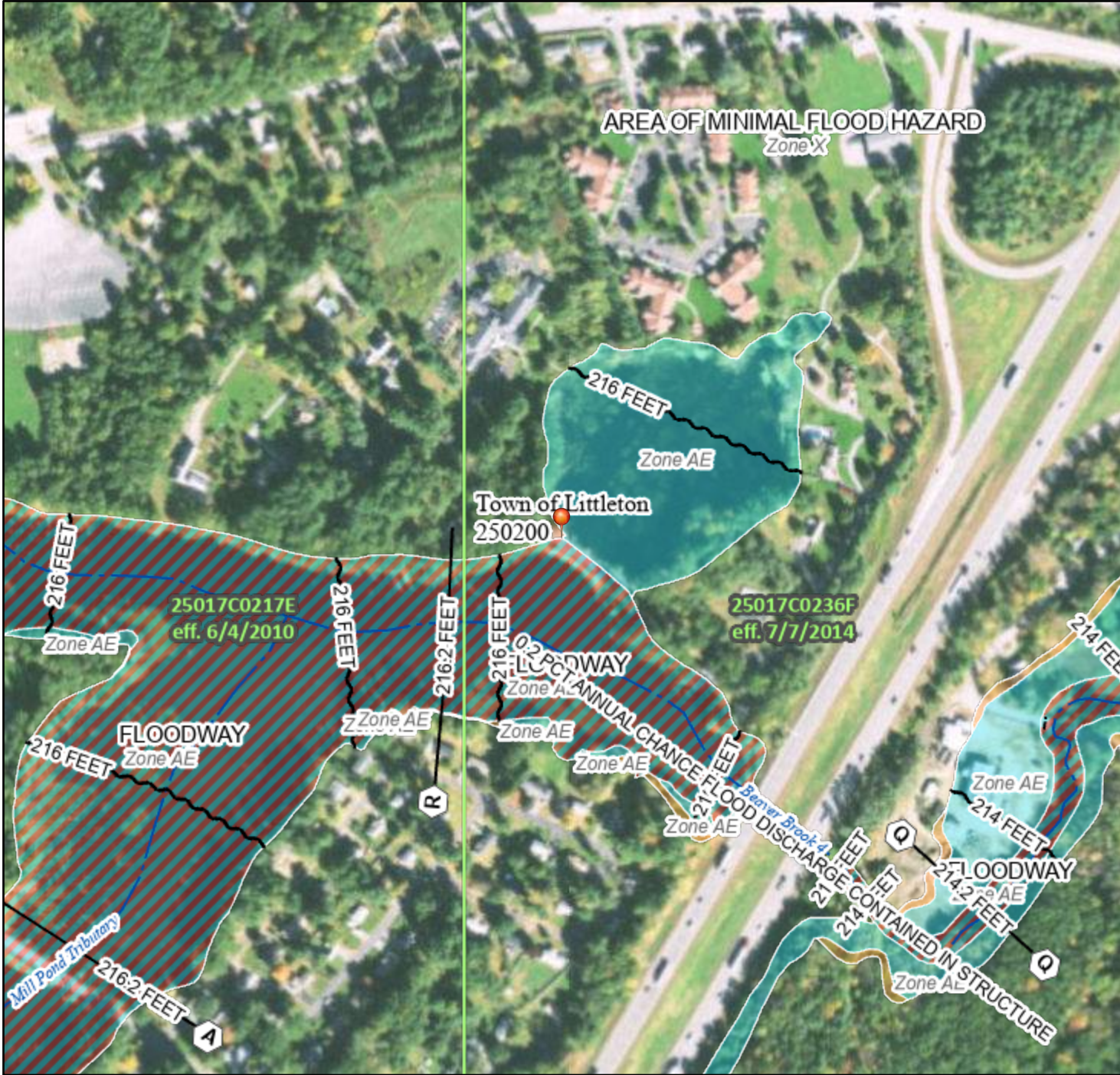
Littleton, MA

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

National Flood Hazard Layer FIRMette



71°30'15"W 42°32'25"N



1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD		Regulatory Floodway
		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
OTHER AREAS		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
GENERAL STRUCTURES		Area with Flood Risk due to Levee Zone D
		NO SCREEN Area of Minimal Flood Hazard Zone X
OTHER FEATURES		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
OTHER FEATURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
OTHER FEATURES		Base Flood Elevation Line (BFE)
		Limit of Study
OTHER FEATURES		Jurisdiction Boundary
		Coastal Transect Baseline
OTHER FEATURES		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
MAP PANELS		Unmapped
		The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **10/15/2023 at 5:56 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attachment C

Mill Road Gas Main Replacement Project
Littleton, Massachusetts
Notice of Intent

SITE PHOTOGRAPHS



Photo #1: Intersection of King St. and Littleton Highschool. *Facing northeast.*



Photo #2: King St. *Facing northeast.*



Photo #3: Intersection of King St. and Mill Rd. *Facing southeast.*



Photo #4: Mill Rd. *Facing east.*



Photo #5: Mill Rd. Facing southeast.



Photo #6: Mill Rd. and Mill Pond. Facing northwest.



Photo #7: Mill Rd. and Mill Pond. *Facing southeast.*



Photo #9: Culvert along Mill Rd. and Mill Pond. *Facing east.*

Attachment D

Mill Road Gas Main Replacement Project
Littleton, Massachusetts
Notice of Intent

EG-303NE BEST MANAGEMENT PRACTICES

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>
APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES
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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 gracilis; 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 MIXSpecies Composition Options:

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

Example Seed Mixes

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

GERNERAL NOTES:

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

APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES

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SEC-11

SEEDING OPTIONS -
WETLAND SEED MIX

SUBJECT

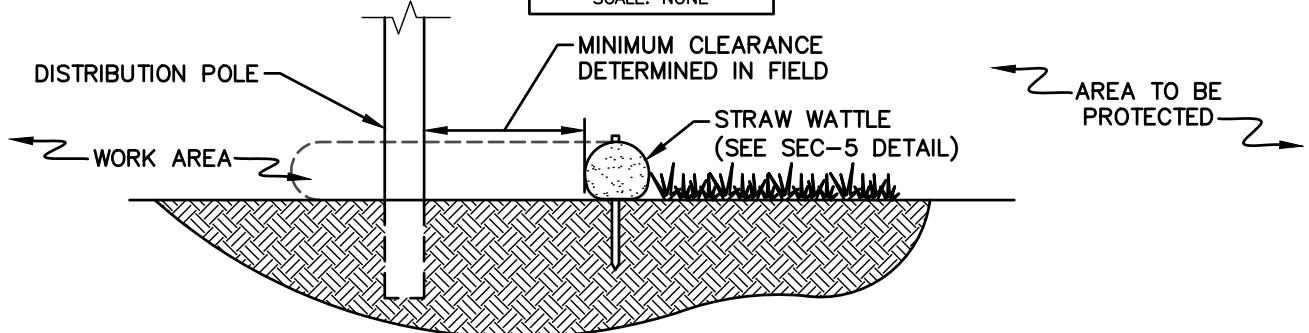
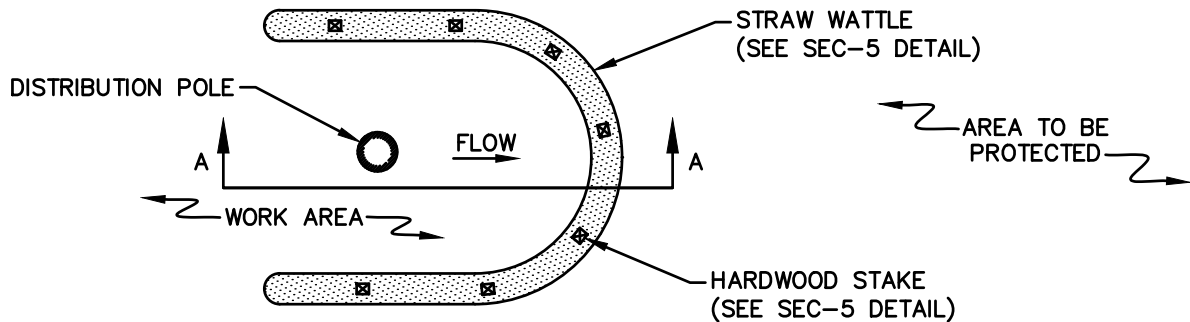
Access, Maintenance and Construction
Best Management Practices

Reference

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

BMP DETAIL

SCALE: NONE

SECTION A-APLANNOTES

1. PRODUCT TO BE STRAW WATTLE OR APPROVED EQUAL BY NATIONAL GRID ENVIRONMENTAL SCIENTIST (SEE SEC-5 BMP DETAIL).
2. STRAW BALE BARRIER PER SEC-1 BMP DETAIL TO BE AN AVAILABLE ALTERNATE DEPENDING ON SITE CONDITIONS AT THE DIRECTION OF NATIONAL GRID ENVIRONMENTAL SCIENTIST (SEE FIGURE 2).
3. MINIMUM CLEARANCE BETWEEN POLE AND EROSION CONTROL TO BE DETERMINED BY CONDITIONS OF POLE INSTALLATION/REPLACEMENT WORK AND ASSOCIATED DISTURBANCE.

BMP PICTURE

FIGURE 1: TYP. STRAW WATTLE APPLICATION



FIGURE 2: ALT. STRAW BALE APPLICATION

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SEC-12
DISTRIBUTION POLE
SEDIMENT CONTROL

SUBJECT

Access, Maintenance and Construction
Best Management Practices

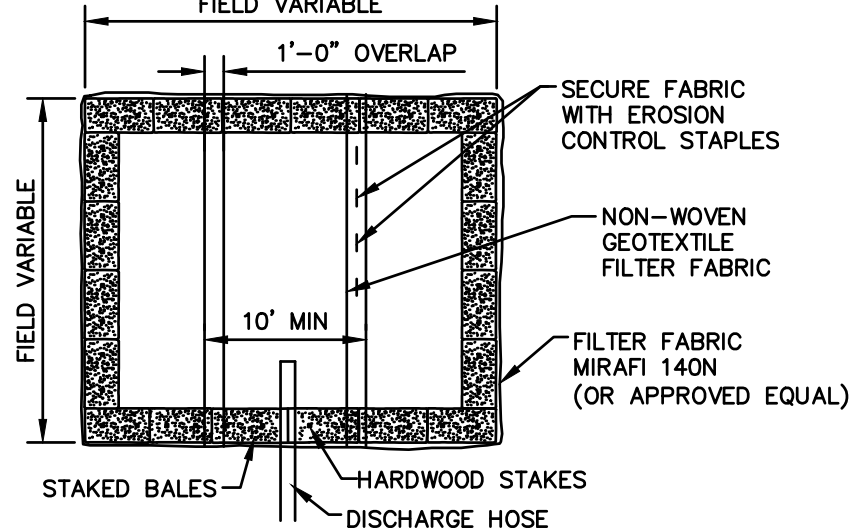
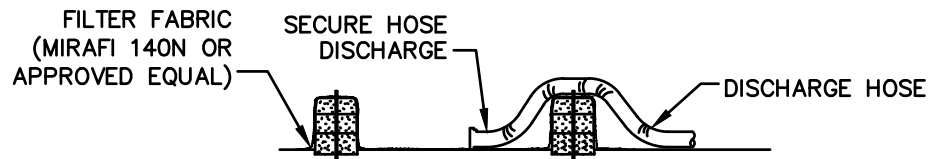
Reference

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

BMP DETAIL

SCALE: NONE

FIELD VARIABLE

PLAN VIEWCROSS-SECTIONNOTES:

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**APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES**

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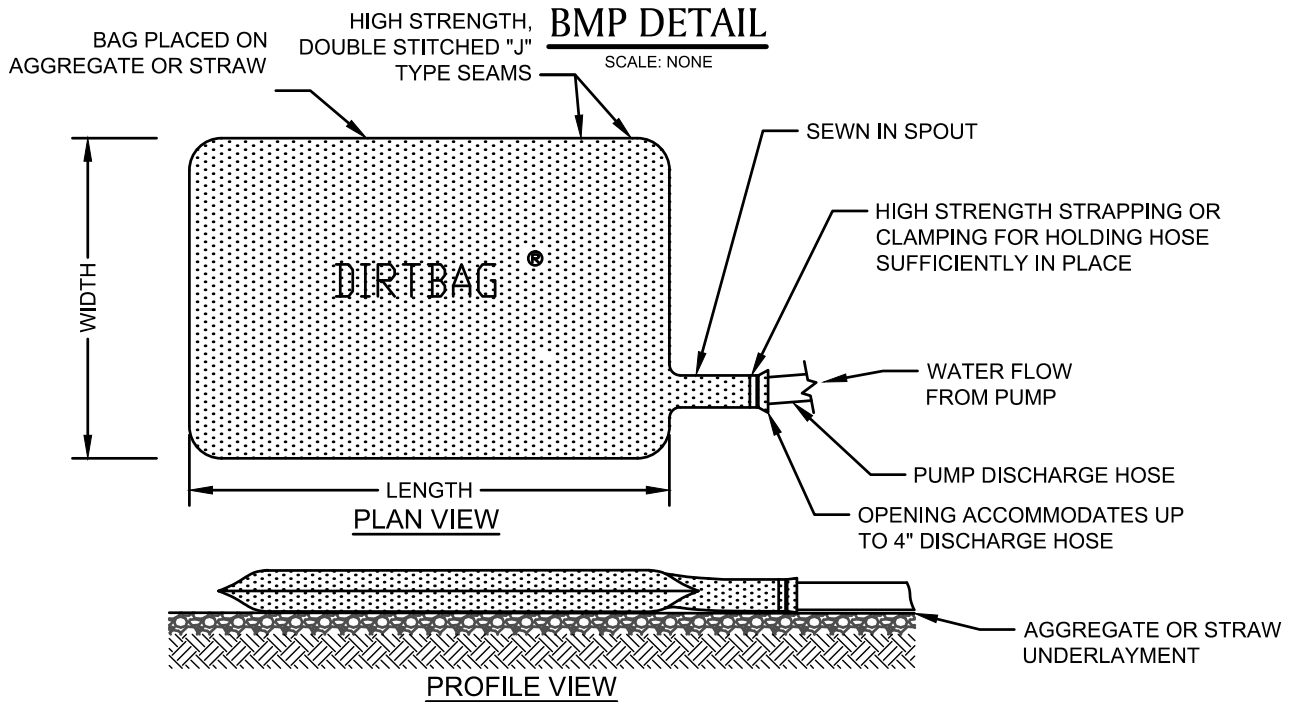
AA-10
DEWATERING BASIN
(SMALL SCALE)

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

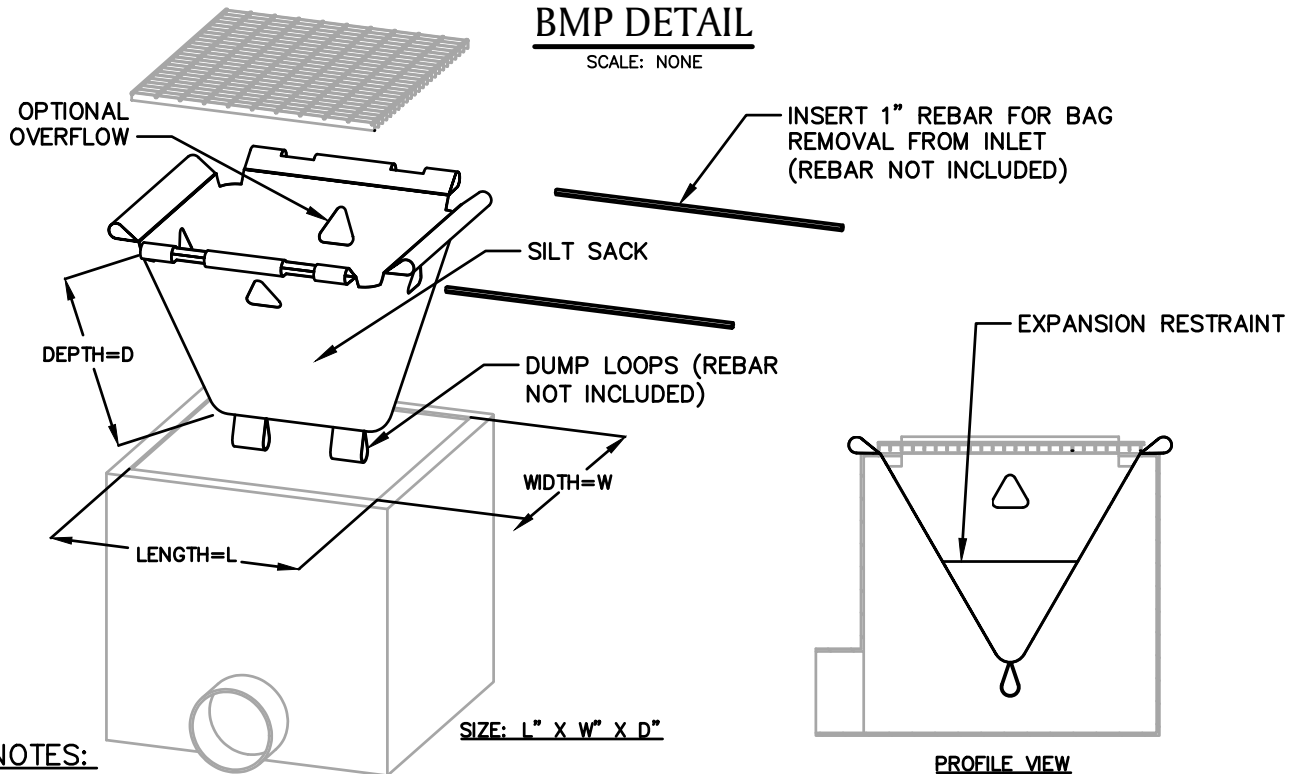
Access, Maintenance and Construction
Best Management Practices

Reference

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

BMP DETAIL

SCALE: NONE

**NOTES:**

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

BMP PICTURE

* DETAIL PROVIDED BY ACF ENVIRONMENTAL

APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES

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AA-20
SILT SACK *

SUBJECT

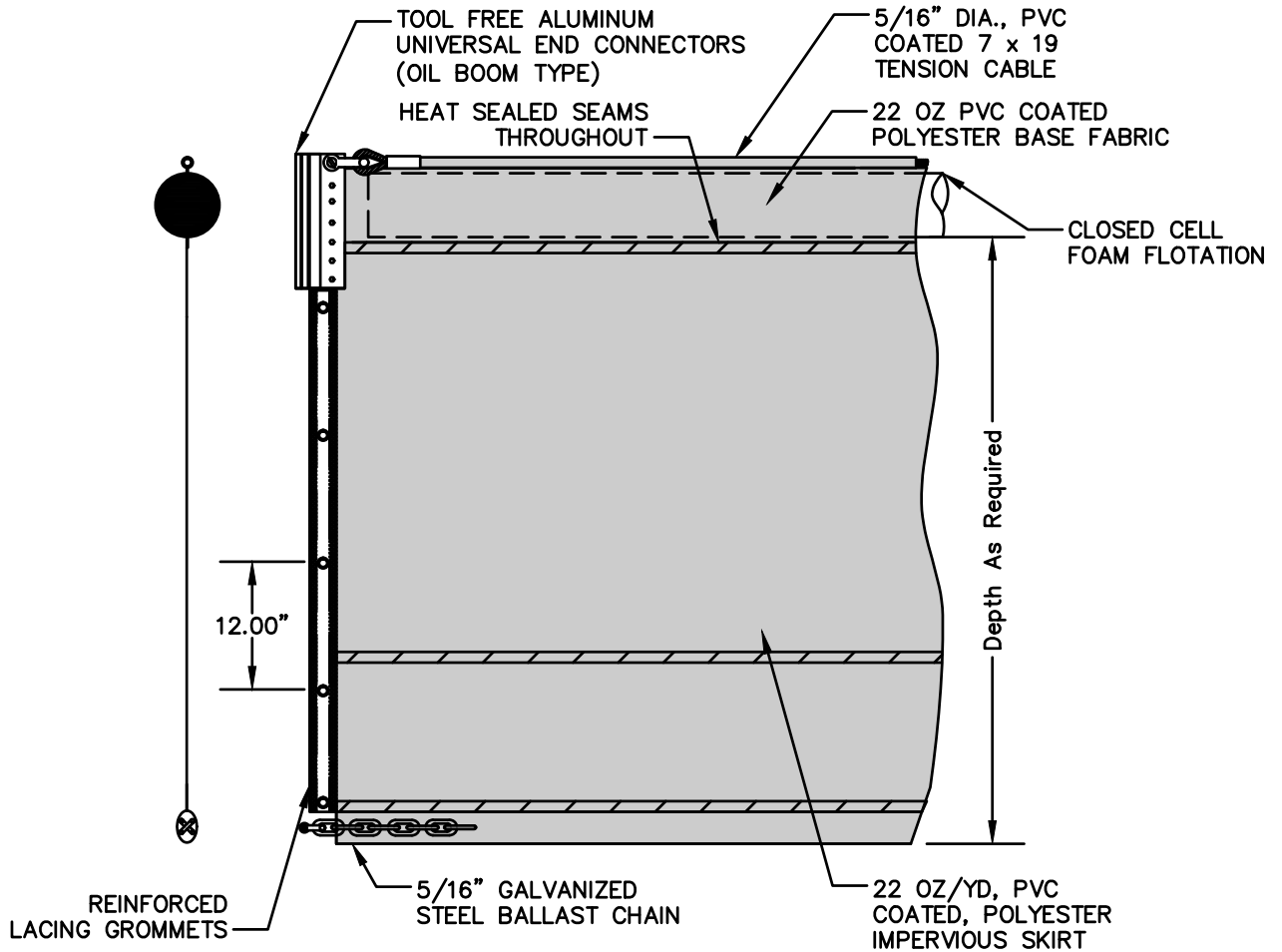
Access, Maintenance and Construction
Best Management Practices

Reference

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

BMP DETAIL

SCALE: NONE

**BMP PICTURE**

* DETAIL PROVIDED BY BROCKTON EQUIPMENT / SPILLDAM INC.

APPROVED BY: VICE PRESIDENT, ENVIRONMENTAL SERVICES

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AA-21
TURBIDITY CURTAIN *

Attachment E

Mill Road Gas Main Replacement Project
Littleton, Massachusetts
Notice of Intent

ABUTTER NOTIFICATION LETTER
CERTIFIED LIST OF ABUTTERS
AFFIDAVIT OF SERVICE- TO BE PROVIDED

NOTIFICATION TO ABUTTERS

Modified for Covid-19 Emergency Response

Notice of Intent or abbreviated Notice of Resource Area Delineation

Under MA Wetlands Protection Act and Littleton Wetlands Protection ByLaw (Chapter 171), this form must be completed and mailed, certified mail return receipt requested, to all abutters at their mailing addresses shown on the most recent Town Assessor's records as well as the owner (if not applicant).

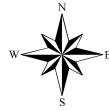
In accordance with the MA Wetlands Protection Act and Littleton Wetlands Protection ByLaw Chapter 171-2D, you are hereby notified of a public hearing on the matter described below:

- A. The applicant has filed a Notice of Intent with the Littleton Conservation Commission for work in an area subject to protection under the Massachusetts Wetlands Protection Act and Littleton Wetlands Protection ByLaw.
- B. The name of the applicant is _____
- C. The address of the land where the activity is proposed is _____
- D. The work proposed is Replacement of the underground gas main below the roadway along Mill Road.

- E. Due to the Commonwealth and Town of Littleton's Covid-19 Emergency Response, it is anticipated that paper copies of the Notice of Intent will not be available for inspection. Copies of the Notice of Intent may be examined at the Conservation Commission webpage at <https://www.littletonma.org/conservation>, under "Conservation Calendar" at least 48 hours before the meeting. If you click on the day of the meeting in the Calendar, you will be lead to a link showing posted project information. If you have questions you can contact the Littleton Conservation Commission (contact information at the end of this notice).
- F. Due to the Commonwealth and Town of Littleton's Covid-19 Emergency Response, it is anticipated that paper copies of the Notice of Intent will not be available for distribution. Copies of the Notice of Intent may be obtained electronically from (check one) the ____ applicant or ____ the applicant's representative by calling ____ - ____ - ____ during the following times:
Monday-Friday, 9am-5pm
- G. The public hearing will be held on _____. Information regarding the date and time of the public hearing may be obtained from the Littleton Conservation Commission (see contact info at the end of this notice).

- H. Notice of the public hearing, including date, will be published at least five business days in advance in a paper of local circulation. The agenda, noting times will be posted at Town Hall and at <https://www.littletonma.org/conservation> under "Conservation Calendar" at least 48 hours in advance of the meeting. It is currently anticipated that this meeting will be held entirely remotely, pursuant to Governor Baker's March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law and Governor Baker's March 15, 2020 Order imposing strict limitations on the number of people that may gather in one place. If the meeting is held remotely, instructions for remote viewing of, and participation in, the meeting will be included in the agenda and may also be obtained from the Littleton Conservation Commission.

You may contact the Littleton Conservation Commission Coordinator (Amy Green; agreen@littletonma.org; 978-540-2428), or the Massachusetts Department of Environmental Protection/ Central Region (508-792-7650) at 8 New Bond Street, Worcester, MA 01606) for information about this application



October 16, 2023

Littleton, MA

1 inch = 400 Feet

www.cai-tech.com



Water-poly	Right of Way	Public Road
Wet Areas	Wetland	Street Centerlines
WaterLines	Property Line	Street Labels



**TOWN OF LITTLETON
BOARD OF ASSESSORS**

P.O. BOX 1305
LITTLETON, MA 01460
(978) 540-2410
FAX: (978) 952-2321

Date: October 23, 2023

Re: Certified List of Abutters Conservation Commission

Applicant: Heidi Graf

Name of Firm: BSC Group Inc.

Mailing Address 1 Mercantile Street, Suite 610, Worcester, MA 01608

Subject Parcel Location: Public Roadway Mill Rd at Mill Pond Crossing

Subject Parcel No.:

Subject Owner Name: Boston Gas & Town of Littleton

M.G.L. Chapter 131: Section 40 "Any person filing a notice of intention with a conservation commission shall at the same time give written notification thereof, by delivery in hand or certified mail, return receipt requested, to all abutters within one hundred feet of the property line of the land where the activity is proposed, but not limited to, owners of land directly opposite said proposed activity on any public or private street or way, and in another municipality or across a body of water. When a notice of intent proposes activities on land under water bodies and waterways or on a tract of land greater than 50 acres, written notification shall be given to all abutters within 100 feet of the proposed project site. For the purposes of this action, "project site" shall mean lands where the following activities are proposed to take place: dredging, excavating, filling, grading, the erection, reconstruction or expansion of a building or structure, the driving of pilings, the construction or improvement of roads or other ways and the installation of drainage, sewerage and water systems, and "land under water bodies and waterways" shall mean the bottom of, or land under, the surface of the ocean or an estuary, creek, river stream, pond or lake. When a notice of intent proposes activity on a linear shaped project site longer than 1,000 feet in length, notification shall be given to all abutters within 1,000 feet of the proposed project site. If the linear project site takes place wholly within an easement through another person's land, notice shall also be given to the landowner. Said notification shall be at the applicant's expense, and shall state where copies of the notice of intention may be examined and obtained and where information regarding the date, time and place of the public hearing may be obtained. Proof of such notification, with a copy of the notice mailed or delivered, shall be filed with the conservation commission."

I hereby certify the attached list of abutter (s) as stated in the M.G.L. Chapter 131, Section 40.

Number of Abutter(s) 12 including the subject parcels + 1 Applicant Requesting Abutter's List.

Certified by:


April Mannacone, Assistant Assessor

50	MILL RD	U38 12 1	70	MILL RD	U38 7 3
		LUC: 959			LUC: 101
	PARKER BIRCH LTD PARTNERSHIP			MOQUIN SHAWN	
	C/O PEABODY PROPERTIES			MOQUIN SARA	
	536 GRANITE STREET			70 MILL RD	
	BRAINTREE, MA 02184			LITTLETON, MA 01460	
36	MILL RD	U38 23 0	68	MILL RD	U38 7 4
		LUC: 101			LUC: 101
	CASPARI IRA			MATURAH CHRISTINE	
	GNANN ALAN CHRISTOPHER			GREEN MARCUS C	
	36 MILL RD			68 MILL RD	
	LITTLETON, MA 01460			LITTLETON, MA 01460	
83	MILL RD	U38 26 0			
		LUC: 101			
	PARASKAR ABHIMANYU				
	PARASKAR MANISHA				
	83 MILL RD				
	LITTLETON, MA 01460				
71	MILL RD	U38 27 0			
		LUC: 101			
	KUPPERSTEIN RUSSELL C				
	EVANS-ROHDE SASHA				
	71 MILL ROAD				
	LITTLETON, MA 01460				
67	MILL RD	U38 28 0			
		LUC: 101			
	SALUTO MARINA PATRICE				
	67 MILL RD				
	LITTLETON, MA 01460				
OFF	MILL RD	U38 29 0			
		LUC: 950			
	LITTLETON CONSERVATION TRUST				
	PO BOX 594				
	LITTLETON, MA 01460				
47	MILL RD	U38 30 0			
		LUC: 101			
	PUTNAM ELIOT T IV				
	PUTNAM KARA A				
	47 MILL RD				
	LITTLETON, MA 01460				
39	MILL RD	U38 31 0			
		LUC: 101			
	WANZER TIMOTHY E				
	WANZER MARCY K				
	39 MILL RD				
	LITTLETON, MA 01460				
74	MILL RD	U38 7 1			
		LUC: 101			
	PACKARD KIM M				
	PACKARD III ALBERT B				
	74 MILL RD				
	LITTLETON, MA 01460				
72	MILL RD	U38 7 2			
		LUC: 101			
	GRIFFIN LARRY D				
	FLADAGER DARLENE H				
	72 MILL ROAD				
	LITTLETON, MA 01460				

Attachment F

Mill Road Gas Main Replacement Project
Littleton, Massachusetts
Notice of Intent

HDD CONTINGENCY PLAN

HDD Overview and Contingency Plan Purpose

HDD is a method of creating a crossing path beneath a surface without intruding directly on that surface area, compared to conventional open-cut trenching methods where the surface feature(s) would otherwise sustain direct disturbance. HDD uses specific drilling equipment capable of boring a drill path at a shallow inclined angle into the subsurface, and steering the borehole at depth beneath a surface feature(s), such as a stream, roadway, railroad, or combination of these features, and re-emerging within an excavation pit on the other side of the designated surface area. Once the borehole is created, it is successively reamed by larger bits until the borehole is wide enough for pre-assembled pipeline to be pulled through the borehole. Pipeline segments are connected to the two ends of the HDD segment once it has been successfully pulled back through the HDD borehole.

HDD drilling requires specialized drilling equipment to allow shallow-angled entry of a drill bit, steering and remote telemetry tracking of the drill head and advancing the drill string by addition of successive segments of drill pipe until a pre-determined exit point is reached. HDD requires drill “mud” to be pumped down the drill string through the head of the drill bit. Drill mud is required for several critical functions:

- It cools the drill head and string as it grinds through soil and/or rock;
- It helps to lubricate and support the borehole side-walls while the bit and drill string pass through;
- It provides a fluid to carry rock and soil cuttings in suspension from the drill path face back to the point of entry so the cuttings can be cleared from the HDD borehole path; and
- It assists in stabilizing an open bore hole, by exerting positive pressure on the borehole wall and through the buildup of a wall cake, also produces a bridging mechanism to hold soil particles in place.

The drill mud must be maintained under pressure within the borehole in order to carry out all of these functions.

HDD crossings are specifically designed to follow a pre-determined path to carry the boring at depths below the surface area being crossed so as to avoid disturbance of the surface area and create a borehole of sufficient diameter and configuration to allow the conduit to pass through the completed borehole smoothly from end to end once the HDD is completed.

Despite specific engineering design of an HDD crossing, it is possible to unexpectedly lose circulation of the drill mud. Lost circulation may be signified by unexpected drop of the desired pressure of the drill mud, failure of it to return to the borehole entry point, or change in other monitored conditions during HDD drilling. A “inadvertent return” is the condition where drilling mud is inadvertently

released through the soil stratigraphy or fractured bedrock and travels to the surface. Because drill mud must be maintained under pressure the potential for an inadvertent return tends to be greatest where the HDD drill path is near the entry or exit points of the drill. Other features, such as unexpected geologic fractures or material may also provide pathways for loss of pressure and circulation that could lead to inadvertent returns at other points along an HDD drill path.

Drilling muds consist largely of a bentonite clay-water mixture, sometimes with non-toxic polymer additives to maintain specific viscosity, density or other properties. Bentonite is a naturally occurring type of clay, is non-toxic and commonly used in farming practices.

The purpose of this Contingency Plan is to:

- Minimize the potential for an inadvertent return associated with HDD activities
- Provide for the timely detection of lost drilling mud circulation and the inadvertent return(s) that may result
- Protect areas that are considered environmentally sensitive (streams, wetlands, other ecological resources, cultural resources)
- Ensure and establish organized, timely, and “minimum-impact” response procedures to address loss of circulation and inadvertent return loss and the proposed clean-up of the event.
- Provide for notifications to the applicable parties and regulatory agencies, in the event an inadvertent drilling mud loss occurs.

Measures to be deployed as part of this contingency plan include site inspection, proper training of the contractor and construction personnel, development of response procedures, deployment of containment materials ahead of drilling and at locations to allow timely and minimum impact use of the materials, and implementation of appropriate clean up procedures. These measures are described in detail below.

Site Personnel Responsibilities

National Grid has overall responsibility for implementing this contingency plan. National Grid will be familiar with the aspects of the HDD drilling and plan for the project, the contents of this contingency plan and the conditions of approval under which the activity is permitted to take place. National Grid will provide a copy of this plan to its construction personnel involved with performance of and potential response to the HDD crossing. National Grid will ensure that workers are properly trained and familiar with the necessary procedures for response to an inadvertent return, prior to initiation of drilling operations. National Grid will provide the anticipated schedule of HDD operations around protected streams, rivers, wetlands, cultural resource sites and other features (non- road, structure or railroad bores) to the site inspector responsible for monitoring environmental compliance (“Environmental Inspector” or “EI”).

Monitoring of HDD operations by National Grid will include the following parameters in order to evaluate and detect potential loss of circulation or inadvertent return during drilling operations:

- Monitor the direction, progress and telemetry of the drill head and drill string along the designed HDD drill path.
- Monitor the condition and character of soil & rock cuttings emerging from the borehole for consistency with geologic conditions anticipated along the drill path.
- Monitor drill mud pressure for unexpected changes (particularly decreases in pressure) as the borehole is advanced.
- Perform visual monitoring of the ground surface along the drill path for signs of inadvertent return (unexpected expansion cracks or emergence of drill mud)

Field crews will provide timely notifications and responses to observed inadvertent returns in accordance with procedures identified in the contingency plan.

Notifications

Upon indication of a potential loss of circulation, National Grid shall notify the drill foreman & appropriate drilling personnel to temporarily suspend drilling operations until verification can be made that an inadvertent return has not occurred. If it is determined that an inadvertent return has occurred, the drilling procedure will be discontinued until clean-up and repair has been successfully implemented and Owner has authorized drilling to commence.

National Grid shall also notify its response personnel to implement containment and response procedures summarized below.

National Grid and the host utility will have the authority to stop work and commit the resources (personnel and equipment) necessary to implement this plan. National Grid and/or the Construction supervisor are responsible for promptly notifying the host utility of the inadvertent return, and coordinating personnel to oversee proper clean-up and disposal of recovered material. The host utility will be on the ROW, available during drilling operations to consult with HDD personnel and conduct inspections. The host utility will inspect the drilling operation (e.g., monitoring HDD drill path during pilot hole operations) for the purpose of identifying signs of inadvertent return and will coordinate with the Construction supervisor to implement the appropriate measures to address an inadvertent return. Should an inadvertent return occur, the host utility will evaluate the situation and location, and will determine the appropriate level of response to the incident based on the guidelines contained in this contingency plan. To the extent practicable, the host utility will consult with Owner before determining the appropriate level of response to the incident.

Training

Prior to the start of construction, the Construction supervisor and EI will verify that the construction field crew members receive the following site-specific training:

- review provisions of the contingency plan, equipment maintenance and site-specific permit and monitoring requirements;
- review location of sensitive environmental resources at the site and relevant permit conditions, including any cultural resource site locations, avoidance or restriction measures;
- review inspection procedures for inadvertent return prevention and be familiar with containment equipment and materials;
- review contractor/crew obligations to temporarily suspend forward progress of the drilling upon first evidence of the occurrence of lost circulation and potential inadvertent return, and to report any observed inadvertent returns to the EI;
- review operation of inadvertent return control equipment and the location of inadvertent return control materials, as necessary and appropriate; and
- review protocols for reporting observed inadvertent returns and project team communication with appropriate regulatory agencies.

Pre-Construction Considerations:

Prior to construction, environmental and cultural resources will be protected by implementing the following measures:

- Environmental, biological and cultural surveys, clearances and applicable permitting for proposed HDD and associated workspace(s) will have been completed prior to commencing drilling operations in order to minimize potential impacts to resources.
- Where present, sensitive resources within the construction right-of-way (CROW) will be flagged for avoidance, restricted activity locations, and construction limits will be clearly marked.
- Barriers (straw bales or sedimentation fences) will be erected between the bore site and nearby sensitive resources within or bounding the edge of the CROW prior to drilling, as appropriate, to prevent the potential for released material to reach resources nearby.
- On-site briefings will be conducted for the workers to ensure they have received site specific training for the HDD drilling operations and contingencies for drilling fluid inadvertent return procedures and clean-up.
- Ensure that all field personnel understand their responsibility for timely reporting of inadvertent returns.

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- Maintaining necessary response equipment on-site or at a readily accessible location(s) and in good working order.

The drilling entry and exit areas will be clearly marked, surrounded by construction fencing and silt fencing to minimize the potential for on-site migration of drilling mud. Access and egress locations will be designated and clearly marked.

The primary areas of concern for inadvertent returns typically occur near the entrance and exit points where the drill bit and leading parts of the drill string is at depths of less than 20 feet deep. The likelihood of inadvertent return decreases as the depth of the pipe increases.

Inadvertent Return Contingency Response Plan

If an inadvertent return is suspected:

- National Grid will temporarily suspend all HDD drilling operations immediately upon a substantive lack of drilling fluid return or a drop in back pressure in the drilling pipe or other indications of potential inadvertent return occurrence.
- Pipeline construction personnel tasked with the observation of the directional drill path shall be dispatched to walk the alignment and visually monitor the area for inadvertent drilling fluid release and report back any findings.

If an inadvertent return is identified:

- All work stops, including the recycling of drilling mud/lubricant. The pressure of water above the pipe will keep excess mud from escaping through the fracture. Drilling operations will be suspended if the release poses a threat to human health and safety or the environment.
- Owner shall be notified of the findings and release location and in return will contact the appropriate concerned parties and regulatory agencies as necessary.
- Determine the location and extent of the inadvertent return. The host utility will document the size, impact and conditions of the release with notes and photographs.
- Immediately contain the inadvertent drilling fluid return to minimize further migration of drilling fluids/slurry mixture across the surrounding area by use of hay bales, sand bags, or silt fencing to surround and contain the drilling mud.
- Direction from the Environmental Inspector shall be followed for clean-up and mitigation requirements.
- Remove the drilling fluids and restore the site to pre-existing conditions. Clean-up work will be performed by hand if a vacuum truck cannot access the release area. The clean-up shall be to

the maximum extent possible. All waste and collected materials will be disposed of at an approved location or recycled to the return pit.

- The host utility shall document the conditions of the cleaned up area with photographs.
- If the release area is not accessible, Owner will consult with the landowner(s) regarding next appropriate action, including leaving the drilling mud in place to avoid potential damage from vehicles entering the area or safety concerns to personnel.
- Once excess drilling mud is removed, the area will be seeded and/or replanted using species similar to those in the adjacent area, or allowed to re-grow from existing vegetation at the direction of National Grid

Containment Materials

At a minimum, the following containment, response, and clean-up equipment will be available in sufficient quantities proximate to the HDD site, during all drilling operations at the time such crossing occurs:

- straw bales/hay bales and 2 stakes per bale (min.);
- weighted sediment logs, sand/gravel bags;
- silt fence;
- erosion control blankets;
- plastic sheeting;
- turbidity barriers;
- shovels, pails, drums;
- push brooms;
- squeegees;
- pumps with sufficient hoses;
- mud storage tanks; and
- vacuum truck on 24-hour call, with 1 hour response time.

Photographs of inadvertent drilling fluid return shall be taken to document the size, location and clean-up procedures of any inadvertent return occurrence.

- If drilling mud congeals, take no other action that would potentially suspend sediments in the water column. Monitor the inadvertent return for at least 2 hours to determine if the drilling mud congeals. (Bentonite will usually harden, effectively sealing the inadvertent return location).

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- If drilling mud does not congeal, erect isolation/containment environment (underwater boom and curtain).
 - If the fracture becomes excessively large, a spill response team would be called in to contain and clean up excess drilling mud in the water. Phone numbers of spill response teams in the area will be on site.
 - If the spill affects an area that is vegetated, the area will be seeded and/or replanted using species similar to those in the adjacent area or allowed to re-grow from existing vegetation at the direction of National Grid.
 - Revegetated areas will be monitored to confirm revegetation is successful.
 - After inadvertent return is stabilized and any required removal is completed, the host utility shall document post-cleanup conditions with photographs and prepare inadvertent return incident report describing time, place, actions taken to remediate the inadvertent return and measures implemented to prevent recurrence.

Response Close-Out

- Drilling mud will be cleaned up by hand using hand shovels, buckets and soft bristled brooms as possible without causing damage to existing vegetation. Fresh water washes will be employed if deemed beneficial and feasible.
- The recovered drilling fluid will either be recycled to the return pit or hauled to an approved facility for disposal. No recovered drilling fluids will be discharged into streams, storm drains or any other water source. Off-site disposal in other than commercially operated disposal locations is subject to compliance with all applicable survey, landowner permission, and mitigation requirements. These materials will not be disposed on or buried in agricultural lands without landowner permission. Other construction materials and wastes shall be recycled, or disposed of, as appropriate.
- All inadvertent return excavation and clean-up sites will be returned to pre-project contours using clean fill, as necessary.
- All containment measures (fiber rolls, straw bale, etc.) will be removed, unless otherwise specified by the host utility.
- Containment structures will be pumped out and the ground surface scraped to bare topsoil without causing undue loss of topsoil or ancillary damage to existing and adjacent vegetation. Bare soil will be seeded and stabilized with mulch or erosion blankets as

applicable. Material will be collected in containers for temporary storage prior to removal from the site.

Construction Re-start

For releases not requiring external notification, drilling may continue, if 100 percent containment is achieved through the use of a leak stopping compound or redirection of the bore and the clean-up crew remains at the inadvertent return location until directed by the host utility that the HDD operations have stabilized and release potential has subsided.

If the release poses a threat to human health and safety or the environment, drilling operations will not recommence until conditions have been adequately addressed. For releases requiring external notification to applicable agencies, construction activities will not restart without prior approval from Owner.

Prior to restart, National Grid shall evaluate the current drill profile (e.g., drill pressures, pump volume rates, drilling mud consistency) to identify means to prevent further inadvertent return events.

Crossing Alternatives

During construction of the HDD, should there be an inadvertent return, the measures in this plan will be employed to respond. If necessary, before determining HDD construction infeasible, alternate drill path profiles may be developed to modify approach in response to site specific drilling conditions or to avoid further inadvertent return conditions.