

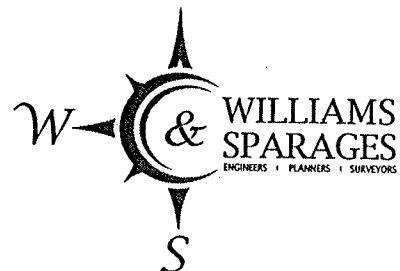
Project No. EBOS-0023

Applicant:
341 Chelsea Street Realty Trust
282 Bennington Street
East Boston, MA 02128

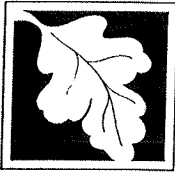
NOTICE OF INTENT

#89-89D PRESCOTT STREET
(aka 341 Chelsea Street)
EAST BOSTON, MASSACHUSETTS

June 29, 2018



189 North Main St, Suite 101
Middleton, MA 01949
www.wsengineers.com

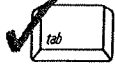


WPA Form 3 – Notice of Intent

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

Provided by MassDEP:
MassDEP File Number
Document Transaction Number
East Boston
City/Town

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



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

A. General Information

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

<u>89-89D Prescott Street</u>	<u>East Boston</u>	<u>02128</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	<u>42.377920 (google)</u>	<u>-71.029188 (google)</u>
	d. Latitude	e. Longitude
<u></u>	<u>0106905000</u>	<u></u>
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>341 Chelsea Street Realty Trust</u>	<u></u>	
c. Organization	b. Last Name	
<u>282 Bennington Street</u>		
d. Street Address		
<u>East Boston</u>	<u>MA</u>	<u>02128</u>
e. City/Town	f. State	g. Zip Code
<u>617-567-1992</u>	<u>celeste@spinellis.com</u>	
h. Phone Number	i. Fax Number	j. Email Address

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

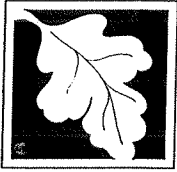
<u></u>	<u></u>	
a. First Name	b. Last Name	
<u></u>		
c. Organization		
<u></u>		
d. Street Address		
<u></u>	<u></u>	<u></u>
e. City/Town	f. State	g. Zip Code
<u></u>	<u></u>	<u></u>
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Chris</u>	<u>Sparages</u>	
a. First Name	b. Last Name	
<u>Williams & Sparages LLC</u>		
c. Company		
<u>189 North Main Street</u>		
d. Street Address		
<u>Middleton</u>	<u>MA</u>	<u>01949</u>
e. City/Town	f. State	g. Zip Code
<u>978-539-8088</u>	<u>978-539-8200</u>	<u>csparages@wsengineers.com</u>
h. Phone Number	i. Fax Number	j. Email address

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

<u>\$1050.00</u>	<u>\$512.50</u>	<u>\$0</u>
a. Total Fee Paid	b. State Fee Paid	c. City/Town Fee Paid



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A. General Information (continued)

6. General Project Description:

Demolish existing 2-family home and garage and erect a three level 5-unit townhouse-style dwelling

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 checked="" type="checkbox"/> Commercial/Industrial | 4. <input type="checkbox"/> Dock/Pier |
| 5. <input 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)

2. Limited Project Type

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

8. Property recorded at the Registry of Deeds for:

Suffolk

a. County

50689

c. Book

b. Certificate # (if registered land)

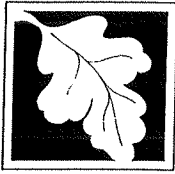
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d. Page Number

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.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Rows include Bank, Bordering Vegetated Wetland, and Land Under Waterbodies and Waterways.

Table with 3 columns: Resource Area, Size of Proposed Alteration, Proposed Replacement (if any). Rows include Bordering Land Subject to Flooding and Isolated Land Subject to Flooding.

- f. Riverfront Area
1. Name of Waterway (if available) - specify coastal or inland
2. Width of Riverfront Area (check one):
- 25 ft. - Designated Densely Developed Areas only
- 100 ft. - New agricultural projects only
- 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: square feet

4. Proposed alteration of the Riverfront Area:
a. total square feet b. square feet within 100 ft. c. square feet between 100 ft. and 200 ft.

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.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
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

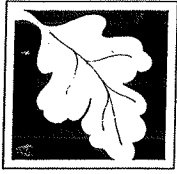
Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. <input type="checkbox"/> Coastal Banks	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet	
h. <input type="checkbox"/> Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. <input 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 checked="" type="checkbox"/> Land Subject to Coastal Storm Flowage	124 1. square feet	

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

N/A	N/A
a. square feet of BWV	b. square feet of Salt Marsh

5. Project Involves Stream Crossings

N/A	N/A
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

- b. 2017
 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).*

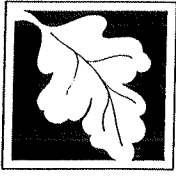
c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:

(a) within wetland Resource Area	N/A
	percentage/acreage
(b) outside Resource Area	N/A
	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 <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/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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Provided by MassDEP:

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

(c) MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/ mesa/ mesa_fee_schedule.htm). 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, http://www.mass.gov/dfwele/dfw/nhosp/regulatory_review/ mesa/ mesa_exemptions.htm; 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:

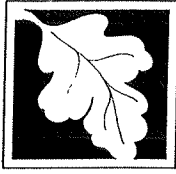
South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

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.



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Provided by MassDEP:
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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.

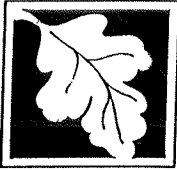
D. Additional Information

- 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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East Boston
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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.

PERMIT SET - 89-89D PRESCOTT STREET

a. Plan Title

Williams & Sparages LLC

Chris Sparages, PE

b. Prepared By

12/27/2017

c. Signed and Stamped by

1"=10'

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. Attach NOI Wetland Fee Transmittal Form
9. Attach Stormwater Report, if needed.

E. Fees

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

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

2. Municipal Check Number

17945

3. Check date

6-30-18

4. State Check Number

RITA

5. Check date

ROBERTO

6. Payor name on check: First Name

7. Payor name on check: Last Name



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F. Signatures and Submittal Requirements

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

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

Rita Roberts, Trustee
1. Signature of Applicant

6-20-18
2. Date

3. Signature of Property Owner (if different)

Chris Spang, PE
5. Signature of Representative (if any)

4. Date
6-29-18
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.

LIST OF ABUTTERS

OWNER	ADDRESSEE	MLG_ADDRESS	MLG_CITYSTATE
SCHIRIPA FRANK TS		84 JUNPER DR	SAUGUS MA
IMBRIANO URSULA		347A CHELSEA	EAST BOSTON MA
ARNAU FIORELLA		364 BREMEN ST	EAST BOSTON MA
AGUILAR JOSE		337 CHELSEA ST	EAST BOSTON MA
HUYNH LINNA		335 CHELSEA ST	EAST BOSTON MA
331 CHELSEA STREET LLC	C/O 331 CHELSEA STREET LLC	431 E 3RD ST #3	BOSTON MA
FALLAVOLLITA JEANNETTE		333 CHELSEA ST	E BOSTON MA
SITU KEVIN X	C/O KEVIN X SITU	339 CHELSEA ST	EAST BOSTON MA
LOGAN AUTOMOTIVE INC	C/O LOGAN AUTOMOTIVE INC	344 BREMEN ST	E BOSTON MA
TRUONG ROBERT	C/O ROBERT TRUONG	356 CHELSEA ST	EAST BOSTON MA
PEREZ CONCEPCION	C/O CONCEPCION PEREZ	24 HIGH ST	EVERETT MA
GUADRON RAMON DE JESUS	C/O RAMON DE JESUS GUADRON	358 CHELSEA ST	EAST BOSTON MA
THREE FORTY EIGHT CHELSEA	THREE FORTY EIGHT CHELSEA LLC	50 FRANKLIN ST #400	BOSTON MA
DAMICO RENATA V JR	C/O RENATO V D'AMICO	154 ST ANDREW RD	EAST BOSTON MA

LIST OF ABUTTERS
 69-89D PRESCOTT STREET
 (AKA 341 CHELSEA ST.)

Notification to Abutters under the
Massachusetts Wetlands Protection Act

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

- A. The name of the applicant is 341 Chelsea Street Realty Trust.
- B. The applicant has filed a Notice of Intent with the conservation Commission for the municipality of the City of Boston seeking permission to remove, fill, dredge, or alter an Area subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, Section 40).
- C. The address of the lot where the activity is proposed is 89-89D Prescott Street.
- D. Copies of the Notice of Intent may be examined at the offices of Williams & Sparages LLC, 189 North Main Street, Suite 101, Middleton, MA, 01949 between the hours of 9:00am and 4:00pm on the following days of the week: Monday through Friday, except state and federal holidays. For more information, call: Office Manager, Kaitlin Boland (978) 539-8088.
Check One: This is the applicant , applicant's representative .
- E. Copies of the Notice of Intent may be obtained from either (check one) the applicant , or the applicant's representative , by calling this telephone number (978) 539-8088 between the hours of 9:00am and 4:00pm, on the following days of the week: Monday through Friday except state and federal holidays.
- F. Information regarding the date, time and place of the public hearing may be obtained from the Boston Conservation Commission by calling this telephone number (617) 635-3850 between the hours of 9:00am and 5:00pm on the following days of the week: Monday through Friday except for local, state, and federal holidays.

Note: Notice of the Public Hearing, including its date, time and place will be published at least five (5) days in advance in the Boston Herald.

Note: Notice of the Public Hearing, including its date, time and place will be posted in the City Hall not less than forty eight (48) hours in advance.

Note: You also may contact your local Conservation Commission or the nearest Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act.

To contact DEP call:

Central Region: 508-767-2884

Southeast Region: 508-946-2718

Northeast Region: 978-694-3200

Western Region: 413-784-1100

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act

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

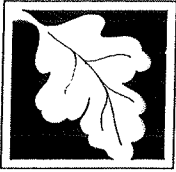
I, Christ P. Sparages, hereby certify under the pains and penalties of perjury that on 7/3/18 I gave notification to abutters in compliance with the second paragraph of Massachusetts General Law Chapter 131, Section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

A Notice of Intent filed under Massachusetts Wetlands Protection Act by 341 Chelsea Street Realty Trust with the Boston Conservation Commission on 7/3/18 for property located at 89-89D Prescott Street.

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

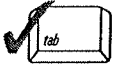
Christ Sparages
Name

7/3/18
Date



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:

89-89D Prescott Street

a. Street Address

East Boston

b. City/Town

c. Check number

d. Fee amount

2. Applicant Mailing Address:

a. First Name

b. Last Name

341 Chelsea Street Realty Trust

c. Organization

282 Bennington Street

d. Mailing Address

East Boston

e. City/Town

MA

f. State

02128

g. Zip Code

617-567-1992

h. Phone Number

i. Fax Number

celeste@spinellis.com

j. Email Address

3. Property Owner (if different):

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

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

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.

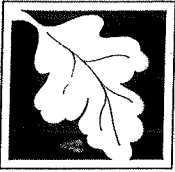
Step 2/Number of Activities: Identify the number of each type of activity.

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.



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

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
(3.b.) townhouse-type development	1	\$1050.00	\$1050.00
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Step 5/Total Project Fee:			\$1050.00
Step 6/Fee Payments:			
Total Project Fee:			\$1050.00
State share of filing Fee:			\$512.50
City/Town share of filling Fee:			c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

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

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

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

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

CASH ONLY IF ALL CheckLock™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

RITA ROBERTO
282 BENNINGTON ST
EAST BOSTON, MA 02128

17946

6-30-17

PAY TO THE ORDER OF City of Boston

Eight hundred & twenty five — 00 DOLLARS

MEMO Contribution to City of Boston

Rita Roberto

#017946# 4211070120# 23 6071981#

East Boston Savings Bank
EAST BOSTON, MA 02128
5-7012/2110

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CASH ONLY IF ALL CheckLock™ SECURITY FEATURES LISTED ON BACK INDICATE NO TAMPERING OR COPYING

RITA ROBERTO
282 BENNINGTON ST
EAST BOSTON, MA 02128

17945

6-30-17

PAY TO THE ORDER OF Commonwealth of Massachusetts

Five hundred & twenty five — 00 DOLLARS

MEMO Contribution to City of Boston

Rita Roberto

#017945# 4211070120# 23 6071981#

East Boston Savings Bank
EAST BOSTON, MA 02128
5-7012/2110

Intuit® CheckLock™ Secure Check

Notice of Intent
#89-89D Prescott Street
East Boston, Massachusetts

List of Documents Attached
(June 29, 2018)

- Project Narrative;
- USGS Location Map;
- FEMA Flood Ins Rate Map 25025C0019J
- Abutters List;
- Copies of NOI Fee Checks;
- Checklist for Stormwater Report
- Erosion and Sediment Control Plan;
- Operation & Maintenance Plan
- Associated Site Plans.
- Climate Resiliency Checklist Information

**#89-89D Prescott Street
East Boston, Massachusetts**

**Project Narrative
(June 29, 2018)**

Introduction

The subject property is located at the corner of Chelsea Street and Prescott Street. It consists of a 1,875 square foot lot created prior to the March 21, 1949. The property is located in the NS, Neighborhood Shopping subdistrict, which allows for the construction of multi-family dwellings. A portion of the property is located within a Flood Hazard Area, Zone AE, elevation 10 NGVD (elevation 16.5 Boston City Base), as shown on Flood Insurance Rate Map Community Panel Number 25025C0019J, map revised March 16, 2016. The flood waters are associated with coastal storm flow from the Atlantic Ocean, therefore, the subject property lies with the wetland resource area known as Land Subject to Coastal Storm Flowage (LSCSF).

The property is improved by an existing residential dwelling and a commercial garage. The City of Boston Assessor's office describes the property as a multiple use property and is assessed for both residential and commercial use. The entire lot is covered by building, deck area, and paved surfaces.

Proposal

The proposal is to re-develop the property into a multi-family dwelling with courtyard, decks, fencing and associated (minor) grading and utilities on the subject property. A portion of this work will take place within the Land Subject to Coastal Storm Flowage (LSCSF) resource area. The proposed top of foundation will be constructed well above the base flood elevation at elevation 18.25 (Boston City Base). In addition, that portion of the proposed foundation that lies below the BFE shall be designed with openings that shall allow for the entry and exit of flood waters in accordance with the Massachusetts State Building Code, Appendix 120.G.

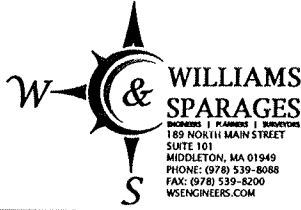
Performance Standards

There is no performance standard for work within LSCSF. As the project and site are subject to flow from the Atlantic Ocean, the proposed work can have no measureable affect on potential flooding on the property. In prior cases involving LSCSF from the Atlantic Ocean, Massachusetts Courts have ruled that any compensatory flood storage consumed by a project in LSCSF is insignificant in comparison to the size of the ocean's basin.

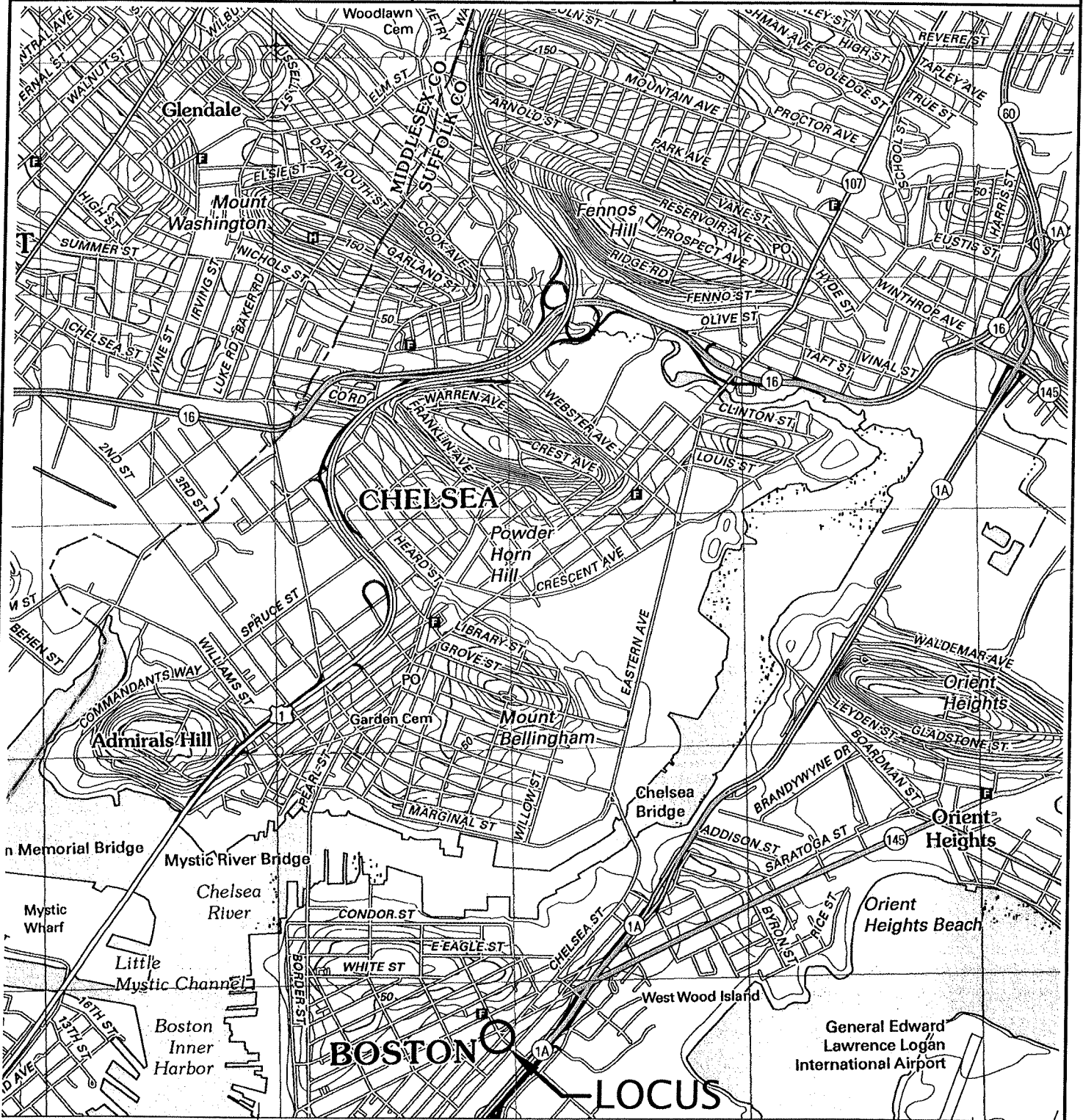
Construction

There is very little earth moving activity proposed on the subject property and the subject property is relatively flat. The potential for erosion and sediment migrating from this construction site is very low. The applicant proposes the use of siltfence and/or straw waddle along the two abutting properties as a precaution. This line of sediment control will also help demarcate the property line and limit of work. Should any sediment migrate onto Chelsea Street or Prescott Street during construction, the sediment will be swept up daily by the contractor or contractor's subcontractors. Utility installation will be coordinated with the Department of Public Works and the appropriate utility companies in East Boston.

WILLIAMS & SPARAGES
CIVIL ENGINEERING &
LAND SURVEYORS



189 NORTH MAIN STREET
SUITE 101
MIDDLETON, MA 01949
PHONE: (978) 539-8088
FAX: (978) 539-8200



UNITED STATES GEOLOGIC SURVEY MAP
BOSTON NORTH, MASS QUAD
SCALE: 1 : 24,000

LOCUS MAP
#89-89D PRESCOTT STREET
EAST BOSTON, MA 02128





MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0019J

FIRM FLOOD INSURANCE RATE MAP SUFFOLK COUNTY, MASSACHUSETTS (ALL JURISDICTIONS)

PANEL 19 OF 176
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
BOSTON, CITY OF	250285	0018	J
CHELSEA, CITY OF	250287	0016	J
REVERE, CITY OF	250288	0016	J
WINTHROP, TOWN OF	250289	0018	J

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.



MAP NUMBER
25025C0019J
MAP REVISED
MARCH 16, 2016

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov



903000 M

FLOODING EFFECTS FROM
BOSTON INNER HARBOR

42° 22' 30"

71° 01' 52.5"

333,000mE

Erosion & Sedimentation Control

#89-89D Prescott Street
East Boston, MA

Erosion & Sediment Control Plan (June 29, 2018)

Summary

In order to limit the amount of erosion and sediment that takes place during and after construction, it is important to implement a management plan, which will protect and limit the amount of land area that is devoid of vegetation at any given time.

Prior to Construction

Prior to start of construction activities, the owner, builder, and site contractor should clearly identify all wetland resource areas that may be affected by the proposed clearing and earth moving activities by reviewing the approved grading plan as part of an initial site visit. During the site visit, the Order of Conditions should be reviewed to confirm the type of erosion control measure to be used to protect downstream wetland resources and abutting property. Limits of tree clearing should be verified during the initial site visit with emphasis on identifying "save areas" for existing trees and vegetation where practicable.

Erosion and Sediment Control Device

Siltfence or straw waddle is proposed as the primary erosion control device for this project (see attached construction detail for siltfence installation). It is important for the owner, builder, and/or site contractor to have access to a supply of haybales should the need arise for additional erosion and sediment control measures. Haybales can be used along a slope and/or together with siltfence or straw waddle to protect against concentrated stormwater runoff over exposed surfaces (see attached construction detail for haybale installation). The erosion and sediment control devices should be inspected every 7 days or within 24-hours of a 1-inch (or greater) rainfall event to ensure that they are operating properly. If sediment levels begin to build up on the erosion control devices, it may be necessary to remove the accumulated sediment to ensure that the erosion control devices continue to operate as designed. Sediment should be removed if it builds up more than 12-inches above the ground surface at the erosion control device.

Earth-moving Activities

After trees and other vegetation are cleared, earth-moving (or grading) activities can begin. The approved grading plan should be used to help guide the site contractor during regrading activities. Often times it is helpful to have a land surveyor establish benchmark elevations and/or lines of grade to aid the site contractor during regrading activities. This is the time during which the site is most vulnerable to erosion. Therefore, it is important for the site contractor to finalize grading activities as soon as practicable following land clearing. Areas that remain exposed longer than 30 working days in an interim condition should be stabilized in a temporary fashion. Once final grades have been established, permanent vegetation can be established.

Temporary Seeding

During construction it may be necessary to temporarily stabilize areas that will not be brought to final grade for a period longer than 30 working days. Temporary seeding is accomplished using fast-growing grass seed species such as ryegrass. Seeding should be performed in accordance with the guidelines set forth in Attachment A to this narrative, which is an excerpt from a publication entitled, "Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas, May 2003, prepared by Franklin, Hampden, and Hampshire Conservation Districts."

Permanent Seeding & Plantings

Once final grades have been established and the weather permits, every effort should be made to establish permanent vegetation on disturbed and exposed areas. In addition to grass seed, tree and shrub plantings should be an integral part of the permanent stabilization plan. Care should be taken by the owner, builder, and/or site contractor to select trees, shrubs, and seed mixes that are best suited to the soil conditions on the site. Soil moisture, depth to seasonal groundwater, and exposure to sunlight should be carefully considered when selecting species. In recent years, the emphasis on using plant species native to Massachusetts has grown. Information on the use of non-native and native species can be found on the web and in many local nursery catalogs.

Permanent seeding should be performed in accordance with the guidelines set forth in Attachment B to this narrative, which is an excerpt from a publication entitled, "Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas, May 2003, prepared by Franklin, Hampden, and Hampshire Conservation Districts."

Attachment A

“Temporary Seeding Guidance Document”

Maintenance

Inspect seeded areas for failure and make necessary repairs and reseed immediately. Conduct or follow-up survey after one year and replace failed plants where necessary.

If vegetative cover is inadequate to prevent rill erosion, overseed and fertilize in accordance with soil test results.

If a stand has less than 40% cover, reevaluate choice of plant materials and quantities of lime and fertilizer. Re-establish the stand following seedbed preparation and seeding recommendations, omitting lime and fertilizer in the absence of soil test results. If the season prevents resowing, mulch or jute netting is an effective temporary cover.

Seeded areas should be fertilized during the second growing season. Lime and fertilize thereafter at periodic intervals, as needed.

References

North Carolina Department of Environment, Health, and Natural Resources, *Erosion and Sediment Control Field Manual*, Raleigh, NC, February 1991.

Personal communication, Richard J. DeVergilio, USDA, Natural Resources Conservation Service, Amherst, MA.

U.S. Environmental Protection Agency, *Storm Water Management For Construction Activities*, EPA-832-R-92-005, Washington, DC, September, 1992.

Washington State Department of Ecology, *Stormwater Management Manual for the Puget Sound Basin*, Olympia, WA, February, 1992.

Seeding, Temporary

Planting rapid-growing annual grasses, small grains, or legumes to provide initial, temporary cover for erosion control on disturbed areas.

Purpose

To temporarily stabilize areas that will not be brought to final grade for a period of more than 30 working days.

To stabilize disturbed areas before final grading or in a season not suitable for permanent seeding.

Temporary seeding controls runoff and erosion until permanent vegetation or other erosion control measures can be established.

Root systems hold down the soils so that they are less apt to be carried offsite by storm water runoff or wind.

Temporary seeding also reduces the problems associated with mud and dust from bare soil surfaces during construction.

Where Practice Applies

On any cleared, unvegetated, or sparsely vegetated soil surface where vegetative cover is needed for less than one year. Applications of this practice include diversions, dams, temporary sediment basins, temporary road banks, and topsoil stockpiles.

Where permanent structures are to be installed or extensive re-grading of the area will occur prior to the establishment of permanent vegetation.

Areas which will not be subjected to heavy wear by construction traffic.

Areas sloping up to 10% for 100 feet or less, where temporary seeding is the only practice used.

Advantages

This is a relatively inexpensive form of erosion control but should only be used on sites awaiting permanent planting or grading. Those sites should have permanent measures used.

Vegetation will not only prevent erosion from occurring, but will also trap sediment in runoff from other parts of the site.

Temporary seeding offers fairly rapid protection to exposed areas.

Disadvantages/Problems

Temporary seeding is only viable when there is a sufficient window in time for plants to grow and establish cover. It depends heavily on the season and rainfall rate for success.

If sown on subsoil, growth will be poor unless heavily fertilized and limed. Because overfertilization can cause pollution of stormwater runoff, other practices such as mulching alone may be more appropriate. The potential for over-fertilization is an even worse problem in or near aquatic systems.

Once seeded, areas should not be travelled over.

Irrigation may be needed for successful growth. Regular irrigation is not encouraged because of the expense and the potential for erosion in areas that are not regularly inspected.

Planning Considerations

Temporary seedings provide protective cover for less than one year. Areas must be reseeded annual or planted with perennial vegetation.

Temporary seeding is used to protect earthen sediment control practices and to stabilize denuded areas that will not be brought into final grade for several weeks or months. Temporary seeding can provide a nurse crop for permanent vegetation, provide residue for soil protection and seedbed preparation, and help prevent dust production during construction.

Use low-maintenance native species wherever possible.

Planting should be timed to minimize the need for irrigation.

Sheet erosion, caused by the impact of rain on bare soil, is the source of most fine particles in sediment. To reduce this sediment load in runoff, the soil surface itself should be protected. The most efficient and economical means of controlling sheet and rill erosion is to establish vegetative cover. Annual plants which sprout rapidly and survive for only one growing season are suitable for establishing temporary vegetative cover. Temporary seeding is effective when combined with construction phasing so bare areas of the site are minimized at all times.

Temporary seeding may prevent costly maintenance operations on other erosion control systems. For example, sediment basin clean-outs will be reduced if the drainage area of the basin is seeded where grading and construction are not taking place. Perimeter dikes will be more effective if not choked with sediment.

Proper seedbed preparation and the use of quality seed are important in this practice just as in permanent seeding. Failure to carefully follow sound agronomic recommendations will often result in an inadequate stand of vegetation that provides little or no erosion control.

Soil that has been compacted by heavy traffic or machinery may need to be loosened. Successful growth usually requires that the soil be tilled before the seed is applied. Topsoiling is not necessary for temporary seeding; however, it may improve the chances of establishing temporary vegetation in an area.

Planting Procedures

Time of Planting

Planting should preferably be done between April 1 and June 30, and September 1 through September 30. If planting is done in the months of July and August, irrigation may be required. If planting is done between October 1 and March 31, mulching should be applied immediately after planting. If seeding is done during the summer months, irrigation of some sort will probably be necessary.

Site Preparation

Before seeding, install needed surface runoff control measures such as gradient terraces, interceptor dike/swales, level spreaders, and sediment basins.

Seedbed Preparation

The seedbed should be firm with a fairly fine surface.

Perform all cultural operations across or at right angles to the slope. See **Topsoiling** and **Surface Roughening** for more information on seedbed preparation. A minimum of 2 to 4 inches of tilled topsoil is required.

Liming and Fertilization

Apply uniformly 2 tons of ground limestone per acre (100 lbs. per 1,000 Sq. Ft.) or according to soil test.

Apply uniformly 10-10-10 analysis fertilizer at the rate of 400 lbs. per acre (14 lbs. per 1,000 Sq. Ft.) or as indicated by soil test. Forty percent of the nitrogen should be in organic form.

Work in lime and fertilizer to a depth of 4 inches using any suitable equipment.

<i>Species</i>	Seedings for Temporary Cover		<i>Recommended Seeding Dates</i>
	<i>Seeding Rates lbs/sq.ft.</i>	<i>Acres</i>	
	<u>1,000 Sq.Ft.</u>	<u>Acres</u>	
Annual Ryegrass	1	40	April 1 to June 1 Aug. 15 to Sept. 15
Foxtail Millet	0.7	30	May 1 to June 30
Oats	2	80	April 1 to July 1 August 15 to Sept. 15
Winter Rye	3	120	Aug. 15 to Oct. 15

"Hydro-seeding" applications with appropriate seed-mulch-fertilizer mixtures may also be used.

Seeding

Select adapted species from the accompanying table.

Apply seed uniformly according to the rate indicated in the table by broadcasting, drilling or hydraulic application.

Cover seeds with suitable equipment as follows:

- ∞ Rye grass ¼ inch
- ∞ Millet ½ to ¾ inch
- ∞ Oats 1 to 1-1/2 inches
- ∞ Winter rye 1 to 1-1/2 inches.

Mulch

Use an effective mulch, such as clean grain straw; tacked and/or tied down with netting to protect seedbed and encourage plant growth.

Common Trouble Points

Lime and fertilizer not incorporated to at least 4 inches

May be lost to runoff or remain concentrated near the surface where they may inhibit germination.

Mulch rate inadequate or straw mulch not tacked down

Results in poor germination or failure, and erosion damage. Repair damaged areas, reseed and mulch.

Annual ryegrass used for temporary seeding

Ryegrass reseeds itself and makes it difficult to establish a good cover of permanent vegetation.

Seed not broadcast evenly or rate too low

Results in patchy growth and erosion.

Maintenance

Inspect within 6 weeks of planting to see if stands are adequate. Check for damage after heavy rains. Stands should be uniform and dense. Fertilize, reseed, and mulch damaged and sparse areas immediately. Tack or tie down mulch as necessary.

Seeds should be supplied with adequate moisture. Furnish water as needed, especially in abnormally hot or dry weather or on adverse sites. Water application rates should be controlled to prevent runoff.

References

Massachusetts Department of Environmental Protection, Office of Watershed Management, Nonpoint Source Program, Massachusetts ***Nonpoint Source Management Manual***, Boston, Massachusetts, June, 1993.

North Carolina Department of Environment, Health, and Natural Resources, ***Erosion and Sediment Control Field Manual***, Raleigh, NC, February 1991.

U.S. Environmental Protection Agency, ***Storm Water Management For Construction Activities***, EPA-832-R-92-005, Washington, DC, September, 1992.

Washington State Department of Ecology, ***Stormwater Management Manual for the Puget Sound Basin***, Olympia, WA, February, 1992.

Silt Curtain

A temporary sediment barrier installed parallel to the bank of a stream or lake. Used to contain the sediment produced by construction operations on the bank of a stream or lake and allow for its removal.

Where Practice Applies

The silt curtain is used along the banks of streams or lakes where sediment could pollute or degrade the stream or lake.

Attachment B

“Permanent Seeding Guidance Document”

Maintenance

The effective life of a sediment trap depends upon adequate maintenance. The trap should be readily accessible for periodic maintenance and sediment removal.

Set a stake at one-half the design depth. This will be the "cleanout level." Remove sediment when it has accumulated to one-half the design depth.

Inspect sediment traps after each significant rainfall event. Repair any erosion and piping holes immediately.

Clean or replace spillway gravel facing if clogged.

Promptly replace any displaced riprap, being careful that no stones in the spillway are above design grade.

Inspect vegetation; reseed and remulch if necessary.

Check spillway depth periodically to ensure minimum of 1.5 ft depth from lowest point of the settled embankment to highest point of spillway crest. Fill any low areas of the embankment to maintain design elevation.

After all sediment-producing areas have been stabilized, inspected, and approved, remove the structure and all unstable sediment. Smooth site to blend with adjoining areas and stabilize in accordance with vegetation plan.

References

Minnick, E. L., and H. T. Marshall, *Stormwater Management and Erosion Control for Urban and Developing Areas in New Hampshire*, Rockingham County Conservation District, August 1992.

North Carolina Department of Environment, Health, and Natural Resources, *Erosion and Sediment Control Field Manual*, Raleigh, NC, February 1991.

U.S. Environmental Protection Agency, *Storm Water Management For Construction Activities*, EPA-832-R-92-005, Washington, DC, September, 1992.

Washington State Department of Ecology, *Stormwater Management Manual for the Puget Sound Basin*, Olympia, WA, February, 1992.

Seeding, Permanent

The establishment of perennial vegetative cover on disturbed areas.

Purpose

Permanent seeding of grass and planting trees and shrubs provides stabilization to the soil by holding soil particles in place.

Vegetation reduces sediments and runoff to downstream areas by slowing the velocity of runoff and permitting greater infiltration of the runoff.

Vegetation also filters sediments, helps the soil absorb water, improves wildlife habitats, and enhances the aesthetics of a site.

Where Practice Applies

- ∞ Permanent seeding and planting is appropriate for any graded or cleared area where long-lived plant cover is needed to stabilize the soil.
- ∞ Areas which will not be brought to final grade for a year or more.
- ∞ Some areas where permanent seeding is especially important are filter strips, buffer areas, vegetated swales, steep slopes, and stream banks.
- ∞ This practice is effective on areas where soils are unstable because of their texture or structure, high water table, winds, or steep slope.

Advantages

Advantages of seeding over other means of establishing plants include the small initial establishment cost, the wide variety of grasses and legumes available, low labor requirement, and ease of establishment in difficult areas.

Seeding is usually the most economical way to stabilize large areas.

Well established grass and ground covers can give an aesthetically pleasing, finished look to a development.

Once established, the vegetation will serve to prevent erosion and retard the velocity of runoff.

Disadvantages/Problems

Disadvantages which must be dealt with are the potential for erosion during the establishment stage, a need to reseed areas that fail to establish, limited periods during the year suitable for seeding, and a need for water and appropriate climatic conditions during germination. Vegetation and mulch cannot prevent soil slippage and erosion if soil is not inherently stable.

Coarse, high grasses that are not mowed can create a fire hazard in some locales. Very short mowed grass, however, provides less stability and sediment filtering capacity.

Grass planted to the edge of a watercourse may encourage fertilizing and mowing near the water's edge and increase nutrient and pesticide contamination.

Depends initially on climate and weather for success.

May require regular irrigation to establish and maintain.

Planning considerations

Selection of the right plant materials for the site, good seedbed preparation, timing, and conscientious maintenance are important. Whenever possible, native species of plants should be used for landscaping. These plants are already adapted to the locale and

survivability should be higher than with “introduced” species.

Native species are also less likely to require irrigation, which can be a large maintenance burden and is neither cost-effective nor ecologically sound.

If non-native plant species are used, they should be tolerant of a large range of growing conditions, as low-maintenance as possible, and not invasive.

Consider the microclimate within the development area. Low areas may be frost pockets and require hardier vegetation since cold air tends to sink and flow towards low spots. South-facing slopes may be more difficult to re-vegetate because they tend to be sunnier and drier.

Divert as much surface water as possible from the area to be planted.

Remove seepage water that would continue to have adverse effects on soil stability or the protecting vegetation. Subsurface drainage or other engineering practices may be needed. In this situation, a permit may be needed from the local Conservation Commission: check ahead of time to avoid construction delays.

Provide protection from equipment, trampling and other destructive agents.

Vegetation cannot be expected to supply an erosion control cover and prevent slippage on a soil that is not stable due to its texture, structure, water movement, or excessive slope.

Seeding Grasses and Legumes

Install needed surface runoff control measures such as gradient terraces, berms, dikes, level spreaders, waterways, and sediment basins prior to seeding or planting.

Seedbed Preparation

If infertile or coarse-textured subsoil will be exposed during land shaping, it is best to stockpile topsoil and respread it over the finished slope at a minimum 2- to 6-inch depth and roll it to provide a firm seedbed. If construction fill operations have left soil exposed with a loose, rough, or irregular surface, smooth with blade and roll.

Loosen the soil to a depth of 3-5 inches with suitable agricultural or construction equipment.

Areas not to receive top soil shall be treated to firm the seedbed after incorporation of the lime and fertilizer so that it is depressed no more than ½ - 1 inch when stepped on with a shoe. Areas to receive topsoil shall not be firmed until after topsoiling and lime and fertilizer is applied and incorporated, at which time it shall be treated to firm the seedbed as described above. This can be done by rolling or cultipacking.

Cool Season Grasses

Cool Season Grasses grow rapidly in the cool weather of spring and fall,

and set seed in June and July. Cool season grasses become dormant when summer temperatures persist above 85 degrees and moisture is scarce.

Lime and Fertilizer

Apply lime and fertilizer according to soil test and current Extension Service recommendations. In absence of a soil test, apply lime (a pH of 5.5 - 6.0 is desired) at a rate of 2.5 tons per acre and 10-20-20 analysis fertilizer at a rate of 500 pounds per acre (40 % of N to be in an organic or slow release form). Incorporate lime and fertilizer into the top 2-3 inches of soil.

Seeding Dates

Seeding operations should be performed within one of the following periods:

- ∞ April 1 - May 31,
- ∞ August 1 - September 10,
- ∞ November 1 - December 15 as a dormant seeding (seeding rates shall be increased by 50% for dormant seedings).

Seeding Methods

Seeding should be performed by one of the following methods. Seed should be planted to a depth of ¼ to ½ inches.

- ∞ Drill seedings,
- ∞ Broadcast and rolled, cultipacked or tracked with a small track piece of construction equipment,
- ∞ Hydroseeding, with subsequent tracking.

Mulch

Mulch the seedings with straw applied at the rate of ½ tons per acre. Anchor the mulch with erosion control netting or fabric on sloping areas.

Warm Season Grasses

Warm Season Grasses begin growth slowly in the spring, grow rapidly in the hot summer months and set seed in the fall. Many warm season grasses are sensitive to frost in the fall, and the top growth may die back. Growth begins from the plant base the following spring.

Lime and Fertilizer

Lime to attain a pH of at least 5.5. Apply a 0-10-10 analysis fertilizer at the rate of 600 lbs./acre.

Incorporate both into the top 2-3 inches of soil. (30 lbs. of slow release nitrogen should be applied after emergence of grass in the late spring.)

Seeding Dates

Seeding operations should be performed as an early spring seeding (April 1-May 15) with the use of cold treated seed. A late fall early winter dormant seeding (November 1 - December 15) can also be made, however the seeding rate will need to be increased by 50%.

Seeding Methods

Seeding should be performed by one of the following methods:

- ∞ Drill seedings (de-awned or de-bearded seed should be used unless the drill is equipped with special features to accept awned seed).
- ∞ Broadcast seeding with subsequent rolling, cultipacking or tracking the seeding with small track construction equipment. Tracking should be oriented up and down the slope.
- ∞ Hydroseeding with subsequent tracking. If wood fiber mulch is used, it should be applied as a separate operation after seeding and tracking to assure good seed to soil contact.

Mulch

Mulch the seedings with straw applied at the rate of ½ tons per acre. Anchor the mulch with erosion control netting or fabric on sloping areas.

Seed Mixtures for Permanent Cover

Recommended mixtures for permanent seeding are provided on the following pages. Select plant species which are suited to the site conditions and planned use. Soil moisture conditions, often the major limiting site factor, are usually classified as follows:

Dry - Sands and gravels to sandy loams. No effective moisture supply from seepage or a high water table.

Moist - Well drained to moderately well drained sandy loams, loams, and finer; or coarser textured material with moderate influence on root zone from seepage or a high water table.

Wet - All textures with a water table at or very near the soil surface, or with enduring seepage.

When other factors strongly influence site conditions, the plants selected must also be tolerant of these conditions.

Permanent Seeding Mixtures

Mix	Site	Seed Mixture	Seed, Pounds per:		Remarks
			Acre	1,000 sf	
1	Dry	Little Bluestem	10	0.25	<ul style="list-style-type: none"> * Use Warm Season planting procedure. * Roadsides * Sand and Gravel Stabilization * Clover requires inoculation with nitrogen-fixing bacteria * Rates for this mix are for PLS.
		or Broomsedge	1	0.10	
		Tumble Lovegrass*	10	0.25	
		Switchgrass	2	0.10	
		Bush Clover*	1	0.10	
		Red Top	1	0.10	
2	Dry	Deertongue	15	0.35	<ul style="list-style-type: none"> * Use Warm Season planting procedures. * Acid sites/Mine spoil * Clover requires inoculation with nitrogen-fixing bacteria. * Rates for this mix are for PLS.
		Broomsedge	10	0.25	
		Bush Clover*	2	0.10	
		Red Top	1	0.10	
		Red Top	1	0.10	
3	Dry	Big Bluestem	10	0.25	<ul style="list-style-type: none"> * Rates for this mix are for PLS. * Use Warm Season planting procedures. * Eastern Prairie appearance * Sand and Gravel pits. * Golf Course Wild Areas * Sanitary Landfill Cover seeding * Wildlife Areas * OK to substitute Poverty Dropseed in place of Red Top/Ryegrass. * Rates for this mix are for PLS.
		Indian Grass	10	0.25	
		Switchgrass	10	0.25	
		Little Bluestem	10	0.25	
		Red Top or	1	0.10	
		Perennial Ryegrass	10	0.25	
		Perennial Ryegrass	10	0.25	
4	Dry	Flat Pea	25	0.60	<ul style="list-style-type: none"> * Use Cool Season planting procedures * Utility Rights-of-Ways (tends to suppress woody growth)
		Red Top or	2	0.10	
		Perennial Ryegrass	15	0.35	
5	Dry	Little Bluestem	5	0.10	<ul style="list-style-type: none"> * Use Warm Season planting procedures. * Coastal sites * Rates for Bluestein and Switchgrass are for PLS.
		Switchgrass	10	0.25	
		Beach Pea*	20	0.45	
		Perennial Ryegrass	10	0.25	
6	Dry - Moist	Red Fescue	10	0.25	<ul style="list-style-type: none"> * Use Cool Season planting procedure. * Provides quick cover but is non-aggressive; will tend to allow indigenous plant colonization. * General erosion control on variety of sites, including forest roads, skid trails and landings.
		Canada Bluegrass	10	0.25	
		Perennial Ryegrass	10	0.25	
		Red Top	1	0.10	
7	Moist- Wet	Switchgrass	10	0.25	<ul style="list-style-type: none"> * Use Warm Season planting procedure. * Coastal plain/flood plain * Rates for Bluestem and Switchgrass are for PLS.
		Virginia Wild Rye	5	0.10	
		Big Bluestem	15	0.35	
		Red Top	1	0.10	

Permanent Seeding Mixtures

Mix	Site	Seed Mixture	Seed, Pounds per:		Remarks
			Acre	1,000 sf	
8	Moist	Creeping Bentgrass	5	0.10	* Use Cool Season planting procedures.
	Wet	Fringed Bromegrass	5	0.10	* Pond Banks
		Fowl Meadowgrass	5	0.10	* Waterways/ditch banks
		Bluejoint Reedgrass or Rice Cutgrass	2	0.10	
		Perennial Ryegrass	10	0.25	
9	Moist	Red Fescue	5	0.10	*Salt Tolerant
	Wet	Creeping Bentgrass	2	0.10	* Fescue and Bentgrass provide low growing appearance, while Switchgrass provides tall cover for wildlife.
		Switchgrass	8	0.20	
		Perennial Ryegrass	10	0.25	
10	Moist	Red Fescue	5	0.10	* Use Cool Season planting procedure.
	Wet	Creeping Bentgrass	5	0.10	* Trefoil requires inoculation with nitrogen fixing bacteria.
		Virginia Wild Rye	8	0.20	
		Wood Reed Grass*	1	0.10	* Suitable for forest access roads, skid trails and other partial shade situations.
		Showy Tick Trefoil*	1	0.10	
11	Moist	Creeping Bentgrass	5	0.10	* Use Cool Season planting procedure.
	Wet	Bluejoint Reed Grass	1	0.10	* Suitable for waterways, pond or ditch banks.
		Virginia Wild Rye	3	0.10	* Trefoil requires inoculation with nitrogen fixing bacteria.
		Fowl Meadow Grass	10	0.25	
		Showy Tick Trefoil*	1	0.10	
		Red Top	1	0.10	
12	Wet	Blue Joint Reed Grass	1	0.10	* Use Cool Season planting procedure.
		Canada Manna Grass	1	0.10	* OK to seed in saturated soil conditions, but not in standing water.
		Rice Cut Grass	1	0.10	
		Creeping Bent Grass	5	0.10	* Suitable as stabilization seeding for created wetland.
		Fowl Meadow Grass	5	0.10	* All species in this mix are native to Massachusetts.
13	Dry-	American Beachgrass	18"	18"	*Vegetative planting with dormant culms, 3-5 culms per planting centers
	Moist			centers	
14	Inter-	Smooth Cordgrass	12-18"	12-18"	* Vegetative planting with transplants
	Tidal	Saltmeadow Cordgrass		centers	centers

Notes:

* Species such as Tumble Lovegrass, Fringed Bromegrass, Wood Reedgrass, Bush Clover and Beach Pea, while known to be commercially available from specific seed suppliers, may not always be available from your particular seed suppliers. The local Natural Resources Conservation Service office may be able to help with a source of supply. In the event a particular species listed in a mix can not be obtained, however, it may be possible to substitute another species.

Seed mixtures by courtesy of Natural Resources Conservation Service, Amherst, MA.

(PLS) Pure Live Seed

Warm Season grass seed is sold and planted on the basis of pure live seed. An adjustment is made to the bulk rate of the seed to compensate for inert material and non-viable seed. Percent of pure live seed is calculated by multiplying the percent purity by the percent germination; (% purity) x (% germination) = percent PLS.

For example, if the seeding rate calls for 10 lbs./acre PLS and the seed lot has a purity of 70% and germination of 75%, the PLS factor is:

$$(.70 \times .75) = .53$$

$$10 \text{ lbs. divided by } .53 = \text{approx. } 19 \text{ lbs.}$$

Therefore, 19 lbs of seed from the particular lot will need to be applied to obtain 10 lbs. of pure live seed.

Special Note

Tall Fescue, Reed Canary Grass, Crownvetch and Birdsfoot Trefoil are no longer recommended for general erosion control use in Massachusetts due to the invasive characteristics of each. If these species are used, it is recommended that the ecosystem of the site be analyzed for the effects species invasiveness may impose. The mixes listed in the above mixtures include either species native to Massachusetts or non-native species that are not perceived to be invasive, as per the Massachusetts Native Plant Advisory Committee.

Wetlands Seed Mixtures

For newly created wetlands, a wetlands specialist should design plantings to provide the best chance of success. Do not use introduced, invasive plants like reed canarygrass (*Phalaris arundinacea*) or purple loosestrife (*Lythrum salicaria*). Using plants such as these will cause many more problems than they will solve.

The following grasses all thrive in wetland situations:

- ☞ Fresh Water Cordgrass (*Spartina pectinata*)
- ☞ Marsh/Creeping Bentgrass (*Agrostis stolonifera*, var. *Palustris*)
- ☞ Broomsedge (*Andropogon virginicus*)
- ☞ Fringed Bromegrass (*Bromus ciliatus*)
- ☞ Blue Joint Reed Grass (*Calamagrostis canadensis*)
- ☞ Fowl Meadow Grass (*Glyceria striata*)
- ☞ Riverbank Wild Rye (*Elymus riparius*)
- ☞ Rice Cutgrass (*Leersia oryzoides*)
- ☞ Stout Wood Reed (*Cinna arundinacea*)
- ☞ Canada Manna Grass (*Glyceria canadensis*)

A sample wetlands seed mix developed by The New England Environmental Wetland Plant Nursery is shown on the following page.

Wetland Seed Mixture

The New England Environmental Wetland Plant Nursery has developed a seed mixture which is specifically designed to be used in wetland replication projects and stormwater detention basins. It is composed of seeds from a variety of indigenous wetland species. Establishing a native wetland plant understory in these areas provides quick erosion control, wildlife food and cover, and helps to reduce the establishment of undesirable invasive species such as Phragmites and purple loosestrife (*Lythrum salicaria*). The species have been selected to represent varying degrees of drought tolerance, and will establish themselves based upon microtopography and the resulting variation in soil moisture.

Common Name (Scientific Name)	% in Mix	Comments
Lurid Sedge (<i>Carex lurida</i>)	30	A low ground cover that tolerates mesic sites in addition to saturated areas; prolific seeder in second growing season.
Fowl Meadow Grass (<i>Glyceria Canadensis</i>)	25	Prolific seed producer that is a valuable wildlife food source.
Fringed Sedge (<i>Carex crinita</i>)	10	A medium to large sedge that tolerates saturated areas; good seed producer.
Joe-Pye Weed (<i>Eupatoriadelphus maculatus</i>)	10	Flowering plant that is valuable for wildlife cover. Grows to 4 feet.
Brook Sedge (<i>Carex spp., Ovales group</i>)	10	Tolerates a wide range of hydrologic conditions.
Woolgrass (<i>Scirpus cyperinus</i>)	5	Tolerates fluctuating hydrology.
Boneset (<i>Eupatorium perfoliatum</i>)	5	Flowering Plant that is valuable for wildlife cover. Grows to 3 feet.
Tussock Sedge (<i>Carex stricta</i>)	<5	Grows in elevated hummocks on wet sites, may grow rhizomously on drier sites.
Blue Vervain (<i>Verbena hastata</i>)	<5	A native plant that bears attractive, blue flowers.

The recommended application rate is one pound per 5,000 square feet when used as an understory cover. This rate should be increased to one pound per 2,500 square feet for detention basins and other sites which require a very dense cover. For best results, a late fall application is recommended. This mix is not recommended for standing water.

Operation & Maintenance Plan

Operation & Maintenance Plan
89-89D Prescott Street
East Boston, MA
June 29, 2018

1,000 gallon Drywell:

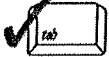
- Access to the drywell is through the catchbasin grate in the courtyard area.
- From the surface, the sediment may be measured.
- A stadia rod may be used to measure the depth of sediment, if any.
- Once the depth of sediment is in excess of three (3") inches, the sediment shall be vacuumed out of the drywell and additional stone will be added to replace any lost stone.
- Should standing water be present in bottom of system during a routine inspection or more than twenty-four (24) hours after the end of a rainfall event, it may be as a result of the stone bed layer being clogged with fine particles. The amount of elapsed time required for the water to infiltrate completely should be recorded. If after seventy-two (72) hours from the end of a rainfall event there is still standing water in the bottom of the drywell, vacuum the sediment laden stone and replace as described above.
- We recommend the following schedule for system maintenance
 - Monthly in first year of service:
 - Check inlets and outlets for clogging and remove any debris as necessary
 - Check for depressions in areas over and surrounding the system
 - Spring and fall in the second year service:
 - Check inlets and outlets for clogging and remove any debris as necessary
 - Check for depressions in areas over and surrounding the system
 - One year after commissioning and every year following:
 - Check inlets and outlets for clogging and remove any debris as necessary
 - Inspect the interior of the drywell via the catch basin grate and measure sediment or depth of standing water
 - Check for depressions in areas over and surrounding the system
 - Confirm that no unauthorized modifications have been performed to the site
- It should be noted that most failures occur in subsurface systems such as these due to inadequate pre-treatment which leads to clogging. However, this system shall only receive roof runoff and limited runoff from the courtyard area which is considered clean and does not require pre-treatment. Therefore, we do not expect there to be any adverse impacts to the system due to debris accumulation.



Checklist for Stormwater Report

A. Introduction

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



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the Massachusetts Stormwater Handbook. The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.¹ This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8²
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification must be submitted with the Stormwater Report.

¹ The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

² For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.



Checklist for Stormwater Report

B. Stormwater Checklist and Certification

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

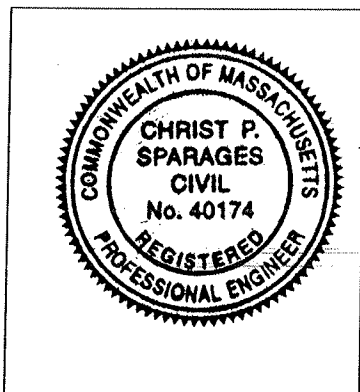
Note: Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature



Christ Sparages 6/29/18
Signature and Date

Checklist

Project Type: Is the application for new development, redevelopment, or a mix of new and redevelopment?

- New development
- Redevelopment
- Mix of New Development and Redevelopment



Checklist for Stormwater Report

Checklist (continued)

LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- No disturbance to any Wetland Resource Areas
- Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- Reduced Impervious Area (Redevelopment Only)
- Minimizing disturbance to existing trees and shrubs
- LID Site Design Credit Requested:
 - Credit 1
 - Credit 2
 - Credit 3
- Use of "country drainage" versus curb and gutter conveyance and pipe
- Bioretention Cells (includes Rain Gardens)
- Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- Treebox Filter
- Water Quality Swale
- Grass Channel
- Green Roof
- Other (describe): _____

Standard 1: No New Untreated Discharges

- No new untreated discharges
- Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.



Checklist for Stormwater Report

Checklist (continued)

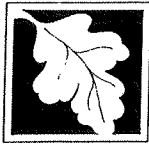
Standard 2: Peak Rate Attenuation

- Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

Standard 3: Recharge

- Soil Analysis provided.
- Required Recharge Volume calculation provided.
- Required Recharge volume reduced through use of the LID site Design Credits.
- Sizing the infiltration, BMPs is based on the following method: Check the method used.
 - Static
 - Simple Dynamic
 - Dynamic Field¹
- Runoff from all impervious areas at the site discharging to the infiltration BMP.
- Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
 - Site is comprised solely of C and D soils and/or bedrock at the land surface
 - M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
 - Solid Waste Landfill pursuant to 310 CMR 19.000
 - Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

¹ 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.



Checklist for Stormwater Report

Checklist (continued)

Standard 3: Recharge (continued)

- The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
 - Provisions for storing materials and waste products inside or under cover;
 - Vehicle washing controls;
 - Requirements for routine inspections and maintenance of stormwater BMPs;
 - Spill prevention and response plans;
 - Provisions for maintenance of lawns, gardens, and other landscaped areas;
 - Requirements for storage and use of fertilizers, herbicides, and pesticides;
 - Pet waste management provisions;
 - Provisions for operation and management of septic systems;
 - Provisions for solid waste management;
 - Snow disposal and plowing plans relative to Wetland Resource Areas;
 - Winter Road Salt and/or Sand Use and Storage restrictions;
 - Street sweeping schedules;
 - Provisions for prevention of illicit discharges to the stormwater management system;
 - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
 - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
 - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
 - Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
 - is within the Zone II or Interim Wellhead Protection Area
 - is near or to other critical areas
 - is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
 - involves runoff from land uses with higher potential pollutant loads.
 - The Required Water Quality Volume is reduced through use of the LID site Design Credits.
 - Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.



Checklist for Stormwater Report

Checklist (continued)

Standard 4: Water Quality (continued)

- The BMP is sized (and calculations provided) based on:
 - The ½" or 1" Water Quality Volume or
 - The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted *prior* to the discharge of stormwater to the post-construction stormwater BMPs.
- The NPDES Multi-Sector General Permit does *not* cover the land use.
- LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- All exposure has been eliminated.
- All exposure has *not* been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

Standard 6: Critical Areas

- The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- Critical areas and BMPs are identified in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
- Limited Project
 - Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
 - Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
 - Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
 - Bike Path and/or Foot Path
 - Redevelopment Project
 - Redevelopment portion of mix of new and redevelopment.
- Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
 - Construction Period Operation and Maintenance Plan;
 - Names of Persons or Entity Responsible for Plan Compliance;
 - Construction Period Pollution Prevention Measures;
 - Erosion and Sedimentation Control Plan Drawings;
 - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
 - Vegetation Planning;
 - Site Development Plan;
 - Construction Sequencing Plan;
 - Sequencing of Erosion and Sedimentation Controls;
 - Operation and Maintenance of Erosion and Sedimentation Controls;
 - Inspection Schedule;
 - Maintenance Schedule;
 - Inspection and Maintenance Log Form.
- A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.



Checklist for Stormwater Report

Checklist (continued)

Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- The project is **not** covered by a NPDES Construction General Permit.
- The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

Standard 9: Operation and Maintenance Plan

- The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
 - Name of the stormwater management system owners;
 - Party responsible for operation and maintenance;
 - Schedule for implementation of routine and non-routine maintenance tasks;
 - Plan showing the location of all stormwater BMPs maintenance access areas;
 - Description and delineation of public safety features;
 - Estimated operation and maintenance budget; and
 - Operation and Maintenance Log Form.
- The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
 - A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
 - A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

Standard 10: Prohibition of Illicit Discharges

- The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- An Illicit Discharge Compliance Statement is attached;
- NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

Long Term Pollution Prevention Plan (LTPPP)

#89-89D Prescott Street (aka 341 Chelsea Street) East Boston, Massachusetts
June 29, 2018

This Long Term Pollution Prevention Plan has been prepared to comply with the provisions set forth in the Massachusetts Department of Environmental Protection (DEP) Stormwater Management Standards. Structural Best Management Practices (BMPs) require periodic maintenance to ensure proper function and efficiency in pollutant removal from stormwater discharges that would otherwise reach wetland resource areas untreated.

Maintenance schedules found below are as recommended in Department of Environmental Protection's Massachusetts Stormwater Handbook and as recommended in the manufacturer's specifications.

1.0 Street Sweeping:

No street sweeping is proposed as the building covers almost the entire limits of the property.

2.0 Ownership and Maintenance Responsibilities:

After completion, the property owner(s) will assume full responsibility of continuing the operation and maintenance of the stormwater management system as well as the long term pollution prevention plan outlined below. The exception would be if a legal agreement is made with another party to perform such duties for the owner(s).

3.0 DEP Standard 4 Water Quality:

The Long Term Pollution Prevention Plan includes the following:

- **Good housekeeping practices;**
Prevent or reduce pollutant runoff from reaching the wetland resource areas through sidewalk sweeping and keeping the courtyard swept to prevent debris from entering the drywell.
- **Provisions for storing materials and waste products inside or under cover;**
All materials on site are to be stored in a neat and orderly fashion in their appropriate containers and, if possible, under a roof or other secure enclosure. All waste products are to be placed in secure receptacles until they are emptied by a solid waste management company licensed in the Commonwealth of Massachusetts.
- **Vehicle washing controls;**
There are no driveways associated with the subject property.
- **Requirements for routine inspections and maintenance of Stormwater BMP's;**
Follow the procedures outlined in the Operation and Maintenance Plan.

- **Spill prevention and response plans;**

Spill Prevention: As mentioned previously, all materials on site are to be stored in a neat and orderly fashion in their appropriate containers and, if possible, under a roof or other secure enclosure. Products shall be kept in their original containers with the original manufacturer's label. Products should not be mixed unless recommended by the manufacturer. The manufacturer's recommendations for proper use and disposal shall be followed at all times and, if possible, all of the product should be used up before proper disposal.

Response: The manufacturer's recommended methods for cleanup must be followed and spills cleaned up immediately after discovery. Spills shall be kept well ventilated and personnel must wear appropriate protective gear to prevent injury from contact with hazardous substances. Spills of toxic or hazardous material must be reported to the appropriate local and/or State agencies in accordance with the local and/or Commonwealth of Massachusetts regulations.

- **Requirements for storage and use of fertilizers, herbicides and pesticides;**

Consult the Order of Conditions issued by the City of Boston Conservation Commission for any questions regarding these materials.

Fertilizers: Fertilizers are to be applied at the minimum amounts recommended by the manufacturer and once applied shall be worked into the soil to limit the possibility of entering the storm drains. Storage procedures are to be followed as previously stated and the contents of any partially used bags should be transferred to a sealable container, either bag or bin to avoid spilling.

Herbicides and Pesticides: Storage of these materials are to be as outlined previously and especially out of the reach of pets and children, away from damp areas where their containers may succumb to moisture or rust and should not be stored near food. These materials must not be placed in the trash or washed down the drain. Handle using rubber gloves and use an appropriate mask when using these products for extensive periods of time.

- **Provisions for maintenance of landscaped areas;**

These activities are to be left up to the owner(s) to schedule and perform.

- **Pet waste management provisions;**

These activities are to be left up to the individual tenants to schedule and perform.

- **Provisions for solid waste management;**

All waste products are to be placed in secure receptacles until they are emptied by a solid waste management company licensed in the Commonwealth of Massachusetts.

- **Snow disposal and plowing plans relative to Wetland Resource Areas;**

Snow disposal/removal is to be in compliance with the Bureau of Resource Protection's (BRP's) Snow Disposal Guidelines effective March 8, 2001, Guideline No. BRPG01-01.

- **Winter Road Salt and/or Sand Use and Storage restrictions;**
Road Salt: Storage is to be as mentioned previously and the use must be in compliance with the Guidelines on Deicing Chemical (Road Salt) Storage effective date December 19, 1997, Guideline No. DWSG97-1 found in the BRP's Drinking Water Program.

Sand Use: Encourage the use of environmentally friendly alternatives such as calcium chloride and/or sand instead of road salt for melting ice whenever possible.

- **Provisions for prevention of illicit discharges to the stormwater management systems;**
According to Standard 10 in the Massachusetts Stormwater Handbook, Illicit discharges to the stormwater management system are discharges that are not entirely comprised of stormwater. Notwithstanding the foregoing, an illicit discharge does not include discharges from the following activities or facilities: firefighting, water line flushing, landscape irrigation, uncontaminated groundwater, potable water sources, foundation drains, air conditioning condensation, footing drains, individual resident car washing, flows from riparian habitats and wetlands, dechlorinated water from swimming pools, water used for street washing and water used to clean residential buildings without detergents.
- **Documentation that Stormwater BMP's are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from land uses with higher potential pollutant loads (LUHPPL);**
Not applicable as this project does not meet the criteria for a LUHPPL.
- **Training for staff or personnel involved with implementing LTPPP;**
This responsibility lies with the owner(s) unless a legally-binding agreement is made with another party to perform such duties for the owner(s).
- **List of Emergency contacts for implementing Long-Term Pollution Prevention Plan;**
This responsibility lies with the owner(s) unless a legally-binding agreement is made with another party to perform such duties for the owner(s).



Boston Planning & Development Agency Climate Resiliency Report Summary



Submitted: 07/03/2018 14:28:51

A.1 - Project Information

Project Name:	Prescott Street Residences		
Project Address:	89-89D Prescott Street		
Filing Type:	Construction / Certificate of Occupancy (post construction completion)		
Filing Contact:	Chris Sparages	Williams & Sparages LLC	csparages@wsengineers.com 978-539-8088
Is MEPA approval required?	No	MEPA date:	

A.2 - Project Team

Owner / Developer:	341 Chelsea Street Realty Trust
Architect:	Khalsa Design, Inc.
Engineer:	Allied Consulting Engineering Services, Inc.
Sustainability / LEED:	N/A
Permitting:	Williams & Sparages LLC
Construction Management:	341 Chelsea Street Realty Trust

A.3 - Project Description and Design Conditions

List the principal Building Uses:	Residential
List the First Floor Uses:	Residential
List any Critical Site Infrastructure and or Building Uses:	Water, sewer, natural gas, electric, and CATV services.

Site and Building:

Site Area (SF):	1875	Building Area (SF):	1826
Building Height (Ft):	31.75	Building Height (Stories):	3
Existing Site Elevation – Low (Ft BCB):	13.08	Existing Site Elevation – High (Ft BCB):	17.62
Proposed Site Elevation – Low (Ft BCB):	13.17	Proposed Site Elevation – High (Ft BCB):	17.62
Proposed First Floor Elevation (Ft BCB):	18.25	Below grade spaces/levels (#):	0
Article 37 Green Building:			
LEED Version - Rating System:	N/A	LEED Certification:	
Proposed LEED rating:		Proposed LEED point score (Pts.):	

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Building Envelope:

When reporting R values, differentiate between R discontinuous and R continuous. For example, use "R13" to show R13 discontinuous and use R10c.i. to show R10 continuous. When reporting U value, report total assembly U value including supports and structural elements.

Roof:	49	Exposed Floor:	10
Foundation Wall:	10	Slab Edge (at or below grade):	10
Vertical Above-grade Assemblies (%'s are of total vertical area and together should total 100%):			
Area of Opaque Curtain Wall & Spandrel Assembly:		Wall & Spandrel Assembly Value:	
Area of Framed & Insulated / Standard Wall:		Wall Value:	21
Area of Vision Window:		Window Glazing Assembly Value:	
		Window Glazing SHGC:	
Area of Doors:		Door Assembly Value:	

Energy Loads and Performance

For this filing – describe how energy loads & performance were determined			
Annual Electric (kWh):		Peak Electric (kW):	7.2
Annual Heating (MMbtu/hr):		Peak Heating (MMbtu):	0.6
Annual Cooling (Tons/hr):		Peak Cooling (Tons):	2.5
Energy Use - Below ASHRAE 90.1 - 2013 (%):		Have the local utilities reviewed the building energy performance?:	No
Energy Use - Below Mass. Code (%):	4.7	Energy Use Intensity (kBtu/SF):	32.2

Back-up / Emergency Power System

Electrical Generation Output (kW):	0	Number of Power Units:	0
System Type (kW):		Fuel Source:	

Emergency and Critical System Loads (in the event of a service interruption)

Electric (kW):	0	Heating (MMbtu/hr):	0
		Cooling (Tons/hr):	0

B – Greenhouse Gas Reduction and Net Zero / Net Positive Carbon Building Performance

Reducing greenhouse gas emissions is critical to avoiding more extreme climate change conditions. To achieve the City's goal of carbon-neutrality by 2050 the performance of new buildings will need to progressively improve to carbon net zero and net positive.

B.1 – GHG Emissions - Design Conditions

For this filing - Annual Building GHG Emissions (Tons): [REDACTED]

For this filing - describe how building energy performance has been integrated into project planning, design, and engineering and any supporting analysis or modeling:

[REDACTED]

Describe building specific passive energy efficiency measures including orientation, massing, building envelop, and systems:

Operable Windows
[REDACTED]

Describe building specific active energy efficiency measures including high performance equipment, controls, fixtures, and systems:

Energystar Equipment & Appliances; High performance lighting & controls
[REDACTED]

Describe building specific load reduction strategies including on-site renewable energy, clean energy, and storage systems:

[REDACTED]

Describe any area or district scale emission reduction strategies including renewable energy, central energy plants, distributed energy systems, and smart grid infrastructure:

[REDACTED]

Describe any energy efficiency assistance or support provided or to be provided to the project:

[REDACTED]

B.2 - GHG Reduction - Adaptation Strategies

Describe how the building and its systems will evolve to further reduce GHG emissions and achieve annual carbon net zero and net positive performance (e.g. added efficiency measures, renewable energy, energy storage, etc.) and the timeline for meeting that goal (by 2050):

Owner will evaluate the use of solar panels as equipment costs come down.

C - Extreme Heat Events

Annual average temperature in Boston increased by about 2 °F in the past hundred years and will continue to rise due to climate change. By the end of the century, the average annual temperature could be 56° (compared to 46° now) and the number of days above 90° (currently about 10 a year) could rise to 90.

C.1 – Extreme Heat - Design Conditions

Temperature Range - Low (Deg.):	-10	Temperature Range - High (Deg.):	95
Annual Heating Degree Days:		Annual Cooling Degree Days:	

What Extreme Heat Event characteristics will be / have been used for project planning

Days - Above 90° (#):	4	Days - Above 100° (#):	1
Number of Heatwaves / Year (#):	1	Average Duration of Heatwave (Days):	4

Describe all building and site measures to reduce heat-island effect at the site and in the surrounding area:

C.2 - Extreme Heat – Adaptation Strategies

Describe how the building and its systems will be adapted to efficiently manage future higher average temperatures, higher extreme temperatures, additional annual heatwaves, and longer heatwaves:

Describe all mechanical and non-mechanical strategies that will support building functionality and use during extended interruptions of utility services and infrastructure including proposed and future adaptations:

The use of operable windows

D - Extreme Precipitation Events

From 1958 to 2010, there was a 70 percent increase in the amount of precipitation that fell on the days with the heaviest precipitation. Currently, the 10-Year, 24-Hour Design Storm precipitation level is 5.25". There is a significant probability that this will increase to at least 6" by the end of the century. Additionally, fewer, larger storms are likely to be accompanied by more frequent droughts.

D.1 – Extreme Precipitation - Design Conditions

What is the project design precipitation level? (In. / 24 Hours)

7

Describe all building and site measures for reducing storm water run-off:

Construction of a new 1000 gallon infiltration drywell with stone.

D.2 - Extreme Precipitation - Adaptation Strategies

Describe how site and building systems will be adapted to efficiently accommodate future more significant rain events (e.g. rainwater harvesting, on-site storm water retention, bio swales, green roofs):

Construction of a new 1000 gallon infiltration drywell with stone.

E – Sea Level Rise and Storms

Under any plausible greenhouse gas emissions scenario, the sea level in Boston will continue to rise throughout the century. This will increase the number of buildings in Boston susceptible to coastal flooding and the likely frequency of flooding for those already in the floodplain.

Is any portion of the site in a FEMA Special Flood Hazard Area? Yes

What Zone: AE

What is the current FEMA SFHA Zone Base Flood Elevation for the site (Ft BCB)? 16.5

Is any portion of the site in the BPDA Sea Level Rise Flood Hazard Area (see [SLR-FHA online map](#))? Yes

If you answered YES to either of the above questions, please complete the following questions. Otherwise you have completed the questionnaire; thank you!

E.1 – Sea Level Rise and Storms – Design Conditions

Proposed projects should identify immediate and future adaptation strategies for managing the flooding scenario represented by the Sea Level Rise Flood Hazard Area (SLR-FHA), which includes 3.2' of sea level rise above 2013 tide levels, an additional 2.5" to account for subsidence, and the 1% Annual Chance Flood. After using the SLR-FHA to identify a project's Sea Level Rise Base Flood Elevation, proponents should calculate the Sea Level Rise Design Flood Elevation by adding 12" of freeboard for buildings, and 24" of freeboard for critical facilities and infrastructure and any ground floor residential units.

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What is the Sea Level Rise - Base Flood Elevation for the site (Ft BCB)?	19.3		
What is the Sea Level Rise - Design Flood Elevation for the site (Ft BCB)?	20.3	First Floor Elevation (Ft BCB):	18.25
What are the Site Elevations at Building (Ft BCB)?	13.17	What is the Accessible Route Elevation (Ft BCB)?	N/A

Describe site design strategies for adapting to sea level rise including building access during flood events, elevated site areas, hard and soft barriers, wave / velocity breaks, storm water systems, utility services, etc.:

Flood Openings to be provided in accordance with Mass State Bldg Code

Describe how the proposed Building Design Flood Elevation will be achieved including dry / wet flood proofing, critical systems protection, utility service protection, temporary flood barriers, waste and drain water back flow prevention, etc.:

[Redacted]

Describe how occupants might shelter in place during a flooding event including any emergency power, water, and waste water provisions and the expected availability of any such measures:

Seek shelter in a higher floor of building

Describe any strategies that would support rapid recovery after a weather event:

Wait until flood waters recede before leaving a shelter

E.2 – Sea Level Rise and Storms – Adaptation Strategies

Describe future site design and or infrastructure adaptation strategies for responding to sea level rise including future elevating of site areas and access routes, barriers, wave / velocity breaks, storm water systems, utility services, etc.:

There are none, in this case

Describe future building adaptation strategies for raising the Sea Level Rise Design Flood Elevation and further protecting critical systems, including permanent and temporary measures:

All equipment is being installed above the BFE.

Thank you for completing the Boston Climate Change Checklist!

For questions or comments about this checklist or Climate Change best practices, please contact:

John.Dalzell@boston.gov