

November 5, 2021

Town of Sudbury Conservation Commission Attention: Ms. Lori Capone 275 Old Lancaster Road Sudbury, MA 01776

Re: Nobscot Scout Reservation, Sudbury & Framingham, MA

Emergency Stabilization Plan

Dear Commissioners:

On behalf of the Mayflower Council of the Boy Scouts of America, *Howard Stein Hudson (HSH)* is pleased to submit this Emergency Stabilization Plan to the Sudbury Conservation Commission for the stabilization measures within the Nobscot Scout Reservation. The intent of the proposed work is to provide erosion control and stabilization measures for unpermitted construction work within the Reservation.

In 2017, a Notice of Intent and Order of Conditions (OOC) for trail maintenance on 2.7 miles of trails in the Nobscot Scout Reservation within Sudbury and Framingham were issued by the respective Conservation Commissions. A 1-year extension to the OOC's was submitted and granted in the Spring of 2020 by both the Sudbury and Framingham Conservation Commissions.

Work was performed in environmentally sensitive areas where construction work was not permitted. On August 27, 2021 a Notice of Violation for Unpermitted Trail Work was issued by the Town of Sudbury's Conservation Commission that immediately suspended any further construction activities. The Notice of Violation allows for the disturbed areas to the stabilized temporary until restoration plans can be prepared and submitted to the Conservation Commissions. Attached to the letter are the Emergency stabilization sketches showing the areas where erosion control measures will be placed and an Erosion Control and Sedimentation Plan detailing the proposed erosion control measures and associated maintenance requirements. The intent is to install erosion control measures such as silt fencing, filter tubes and also use check dams within the newly constructed swales to slow stormwater runoff on the steeper slopes.

The Emergency Stabilization Plan will act as a temporary stabilization plan to prevent further disturbance to the disturbed areas and wetlands during the Winter of 2021/2022. These measures will be inspected weekly until the ground is frozen and then periodically during the winter months and after storm events. Restoration plans will be submitted at a later date with the goal of implementation during the Spring of 2022.

Thank you for your consideration of the enclosed Emergency Stabilization Plan, Erosion Control and Sedimentation Plan. Should you have any questions or require additional information, please do not hesitate to contact me at (617) 348-3310 or jdowning@hshassoc.com.

Sincerely,

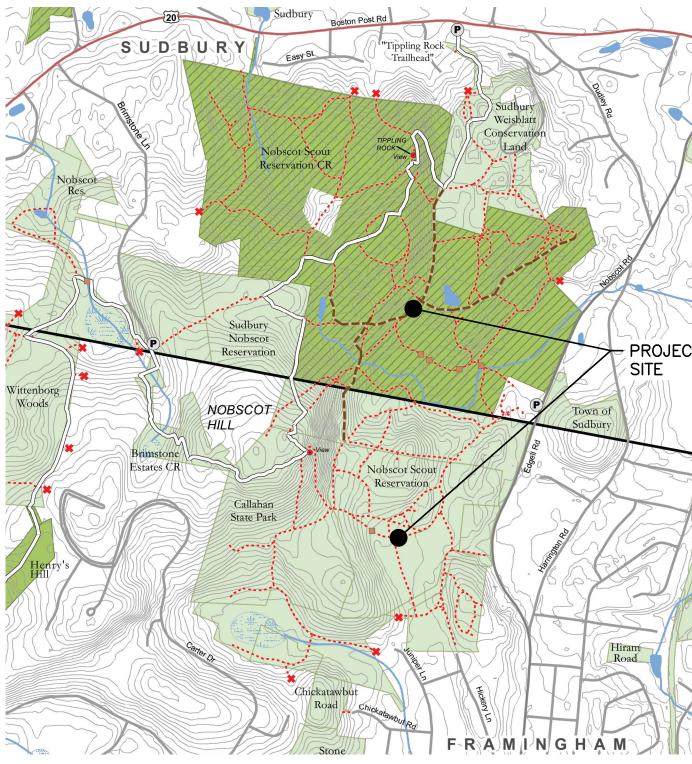
James Downing

Manager of Civil Engineering

EMERGENCY STABILIZATION PLAN FOR NOBSCOT SCOUT RESERVATION TRAIL PROJECT SUDBURY AND FRAMINGHAM, MA

- GENERAL NOTES:

 1. EXISTING PROPERTY LINE AND UTILITY INFORMATION SHOWN IS BASED ON AN EXISTING SURVEY CONDUCTED BY FELDMAN LAND SURVEYORS REVISED THROUGH 06-22-16. 2. WETLAND DELINEATION COMPLETED BY LUCAS ENVIRONMENTAL, LLC BETWEEN APRIL
- 4. "BF" SERIES REFER TO INLAND BANK, UNLESS OTHERWISE NOTED OR LABELED.
 5. THE 100-FOOT BUFFER ZONE IN THE TOWN OF SUDBURY IS DESIGNATED AS THE
- THE LIMIT OF WORK AREA IS LOCATED WITHIN ESTIMATED HABITAT FOR RARE WILDLIFE
- TO DETERMINE THE EXACT LOCATION, SIZE, TYPE, ETC. OF ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE WORK. AT LEAST 72 HOURS BEFORE EXCAVATION, THE CONTRACTOR SHALL BE REQUIRED TO CONTACT DIGSAFE AT
- IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, PRIOR TO EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAVING
- 11. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS AT HIS/HER OWN EXPENSE, OUTSIDE OF
- 12. GIS TOPOGRAPHIC INFORMATION PROVIDED FOR WOODED AREAS TO SUPPLEMENT THE SURVEY PROVIDED BY FELDMAN LAND SURVEYORS.



LOCUS MAP NOT TO SCALE

SHEET INDEX

SHEET 1	COVER SHEET
SHEET 2	DETAILS
SHEET 3	KEY PLAN
SHEET 4	SITE STABILIZATION PLAN (SHEET 1 OF 6)
SHEET 5	SITE STABILIZATION PLAN (SHEET 2 OF 6)
SHEET 6	SITE STABILIZATION PLAN (SHEET 3 OF 6)
SHEET 7	SITE STABILIZATION PLAN (SHEET 4 OF 6)
SHEET 8	SITE STABILIZATION PLAN (SHEET 5 OF 6)
SHEET 9	SITE STABILIZATION PLAN (SHEET 6 OF 6)

<u>OWNER</u>

BOY SCOUTS OF AMERICA MAYFLOWER COUNCIL 83 CEDAR STREET MILFORD, MA 01757

FRAMINGHAM ASSESSORS INFORMATION

ASSESSORS MAP 008 BLOCK 01 LOT 2517 ASSESSORS MAP 008 BLOCK 11 LOT 7059 ASSESSORS MAP 015 BLOCK 19 LOT 6802

SUDBURY ASSESSORS INFORMATION

BLOCK 05 LOT 0001 BLOCK 05 LOT 0003 BLOCK 05 LOT 0004 ASSESSORS MAP L BLOCK 05 LOT 0005 ASSESSORS MAP L BLOCK 05 LOT 0007 ASSESSORS MAP L BLOCK 05 LOT 0200 ASSESSORS MAP L BLOCK 06 LOT 0009

REFERENCES

1. EXISTING CONDITIONS SURVEY BY FELDMAN LAND SURVEYORS.



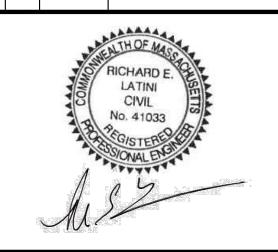
HOWARD STEIN HUDSON

11 Beacon Street, Suite 1010 Boston, MA 02108 www.hshassoc.com

PREPARED FOR:

BOY SCOUTS OF AMERICA MAYFLOWER COUNCIL 83 CEDAR STREET MILFORD, MA 01757

REVISIONS:				
NO	BY	DATE	DESCRIPTION	



CONSERVATION COMMISSION SUBITTAL

COVER SHEET

TE:	11/02/2021
OJECT NUMBER:	2016033.01
SIGNED BY:	MGB
AWN BY:	MGB
IECKED BY:	JD/RL
1	
	SHEET 1 OF 9

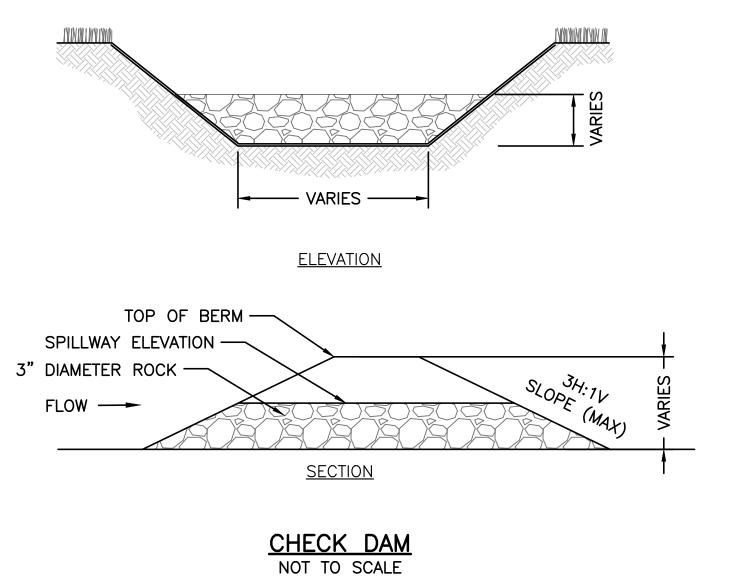
NOTES

 ALL SILT FENCE SHALL BE ENTRENCHED PLACED AROUND ALL MATERIAL STOCKPILE AREAS AND MAINTAINED AT STAGING AREAS TO ASSURE NO SILTATION ONTO PUBLIC OR PRIVATE WAYS OR PROPERTY.

TRENCH DETAIL

SILT FENCE DETAIL

NOT TO SCALE



DIRECTION OF FLOW -2 IN. (51mm) DEEP x 12 IN. (300mm) WIDE LAYER OF LOOSE COMPOST MATERIAL PLACED ON UPHILL/FLOW SIDE OF TUBES TO FILL SPACE BETWEEN SOIL SURFACE AND TUBES. COMPOST FILTER TUBE MINIMUM 12 INCHES (300mm) IN DIAMETER WITH AN EFFECTIVE HEIGHT OF 9.5 INCHES (240mm). TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR APPROVED BIODEGRADABLE DIRECTION OF FLOW MATERIAL. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER. TAMP TUBES IN PLACE TO ENSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE. - 2 INCH X 2 INCH X 3 FEET (51mm X 51mm X 914mm) UNTREATED HARDWOOD STAKES, UP TO 5 FT. (1.5m) APART OR AS REQUIRED TO SECURE TUBES IN PLACE. WHEN STAKING IS NOT POSSIBLE, SUCH AS WHEN TUBES MUST BE PLACED ON PAVEMENT, HEAVY **UNDISTURBED** CONCRETE OR CINDER BLOCKS CAN BE USED SUBGRADE BEHIND TUBES UP TO 5 FT. (1.5m) APART OR AS REQUIRED TO SECURE TUBES IN PLACE. — LIMIT OF WORK

TUBES TO JOIN IN A CONTINUOUS TUBES CAN BE PLACED BARRIER AND MINIMIZE UNIMPEDED DIRECTLY ON EXISTING FLOW. PAVEMENT WHEN STAKE JOINING TUBES SNUGLY NECESSARY. AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM. EXISTING HEADWALL OR OTHER OBSTACLE ₹ 3.0 FT. MIN. SECURE ENDS OF TUBES WITH STAKES SPACED 18 IN. (457mm) STREAM APART THROUGH TOPS OF TUBES. $^{\sim}$ UNTREATED HARDWOOD STAKE (TYP.) DIRECTION OF FLOW COMPOST FILTER TUBE (TYP.) LOOSE COMPOST LAYER PLACING TUBES PLAN VIEW - JOIN DETAIL AGAINST THE UPHILL SIDE OF WELL-ANCHORED, STATIONARY FEATURES SUCH AS EXISTING TREES CAN PROVIDE ADDITIONAL PLAN VIEW BRACING.

GENERAL NOTES:

CURVE ENDS UPHILL

OF UNFILTERED

RUN-OFF.

TO PREVENT DIVERSION

1. PROVIDE A MINIMUM TUBE DIAMETER OF 12 INCHES (300mm) FOR SLOPES UP TO 50 FEET (15.24m) IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER TUBE DIAMETER OR ADDITIONAL COURSING OF FILTER TUBES TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES

PROVIDE A 3 FT. (914mm)

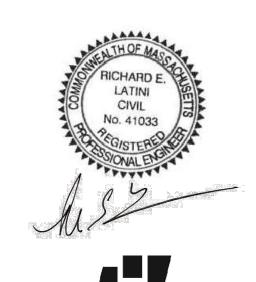
MINIMUM OVERLAP AT ENDS OF

- 2. INSTALL TUBES ALONG CONTOURS AND PERPENDICULAR TO SHEET OR
- CONCENTRATED FLOW.

 3 DO NOT INISTALL IN DEPENDIAL EDUEMEDAL OD INTERMITTENT STREAMS
- DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
 CONFIGURE TUBES AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.

COMPOST FILTER TUBE DETAIL

NOT TO SCALE



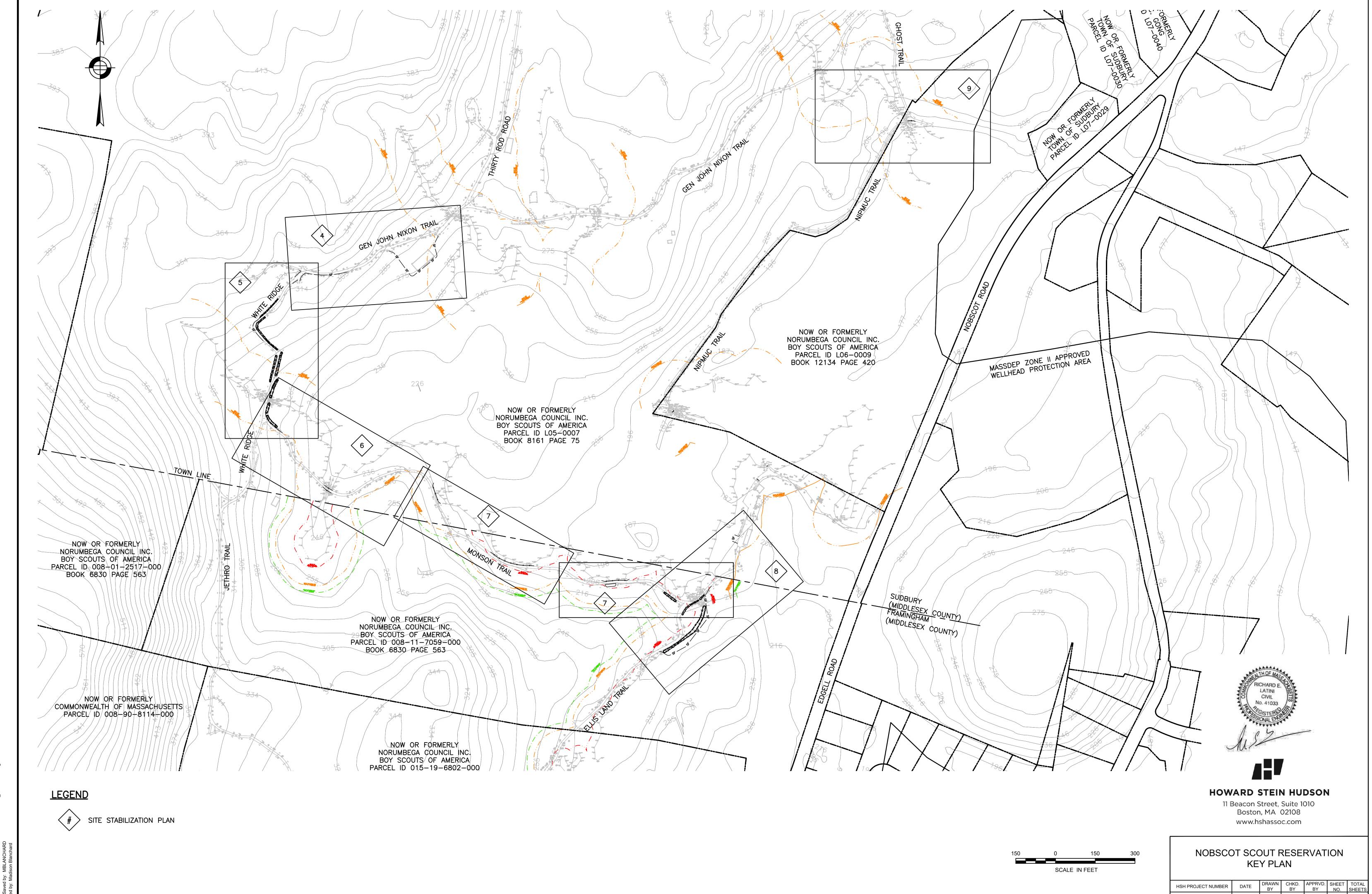
HOWARD STEIN HUDSON

11 Beacon Street, Suite 1010 Boston, MA 02108 www.hshassoc.com

NOBSCOT SCOUT RESERVATION DETAILS

HSH PROJECT NUMBER DATE DRAWN BY BY SHEET TOTAL SHEETS

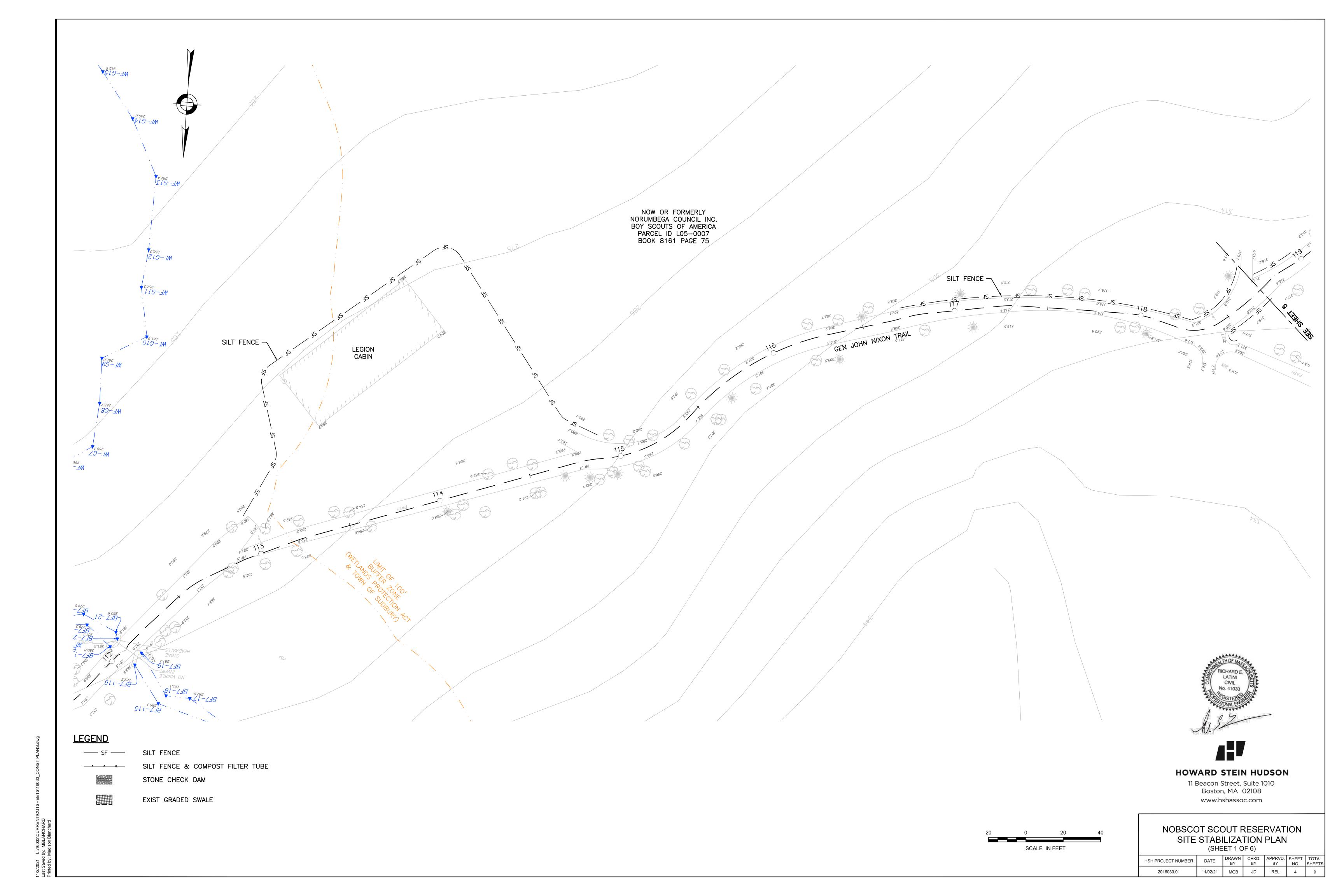
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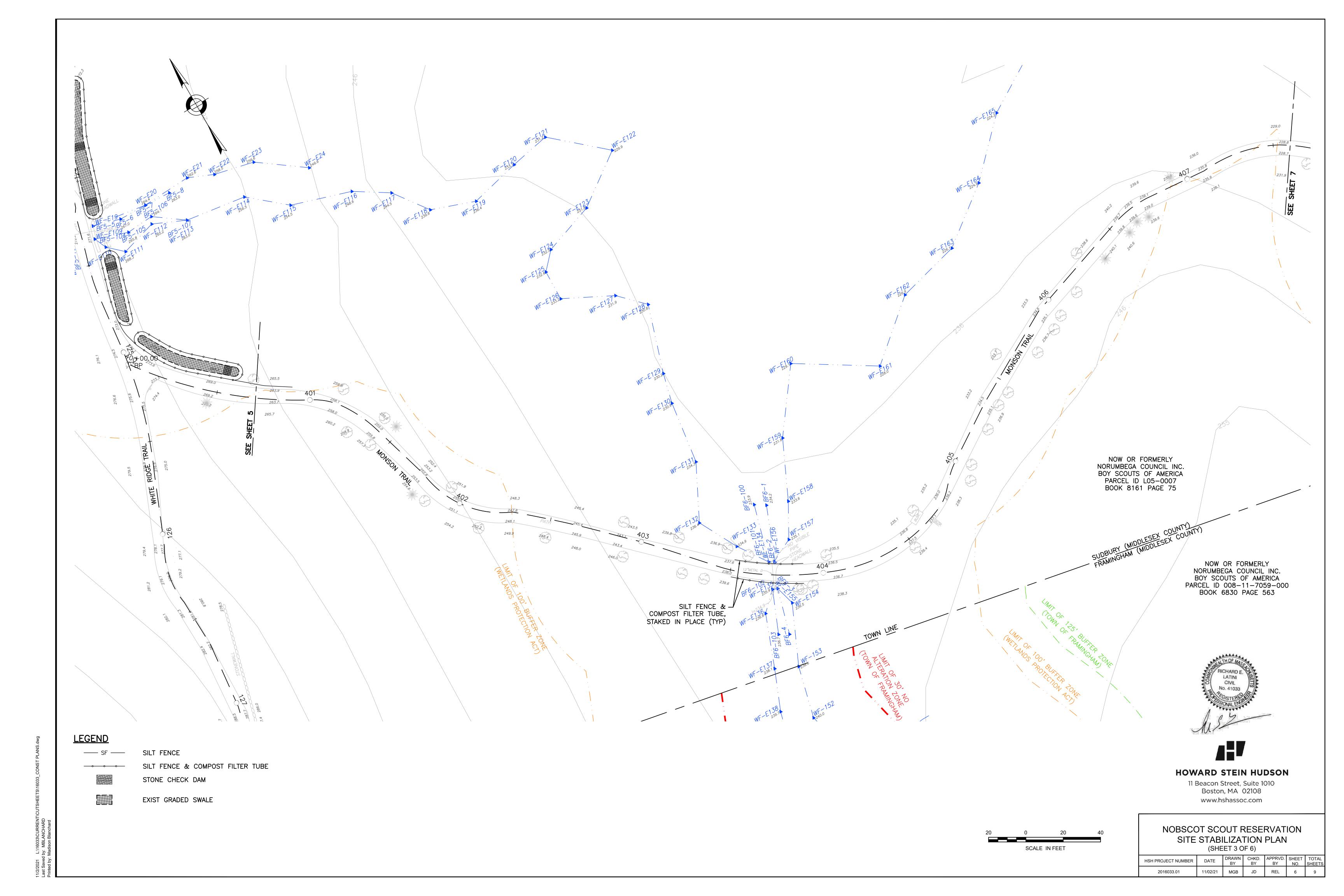


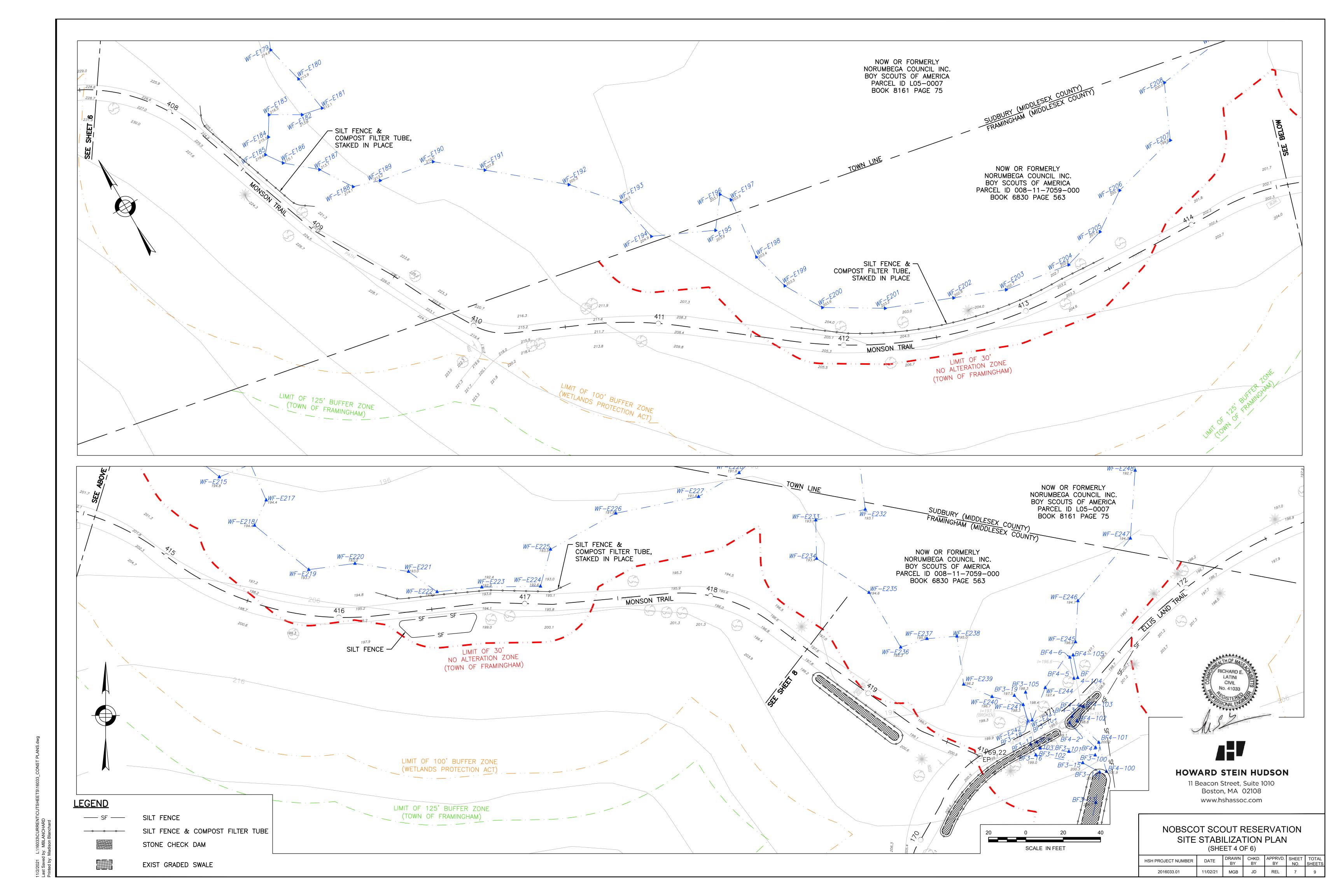
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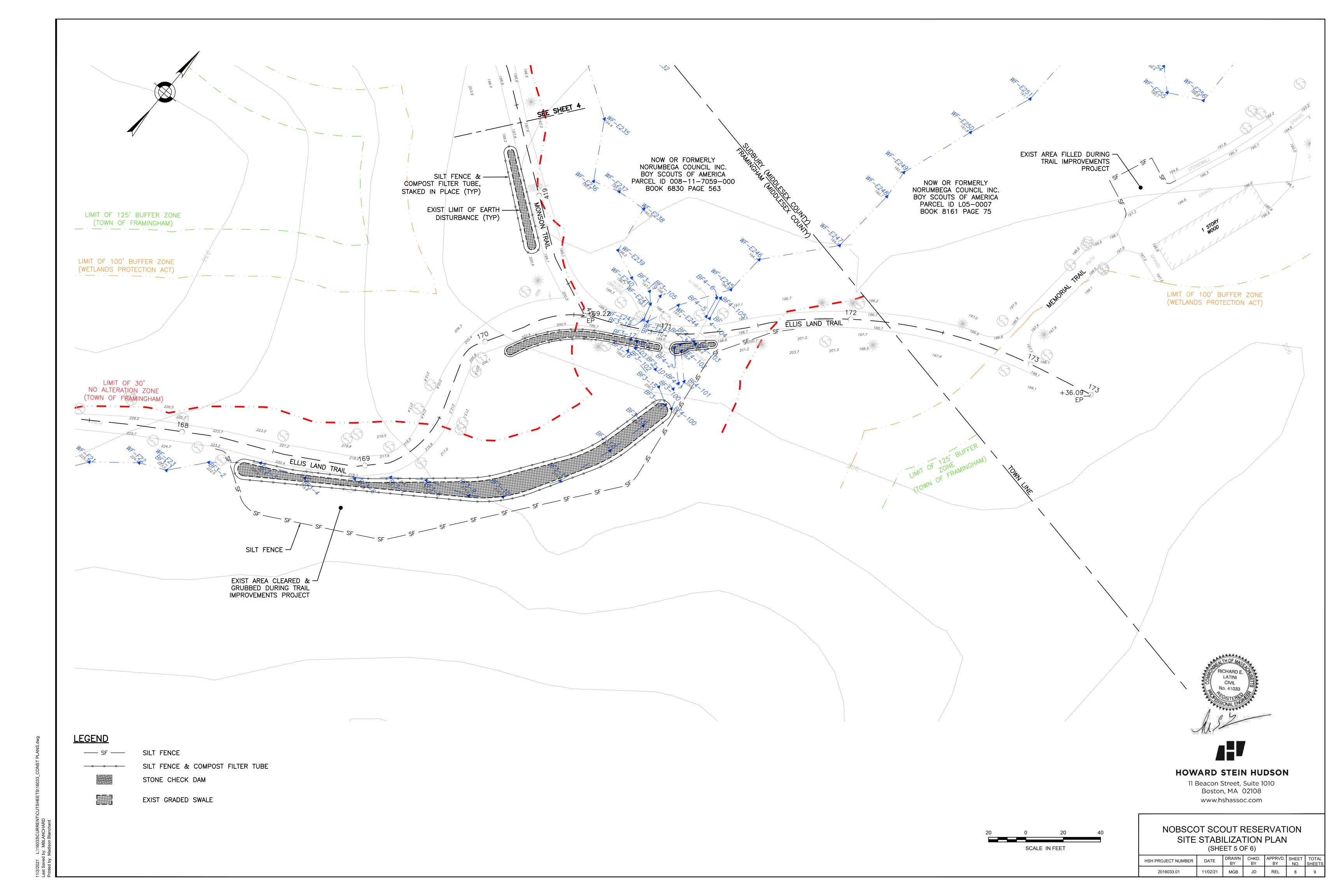
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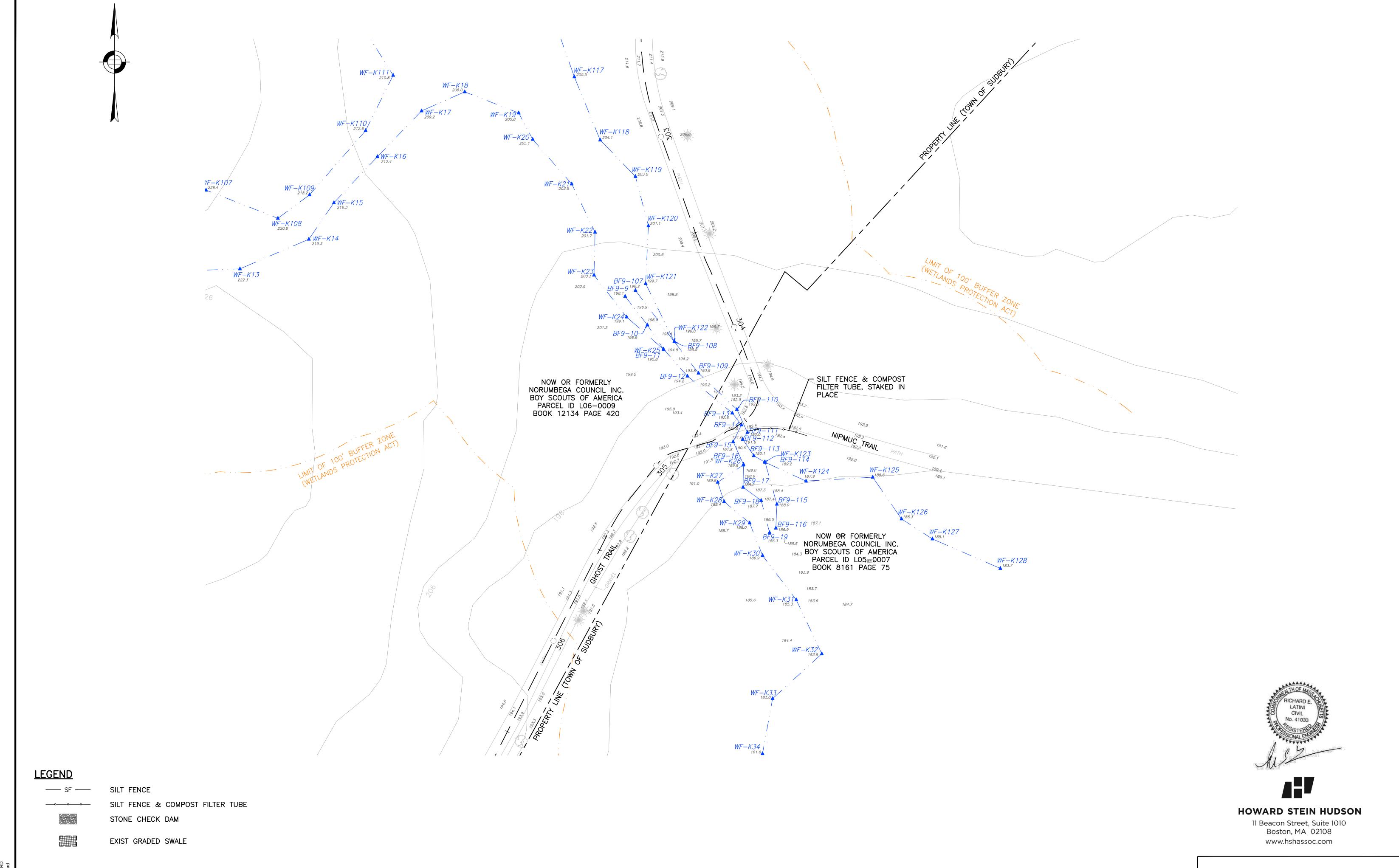
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NOBSCOT SCOUT RESERVATION SITE STABILIZATION PLAN (SHEET 6 OF 6)

SCALE IN FEET

HSH PROJECT NUMBER DATE DRAWN BY BY SHEET TOTAL SHEETS

2016033.01 11/02/21 MGB JD REL 9 9



NOBSCOT SCOUT RESERVATION SUDBURY & FRAMINGHAM, MASSACHUSETTS

Erosion Control & Sedimentation Plan

This Erosion Control and Sedimentation Plan provides for the inspection and maintenance of erosion control and stabilization measures to prevent further pollution to the disturbed areas and wetlands within the Nobscot Scout Reservation located in Sudbury and Framingham, Massachusetts.

SECTION 1: CONTACT INFORMATION/RESPONSIBLE PARTIES

1.1 Operator(s) / Subcontractor(s)

Operators:

Mayflower Council of the Boy Scouts of America

Contact: Hank Rauch 83 Cedar Street Milford, MA 01757 Mobile: (508) 366-1292

Email: HJRauch@gmail.com

SECTION 2: EROSION AND SEDIMENT CONTROLS

A variety of storm water pollutant controls (Best Management Practices) are recommended for this Emergency Stabilization Project. These controls are reflected in the Emergency Stabilization Plans. The controls are intended to function temporarily and will be used as needed for pollutant control until the Project site is permanently stabilized. These include silt fencing, compost filter tubes, and stone check dams to be placed withing existing graded swales.

2.1 Site Stabilization

General

- Silt fencing, compost filter tubes will be installed around the perimeter of areas disturbed by construction.
- If site stabilization practices fail due to extreme storm events, trails within the Nobscot Scout Reservation will be shutdown to allow for more robust sedimentation and stabilization techniques that span the width of the trail at closer intervals.

Silt Fence

Description of Practice:

EROSION CONTROL & SEDIMENTATION PLAN

Nobscot Scout Reservation – Framingham & Sudbury, MA November 5, 2021



• Silt fencing will be installed as shown on the plans, at the perimeter of areas disturbed by construction, and surrounding the existing graded swales. Silt fencing will consist of filter fabric secured to 36-inch posts, spaced 10-ft on center, staked into the ground.

Maintenance Requirements:

- Stabilized areas will be inspected weekly until the ground has frozen, every two (2) weeks once the ground has frozen, and within twenty-four (24) hours following large storm events.
- Accumulated sediment must be removed once the volume reaches ¼ to ½ the height of the silt fence.

Compost Filter Tube

Description of Practice:

- Compost filter tubes will be installed as shown on the plans and against all silt fences that surround existing graded swales. The compost filter tubes will be a minimum of 12 inches in diameter with an effective height of 9.5 inches, consist of jute mesh or an approved biodegradable material, and be staked in place on the uphill side of the silt fence.
- In areas of the trail with longitudinal slopes greater than or equal to 6%, compost filter tubes shall be staked in place and staggered (laid diagonally) across the trail that allows passage for trail users (approx. 4ft.). Multiple rows of compost filter tube should be installed, alternating which side of the trail is accessible for trail users.

Maintenance Requirements:

- Stabilized areas will be inspected weekly until the ground has frozen, every two (2) weeks once he ground has frozen, and withing twenty-four (24) hours following large storm events.
- Accumulated sediment must be removed once the volume reaches ¼ to ½ the height of the compost filter tube.

Stone Check Dam

Description of Practice:

• Stone check dams will be installed as shown on the plans and within the existing graded swales. The check dams will consist of 3-inch crushed stone and be installed to one half the height of the swale.

Maintenance Requirements:

- Stabilized areas will be inspected weekly until the ground has frozen, every two (2) weeks once he ground has frozen, and withing twenty-four (24) hours following large storm events.
- Accumulated sediment must be removed once the volume reaches ¼ to ½ the height of the stone check dam.

SECTION 3: INSPECTION

3.1 Inspection Personnel and Procedures

Personnel Responsible for Inspections

Inspections will be conducted by members of the May Flower Council maintenance personnel who are familiar with construction practices and are capable to assess conditions at the site that could impact stormwater quality and to assess the effectiveness of any erosion and sediment control measure selected for this site.

For each inspection, an inspection report will be completed. Records of these inspection reports will be retained for at least three years from the date that the Plan is implemented. The inspection reports will be kept in a binder and be available for review. Copies of all inspection reports will be

EROSION CONTROL & SEDIMENTATION PLAN
Nobscot Scout Reservation – Framingham & Sudbury, MA
November 5, 2021



submitted to the Sudbury Conservation Commission, Framingham Conservation Commission, and the National Heritage Council.

Inspection Report Forms

Inspection forms can be found in Appendix A.

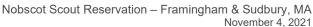
EROSION CONTROL & SEDIMENTATION PLAN Nobscot Scout Reservation – Framingham & Sudbury, MA November 5, 2021



EROSION CONTROL & SEDIMENTATION PLAN ATTACHMENTS

 $Attachment\,A-Inspection\,Form$

EROSION CONTROL & SEDIMENTATION PLAN





Attachment A - Inspection Report Form

Project Name: Nobscot Scout Reservation – Emergency Stabilization Erosion Control & Sedimentation Plan Contact: Hunter McCormick Inspections shall be conducted at least once every seven (7) days and within 24 hours of the end of a storm event of one-half inch (0.5") or greater. □ Pre-Storm Inspection Type: ☐ Routine (7 calendar days) □ Post-Storm □ During Storm Erosion/Sediment Control System: Name of Inspector: ______ Date of Inspection: _____ Weather / Storm Event Information: Storm Start Time: _____ Storm Duration: ______ Time Elapsed Since Last Storm: _____ Approx. Amount of Rainfall: _____ Location Onsite: _____ Scoring Breakdown: N/A = Not Applicable1 = Monitor (potential for future problems exist) N/I = Not Investigated2 = Routine Maintenance Required 0 = Not a problem 3 = Immediate Repair Necessary **Erosion & Sedimentation Control Structures:** Overall Condition N/A N/I 0 1 2 3 Displacement/Erosion N/A N/I 0 1 2 3 Evidence of flow around structure Yes 0 1 2 3 No Sediment accumulation >1" Yes 0 1 2 3 Amount: No **Overall Condition** Inspector's Summary: