Sudbury-Hudson Transmission Reliability Project

Sudbury, Marlborough, Stow, Hudson

CONSTRUCTION ACTIVITIES AT:
Inactive MBTA ROW
Sudbury, Marlborough, Stow, and Hudson; and
Wilkins Street and Forest Avenue in Hudson

PREPARED ON BEHALF OF:
NSTAR Electric d/b/a Eversource Energy
Eversource Energy
247 Station Drive
Westwood, MA 02090

PREPARED FOR:
Denise Bartone
Senior Environmental Engineer
247 Station Drive
Westwood, MA 02090
(781) 441-8174
Denise.Bartone@eversource.com

PREPARED BY:
Vanasse Hangen Brustlin, Inc.
101 Walnut Street
PO Box 9151
Watertown, MA 02471
(617) 924-1770

SWPPP Preparation Date: May 2020
Estimated Project Start Date: XX
Estimated Project End Date: XX

This page intentionally left blank.

Table of Contents

Attachments .....

List of Tables

List of Figures

Figure No.	Description	Page

No table of contents entries found.

This page intentionally left blank.

1

Introduction

This page intentionally left blank.

This Stormwater Pollution Prevention Plan (SWPPP) manual has been prepared to address the requirements of the U.S. Environmental Protection Agency (EPA) National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) for Stormwater Discharges from Construction Activity (2017, USEPA). A copy of the 2017 CGP is included in Attachment A.

The CGP gives **Project Operators** of construction activities that meet the eligibility requrements of Part 1.1 of the 2017 CGP, authorization to discharge:

- stormwater as defined in Part 1.2.1 of the 2017 CGP, and
- non-stormwater associated with some construction activities as defined in part 1.2.2 of the 2017 CGP provided that adequate measures are taken to prevent pollution to receiving waters.

This manual is specific to project sites in **Massachusetts**, where the EPA is the permitting authority for stormwater discharges from construction sites nationally.

How to Use this Manual

This manual does not become a CGP-compliant SWPPP until the Project Operators:

- finalize the SWPPP by completing the initial activities indicated on the following pages and
- by maintaining the SWPPP during the construction period in accordance with the 2017 CGP.

Before the project activities begin, the Project Operators must review this manual, fill out relevant information in the spaces provided (or attach additional pages as necessary) and update and/or revise as necessary.

What is a Project Operator?

The 2017 CGP provides permit coverage for Project Operators (Operator) to discharge stormwater from construction sites. An Operator is any party associated with a construction project that meets either of the following two criteria:

- The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
- The party has day-to-day operational control of those activities at a project, which are necessary to ensure compliance with a SWPPP for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the SWPPP or comply with other permit conditions).

Operators are responsible for maintaining compliance with the terms of the 2017 CGP.

All operators who wish to obtain coverage to discharge stormwater under the 2017 CGP must submit and certify their own NOI to the Environmental Protection Agency (EPA).

Eversource adopts the role of the Project Operator. Contractors and subcontractors certify that they have reviewed and will follow the provisions of the SWPPP. See Attachment B.

Eligibility for Permit Coverage

To be covered under the 2017 CGP, a party must meet the eligibility conditions and follow the requirements for obtaining permit coverage. To be eligible for coverage:

- You must be an Operator of a construction site for which discharges will be covered under this permit.
- The project's construction activities:
  - will disturb one (1) or more acres of land, or less than one (1) acre of land if the project is part of a larger common plan that will ultimately disturb one (1) or more acres of land.
  - have been designated by EPA as needing permit coverage under 40 CFR 122.26(a)(1)(v) or 40 CFR 122.26(b)(15)(ii).
- Discharges from your site are not already covered by a different NPDES permit for the same discharge or in the process of having coverage under a different NPDES permit for the same discharge denied, terminated, or revoked.
- The project meets the requirements relevant to the Endangered Species Act (ESA) (Section 9.1).
- The project meets the requirements relevant to preservation of Historic Properties (Section 9.2).
- The project meets the requirements relevant to water quality impacts to designated waters (Section 3.2. Refer to Part 1.1.8 and 1.1.9 of the 2017 CGP).

Project Operators must file and certify an NOI at least fourteen (14) days prior to the start of project activities. https://www.epa.gov/compliance/npdes-ereporting

Compliance Requirements

Compliance with the 2017 CGP is achieved by:

- Developing a draft SWPPP (this document);
- Identifying project operators and responsible parties and obtaining authorization to perform permit compliance activities. (Section 2.1 and Attachment A);
- Submitting and certifying a Notice of Intent (NOI) to the Environmental Protection Agency (EPA) Construction General Permit Program;
- Installing a sign or other notice posted conspicuously at a safe, publicly accessible location, in close proximity to the project site. At a minimum, the notice shall include:
  - The NPDES Permit tracking number,
  - A contact name and phone number for obtaining additional project information,
  - The location where an EPA inspector or a member of the public may access a copy of the current SWPPP,
  - The statement: "If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbodies, contact the EPA through the following website: https://www.epa.gov/enforcement/report-environmental-violations."
- Updating this SWPPP as necessary and maintaining compliance with the CGP and any and all Orders of Conditions during construction period activities; and
- Maintaining an updated copy of the SWPPP on the project site.

Document Control

A current copy of the following documents:

1. 2017 NPDES CGP,
2. the SWPPP and all attachments and insertions, and
3. EPA-issued authorizations must be kept **on site** at the Project field office so that they can be made available:
   - at the time of an on-site inspection by the EPA
   - upon request by EPA; a state; tribal; or local agency that approves stormwater management plans;
   - the operator of a storm sewer system receiving discharges from the site;
   - or representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS).

If an on-site location is unavailable for storing these documents, a notice of the plan's location must be posted near the main entrance of the construction site.

These documents may be made available to the general public by federal, state, or local agencies. These documents must be retained for at least 3 years from the date that the permit coverage expires or is terminated.

The SWPPP is a dynamic document, and must be continually updated by the Operator(s) throughout construction. It is the responsibility of the Operator(s) to update and complete this manual by including the following information and performing ongoing project activity logging as described in the remainder of this document.

Task Completed	Task	See Sections
☐	Designate and Provide Contact Information for the Responsible Parties	Section 1 Attachment B Section 8.8 Attachment N
☐	Provide documentation confirming EPA authorization of the Project	Attachment C
☐	Provide a construction schedule including dates of major earthwork, stabilization and/or erosion control installations.	Table 24 Appendix J
☐	Review the Erosion and Sediment Controls described in this manual and add or update as needed. Document the installation and maintenance of Erosion and Sediment Controls.	Section 7 Attachment E Attachment J Attachment O Attachment S
☐	Identify any chemical treatments that may be applied to the site and describe dosage, application techniques, and training for personnel.	Section 7.12 Attachment P
☐	Identify potential sources of pollution.	Table 48 Section 8.1
☐	Provide documentation of correspondence congruent with the Endangered Species Act	Section 9.1 Attachment F
☐	Provide documentation of correspondence with Massachusetts Historical Commission. Submit the Project Notification Form (PNF) to Massachusetts Historic Commission	Section 9.2 Attachment G
☐	Provide documentation of compliance with DEP regulations 310 CMR 27.00 (Underground Injection Wells)	Section 9.3 Attachment Q

The SWPPP must be kept up to date throughout the construction period until a Notice of Termination (NOT) Form has been submitted to the EPA. From the date of submital of the NOT form, the SWPPP documents must be maintained by the Operator(s) for a period of three years.

This page intentionally left blank.

2

Contact Information and Responsible Parties

This page intentionally left blank.

2.1 Operators(s)

Individuals identified in this section are designated responsible parties for each of the project Operators. Project Operators may include, but not be limited to the site Owner, the project owner, and the general contractor. Amend this Section during the construction period if any ownership changes or any temporary or permanent staff changes occur.

Table 1 Project Role: Owner

Company or Organization:	Eversource
Name:	Michael Hager
Address:	247 Station Drive
City, State, Zip	Westwood, MA 02090
Telephone:	(781) 441-8206
Fax/Email:	Michael.Hager@eversource.com
Title:	Project Manager

Table 2 Project Role: Owner

Company or Organization:	Eversource
Name:	Denise Bartone
Address:	247 Station Drive
City, State, Zip	Westwood, MA 02090
Telephone:	(781) 441-8174
Fax/Email:	Denise.Bartone@eversource.com
Title:	Manager, Licensing & Permitting

Table 3 Project Role: General Contractor

Company or Organization:	[TBD]
Name:	[enter]
Address:	[enter]
City, State, Zip	[enter]
Telephone:	[enter]
Fax/Email:	[enter]
Title:	[enter]

Table 4 Project Role: [Optional 2]

Company or Organization:	[enter]
Name:	[enter]
Address:	[enter]
City, State, Zip	[enter]
Telephone:	[enter]
Fax/Email:	[enter]
Title:	[enter]

Insert additional sheets as necessary.

2.2 24-hour Emergency Contact Information

The individuals identified in this Section will be available to respond to emergency conditions on the site 24 hours a day, 7 days a week. Amend this Section during the construction period if any temporary or permanent staff changes occur.

Table 5 24-hour Emergency Contact (Primary)

Company or Organization:	Eversource
Name:	TBD
Address:	247 Station Drive
City, State, Zip	Westwood, MA 02090
Telephone:	[enter]
Fax/Email:	[enter]
Title:	Construction Supervisor

Table 6 24-hour Emergency Contact (Secondary)

Company or Organization:	Eversource
Name:	Michael Hager
Address:	247 Station Drive
City, State, Zip	Westwood, MA 02090
Telephone:	(781) 441-8206
Fax/Email:	Michael.Hager@eversource.com
Title:	Project Manager

Attach additional sheets as necessary.

2.3 Delegation of Authority

The individual authorized to sign/certify the NOI is granted the authority to sign the

- SWPPP,
- Inspection Reports,
- Corrective Action Reports and
- other permit documents.

Alternatively, the individual may delegate this authority. A duly authorized representative may only sign the documents if:

- This authorization specifies either an individual or a position (e.g., Environmental Compliance Officer) who has the responsibility for the overall operation of the regulated area or who has overall responsibility for environmental matters.
- This SWPPP includes a signed, dated written authorization.

The duly authorized representative cannot be a subcontractor or a third party. A duly authorized third party may conduct inspections and corrective actions and may complete reports, but the NOI signer/certifier or duly authorized representative identified here must sign the reports.

Insert authorization signature pages into Attachment B. Amend this Section and add pages to Attachment B during the construction period if any temporary or permanent staff changes occur.

Table 7 Duly Authorized Representative or Position (Primary)

Company or Organization:	TBD
Name:	[enter]
Address:	[enter]
City, State, Zip	[enter]
Telephone:	[enter]
Fax/Email:	[enter]
Title:	[enter]

Table 8 Duly Authorized Representative or Position (Secondary, optional)

Company or Organization:	[enter]
Name:	[enter]
Address:	[enter]
City, State, Zip	[enter]
Telephone:	[enter]
Fax/Email:	[enter]
Title:	[enter]

Table 9 Duly Authorized Representative or Position (Tertiary, optional)

Company or Organization:	[enter]
Name:	[enter]
Address:	[enter]
City, State, Zip	[enter]
Telephone:	[enter]
Fax/Email:	[enter]
Title:	[enter]

Attach additional sheets as necessary.

2.4 Stormwater Team

The duties of these personnel include one or more of the following:

1. Prepare the Draft SWPPP
2. Finalize the SWPPP
3. Implement the SWPPP
4. Oversee maintenance practices identified as BMPs in the SWPPP
5. Conduct or provide for inspection and monitoring activities
6. Identify other potential pollutant sources and make sure that they are added to the plan
7. Identify any amendments to the SWPPP necessitated by field conditions and make sure they are implemented
8. Ensure that any design changes during construction are addressed in the SWPPP

All Operators and/or Subcontractors that will use this SWPPP for compliance with the terms of their CGP must provide a certification agreement to do so. The certification agreements are located in Attachment B.

Table 10 Stormwater Team 1

Company or Organization:	TBD
Name:	[enter]
Address:	[enter]
City, State, Zip	[enter]
Telephone:	[enter]
Fax/Email:	[enter]
Title:	[enter]

Continued on the next page

Table 11 Stormwater Team 2

Company or Organization:	[enter]
Name:	[enter]
Address:	[enter]
City, State, Zip	[enter]
Telephone:	[enter]
Fax/Email:	[enter]
Title:	[enter]

Table 12 Stormwater Team 3

Company or Organization:	**Eversource**
Name:	Denise Bartone
Address:	247 Station Drive
City, State, Zip	Westwood, MA 02090
Telephone:	(781) 441-8174
Fax/Email:	Denise.Bartone@eversource.com
Title:	Manager, Licensing & Permitting

Table 13 Stormwater Team 4

Company or Organization:	**Eversource**
Name:	Michael Hager
Address:	247 Station Drive
City, State, Zip	Westwood, MA 02090
Telephone:	(781) 441-8206
Fax/Email:	Michael.Hager@eversource.com
Title:	Project Manager

Attach additional pages as necessary.

2.5 Personnel Responsible for Inspections

Inspections are to be performed by "qualified personnel" as defined in Part 4.1 of the 2017 CGP and shall include all areas of the site disturbed by construction activity and areas used for materials storage that are exposed to precipitation. The Inspector must look for evidence of, or the potential for, pollutants entering the storm water system, inspect the BMPs installed as part of the Plan, inspect the site drainage outfalls, inspect the site egress points for tracking, and inspect material, waste, borrow, or equipment storage and maintenance areas. If, in the course of the inspection, the inspector identifies an eroded area or an area

impacted by sedimentation, additional erosion and sedimentation controls will be implemented, the discharge will be documented, and the SWPPP will be revised to include these changes.

Inspection forms are available in Attachment L. Amend this Section during the construction period if any temporary or permanent staff changes occur.

Table 14 Personnel Authorized to Perform Inspections

Name: Title:	
Name: Title:	
Name: Title:	
Name: Title:	
Name: Title:	
Name: Title:	

Attach additional sheets as necessary.

2.6 Personnel Responsible for Completing Corrective Actions

The following personnel are responsible for completing corrective action forms.

Insert authorization signature pages into Appendix K. Amend this Section during the construction period if any temporary or permanent staff changes occur.

Table 15 Personnel Responsible for Completing Corrective Actions (Primary)

Company or Organization:	
Name:	
Address:	
City, State, Zip	
Telephone:	
Fax/Email:	
Title:	

Table 16 Personnel Responsible for Completing Corrective Actions (Secondary, optional)

Company or Organization:	
Name:	
Address:	
City, State, Zip	
Telephone:	
Fax/Email:	
Title:	

Attach additional sheets as necessary

This page intentionally left blank.

3

Site Evaluation Assessment and Planning

This page intentionally left blank.

3.1 Project/Site Information

Table 17 Project Name and Address

Project/Site Name:	Sudbury-Hudson Transmission Reliability Project
Project Street/Location:	Inactive MBTA ROW in Sudbury, Marlborough, Stow, and Hudson; and Wilkins St and Forest Ave in Hudson
City:	Sudbury, Marlborough, Stow, Hudson
State:	Massachusetts
Zip:	Various
County:	Middlesex

Table 18 Project Coordinates - Sudbury

Type	Latitude		Longitude	
Subdury Substation	42.359997	N	71.397021	W
Hudson Substation	42.387273	N	71.556489	W

Table 19 Source for coordinate information

	Source
☐	USGS topographic map
☐	EPA Website
☐	GPS
☒	Other: (Maps.google.com)

Table 20 Horizontal Reference Datum

	Reference
☐	NAD 27
☒	NAD 83 or WGS 84
☐	Unknown
☐	Other:

3.1.1.1 Additional Information

Yes	No	
☐	☒	Is the project/site located on **Indian country lands,** or located on a property of religious or cultural significance to an Indian tribe? If yes, provide the name of the Indian tribe associated with the area of Indian country (including the name of Indian reservation if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property: n/a If you are conducting earth-disturbing activities in **response to a public emergency,** document the cause of the public emergency *(e.g., natural disaster, extreme flooding conditions)*, information substantiating its occurrence *(e.g., state disaster declaration)*, and a description of the construction necessary to reestablish effective public services: n/a
☐	☒	Are you applying for permit coverage as a "**federal operator**" as defined in Appendix A of the 2017 CGP?

3.2 Discharge Information

Yes	No	
☒	☐	Does your project/site discharge stormwater into a Municipal Separate Storm Sewer System (MS4)?
☒	☐	Are there any surface waters that are located within 50 feet of your construction disturbances?

3.2.1 Receiving Waters

Name(s) of the first surface water(s) that receive stormwater directly from your site and/or from the MS4 (note: multiple rows provided where your site has more than one point of discharge that flows to different surface waters)

Table 21 Receiving Waters

Number	Name
1	Assabet River
2	Fort Meadow Brook
3	Hop Brook
4	Unnamed Stream/Tributary
5	Dudley Brook
6	Hudson wetlands 1-21 (H1-H21)
7	Sudbury wetlands 1-45 (S1-S45)

3.2.2 Impaired Waters

Use the interactive map of the 2016 integrated list of waters to identify impaired waters in the vicinity of the project area. The interactive map is available online at: http://www.mass.gov/eea/agencies/massdep/water/watersheds/integrated-list-of-waters.html

Table 22 Impaired Receiving Waters

	Is this surface water listed as impaired?		If you answered yes, then answer the following:				
				Has a TMDL been completed?			
	Yes	No	What pollutants are causing the impairment?	Yes	No	Title of the TMDL document	Pollutant(s) for which there is a TMDL
Assabet River	☒	☐	(Debris/Floatables/Trash); (Non-Native Aquatic Plants); Aquatic Plants (Macrophytes); Escherichia coli; Excess Algal Growth; Fecal Coliform; Nutrient/ Eutrophication Biological Indicators; Oxygen, Dissolved; Phosphorus (Total); Taste and Odor.	☒	☐	Assabet River Total Maximum Daily Load for Total Phosphorus *(CN 201.0)*	Phosphorus
Fort Meadow Brook	☐	☒		☐	☒		

Is this surface water listed as impaired?			If you answered yes, then answer the following:				
Hop Brook	☒	☐	(Non-Native Aquatic Plants); Aquatic Plants (Macrophytes); Dissolved oxygen saturation; Escherichia coli; Excess Algal Growth; Oxygen, Dissolved; Phosphorus (Total); Turbidity. Oxygen, Dissolved; Phosphorus (Total.	☒	☐		
Unnamed Tributary	☒	☐	Dissolved oxygen saturation; Excess Algal Growth; Oxygen, Dissolved; Phosphorus (Total); Total Suspended Solids (TSS).	☒	☐		
Dudley Brook	☐	☒		☐	☐		

3.2.3 Tier 2, 2.5, or 3 Waters

In **Massachusetts**, Tier 2 waters are listed as "High Quality Waters." **All wetlands** that are not designated as an Outstanding Resource Water are considered a High Quality Water (Refer to antidegradation designations, link below).

In **Massachusetts,** Tier 2.5 waters are listed as Outstanding Resource Water, Public Water Supply, and/or Tributary to Public Water Supply, and all wetlands bordering Outstanding Resource Waters and all vernal pools.

In **Massachusetts,** Tier 3 waters are defined as Special Resource Waters. (As of February 2017, no waters are listed as Special Resource Waters).

Tier 2, Tier 2.5, and Tier 3 waters are identified and listed in the Massachusetts Water Quality Standards 314 CMR 4.00. See 314 CMR 4.06(1)(d)m for definitions. See the Tables and Figures associated with 314 CMR 4.06 available online at: https://www.mass.gov/regulations/314-CMR-4-the-massachusetts-surface-water-quality-standards

To determine applicability of specific antidegradation designations refer to: https://www.mass.gov/doc/antidegradation-implementation-procedures-0/download

Table 23 Special Receiving Waters (Tier 2, Tier 2.5 or Tier 3)

	Is this surface water designated as a Tier 2, Tier 2.5 or Tier 3 water?		If you answered yes, specify which Tier (2, 2.5, or 3) the surface water is designated as.
	Yes	No	
Assabet River	☒	☐	Tier 2. High quality water.
Hop Brook	☒	☐	Tier 2. High quality water.
Wetland H3	☒	☐	Tier 2. High quality water.
Wetland H12	☒	☐	Tier 2. High quality water.
Wetland S4	☒	☐	Tier 2. High quality water.
Wetland S12	☒	☐	Tier 2. High quality water.
Wetland S13	☒	☐	Tier 2. High quality water.
Wetland S14	☒	☐	Tier 2. High quality water.
Wetland S15	☒	☐	Tier 2. High quality water.
Wetland S16	☒	☐	Tier 2. High quality water.

3.3 Project Description

3.3.1 General Description

NSTAR Electric Company d/b/a Eversource Energy (Eversource) is proposing to construct, operate, and maintain an approximate 9-mile, 115-kilovolt (kV) underground transmission line extending from Eversource's Sudbury Substation on Boston Post Road (Route 20) in Sudbury, Massachusetts (Sudbury Substation) to Hudson Light & Power Department's (HLPD) substation at Forest Avenue in Hudson, Massachusetts (Hudson Substation). The new transmission line and related improvements at Sudbury Substation comprise the Sudbury-Hudson Transmission Reliability Project (the Project).

The Project will provide also base for and support construction of a portion of the Mass Central Rail Trail (MCRT). The Project will be installed primarily along an inactive railroad right-of-way (ROW) owned by the Massachusetts Bay Transportation Authority (MBTA). The Project originates at the Sudbury Substation and travels northwest along the MBTA ROW passing through short sections of Marlborough and Stow before entering Hudson, where it travels underground within public roadways for 1.3 miles after eciting the MBTA ROW, terminating at the Hudson Substation. The New Line will pass mostly through the Towns of Sudbury and Hudson and will cross short sections of the Town of Stow and the City of Marlborough.

The Project includes the following work activities:

- Installation of new equipment at Sudbury Substation
- Within MBTA ROW:
  - Vegetation removal within the limit of work (no stumping)
  - Installation of erosion and sediment controls with on-going monitoring and maintenance
  - Rail and tie removal
  - Grading to create construction platform
  - Installation of stormwater management features
  - Construction of wetland replication area
  - Construction of bridges and other crossings
  - Installation of manholes and duct bank
  - Installation of electrical and signal conduit for MCRT at road crossings
  - Final grading of the gravel base for MCRT
  - Cable pulling, splicing, testing, and commissioning
  - Loaming, seeding, and planting of disturbed areas
- Within Public Roadways:
  - Installation of sediment controls
  - Manhole installation
  - Roadway trench excavation, duct bank installation, and pavement restoration

- Cable pulling, splicing, and testing
- Final pavement restoration

3.3.2 Site Maps

Attachment D contains the Project Plans for this project.

Attachment E contains Site Maps including the:

› Site Location Map
› FEMA Flood Insurance Rate Map
› Soil Map

3.3.3 Size/Footprint of the Project

The project activities will occupy the footprint identified below.

Table 24 Footprint of the Project Area

Area Description	Area (acres)
Total property size	
Total area of construction disturbance	
Maximum area to be disturbed at any one time	

3.3.4 Construction Activities Sequencing and Logging

Construction activities, phasing, and sequencing are generally performed at the discretion of the General Contractor and may be determined or refined during the construction period. Project Operators are responsible for maintaining a construction log that address the following project activities.

3.3.4.1 Projected Construction Sequence

The projected construction sequence presented in this section is the best estimate of the construction sequence at the time that this SWPPP template was prepared. If the general sequence presented here changes during the course of the project, amend the SWPPP to include the revised project construction sequence.

Table 25 Projected Construction Sequence (Phase 1)

Phase 1 –

Area of Disturbance _____ acres

Action	Projected Date
Installation of new equipment at Sudbury Substation	
Within MBTA ROW:	
Vegetation removal within the limit of work (no stumping)	
Installation of erosion and sediment controls with on-going monitoring and maintenance	
Rail and tie removal	
Grading to create construction platform	
Installation of stormwater management features	
Construction of wetland replication area	
Construction of bridges and other crossings	
Installation of manholes and duct bank	
Installation of electrical and signal conduit for MCRT at road crossings	
Final grading of the gravel base for MCRT	
Cable pulling, splicing, testing, and commissioning	
Loaming, seeding, and planting of disturbed areas	
Within Public Roadways:	
Installation of sediment controls	
Manhole installation	
Roadway trench excavation, duct bank installation, and pavement restoration	
Cable pulling, splicing, and testing	
Final pavement restoration	

Refer to the Construction Activities Log for actual construction sequence performance.

3.3.4.2 Construction Activity Logging Requirements

For each phase of construction, document the dates for the following activities:

- Installation of stormwater controls, and when they will be made operational;
- Commencement and duration of earth-disturbing activities, including clearing, grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;
- Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;
- Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject to in Part 2.2.1; and
- Removal of temporary stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.

Construction Activity logs are maintained in Attachment J.

3.3.5 Construction Support Activities

Construction support activities are generally performed at the discretion of the General Contractor and may be determined or refined during the construction period. Support activities that are not addressed in the Project Description (Section 0) must be identified here:

3.3.6 Allowable Non-Stormwater Discharges

Congruent with Section 1.2.2 of the 2017 CGP, the following non-stormwater discharges associated with construction activities are authorized under this permit provided that, with the exception of water used to control dust and to irrigate vegetation in stabilized areas, these discharges are not routed to areas of exposed soil on the site and the discharges also meet the requirements of Part 2 of the 2017 CGP.

Table 26 Allowable non-stormwater discharges likely occur at the Project Site

	Likely to be Present at the Site?	
Types of Allowable Non-Stormwater Discharges Present at the Site	**Yes**	**No**
Discharges from emergency fire-fighting activities	☐	☒
Fire hydrant flushings	☐	☒
Landscape irrigation	☐	☒
Waters used to wash vehicles and equipment	☒	☐
Water used to control dust	☒	☐
Potable water including uncontaminated water line flushings	☐	☒
Routine external building wash down	☐	☒
Pavement wash waters	☒	☐
Uncontaminated air conditioning or compressor condensate	☐	☒
Uncontaminated, non-turbid discharges of ground water or spring water	☒	☐
Foundation or footing drains	☐	☒
Construction dewatering water	☒	☐

This page intentionally left blank.

4

Inspections, Corrective Actions, and Amendments

This page intentionally left blank.

4.1 Inspection Schedule

Section 4.2 and Section 4.3 of the 2017 CGP specify minimum inspection frequencies. Section 4.2 specifies the minimum inspection frequency for a typical site. Section 4.3 specifies the minimum inspection frequency for locations on the site that discharge to sensitive waters. Sensitive waters are defined as sediment or nutrient-impaired waters or waters that are identified by the State, tribe or EPA as Tier 2, Tier 2.5, or Tier 3.

Table 27 Project Inspection Schedule

Does the project area discharge to sensitive waters?	Inspection Frequency
☒ Yes	Once every 7 calendar days AND Within 24 hours of an event 0.25 inches or greater
☐ No	Choose one option below:
	☐ Once every 7 calendar days
	☐ Once every 14 calendar days AND Within 24 hours of an event 0.25 inches or greater

To determine if a storm event of 0.25 inch or greater has occurred on the site, data will be obtained from the weather station at:

Blueberry Hill – KMASUDBU29 in Sudbury, MA.

For any day of rainfall during normal business hours that measures 0.25 inches or greater, the date and rainfall amount must be recorded in the Construction Activities Log (Section 3.3.4).

The Site Inspection Log and Inspection Forms are maintained in Attachment L.

Record daily rainfall that exceeds 0.25 inches in the Construction Activities Log (Section 3.3.4).

4.1.1 Reductions in Inspection Frequency

Inspection frequency may be reduced to once per month if:

- The stabilization of the contributing area was completed more than one month prior and the stabilization activities are documented in the Construction Activities and the Grading and Stabilization Logs.
- The project is experiencing frozen soil conditions.

Exceptions may also be made for drought-stricken areas, refer to Part 4.4.2 for additional information.

4.1.1.1 Suspension of Construction Activities due to Frozen Conditions

If the project will suspend construction activities due to frozen conditions, the project may temporarily suspend inspections on the site until thawing conditions begin to occur if:

- Runoff is unlikely due to continuous frozen conditions that are likely to continue at the site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, the contractor must immediately resume regular inspection frequency as described in Parts 4.2 or 4.3, if applicable;
- Land disturbances have been suspended; and
- All disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.14.a of the CGP.

4.1.1.2 Continuation of Construction Activities Despite Frozen Conditions

If the project will continue construction activities despite frozen conditions, the project may temporarily reduce inspections to once per month until thawing conditions begin to occur if:

- Runoff is unlikely due to continuous frozen conditions that are likely to continue at the site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, the contractor must immediately resume regular inspection frequency as described in Parts 4.2 or 4.3, if applicable;
- Land disturbances have been suspended; and
- All disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.14.a of the CGP.

Record changes in the inspection frequency in the Construction Activities Log (Section 3.3.4).

4.2 Corrective Action Directives

Project Operators must take corrective action to address any of the following conditions if they appear at the project site:

- A stormwater control needs repair or replacement
- A stormwater control necessary to comply with the permit was not installed, or was installed incorrectly
- A discharge from the project site is causing an exceedance of water quality standards to receiving waters
- A prohibited discharge has occurred (refer to Part 1.3 of the 2017 CGP)

4.2.1 Corrective Action Timelines

For any required corrective action (refer to part 5.1 of the 2017 CGP), project operators must:

- **Immediately** take all reasonable steps to address the condition, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.
- When the problem does not require a new or replacement control or significant repair, the corrective action must be completed by the close of the **next business day.**
- When the problem requires a new or replacement control, or significant repair, install the new or modified control by **no later than 7 calendar days** from the time of discovery.
- If it is not possible to complete the action within 7 days, record the extenuating circumstances in detail on a Corrective Action Form (Attachment M).

4.2.2 Corrective Action Reports

For each corrective action taken, complete a corrective action report in accordance with the following (refer to Part 5.4 of the 2017 CGP):

- Within 24 hours of identifying the condition requiring corrective action, document the condition and the date/time it was identified.

  Within 24 hours of completing the corrective action, document the action taken and note whether any modifications to the SWPPP are required.

The Corrective Action Log and Corrective Action Report Forms are maintained in Attachment M.

4.3 Amendments

This SWPPP must be amended and the amendments must be recorded in the amendment log if any of the following conditions apply:

- Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater controls, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.2.3.f change during the course of construction;
- To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;
- If inspections or investigations by EPA or its authorized representatives determine that SWPPP modifications are necessary for compliance with this permit;
- Where EPA determines it is necessary to impose additional requirements on your discharge, the following must be included in your SWPPP:
  - A copy of any correspondence describing such requirements; and
  - A description of the controls that will be used to meet such requirements.
- To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater controls implemented at the site; and
- If applicable, if a change in chemical treatment systems or chemically enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

The Amendment Log is maintained in Attachment I.

5

Staff Training

This page intentionally left blank.

5.1 Training

Each Operator or group of Operators must assemble a Stormwater Team to carry out compliance activities associated with the requirements of the 2017 CGP. Prior to the commencement of construction activities, the Operators must ensure that the personnel on the stormwater team understand the requirements of this permit and their specific responsibilities with respect to those requirements.

All of the personnel responsible for the following activities must be trained to understand the relevant requirements under the terms of the 2017 CGP including:

- The design, installation, maintenance, and/or repair of stormwater controls (and pollution prevention controls)
- Permits that include provisions for stormwater and erosion control management include:
  - Sudbury, Stow, and Hudson Orders of Conditions
  - Sudbury Stormwater Management Permit
  - USACE General Permits for Massachusetts authorization
- The application and storage of treatment chemicals (if applicable)
- Conducting and documenting inspections (Part 4 of the 2017 CGP)
- Performing and documenting corrective actions (Part 5 of the 2017 CGP)

Minimum training measures for the stormwater team must include:

- Permit deadlines associated with the installation, maintenance, and removal of stormwater controls and stabilization
- The location of all stormwater controls on the site required by this permit and how they must be maintained
- The proper procedures to follow with respect to the permit's pollution prevention requirements
- When and how to conduct inspections, record findings, and take corrective actions.

All members of the stormwater team must have easy access to an electronic or paper copy of the applicable portions of this permit, the most updated copy of the SWPPP, and other relevant documents associated with the SWPPP including logs and completed forms.

The Training Log and Attendance Records are maintained in Attachment H.

This page intentionally left blank.

6

Notifications

This page intentionally left blank.

6.1 Notice of Intent (NOI)

Following the completion of the draft SWPPP, project operators may submit their NOIs to the EPA.

Permit coverage does not begin until 14 calendar days from the date that the NOI is certified by a person authorized in accordance with Appendix I of the 2017 CGP.

Within 14 calendar days, the EPA may notify the Operator(s) that the authorization has been delayed or denied.

Project NOIs and authorizations are maintained in Attachment C.

6.2 Notice of Termination (NOT)

Operators are required to continue to comply with all conditions and requirements in the permit until coverage is terminated under this permit.

To terminate permit coverage, all Operators must submit a complete and accurate NOT to the EPA. The NOT certifies that an Operator has met the requirements for termination as listed in Part 8 of the CGP. Operators must use NPDES eReporting Tool (NeT) to electronically prepare and submit an NOT for the 2017 CGP.

https://www.epa.gov/npdes/stormwater-discharges-construction-activities#ereporting

Operators must submit the NOT within 30 calendar days after any of the triggering conditions listed in Part 8.2 of the CGP.

An Operator's authorization to discharge under the CGP terminates at midnight of the calendar day that a complete NOT is processed and posted on EPA's website.

Project NOTs and authorizations are maintained in Attachment C.

This page intentionally left blank.

7

Erosion and Sediment Controls

Stormwater controls have been designed, installed, and maintained in compliance with Part 2.1 of the 2017 CGP. If any stormwater controls must be designed (e.g., sediment basins or conveyance channels), the design documentation must be included in Attachment S.

Erosion and Sediment Controls must be implemented to address the requirements of Part 2.2 of the 2017 CGP.

This section of the SWPPP provides general guidance for compliance with the 2017 CGP. Ultimately the project Operators are responsible for making sure sufficient controls are implemented to effectively meet the conditions of the 2017 CGP.

The purpose of an erosion and sedimentation control program is to minimize the discharge of pollutants from earth-disturbing activities during the construction phase of the project. The program described in this SWPPP incorporates BMPs specified in guidelines developed by the DEP[1] and the U.S. Environmental Protection Agency[2] and complies with the requirements of the NPDES General Permit for Storm Water Discharges from Construction Activities.

Proper implementation of the erosion and sedimentation control program will:

- minimize exposed soil areas through temporary stabilization and construction sequencing;
- minimize sediment track-out from the site;
- minimize the generation of dust;
- minimize soil compaction;
- place structures to manage stormwater runoff and erosion; and
- establish permanent vegetative cover or other forms of stabilization in accordance with Part 2.2.14 of the Permit.

The Contractor will install stormwater controls prior to the commencement of each phase of earth-disturbing activities per Part 2.1.3 of the 2017 CGP. All manufactured control measures will be installed and maintained in accordance with the manufacturer's specifications. The site Contractor will inspect all erosion and sediment controls in accordance with the applicable requirements in Part 4, document findings in accordance with Part 4, and perform corrective actions in accordance with Part 5 of the 2017 CGP.

The following sections describe the erosion and sedimentation controls that may be used on this site. **The Contractor will implement, modify, and amend the stormwater controls identified in this section as necessary.** Please refer to the NSTAR BMP Manual located in Attachment N for specifications on installation and maintenance.

1 Massachusetts Department of Environmental Protection, 1993. *Massachusetts Nonpoint Source Management Manual, The Megamanual: A Guidance Document for Municipal Officials.*

2 United States Environmental Protection Agency, 1992. *Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.*

7.1 Natural Buffers or Equivalent Sediment Controls

The requirements for natural buffers are described in Part 2.2.1 and Appendix G of the 2017 CGP. This section of the SWPPP describes project compliance activities to maintain natural buffers in compliance with the 2017 CGP.

Documentation of compliance with buffer requirements is located in Attachment O.

7.1.1.1 Buffer Compliance Alternatives

Are there any surface waters within 50 feet of the project's earth disturbances?

☒ YES ☐ NO

(Note: If no, no further documentation is required under Section 7.1 of this SWPPP Manual.)

If there are surface waters within 50 feet of the project's earth disturbances, continue below:

☐ The project will provide and maintain a 50-foot undisturbed natural buffer.

Note (1): The project must show the 50-foot boundary line of the natural buffer on the Site Map.

Note (2): The project must show on the Site Map how all discharges from the construction disturbances through the natural buffer area will first be treated by the site's erosion and sediment controls. Also, show on the site map any velocity dissipation devices used to prevent erosion within the natural buffer area.

☐ The project will provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Note (1): The project must show the boundary line of the natural buffer on the site map.

Note (2): The project must show on the site map how all discharges from the construction disturbances through the natural buffer area will first be treated by the site's erosion and sediment controls. Also, show on the site map any velocity dissipation devices used to prevent erosion within the natural buffer area.

☐ It is infeasible to provide and maintain an undisturbed natural buffer of any size, therefore the project will implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

☒ The project qualifies for one of the exceptions described in the 2017 CGP Appendix G, Part G.2. (If this box is checked, provide information on the applicable buffer exception that applies in Section 7.1.1.2.)

7.1.1.2 Buffer Exceptions

Indicate whether any of the following exceptions to the buffer requirements apply to the project site. Refer to Part 2.2.1 and Appendix G.2 of the 2017 CGP for more information.

☐ There is no discharge of stormwater to the surface water that is located 50 feet from my construction disturbances.

Note: If this exception applies, no further documentation is required under Section 7.1 of this SWPPP Manual.

☐ No natural buffer exists due to preexisting development disturbances that occurred prior to the initiation of planning for this project.

Note (1): If this exception applies, no further documentation is required to achieve compliance with Part 2.2.1.

Note (2): Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, the project must comply with Part 2.2.1 and Appendix G.2.2 of the 2017 CGP.

☒ For a "linear project" (defined in Appendix A), site constraints (e.g., limited right-of-way) make it infeasible to implement one of the Part 2.2.1.a compliance alternatives provided that additional measures described in Appendix G.2.2 of the 2017 CGP are met.

☐ The project qualifies as "small residential lot" construction and meets the compliance alternatives described in Appendix G.3 of the 2017 CGP.

☐ Buffer disturbances are authorized under a CWA Section 404 permit.

Note (1): If this exception applies, no further documentation is required under Section 7.1 of this SWPPP Manual.

Note (2): This exception only applies to the limits of disturbance authorized under the Section 404 permit, and does not apply to any upland portion of the construction project.

☐ Buffer disturbances will occur for the construction of a water-dependent structure or water access area (e.g., pier, boat ramp, and trail).

Note (1): If this exception applies, no further documentation is required under Section 7.1 of this SWPPP Manual.

7.2 Perimeter Controls

Refer to Part 2.2.3 of the 2017 CGP for information on the requirements for perimeter controls. Some exceptions apply to linear projects.

7.2.1 General Perimeter Controls

Installation of perimeter controls must be completed prior to the commencement of earth-disturbance activities. This section of the SWPPP provides examples of perimeter controls that the General Contractor may use to effectively control stormwater on construction sites. The General Contractor may select and install perimeter controls at their discretion. The locations of perimeter controls should be clearly identified on the Site Map.

The General Contractor will record activities associated with perimeter controls in the following project logs:

Table 28 Recording Requirements: Perimeter Controls

Action	Recorded in
Installation	Construction Activities Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log

7.2.2 Specific Perimeter Controls

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.2.2.1 Compost Filter Tube

Compost Filter Tubes consist of a polyester mesh filled with compost and placed at the limit of work held in place with stakes. They are appropriate for use as perimeter controls.

The General Contractor will prepare and install compost filter tubes in accordance with manufacturer recommendations.

Inspection and Maintenance Requirements

Inspection and maintenance activities for compost filter tubes will include:

Table 29 Maintenance Requirements: Compost Filter Tubes

Inspection Item	Condition	Maintenance Activity
Condition	Torn outer fabric	Replace
Continuity	Break in continuous perimeter	Re-install existing -or- Install new to close any gaps
Sediment Build-up	Accumulated sediment at one-half the above ground height of the control	Remove the sediment and dispose properly

7.2.2.1 Syncopated silt-fence

Staked silt-fence erosion control devices are commonly used to intercept, filter, and reduce the velocity of stormwater run-off. They are appropriate for use as perimeter controls. Syncopated silt fence includes offset section of fencing to intentionally create gaps every 200 feet adequate for small wildlife to pass.

The General Contractor will place syncopated silt-fences at the downgradient edge of disturbed areas within 450 feet of a vernal pool, they are held in place by wooden stakes.

Inspection and Maintenance Requirements

Inspection and maintenance activities for syncopated silt fences will include:

Table 30 Maintenance Requirements: Syncopated Silt Fence

Inspection Item	Condition	Maintenance Activity
Condition	Rotted or torn	Replace
Continuity	Break in continuous perimeter or insufficient overlap between silt fence sections	Re-install existing -or- Install new to close any gaps
Sediment Build-up	Accumulated sediment at one-half the above ground height of the control	Remove the sediment and dispose properly
Placement	Silt fence not dug in to the ground to prevent underflow	Reset, repair and/or re-install

7.2.2.1 Turbidity Curtain

Floating turbidity curtain may be used in open water areas to intercept, filter, and reduce the spread of turbidity within open water as part of the bridge replace work. They are appropriate for use as perimeter controls.

The General Contractor will place turbidity curtain at the downgradient edge of disturbed areas within open water. They are held in place by weighted toes and securing ropes to the shoreline. To be used in open water conditions where water depth is adequate to allow proper extension of the turbidly curtain skirt.

Inspection and Maintenance Requirements

Inspection and maintenance activities for turbidity curtains will include:

Table 29 Maintenance Requirements: Turbidity Curtains

Inspection Item	Condition	Maintenance Activity
Condition	Torn, loss of floatation at top	Replace
Continuity	Break in continuous perimeter	Re-install existing -or- Install new to close any gaps
Sediment Build-up	Accumulated sediment at one-half the above ground height of the control	Remove the sediment and dispose properly
Placement	Place along shoreline only! **DO NOT install across flowing water.**	Reset, repair and/or re-install

7.2.2.1 Staked Tall Silt Fence

Staked tall silt fence erosion control devices are commonly used to intercept, filter, and reduce the spread of turbidity within open water as part of the bridge replace work. They are appropriate for use as perimeter controls. This is an alternative perimeter control to turbidity curtain in open water.

The General Contractor will place tall silt fence at the downgradient edge of disturbed areas within open water. They are held in place by driven stakes. To be used in open water conditions where water depth is adequate to allow installation of the silt fence proper but too shallow for installation of a turbidly curtain.

Inspection and Maintenance Requirements

Inspection and maintenance activities for staked tall silt fences will include:

Table 29 Maintenance Requirements: Staked Tall Silt Fence

Inspection Item	Condition	Maintenance Activity
Condition	Torn, fallen down stake	Replace, or reinstall
Continuity	Break in continuous perimeter	Re-install existing -or- Install new to close any gaps
Sediment Build-up	Accumulated sediment at one-half the above ground height of the control	Remove the sediment and dispose properly
Placement	Place along shoreline only! **DO NOT install across flowing water.**	Reset, repair and/or re-install

7.3 Sediment Track-out

Refer to Part 2.2.4 of the 2017 CGP for information on the requirements for sediment track-out controls. Some exceptions apply to linear projects.

7.3.1 General Track-out Controls

Sediment track-out controls may be structural or non-structural.

Non-structural controls including:

- Restricting vehicle use to properly designated exit points.
- Sweeping, shoveling, or vacuuming to manually remove sediment from public rights-of-way (hosing or sweeping sediment directly into a stormwater conveyance, storm drain inlet, or surface water is prohibited).

In the event that sediment is tracked-out of the site onto the surface of off-site streets, other paved areas, and sidewalks, the contractor will remove the deposited sediment by the end of

the same work day. If track-out occurs on a non-work day, the contractor will remove the sediment by the end of the next work day.

The General Contractor may select and install structural sediment track-out controls at their discretion. The General Contractor shall specify locations of structural controls on the Site Map.

The General Contractor will record activities associated with sediment track-out controls in the following project logs:

Table 31 Recording Requirements: Sediment Track-out Controls

Action	Recorded in
Installation	Construction Activities Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log

7.3.2 Specific Track-out Controls

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.3.2.1 Stabilized Construction Entrance/Exit

The General Contractor will establish a stabilized construction entrance consisting of a stone pad at each access point off public roads. The construction entrance may include a cross-slope to direct runoff to a protected receiving area. If track-out is observed after construction begins, the General Contractor will take additional measures to address sediment track out.

Additional measures could include a wash pad to wash off vehicle wheels before they leave the project site. Wash water discharges will be collected and treated in a manner consistent with the requirements of the 2017 CGP.

Following completion of earth-disturbing activities, the General Contractor will remove the stabilized construction entrance/exit and installing final finishing materials.

Inspection and Maintenance Requirements

Inspection and maintenance activities for sediment track-out controls will include:

Table 32 Maintenance Requirements: Construction Entrance

Inspection Item	Condition	Maintenance Activity
Construction access routes adjacent to the disturbance area	Sediment present on vehicle travel surfaces	Sweep, shovel, or vacuum sediment from the surface, dispose of properly

Inspection Item	Condition	Maintenance Activity
Construction Entrance Condition	Muddy or sediment-laden	Add a top-dressing of stone or gravel

7.4 Stockpiled Sediment or Soil

Refer to Part 2.2.5 of the 2017 CGP for information on the requirements for stockpile controls.

The Contractor will provide cover or appropriate temporary stabilization to stockpiles that will remain inactive/unused for more than 14 days. Temporary stabilization may be performed using vegetative or non-vegetative stabilization practices. Refer to Section 7.13 for more information on stabilization practices.

7.4.1 General Stockpile Controls

In accordance with Part 2.2.5 of the 2017 CGP, the contractor must comply with the following requirements for any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil:

- Locate the piles outside of any natural buffers established under Part 2.2.1 and physically separated from other stormwater conveyances, drain inlets, and areas where stormwater flows are concentrated.
- Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier;
- Provide cover or appropriate temporary stabilization to avoid direct contact with precipitation or wind;
- Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance storm drain inlet, or water of the U.S.

Record activities associated with sediment stockpile controls in the following project logs:

Table 34 Recording Requirements: Stockpile Controls

Action	Recorded in
Installation	Construction Activities Log Grading and Stabilization Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log Grading and Stabilization Log

7.4.2 Specific Stockpile Controls

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.4.2.1 Vegetative Stabilization

Vegetative stabilization practices may include seeding exposed surfaces with a seed mix containing a blend of rapid germinating grasses that are indigenous to the appropriate region of Massachusetts. Once seeded, areas will be covered with a layer of straw mulch according to the recommendations provided by the manufacturer. Refer to Section 7.13.2.1 for more information.

7.4.2.2 Non-Vegetative Stabilization

Non-vegetative stabilization practices may include applying straw mulch or an erosion control blanket. Refer to Section 7.13.2.2 for more information.

7.5 Minimize Dust

Refer to Part 2.2.6 of the 2017 CGP for information on the requirements for minimizing dust.

The General Contractor will record activities associated with dust controls in the following project logs:

Table 34 Recording Requirements: Dust Controls

Action	Recorded in
Installation	Construction Activities Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log

Wetting the soil and/or spreading calcium chloride will be performed, as necessary, to minimize the movement of dust and fine-grained sediment. Fugitive dust created by movement of equipment or trucks along the project corridor or dust generated by wind warrant application of dust control measures. If water is used for dust control, it shall be applied as a fine spray to wet the upper 0.5 inch of soil.

7.6 Minimize the Disturbance of Steep Slopes

Refer to Part 2.2.7 of the 2017 CGP for information on the requirements for controls on steep slopes.

Where a state, tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a "steep slope", the 2017 CGP automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

The General Contractor will record activities associated with steep-slope controls in the following project logs:

Table 35 Recording Requirements: Steep Slope Stabilization Controls

Action	Recorded in
Installation	Construction Activities Log Grading and Stabilization Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log Grading and Stabilization Log

7.6.1 General Steep Slope Controls

During the design phase of the project, the design engineers minimized construction impacts to steep slopes to the maximum extent practicable.

Where disturbances to steep slopes are still required, the General Contractor will minimize disturbances through the implementation of erosion and sediment control practices designed for use on steep slopes.

Stabilization practices on steep slopes will occur within 14 days after grading or construction activities have temporarily or permanently ceased.

7.6.2 Specific Steep Slope Controls

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.6.2.1 Vegetative controls

Vegetative slope stabilization practices will be used to minimize erosion on slopes of 3:1 or flatter. Temporary, rapid stabilization will be completed using annual grasses, such as annual rye. Permanent stabilization will be completed with the planting of perennial grasses or legumes.

A suitable topsoil, good seedbed preparation, soil amendments, and water will be provided for effective establishment of these vegetative stabilization methods. Vegetation may be applied via hydro seeding or sodding techniques. Mulch may also be applied following permanent seeding activities to protect soil from the impact of falling rain and to increase the capacity of the soil to absorb water.

Refer to Section 7.13.2.1 for inspection and maintenance activities for vegetative stabilization controls.

7.6.2.2 Erosion Control Blanket

Erosion control blankets may be combined with vegetative controls to minimize erosion on slopes 3:1 or steeper. Erosion control blankets shall consist of a non-woven bio-degradable material and shall be installed by anchoring the top of the blanket in a 6-inch deep trench. The trench shall be backfilled and compacted after the blanket is secured with staples. The erosion control blanket will be installed in the direction of potential flow. Edges of the blankets must be stapled with approximately 4 inches overlap where 2 or more strip widths are required.

Refer to Section 7.13.2.2 for inspection and maintenance activities for non-vegetative stabilization controls.

7.7 Topsoil

Refer to Part 2.2.8 of the 2017 CGP for information on the requirements for the preservation of topsoil.

The General Contractor will record activities associated with topsoil controls in the following project logs:

Table 36 Recording Requirements: Topsoil Controls

Action	Recorded in
Stockpiling	Construction Activities Log Grading and Stabilization Log
Disposal	Construction Activities Log Grading and Stabilization Log

Topsoil will be preserved to the maximum extent practicable. Where it is infeasible to preserve topsoil in place, it will be repurposed throughout the site or stockpiled and disposed of in accordance with local, state and federal regulations, as necessary.

7.8 Soil Compaction

Refer to Part 2.2.9 of the 2017 CGP for information on the requirements for the reduction of soil compaction.

To avoid soil compaction, the General Contractor will limit vehicle and equipment use in areas where final vegetative stabilization will occur or where infiltration practices will be installed.

Prior to seeding or planting of areas where final vegetative stabilization will occur or where infiltration practices will be installed the soil will be inspected to determine if compaction will hinder vegetative growth.

If compaction has occurred, techniques that condition soil to support vegetative growth will be implemented. Soil conditioning techniques shall be specified, as needed by the General Contractor.

7.9 Storm Drain Inlets

Refer to Part 2.2.10 of the 2017 CGP for information on the requirements for the protection of storm drain inlets.

The General Contractor will record activities associated with storm drain inlet protection in the following project logs:

Table 37 Recording Requirements: Stormdrain Inlet Controls

Action	Recorded in
Installation	Construction Activities Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log

7.9.1 General Storm Drain Inlet Controls

Prior to any earth-disturbing activities inlet protection measures will be installed. Storm drain inlet controls are required at all storm drain inlets that carry stormwater flow from the project site to a water of the U.S., even if they are located downgradient from a construction period stormwater BMP.

7.9.2 Specific Storm Drain Inlet Controls

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.9.2.1 Siltsack Sediment Traps

The General Contractor may choose to use Siltsack sediment traps at the project site. They may be installed at the inlets of existing and proposed catch basins. At locations where silt sacks are used, the catch basin grates will be placed over the siltsack to secure it into place.

7.9.2.2 Straw Bale and Non-Woven Filter Fabric

The General Contractor may choose to use Straw bale barriers at the project site. They may be installed at the inlets of existing and proposed catch basins. At locations where straw bales are used, a layer of non-woven filter fabric will be placed beneath the grate of each catch basin to secure it into place.

7.9.2.3 Inspection and Maintenance Requirements

Inspection and maintenance activities for storm drain inlet controls includes:

Table 38 Maintenance Requirements: Storm Drain Inlet Controls

Inspection Item	Condition	Maintenance Activity
Sediment accumulation	Sediment buildup at filter layer	Sweep, shovel, or vacuum sediment from the filter surface, dispose of properly.
Continuity	Breaks in continuous barrier	Install new or re-install original barrier structure.
Clogging	Standing water	Sweep, shovel, or vacuum sediment from the filter surface, dispose of properly. Install new or re-install restored filter layer.

7.10 Constructed Stormwater Conveyance Channels

Refer to Part 2.2.11 of the 2017 CGP for information on the requirements for the constructed stormwater conveyance channels.

The General Contractor will record activities associated with constructed stormwater conveyance channels in the following project logs:

Table 39 Recording Requirements: Conveyance Channel Controls

Action	Recorded in
Installation	Construction Activities Log Grading and Stabilization Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log Grading and Stabilization Log

7.10.1 General Conveyance Controls

The General Contractor may select and install constructed stormwater conveyance channels at their discretion. The General Contractor shall specify locations of structural controls on the Site Map.

Constructed Stormwater Conveyance Channels may be used to collect runoff from construction areas and discharge to either sedimentation basins or protected catch basin inlets. The contractor may use erosion controls and velocity dissipation devices within and along the length of any stormwater conveyance channel and at any outlet to slow runoff down and to minimize erosion. Permanent infiltration BMPs shall not be used as temporary construction sedimentation basins without prior approval of the project engineer.

7.10.2 Specific Conveyance Controls

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.10.2.1 Diversion Channels

Diversion channels may be used to collect runoff from construction areas and discharge to either sedimentation basins or protected catch basin inlets.

Inspection and Maintenance Requirement

Diversion channels will be inspected in accordance with the inspection schedule. If breakout or erosion is observed, the diversion channel shall be reinforced or protected by an erosion control blanket.

Inspection and maintenance activities for conveyance channel controls will include:

Table 40 Maintenance Requirements: Conveyance Channels

Inspection Item	Condition	Maintenance Activity
Surface	Erosion	Reinforce the surface using a vegetative or non-vegetative stabilization measure
Inlet/Outlet	Clogging	Remove Obstruction
Sediment Accumulation	Sediment occupies one half of the storage capacity of the basin	Sweep, shovel, or vacuum sediment from the basin sump and dispose of properly
Embankment/Berm	Cracking	Identify root cause of embankment failure and repair or reconstruct as needed
Embankment/Berm	Erosion	Reinforce the surface using a vegetative or non-vegetative stabilization measure
Embankment/Berm	Breakout	Identify root cause of embankment failure and repair or reconstruct as needed

7.11 Sediment Basins

Refer to Part 2.2.12 of the 2017 CGP for information on the requirements for construction period sediment basins.

If the General Contractor elects to use sediment basin controls, the General Contractor will update the Site Map to show their location on the project site.

The General Contractor will record activities associated with sediment basins in the following project logs:

Table 41 Recording Requirements: Sediment Basin Controls

Action	Recorded in
Installation	Construction Activities Log Grading and Stabilization Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log Grading and Stabilization Log

7.11.1 General Sediment Basin Controls

Constructed sediment basins may be used to collect runoff from construction areas to allow for suspended sediments to settle out of stormwater prior to discharge to points downstream. The following design criteria shall apply:

- Sediment basins must be placed outside any water of the U.S. and any natural buffer established under Part 2.2.1 of the 2017 CGP.
- Sediment basins must be designed and constructed to avoid collecting water from wetlands and waterbodies.
- Sediment basins must be designed and constructed to provide storage for either:
  - The volume of runoff generated from a 2-year, 24-hour design storm, or
  - 3,600 cubic feet per acre of contributing area.
- Outlet structures must be designed to withdraw water from the surface of the basin (not the invert), if feasible, see note below.
- Inlets and outlets must be constructed to dissipate velocity and prevent erosion.

Note: If the outlet structure must be designed to withdraw water from a place within the water column other than the surface, the basin must be designed to allow suspended soil particles to settle out of the water column prior to withdrawal.

Inspection and Maintenance Requirements

Inspection and maintenance activities for sediment basins will include:

Table 42 Maintenance Requirements: Sediment Basins

Inspection Item	Condition	Maintenance Activity
Surface	Erosion	Reinforce the surface using a vegetative or non-vegetative stabilization measure
Inlet/Outlet	Clogging	Remove Obstruction
Sediment accumulation	Sediment occupies one half of the storage capacity of the basin	Sweep, shovel, or vacuum sediment from the basin sump and dispose of properly
Embankment/Berm	Cracking	Identify root cause of embankment failure and repair or reconstruct as needed
Embankment/Berm	Erosion	Identify root cause of embankment failure and repair or reconstruct as needed
Embankment/Berm	Breakout	Identify root cause of embankment failure and repair or reconstruct as needed

7.12 Chemical Treatment

Refer to Part 2.2.13 of the 2017 CGP for information on the requirements for chemical treatment.

Record activities associated with chemical treatment in the following project logs:

Table 43 Recording Requirements: Chemical Treatment Controls

Action	Recorded in
Training	Training Log
Installation	Construction Activities Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log

7.12.1 General Chemical Treatment Controls

In general, chemical treatment may only be applied in the following situations:

- Chemicals may only be applied where the treated stormwater is directed to a sediment control (e.g., a sediment basin, perimeter control) prior to discharge.
- Chemicals must be appropriately suited to the types of soils likely to be exposed during construction and present in the discharges being treated.

- If chemicals will be stored on the project site, chemicals must be stored in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures.
- Use of chemicals must comply with applicable state and local requirements affecting the use of the selected treatment chemicals.
- Use of the chemicals must be in accordance with good engineering practices and specifications of the chemical provider/supplier.
  - NOTE: Departures from provider/supplier specifications must be documented in this SWPPP.
- All personnel who handle and/or use treatment chemicals must be undergo appropriate, product-specific training
- There are additional restrictions for the use of cationic chemicals. Prior authorization is required (Part 1.1.9 of the 2017 CG) and authorization is conditioned on compliance with additional measures to ensure that the use of the chemicals will not cause and exceedance of the water quality standards.

7.12.2 Specific Chemical Treatment Controls

The General Contractor will list all treatment chemicals in the table below. If any of the chemicals are cationic, the General Contractor will indicate whether the authorization has been obtained from the Regional Office (EPA). Include correspondence and indicate whether a record of the authorization is included in this SWPPP in Attachment P.

Table 44 List of Treatment Chemicals and Dosage/Use to be used on Site

Chemical	Dosage and Application Details	Cationic Authorization in Attachment P
		☐
		☐
		☐
		☐
		☐
		☐
		☐
		☐
		☐
		☐

Table 45 Departures from Provider/Supplier Specifications

Chemical	Dosage and Application Notes

7.13 Site Stabilization

Refer to Part 2.2.14 of the 2017 CGP for information on the requirements for site stabilization.

The General Contractor will record activities associated with site stabilization in the following project logs:

Table 46 Recording Requirements: Site Stabilization Controls

Action	Recorded in
Installation	Construction Activities Log Grading and Stabilization Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log Grading and Stabilization Log

7.13.1 General Site Stabilization Controls

The contractor will implement and maintain stabilization measures that minimize erosion from exposed portions of the site in accordance with Parts 2.2.14a and 2.2.14b of the 2017 CGP.

- **Timeline**: Initiate stabilization measures **immediately** in any areas of exposed soil where construction activities have ceased and will not resume for 14 or more calendar days. The EPA may propose an accelerated schedule if site conditions warrant additional protection measures. Some exceptions for unforeseen circumstances apply, refer to Parts 2.2.14(a)(iii) of the 2017 CGP. Document any departures from the standard timeline in the construction activities log.
- **Timeline**: for discharges to sediment- or nutrient-impaired waters or to a water that is identified by Massachusetts or the EPA as a **Tier 2, Tier 2.5, or Tier 3** water, complete stabilization as soon as practicable but no later than 7 calendar days after stabilization has been initiated.

Site stabilization practices may be temporary or permanent, vegetative or non-vegetative.

7.13.2 Specific Site Stabilization Controls

This section of the SWPPP describes site stabilization practices that the contractor may use during the course of the work.

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.13.2.1 Vegetative Stabilization

Temporary, rapid vegetative stabilization will be completed using annual grasses, such as annual rye. Permanent stabilization will be completed with the planting of perennial grasses or legumes. Permanent vegetative stabilization will provide uniform perennial cover with a density of 70 percent or more of the natural background cover.

The Contractor will provide a suitable topsoil, good seedbed preparation, soil amendments, and water for effective establishment of these vegetative stabilization methods. Vegetation may be applied via hydro seeding or sodding techniques.

Mulch may also be applied following permanent seeding activities to protect soil from the impact of falling rain and to increase the capacity of the soil to absorb water.

7.13.2.2 Non-Vegetative Stabilization

Non-vegetative stabilization practices may consist of the application of mulch or erosion control blankets.

Mulch Application

If application of mulch is necessary, mulch will be applied at a rate of 90 pounds per 1,000 square feet. The mulch will be anchored with a tacking coat (non tar) applied by a hydroseeder. Steeper slopes (greater than 10 percent) will be covered with a bonded fiber matrix.

Erosion Control Blanket

Erosion control blankets will consist of bio-degradable materials such as mats of woven jute and/or coconut fiber.

Erosion control blankets may be combined with vegetative controls. For permanent stabilization applications, erosion control blankets shall consist of a non-woven bio-degradable material and shall be installed by anchoring the top of the blanket in a 6-inch-deep trench. The trench shall be backfilled and compacted after the blanket is secured with staples. Edges of the blankets must be stapled with approximately 4 inches overlap where two or more strip widths are required.

Erosion control blankets are applied to the soil surface as a continuous sheet and are used to protect disturbed areas from erosion and to enhance seed growth, typically where moving water is likely to wash out new vegetative plantings and mulches are ineffective.

Inspection and Maintenance Requirements

Inspection and maintenance activities for site stabilization will include:

Table 47 Maintenance Requirements: Site Stabilization

Inspection Item	Condition	Maintenance Activity
Surface	Erosion	Reinforce the surface using a vegetative or non-vegetative stabilization measure
SWPPP		Maintain the SWPPP throughout the construction period in accordance with the terms of the 2017 CGP.

7.14 Dewatering Practices

Refer to Part 2.4 of the 2017 CGP for information on the requirements for dewatering.

7.14.1 General Dewatering Practices

If project activities require dewatering, the General Contractor will implement dewatering practices to comply with the following requirements. The General Contractor:

› Will treat dewatering discharges with controls to minimize discharges of pollutants

- Will not discharge visible floating solids or foam
- Will use an oil-water separator or suitable filtration device that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials.
- Will discharge water to vegetated, upland areas of the site to promote infiltration.
- Will comply with velocity dissipation requirements of Part 2.2.11
- Will handle backwash water by either hauling it away or returning it to the beginning of the treatment process
- Will replace and clean the filter media used in the dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

The General Contractor may select and install dewatering controls at their discretion. The General Contractor shall specify locations of structural controls on the Site Map.

The General Contractor will record activities associated with dewatering controls in the following project logs:

Table 48 Recording Requirements: Dewatering Controls

Action	Recorded in
Installation	Construction Activities Log
Inspection	Inspection Log
Maintenance	Corrective Action Log
Removal	Construction Activities Log

7.14.2 Specific Dewatering Practices

If the General Contractor elects to use controls that are not specified in this SWPPP manual, the contractor will prepare documentation describing the control installation, inspection, maintenance, and removal procedures and record the actions in the appropriate project logs.

7.14.2.1 Dewatering Filter Bag

The dewatering filter bag consists of a non-woven geotextile filter fabric placed at the outlet of one (maximum diameter) six-inch discharge hose. If the dewatering filter bag will be used as a construction period dewatering control device, any bags will be placed on relatively flat terrain, free of brush and stumps. If rough ground conditions make punctures likely, a geotextile fabric will be placed beneath the filter bag. Unattended filter bags will be encircled with a straw bale and silt fence barrier.

Inspection and Maintenance Requirements

All dewatering structures will be placed as far away from wetland resources as practicable. Filter bags used during construction will be bundled and removed for proper disposal. Filter media shall be cleaned and replaced in all dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

This page intentionally left blank.

8

Pollution Prevention

This page intentionally left blank.

8.1 Potential Sources of Pollution

The following list identifies pollutant generating activities that are likely to occur on the project site in accordance with Part 7.2.3.g of the 2017 CGP.

Table 49 Pollutant Generating Activities and Pollutants Located on Site

Pollutant-generating Activity	Pollutants or Pollutant Constituents (that could be discharged if exposed to stormwater)	Location on Site (or reference SWPPP site map where this is shown)
Vehicle Maintenance	Petroleum-based products	
Cleared & Graded Areas	Soil erosion, fertilizer	
Portable Toilets	Sewage	
Fuel Tanks	Fuel oil, gasoline, other fuels	
Storage Areas	Soil erosion, fuel oil, gasoline, concrete, vehicle fluids, paints, solvents, adhesives	

8.2 Fueling and Maintenance of Equipment or Vehicles

When fueling or maintaining equipment or vehicles, the contractor will adhere to the following requirements specified in Part 2.3.1 of the 2017 CGP:

- Provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuels and oils, from these activities.
- If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR 112 and Section 311 of the CWA;
- Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;
- Use drip pans and absorbents under or around leaky vehicles;
- Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements;
- Clean up spills or contaminated surfaces immediately, using dry clean up measures where possible, and eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge. **Do not clean surfaces by hosing the area down.**
- Whenever possible refueling shall take place at least 100 feet away from any vegetated wetland or open water areas.

8.3 Washing of Equipment and Vehicles

When washing equipment and/or vehicles, the contractor will adhere to the following requirements specified in part 2.3.2 of the 2017 CGP.

- Provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing.
- Ensure that there is no discharge of soaps, solvents, or detergents in equipment and vehicle wash water.
- For storage of soaps, detergents, or solvents, the contractor must provide either cover (e.g., plastic sheeting or temporary roofs) to prevent these detergents from coming into contact with rainwater, or a similarly effective means designed to prevent the discharge of pollutants from these areas.

Effective controls may include, but are not restricted to, locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediments trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.

Refer to Part 2.3.4 of the 2017 CGP for additional requirements for handling wash water associated with concrete, paint, or stucco.

8.4 Storage, Handling, and Disposal of Construction Products, Materials, and Wastes

When storing, handling, and disposing of construction products, materials, and wastes, the contractor will adhere to the following good-housekeeping practices specified in part 2.3.3 of the 2017 CGP.

- An effort will be made to store only enough product required to do the job;
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers, and (if possible) under a roof or other enclosure;
- Products will be kept in their original containers with the original manufacturer's label;
- Substances will not be mixed with one another unless recommended by the manufacturer;
- Whenever possible, all of a product will be used before disposing of the container;
- Manufacturer's recommendations for proper use and disposal will be followed; and
- The site superintendent will inspect the storage area daily to ensure proper use and disposal of materials on-site.

The following practices will reduce the risks associated with hazardous materials (e.g., petroleum products, solvents):

- A copy of all Material Safety Data Sheets (MSDS) for materials or products used during construction will be kept in the office trailer;
- Products will be kept in original containers unless they are not re-sealable;
- Original labels and material safety data (MSD sheets) will be retained; they contain important product information; and
- If surplus product must be disposed, manufacturer's or local- and state-recommended methods for proper disposal will be followed.

8.4.1 Building Products

In accordance with CGP Part 2.3.3.b, all containers will be tightly sealed and covered with plastic sheeting or a temporary roof when not required for use. Excess materials will be properly disposed according to manufacturer's instructions or state and local regulations and shall not be discharged to the storm sewer system. No storage will occur within 100 feet of a wetland or waterway.

8.4.2 Pesticides, Herbicides, Insecticides

Pesticides, herbicides, and insecticides will not be used at the Project Site.

8.4.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

In accordance with CGP Part 2.3.3.c products stored on site will be contained in water-tight containers with either

- a cover to minimize the exposure of the container to precipitation and to stormwater or
- or a similarly effective means detained to minimize the discharge of pollutants from these areas such as secondary containment

All on-site vehicles will be monitored for leaks and will receive regular preventive maintenance to reduce the chance of leakage. Spills will be cleaned up immediately, using dry clean-up methods where possible. The source of the spill will be eliminated to prevent continuation of an on-going discharge.

No vehicle maintenance or handling of petroleum products will occur within 100 feet of a wetland or waterway.

Any asphalt substances used on-site will be applied according to manufacturer's recommendations. No petroleum-based or asphalt substances will be stored within 100 feet of a wetland or waterway.

8.4.4 Hazardous or Toxic Waste

In accordance with CGP Part 2.3.3.d, the contractor will:

- Separate hazardous or toxic waste from construction and domestic waste;
- Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;
- Store all containers that will be stored outside within appropriately sized secondary containment (e.g., spill berms, decks, spill containment pallets) to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas (e.g., storing chemicals in covered area or having a spill kit available on site); and

- Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly.
- Hosing will not be utilized as a method to clean surfaces or spills.
- Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

All hazardous waste materials (e.g., petroleum products, solvents) will be disposed in the manner specified by local and state regulation, or by the manufacturer. Site personnel will be instructed in these practices, and the site construction supervisor will be responsible for seeing that these procedures are followed.

8.4.5 Construction and Domestic Waste

In accordance with CGP Part 2.3.3.e, the contractor will provide waste containers (e.g., dumpster or trash receptacle) of sufficient size and number to contain construction and domestic wastes. Waste containers will be covered to prevent precipitation from entering the container and becoming a source of pollution. Alternatively, the waste container will be kept in secondary containment to prevent discharges of contaminated stormwater.

Daily loose trash removal will prevent litter, construction debris, and construction chemicals exposed to stormwater from becoming a pollutant source for stormwater discharges. All loose trash will be placed in appropriate storage containers and will be disposed of properly.

The General Contractor will identify the areas to be used for storing dumpsters, compactors or other raw or waste materials on the Site Map.

8.4.6 Large Structures Built or Renovated prior to January 1980

In accordance with CGP Part 2.3.3.f, the contractor will implement controls to minimize the exposure of PCB-containing building materials including paint, caulk, and pre-1980s fluorescent light fixtures to precipitation and stormwater and ensure that disposal of such materials is performed in compliance with applicable state, federal and local laws.

8.4.7 Sanitary Waste

Portable toilets will be placed away from waters of the U.S., stormwater inlets and/or conveyances and will be secured in place so that they will tip or be knocked over. All sanitary waste will be collected from the portable units by a licensed contractor as required, and disposed in compliance with state and local regulations.

8.5 Washing of Applicators and Containers used for Paint, Concrete or Other Materials

In compliance with the prohibition in CGP Parts 2.3.4, the contractor must provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. To comply with this requirement, the contractor must:

- Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation;
- Handle washout or cleanout wastes as follows:
  - Do not dump liquid wastes in storm sewers;
  - Dispose of liquid wastes in accordance with applicable requirements in Part 2.3.3; and
  - Remove and dispose of hardened concrete waste consistent with handling of other construction wastes in Part 2.3.3.
- Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and, to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

8.6 Pavement Sweeping

Pavement sweeping may be performed daily or as needed, when track-out has occurred. The sweeping program will remove sediments and contaminants directly from paved surfaces before their release into stormwater runoff. Pavement sweeping has been demonstrated to be an effective initial treatment for reducing pollutant loading into stormwater.

8.7 Spill Prevention and Response

The following practices will be followed for spill control, notification, and cleanup:

The General Contractor is responsible for the daily operations and is also responsible for coordinating spill prevention and cleanup coordination. The General Contractor will designate at least three other site personnel to receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of the responsible spill personnel will be posted in the material storage area and in the on-site office trailer.

- Spills of toxic or hazardous material in excess of reportable quantities, as established in the under 40 CFR 110, 40 CFR 117, or 40 CFR 302, will be reported to the following agencies as soon as the General Contractor has knowledge of the release:

Massachusetts Department of Environmental Protection Division of Hazardous Waste	(617) 292-5851 or (978) 661-7679
National Response Center	(800) 424-8802

- All spills will be cleaned up immediately after discovery;
- The spill area will be kept well ventilated and personnel will wear protective clothing to prevent injury from contact with a hazardous substance; and
- Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be informed of the procedures and the location of the information and cleanup supplies;

› Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include, but will not be limited to the emergency response equipment listed herein;

A comprehensive Spill Prevention Control and Countermeasure (SPCC) plan will be developed and implemented by the General Contractor and other Operators. At a minimum the SPCC, will discuss:

› Spill prevention equipment;
› Spill prevention supplies provided on-site; and
› Spill prevention training to be provided by the Owner and/or Tenant to designated employees.

8.7.1 Initial Notification

In the event of a spill the notify the 24-hour Emergency Contact (Section 0) immediately.

The 24-hour Emergency Contact or their chosen delegate will immediately notify emergency response services and notify the local boards and commissions at the first possible opportunity:

› Fire Department (immediately)
› the Police Department, (immediately)
› the Board of Health (at first opportunity)
› and the Conservation Commission (at first opportunity)

8.7.2 Further Notification

Based on the assessment from the Fire Chief, additional notification to a cleanup contractor may be made. The Massachusetts Department of Environmental Protection (DEP) and the EPA may be notified depending upon the nature and severity of the spill. The Fire Chief will be responsible for determining the level of cleanup and notification required. The attached list of emergency phone numbers shall be posted in the main construction/facility office and readily accessible to all employees. A hazardous waste spill report shall be completed as necessary using the attached form.

8.7.3 Assessment - Initial Containment

The supervisor or manager will assess the incident and initiate containment control measures with the appropriate spill containment equipment included in the spill kit kept on-site. A list of recommended spill equipment to be kept on site is included on the following pages.

8.7.4 Reporting

A copy of the Spill Report Template is included in Attachment N.

Table 50 Emergency Notification Phone Numbers

1A	24-hour Contact	Eversource	T: (###) ###-###
1B	Alternate Contact		T: (###) ###-###
2	Fire and Police		911
3	Cleanup Contractor		T: (###) ###-###
4	MassDEP		T: (800) 340-1133
5A	National Response Center		T: (800) 424-8802
5B	USEPA		T: (800) 424-8802 T: (800) 424-8802
6A	Sudbury Board of Health		T: (978) 440-5479
6B	Marlborough Board of Health		T: (508) 460-3751
6C	Hudson Board of Health		T: (978) 562-2020
6D	Stow Board of Health		T: (978) 897-4592
7A	Sudbury Conservation Commission	Coordinator Lori Capone	T: (978) 440-5471
7B	Hudson Conservation Commission	Agent/Planner Pam Helinek	T: (978) 568-9641
7C	Stow Conservation Commission	Coordinator Kathy Sferra	T: (978) 897-8615

Post this list of emergency contact numbers in the main construction/facility office in a location that is readily accessible to all employees.

Emergency Response Equipment

The following is an example of an equipment and materials list that must be prepared by the Owner and Tenant. Equipment and Supplies on this list shall be maintained at all times and stored in a secure area for long-term emergency response need.

Table 51 Emergency Response Equipment

Supply	Quantity	Supplier
Sorbent Pillows (Pigs)	2	http://www.newpig.com
Sorbent Boom/Sock	25 feet	Item # KIT276 — mobile container with two pigs, 26 feet of sock
Sorbent Pads	50	50 pads, and five pounds of absorbent (or equivalent)
Lite-Dri® Absorbent	5 pounds	http://www.forestry-suppliers.com
Shovel	1	Item # 33934 — Shovel (or equivalent)
Pry Bar	1	Item # 43210 — Manhole cover pick (or equivalent)
Goggles	1 pair	Item # 23334 — Goggles (or equivalent)
Heavy Gloves	1 pair	Item # 90926 — Gloves (or equivalent)

This page intentionally left blank.

9

Compliance with Other Regulations

This page intentionally left blank.

9.1 Endangered Species

Appendix D of the 2017 CGP describes eligibility requirements with regard to the protection of threatened and endangered species and designated critical habitat.

9.1.1 Eligibility Criterion

Under which criterion listed in Appendix D of the 2017 CGP are you eligible for coverage under this permit?

☐ A ☐ B ☐ C ☐ D ☒ E

- **Criterion A.** No federally listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of the 2017 CGP.
- **Criterion B.** The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.
- **Criterion C.** Federally listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area," and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.
- **Criterion D.** Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.
- **Criterion E.** Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under Section 7 of the ESA has been concluded.

The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:

- a biological opinion that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or
- written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally designated habitat.

› You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

› **Criterion F.** Your construction activities are authorized through the issuance of a permit under Section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

› For reference purposes, the eligibility criteria listed in Appendix D of the 2017 CGP are as follows:

9.1.2 Supporting Documentation

Provide documentation for the applicable eligibility criterion you select in Appendix D of the 2017 CGP, as follows:

For criterion A, indicate the basis for your determination that no federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's action area (as defined in Appendix A of the 2017 CGP). Check the applicable source of information you relied upon:

☐ Specific communication with staff of the U.S. Fish & Wildlife Service or National Marine Fisheries Service.

☐ Publicly available species list.

☒ Other source: IPaC

For criterion B, provide the Tracking Number from the other operator's notification of permit authorization:

Provide a brief summary of the basis used by the other operator for selecting criterion A, B, C, D, E, or F:

For criterion C, provide the following information:

› Any federally listed species and/or designated habitat located in your "action area"

› The distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site with you NOI.

For criterion D, E, or F, attach copies of any letters or other communication between you and the U.S. Fish & Wildlife Service or National Marine Fisheries Service concluding consultation or coordination activities.

Supporting documentation related to project compliance with the Endangered Species Act is provided in Attachment F.

9.2 Historic Preservation

Appendix E of the 2017 CGP describes eligibility requirements with regard to the protection of historic properties, including tribal lands.

The Operator responsible for finalizing this SWPPP must:

- Fill out the answers to the questions below for
  - Appendix E, Step 2
  - Appendix E, Step 3
  - Appendix E, Step 4
- Insert copies of any correspondence with the Massachusetts Historical Commission into Attachment G.

9.2.1 Appendix E, Step 1

Do you plan on installing any of the following stormwater controls at your site? Check all that apply below, and proceed to Appendix E, Step 2.

- ☐ Dike
- ☐ Berm
- ☐ Catch Basin
- ☐ Pond (Bioretention Basin)
- ☒ Stormwater Conveyance Channel (e.g., ditch, trench, perimeter drain, swale, etc.)
- ☒ Culvert
- ☐ Other type of ground-disturbing stormwater control: Subsurface infiltration structures

(Note: If you will not be installing any ground-disturbing stormwater controls, no further documentation is required for this section of the SWPPP template.)

9.2.2 Appendix E, Step 2

If you answered yes in Step 1, have prior surveys or evaluations conducted on the site already determined that historic properties do not exist, or that prior disturbances at the site have precluded the existence of historic properties?

☐ YES ☒ NO

If yes, no further documentation is required for this section of the SWPPP template. If no, proceed to Appendix E, Step 3.

9.2.3 Appendix E, Step 3

If you answered no in Step 2, have you determined that your installation of subsurface earth-disturbing stormwater controls will have no effect on historic properties?

☐ YES ☒ NO

If yes, provide documentation of the basis for your determination. If no, proceed to Appendix E, Step 4.

9.2.4 Appendix E, Step 4

If you answered no in Step 3, did the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Office (THPO), or other tribal representative (whichever applies) respond to you within 15 calendar days to indicate whether the subsurface earth disturbances caused by the installation of stormwater controls affect historic properties?

☒ YES ☐ NO

If no, no further documentation is required for this section of the SWPPP template.

If yes, describe the nature of their response:

☐ Written indication that adverse effects to historic properties from the installation of stormwater controls can be mitigated by agreed upon actions.

INSERT COPIES OF LETTERS, EMAILS, OR OTHER COMMUNICATION BETWEEN YOU AND THE APPLICABLE SHPO, THPO, OR OTHER TRIBAL REPRESENTATIVE

☒ No agreement has been reached regarding measures to mitigate effects to historic properties from the installation of stormwater controls.

INSERT COPIES OF LETTERS, EMAILS, OR OTHER COMMUNICATION BETWEEN YOU AND THE APPLICABLE SHPO, THPO, OR OTHER TRIBAL REPRESENTATIVE

☐ Other: *Response from MHC indicating determination that the proposed project will have no adverse effect on significant historic or archaeological properties is included in Attachment G.*

Supporting documentation related to project compliance with the Historic Preservation is provided in Attachment G.

9.3 Safe Drinking Water Act Underground Injection Control Requirements

Do you plan to install any of the following controls? Check all that apply below.

- ☐ Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)
- ☐ Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow
- ☐ Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system)

All stormwater structures meeting the definition of Underground Injection Wells shall be registered in accordance with DEP regulations 310 CMR 27.00. Copies of correspondence with the MassDEP or the EPA Regional Office should be included in the SWPPP.

Supporting documentation related to project compliance with the Safe Drinking Water Act is provided in Attachment Q.

This page intentionally left blank.

Attachment A
2017 Construction General Permit

This page intentionally left blank.

Attachment B
Certifications

Refer to Section 1 of this SWPPP Manual for more information.

This page intentionally left blank.

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

Name of person/position: _____

Company: _____

Address: _____

City, State, zip: _____

Phone: _____

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in Appendix I of EPA's Construction General Permit (CGP), and that the designee above meets the definition of a "duly authorized representative" as set forth in Appendix I.

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

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

This page intentionally left blank.

Signatories to the SWPPP

The signatories identified on this sheet are considered Operators of the project described in this SWPPP and will use, update, and maintain this SWPPP to comply with the terms of the 2017 EPA NPDES CGP.

Subcontractors who are not operators may sign the Subcontractor Certification Form.

OWNER	**CONTRACTOR**	**SUBCONTRACTOR (Operator status)**
Signature and Date	Signature and Date	Signature and Date
Title	Title	Title
Client Contact Client Company ### Street Address Town, State ##### T: (###) ###-#### name@address.com	Contractor Contact Contractor Company Address Town, State Zip T: (###) ###-#### name@address.com	Contractor Contact Contractor Company Address Town, State Zip T: (###) ###-#### name@address.com

Add additional sheets as necessary.

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

This page intentionally left blank.

Signatories to the SWPPP

The signatories identified on this sheet are considered Operators of the project described in this SWPPP and will use, update, and maintain this SWPPP to comply with the terms of the 2017 EPA NPDES CGP.

Subcontractors who are not operators may sign the Subcontractor Certification Form.

SUBCONTRACTOR (Operator status)	**SUBCONTRACTOR (Operator status)**	**SUBCONTRACTOR (Operator status)**
Signature and Date	Signature and Date	Signature and Date
Title	Title	Title
Client Contact Client Company ### Street Address Town, State ##### T: (###) ###-#### name@address.com	Contractor Contact Contractor Company Address Town, State Zip T: (###) ###-#### name@address.com	Contractor Contact Contractor Company Address Town, State Zip T: (###) ###-#### name@address.com

Add additional sheets as necessary.

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

This page is intentionally left blank.

Subcontractor Certification (Non-Operator Status)

Stormwater Pollution Prevention Plan

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

"I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the practices described in the SWPPP."

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

Signature: _____

Title: _____

Date: _____

This page intentionally left blank.

Attachment C
EPA NOIs and EPA NOTs

This page intentionally left blank.

Attachment D
Project Plans

This page intentionally left blank.

Attachment E
Site Map

This page intentionally left blank.

Site Map Requirements (Part 7.2.4 of the 2017 CGP):

1. Boundaries of the area of disturbance
2. 50-foot buffer around the area of disturbance
3. Identify areas of steep slope
4. Locations of stockpiles
5. Locations of construction vehicle access
6. All stormwater discharge points from the area of disturbance (to waterbodies AND to storm drain inlets)
7. All surface waters that the area of disturbance discharges to
8. The location and nature of all erosion and sediment controls
   - Perimeter controls
   - Storm drain inlet controls
   - A note that indicates that the contractor will provide information for any other types of controls required.
9. Location of proposed, post-construction impervious surfaces and structures
10. Location of on-site and off-site construction support activity areas covered by this permit
11. Locations of all waters of the US within and one mile downstream of the site. Also identify if any are listed as impaired, or are identified as Tier 2, Tier 2.5, or Tier 3.
12. Areas of federally listed critical habitat within the site and/or at discharge locations
13. Type and extent of pre-construction cover on the site
14. Drainage patterns of stormwater and authorized non-stormwater before and after major grading activities.
15. Locations of all potential pollutant generating activities.

Locations where any chemicals will be used and stored.

This page intentionally left blank.

Attachment F
Endangered Species Act

This page intentionally left blank.

Attachment G
Historic Preservation

This page intentionally left blank.

Attachment H
Training Log and Attendance Forms

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Training Log

This log provides a table of contents for the training forms. Insert training attendance lists into the field binder.

Date of Inspection	Notes:	Initials

Attach additional sheets as necessary

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Stormwater Pollution Prevention Training Attendance Form

Date/Time of Training:	
Instructor (name/title):	
Training Location:	
Training Duration:	

Topics addressed in this training

- ☐ Sediment and Erosion Controls
- ☐ Stabilization Controls
- ☐ Pollution Prevention Measures
- ☐ Emergency Procedures
- ☐ Inspections/Corrective Actions
- ☐ Other: _____

Print Name of Attendee:	**Initials**

Attach additional sheets as necessary

This page intentionally left blank.

Attachment I
SWPPP Amendment Log

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Amendment Log

This log provides a table of contents for the amendments to the SWPPP. Insert supplemental materials (if applicable) into the field binder and note their location.

No.	Date of Amendment	Summarize the changes to the SWPPP and indicate any supplemental materials that have been added	Authorization[3] (Name and Signature)	All Other Operators Notified of the Change
1				☐
				☐
				☐
				☐
				☐
				☐
				☐
				☐

Attach additional sheets as necessary.

3 Amendments must be authorized by an individual who meets the requirements of Appendix I, Part 1.11b of the 2017 CGP.

This page intentionally left blank.

Attachment J
Construction Activities Log

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Construction Activities Log

Record the following activities in the Construction Activities log.

Type of Action:	Information to include in the Construction Activity Log
Site-mobilization activities commence	› Record the date
Install construction period stormwater controls	› Record the date that each stormwater control identified on the Sediment and Erosion Control Plan is installed. Record the date each control becomes operational.
Earth-disturbance activities commence	› Record the date, the location on the site, and the type of activity. Activities that must be recorded include: clearing, grubbing, mass grading, cutting/filling, final grading, stockpiling. Record the activity in the Grading and Stabilization Log.
Earth-disturbance activities cease	› Record the date, the location on the site, and the type of activity. › Activities that must be recorded include: clearing, grubbing, mass grading, cutting/filling, final grading, stockpiling. › Record the activity in the Grading and Stabilization Log.
Site stabilization measures commence (P/T)	› Record the date, the location on the site, and the type of site stabilization measure commenced. Indicate if the stabilization measure is temporary or permanent. Record the activity in the Grading and Stabilization Log.
Site stabilization measures cease (P/T)	› Record the date, the location on the site, and the type of site stabilization measure that has ceased. Record the date that the stabilization measure becomes operational.Record the activity in the Grading and Stabilization Log.
Removal of construction period stormwater controls	› Record the date that each stormwater control identified on the Sediment and Erosion Control Plan is removed.
Removal of construction equipment and vehicles	› Record the date that all equipment and vehicles vacate the site.
Cessation of pollutant-generating activities	› Record the date that all pollution generating activities on the site cease.
Construction activities cease	› Record the date.

This page intentionally left blank.

Attachment K
Grading and Stabilization Log

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Construction Activities Log

Date	Type of Action	Notes:	Supplemental Log Entry Created[4]
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐
			☐

Attach additional sheets as necessary.

4 If the activity type is an earth disturbance activity or a site stabilization measure, then also record the activity in the separate Grading and Stabilization Log

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Grading and Stabilization Log

Date Grading Activity Initiated	Date Grading Activity Ceased	Description of Grading Activity	Date Stabilization Measure Initiated	Date Stabilization Achieved	P/T	Description of Stabilization Measure

P = Permanent, T = Temporary

Attach additional sheets as necessary

This page intentionally left blank.

Attachment L
Inspection Log and Template Forms

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Inspection Log

This log provides a table of contents for the completed inspection log forms. Insert completed inspection reports into the field binder.

Date of Inspection	Notes:	Initials

Attach additional sheets as necessary

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Site Inspection Form

Complete this inspection report within 24 hours of completing the site inspection.

Date/Time of Inspection: _____ **Weather Conditions:** _____

Recent Precipitation Event: _____

(Record daily rainfall total if 0.25 inches has fallen within the previous 24 hours)

Construction Activities Underway: _____

Inspector: _____

Status of Existing BMPs

Refer to Part 4.5 of the 2017 CGP to identify areas that must be inspected.
Refer to Part 4.6 for the requirements for inspections.

	Status – Cleaning or Repair Needed?		
Erosion Control Measure	**Yes**	**No**	**Comments/Notes**
[Silt Fence]	☐	☐	
[Haybales]	☐	☐	
[Construction Period Swales]	☐	☐	
[Construction Period Basins]	☐	☐	
[Erosion Control Blankets]	☐	☐	
	☐	☐	
	☐	☐	

N/A – Not applicable

Attach additional sheets if necessary

In the event of a spill refer to the **Spill Response Procedure** and contact appropriate agencies. Refer to Section 8.8 of the SWPPP Manual for Spill Prevention Plan and Response Procedures.

General Comments (Attach figures to show locations of concern):

	No	Yes
Are additional Erosion Control Measures needed? If yes, describe:	☐	☐
Are sediment/pollution discharges from the site present? If yes, describe:	☐	☐

Describe any corrective action required at this time:

Notes:

Attach additional sheets with notes, comments, illustrations and issues as needed. Use site plan to identify locations of work areas or issues noted above.

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

Authorization: _____ Date: _____

Authorization must be made by personnel identified in the Delegation of Authority and authorized to complete this task.

Attachment M
Corrective Action Log and Template Forms

This page intentionally left blank

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Corrective Action Log

This log provides a table of contents for the completed corrective action log forms. Insert completed corrective action reports into the field binder.

Date of Action	Notes:	Initials

Attach additional sheets as necessary.

Intentionally blank

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Corrective Action Form

	BMP/Activity	Date Observed	Date Corrected	Corrective Action Needed and Notes
1				
2				
3				
4				

Corrective Action

Describe how any incidents of non-compliance have been addressed:

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

Authorization: _____ Date: _____

Authorization must be made by personnel identified in the Delegation of Authority and authorized to complete this task.

This page intentionally left blank.

Attachment N
Spill Log and Template Forms

This page intentionally left blank.

Sudbury-Hudson Transmission Reliability Project, Sudbury, Marlborough, Stow, Hudson, Massachusetts

Hazardous Waste & Oil Spill Report

Date: _____ **Time:** _____ **AM / PM**

Exact location (Transformer #): _____

Type of equipment: _____ **Make:** _____ **Size:** _____

S / N: _____ **Weather Conditions:** _____

On or near water? ☐ Yes ☐ No **If yes, name of body of water:** _____

Type of chemical / oil spilled: _____

Amount of chemical / oil spilled: _____

Cause of spill: _____

Measures taken to contain or clean up spill: _____

Amount of chemical / oil recovered: _____ **Method:** _____

Material collected as a result of cleanup:

_____ drums containing _____

_____ drums containing _____

_____ drums containing _____

Location and method of debris disposal: _____

Name and address of any person, firm, or corporation suffering charges: _____

Procedures, method, and precautions instituted to prevent a similar occurrence from recurring: _____

Spill reported by General Office by: _____ **Time:** _____ **AM / PM**

Spill reported to DEP / National Response Center by: _____

DEP Date: _____ **Time:** _____ **AM / PM** **Inspector:** _____

NRC Date: _____ **Time:** _____ **AM / PM** **Inspector:** _____

Additional comments: _____

This page intentionall left blank.

Attachment O
Buffer Documentation

This page intentionally left blank.

Attachment P
Chemical Information

This page intentionally left blank.

Attachment Q
UIC Well Correspondence

This page intentionally left blank.

Attachment R
Local Orders of Condition

This page intentionally left blank.

Attachment S
Design Calculations for Stormwater Erosion Controls

This page intentionally left blank.