

October 24, 2022

Ms. Lori Capone
Conservation Coordinator
275 Old Lancaster Road
Sudbury, Massachusetts 01776

Re: Nobscot Scout Reservation Trail Project
1 Nobscot Road, Sudbury, MA

Dear Ms. Capone:

Howard Stein Hudson (HSH) has prepared a response to the Sudbury Conservation Commission comments dated August 22, 2022 and offers the following responses including submitting supplemental information:

Comment 1: *As you know, the violation occurred due to volunteers undergoing the work, without supervision or an understanding of the Order of Condition requirements. No erosion controls were installed before work was conducted. MESA permitting had not been obtained, and significant swales were dug out which were not part of the plan. Personnel has changed since this violation occurred, however, this work is proposed to be done by volunteers.*

Response: **The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife letter is attached to this response letter.**

Comment 2: *Invasive Species Management: One of the most impressive aspects of the Nobscot Reservation is its lack of invasive species. There is some buckthorn and bittersweet along the trails in low density, primarily due to the fact that the land remains largely unaltered. This is not the case near the parking lot, a high use area, where invasives run rampant. The secondary impact that could arise from the unauthorized work that was conduct, is the high potential for a significant expansion of invasive species into the interior of the site which could significantly impact wetlands and wildlife habitat.*

Response: **The applicant will management invasive species within all disturbed areas and approximately 5 feet past the limit of grading. The applicant is willing to discuss and participate in weed warrior training programs offered and**



mentioned by STV staff on the Commission Site walk. This would allow the volunteer group to be able to identify and remove invasive through out the trail system. Lucas Environmental, LLC wetland scientists are also certified in invasive species management.

Comment 3: *It is unclear how the volunteers will know how to grade the trail and to what direction since the plan do not show topography lines. This is concerning as the work that was conducted was directing runoff directly to the wetlands.*

Response: **Spot grades and major contours were provided on the construction plans. However additional contours have been added to the revised NOI plans.**

Comment 4: *A large section of boulders that were stabilizing the hillside were removed. This plan does not appear to be reinstalling them. The applicant should explain how this slope will be stabilized.*

Response: **As discussed on the site walk, these disturbed areas will be addressed by placing back installed small rock walls utilizing the existing boulders and stones that were removed from the embankment. Other areas will be regraded, hydroseed and stabilized. A typical detail of the rock wall has been added to the detail sheets.**

Comment 5: *Some stumping is proposed as part of the project. The applicant should specify if stumps are being removed from the site or stockpiled on site, and if so, where.*

Response: **Stumps will be cut down as close as possible to the ground. These small logs will be used as firewood throughout the trail system. The remaining stump will be ground down in place. The wood chips generated from grinding will be used to stabilize the area.**

Comment 6: *The applicant should explain how the areas being graded around the cabin will be stabilized.*

Response: **The disturbed areas around the cabins will be stabilized using mulch wood chips that are generated on site.**

Comment 7: *The proposed footings for the bog bridges are precast concrete blocks that appear to require minor excavation. The applicant should consider concrete footings that are pinned into the ground or helical piers to minimize wetland impacts. The applicant should confirm that all bridge and bog bridge construction will be completed by hand,*



without machinery (other than to bring the materials to the site as close as possible, using existing trails that are outside wetland resource areas).

Response: The proposed precast footings are to be placed on crushed stone over a firm subbase. This requires minor excavation. All of the work associated with the bridge removal and construction of the new foot bridges and bog bridges will be done by hand. Alternative foundation types such as helical piers were assessed, however given the required depth, soil type, and the specialized machinery required to drive the pier it is unfeasible to use this type of foundation system.

Comment 8: *A new culvert is proposed to connect a wetland on either side of the existing trail. This will require additional wetland alterations. The applicant should explain what other alternatives were evaluated for this area that may have less to no impact to wetlands. They should explain what this culvert was sized for. The applicant should also explain how the temporary impact to wetlands will be restored. A restoration detail and construction narrative should be provided to direct restoration efforts. The Order should be conditions to require wetland alteration and restoration work to be conducted under direct supervision of a wetland scientist.*

Response: The Muskie Trail crosses this degraded wetland area. The existing surface is compacted soil. Vehicles using the trail during wet weather conditions has led to the trail increasing in width due to rutting. The only other option to correct the rutting would be to place gravel stone over the existing trail. This would not be a good long-term condition and would need constant maintenance due to the topography and hydrology of this wetland. Alternatively, it could be left as is; however, the rutting would continue and likely lead to downgradient sedimentation of the wetland system.

The 12-inch culvert was not sized for a certain storm event; however, it has a flow full capacity of approximately 8 cfs and has sufficient capacity to connect the two wetland areas. The temporary impact to the wetland as result to grading will be loamed and hydroseeded with a wetland seed mix. The loss of wetland area as a result of more than a 12-inch change in grade and within the placement of gravel is to be replicated on the upgradient side of the culvert crossing as shown on the NOI Plans. Wetland restoration details for temporary impacts was provided within the original Notice of Intent. Wetland scientists from Lucas Environmental, LLC and Engineers



from Howard Stein Hudson will provide direct supervision to the volunteers completing the work.

Comment 9: *Each construction area will need to be surrounded by silt fence to prevent turtles from entering the construction site. A two-man trencher is proposed to be used to trench the silt fence in as digging is very difficult. This machine will cut through the roots for this installation. The applicant should confirm that additional trees are not going to be impacted by this installation. The silt fence can also be weighted down instead of trenched, which may make sense in areas directly adjacent to trees.*

Response: **The silt fence will be weighted down by a compost filter tube and stake in position as an alternative to trenching.**

Comment 10: *Sheet 8 shows the silt fence being installed through the wetland with no wetland impact noted. The applicant should explain why the fence is positioned where proposed and identify any wetland impacts for this area. Ultimately the silt fence should be repositioned outside the wetland area.*

Response: **The silt fence is positioned to created a work zone to construct bog bridges. The area between the silt fence and existing edge of trail will be loamed ad hydroseeded after the bridge is installation. This area has been labelled as a temporary wetland impact.**

Comment 11: *Sheet 9 shows proposed fill within the wetlands as a temporary alteration. The applicant should explain how this is temporary. This area is also being widened to 18 feet at the widest point. The applicant should explain why this is expansion is needed.*

Response: **If there is more than a 12-inch change in grade it is been classifying as a permanent impact and a wetland replicated is being provided. When the change in grade is less than 12-inches it is been classified as a temporary impact. This temporary impact area is still hydraulically connected to the wetland. This temporary impacted area will be loamed and hydroseeded with a wetland seed mix.**

Comment 12: *Trail work at the boundary between Sheets 8 and 9 shown on the plan sheet above has no erosion controls and results in wetland fill. The applicant should explain if this area of trail could be moved to prevent this fill.*

Response: **This area has been redesign. There will be no filling of the wetland in this area. Ersion control measure have been added to the plan set on page 8 & 9.**



Comment 13: *The applicant should explain what type of equipment will be used at the Sachem Brook bridge crossings. The Big Sachem footings are in the wetlands. The applicant should explore using helical piers for these footings.*

Response: **The replacement of the existing bridges will be completed by hand. All materials will be carried in or wheeled in using wheelbarrows or rubber wheeled dollies. The use of alternative footings has been completed (see response to comment 7).**

Comment 14: *Sheet 16 shows work around cabins 13 and 14 but their location on the site is not provided. The applicant should explain how these areas are accessed.*

Response: **The plans have been updated to show how cabins 13 & 14 are accessed.**

Comment 15: *The plan should clarify when erosion control blankets will be used to help direct installation.*

Response: **The locations of where erosion controls blankets are to be used have been added to the plans.**

Comment 16: *The application mentions hydroseeding, the applicant should explain where this is proposed, how the areas will be accessed.*

Response: **The locations of where hydroseeding will be used has been added the plans.**

Comment 17: *Mitigation: Besides the wetlands replacement, which is required, no mitigation is being proposed. A robust invasive species monitoring program should be developed to prevent any invasives species from invading work areas. Additionally, an invasive species management plan should be developed for areas around the cabins and trails to mitigate for the unauthorized work. This would not only benefit the wetland resource areas, but also meet the commitment of the Conservation Restriction to protect this open space and its wildlife habitat values.*

Response: **As discussed on the site the site walk, the applicants wetland scientist shall monitor for invasive up to 5 feet beyond all disturbed areas. The applicant is very interested in the Weed Warrier program and would like to explore that idea with the goal of having some of their volunteers trained to identify and remove invasive through the trail system.**



Comment 18: *The CR does not allow the construction of new temporary or permanent structures.*

The Commission and SVT should determine whether the proposed bog bridge and the new culvert is allowable under the Conservation Restriction.

Response: **The applicant has confirmed with SVT Stewardship Kristin O'Brien the C/R enables the install of bog bridges and the culvert with notice and approval from SVT.**

Comment 19: *Show additional tree removal proposed around the parking lot and any information provided by the arborist/tree service on these trees regarding their health and safety risk they pose.*

Response: **The six trees to be removed from the edge of the parking lot have been added to the plans. An arborist report of the trees is attached to this response letter.**

Comment 20: *Payment of Bylaw Application fee.*

Response: **The applicant will pay the bylaw application fee.**

Comment 21: Stormwater Management Peer Review.

Response: **The design completed a site walk with the peer reviewer and has received comments.**

Please contact me at (617) 348-3310 or jdowning@hshassoc.com if you have any additional questions or comments.

Sincerely,

James Downing
Project Manager

cc: MassDEP Division of Wetlands & Waterways, Northeast Regional Office
Massachusetts Natural Heritage & Endangered Species Program (electronic copy)
Lucas Environmental, LLC (electronic copy)
Property Owner &Applicant – Mayflower Council, Boy Scouts of America (electronic copy)

Attachments; arborist email, NHESP letter, supplemental information, revised plans.

James Downing

From: Hank Rauch <hjrauch@gmail.com>
Sent: Thursday, October 6, 2022 3:43 PM
To: James Downing
Cc: Hunter McCormick; alex@mayflowerbsa.org
Subject: FW: Nobscot Hazard Tree Removal
Attachments: IMG_2186[1].JPG

James;

This is the report from Roger Plourde on Nobscot tree removal. Roger prepared the Foresry Plan for Mayflower & SVT in 2010 for the C/R

Hank Rauch
HJRauch@gmail.com
Phone: 508-366-1292
Cell: 508-207-3225

From: baf@rcn.com
Sent: Friday, September 30, 2022 12:20 AM
To: hjrauch
Subject: Nobscot Hazard Tree Removal

Hi Hank,

I just wanted to report to you that I visited Nobscot today and met with Pete Lane who showed me the trees that you wish to remove. Nearly all of the trees that Pete showed me were either dead or had advanced stages of decay. Obviously a dead tree could fall at any time and is a serious visitor safety concern. There were a few small trees (about 6-8" diameter) that were not showing signs of serious decay but had other valid reasons for removal such as leaning heavily into the parking area, containing dead limbs from adjacent trees or of a species likely to die (the majority of the white ash in this area are dying of ash decline). I added two additional trees from the first parking lot to the tally due to advanced decay noted. I highly recommend that these tree be removed sooner than later due to safety concerns. Of particular concern is the large dead oak in the first parking lot which was noted to have a limb dangling over the parking area and looking like it was going to drop any second (see attached photo). I recommend managing the parking so that no one can park near these trees.

Sincerely,

Roger P. Plourde, Jr. C.F.
Broad Arrow Forestry
PO Box 322
Hubbardston, MA 01452
508-792-2414
baf@rcn.com



DIVISION OF
FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

September 7, 2022

Sudbury Conservation Commission
275 Old Lancaster Road
Sudbury MA 01776

Hunter McCormick
Boy Scouts of America Mayflower Council
83 Cedar Street
Milford MA 01757

RE: Applicant: Hunter McCormick
Project Location: 1 Nobscot Road, Nobscot Scout Reservation
Project Description: Trail Work
DEP Wetlands File No.: 301-1375
NHESP File No.: 16-36246

Dear Commissioners & Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the “Division”) received a Notice of Intent with site plans (dated 8/1/2022) in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.59). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.18).

WETLANDS PROTECTION ACT (WPA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not adversely affect** the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of **rare** wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

MASSACHUSETTS ENDANGERED SPECIES ACT (MESA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not result in a prohibited Take** of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site plans may require an additional filing with the Division

pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Emily Holt, Endangered Species Review Assistant, at (508) 389-6385.

Sincerely,



Everose Schlueter, Ph.D.
Assistant Director

cc: Christopher Lucas, Lucas Environmental
MA DEP Northeast Region



500A Washington Street, Quincy, MA 02169

October 24, 2022

Sudbury Conservation Commission
275 Old Lancaster Road
Sudbury, MA 01776

Framingham Conservation Commission
150 Concord Street, Room 213
Framingham, MA 01702

Re: Notice of Intent Supplement #1
Nobscot Scout Reservation Trail Project
1 Nobscot Road
Sudbury & Framingham, Massachusetts
MassDEP File #301-1375 – Sudbury
MassDEP File #158-1621 – Framingham

Dear Members of the Sudbury & Framingham Conservation Commissions,

On behalf of the Mayflower Council (formerly known as the Knox Trail Council), Boy Scouts of America (Owner & Applicant), Lucas Environmental, LLC, in association with Howard Stein Hudson (HSH), is pleased to submit this supplement to the Notice of Intent (NOI) to the Sudbury & Framingham Conservation Commissions for the Nobscot Scout Reservation Trail Project located at 1 Nobscot Road in Sudbury and Framingham, Massachusetts.

This letter is provided as an addendum to the HSH responses in which LE assisted with the wetland related concerns. The tables included in the original application have been updated herein to address comments from both the City of Framingham and Town of Sudbury, as well as the peer review by BETA and Horsley Whitten Group.

A summary of the trail improvements is provided in the updated Table 4-1 on the following page and is also depicted in detail on the NOI Plans (provided under separate cover). Note that the overall length of trail impact has been reduced from 14,097.50 linear feet (2.7 miles) to 6,093 linear feet (1.1 miles).

Table 5-1 and Table 5-2 have been updated and summarize the project components with respect to development within resource areas cumulatively and within each municipality. Specific impact areas are shown on the NOI Plans.

Table 5-3 has also been updated and documents the trail, turtle habitat presence or absence, and impacts to the area cumulatively and within each municipality. Approximately 0.54 acres of area determined to be turtle habitat will be altered for the proposed trail maintenance.

Note that MassDEP has not technical comments on the proposed project.

TABLE 4-1
SUMMARY OF TRAIL IMPROVEMENTS

Station Range	Trail Names	Length (feet)	Proposed Trail Base	# of Trees to be Removed
Segment 1 – Town of Sudbury				
98+20 - 103+20	Thirty Rod Road	500	6" gravel/crushed stone	0
108+70 - 110+20	Thirty Rod Road	150	6" gravel/crushed stone	0
110+90 - 111+40	Thirty Rod Road	50	6" gravel/crushed stone	0
112+00 - 112+20	Gen John Nixon Trail	20	6" gravel/crushed stone	0
113+10 - 113+50	Gen John Nixon Trail	40	6" gravel/crushed stone	0
114+05 - 114+70	Gen John Nixon Trail	65	6" gravel/crushed stone	0
0+85 - 2+35	Gen John Nixon Trail	150	6" gravel/crushed stone	0
120+60 - 124+20	White Ridge Trail	360	6" gravel/crushed stone	3
124+45 - 125+00	White Ridge Trail	55	6" gravel/crushed stone	0
126+00 - 126+50	White Ridge Trail	50	6" gravel/crushed stone	0
Subtotal Segment 1		1,440	---	3
Segment 2 – City of Framingham				
127+80 - 128+80	White Ridge Trail	100	6" gravel/crushed stone	0
131+20 - 131+60	Jethro Trail	40	6" gravel/crushed stone	0
133+55 - 133+70	Jethro Trail	15	6" gravel/crushed stone	0
135+50 - 135+90	Jethro Trail	40	6" gravel/crushed stone	0
140+90 - 141+30	Jethro Trail	40	6" gravel/crushed stone	0
142+90 - 145+50	Jethro Trail	260	6" gravel/crushed stone	0
147+60 - 147+90	Jethro Trail	30	6" gravel/crushed stone	0
148+40 - 149+00	Jethro Trail	60	6" gravel/crushed stone	0
153+20 - 155+30	Jethro Trail	210	6" gravel/crushed stone	0
162+20 - 163+00	Ellis Land Trail	80	6" gravel/crushed stone	0
164+00 - 166+50	Ellis Land Trail	250	6" gravel/crushed stone	0
169+00 - 171+90	Ellis Land Trail	290	6" gravel/crushed stone	0
Subtotal Segment 2		1,415	---	0
Segment 3 – Town of Sudbury & City of Framingham				
400+17 - 404+57	Monson Trail	460	6" gravel/crushed stone	0
405+60 - 406+25	Monson Trail	65	6" gravel/crushed stone	0
408+70 - 412+50	Monson Trail	380	6" gravel/crushed stone	0
414+65 - 414+00	Monson Trail	35	6" gravel/crushed stone	0
416+13 - 416+38	Monson Trail	25	6" gravel/crushed stone	0
417+40 - 419+05	Monson Trail	165	6" gravel/crushed stone	0
Subtotal Segment 3		1,130	---	0

TABLE 4-1
SUMMARY OF TRAIL IMPROVEMENTS

Station Range	Trail Names	Length (feet)	Proposed Trail Base	# of Trees to be Removed
Segment 4 – Town of Sudbury				
1+38 - 1+46	Legion Trail	8	6" gravel/crushed stone w/ filter fabric base	2
4+86 - 4+98	Legion Trail	12	6" gravel/crushed stone w/ filter fabric base	0
7+53 - 7+78	Nipmuc Trail	25	6" gravel/crushed stone	0
8+68 - 9+33	Muskie Trail	65	6" gravel/crushed stone	0
9+91 - 10+39	Muskie Trail	48	6" gravel/crushed stone	0
Subtotal Segment 4		158	---	0
Segment 5 – Town of Sudbury				
200+50 - 201+00	Gen John Nixon Trail	50	6" gravel/crushed stone	0
202+40 - 203+60	Gen John Nixon Trail	120	6" gravel/crushed stone	0
204+50 - 205+40	Gen John Nixon Trail	90	6" gravel/crushed stone	0
207+00 - 207+40	Gen John Nixon Trail	40	6" gravel/crushed stone	0
207+90 - 208+20	Gen John Nixon Trail	30	6" gravel/crushed stone	0
210+50 - 211+50	Gen John Nixon Trail	100	6" gravel/crushed stone	0
214+00 - 217+70	Gen John Nixon Trail	370	6" gravel/crushed stone	0
220+30 - 223+80	Gen John Nixon Trail	350	6" gravel/crushed stone	0
226+50 - 227+70	Gen John Nixon Trail	120	6" gravel/crushed stone	0
300+00 - 310+10	Ghost Trail	110	6" gravel/crushed stone	0
301+60 - 304+00	Ghost Trail	240	6" gravel/crushed stone	0
310+10 - 311+50	Ghost Trail	140	6" gravel/crushed stone	0
315+25 - 315+75	Nipmuc Trail	50	6" gravel/crushed stone	0
318+25 - 319+65	Nipmuc Trail	140	6" gravel/crushed stone	0
Subtotal Segment 5		1,950	---	0
PROJECT TOTAL		6,093		3

TABLE 5-1
SUMMARY OF PROPOSED BANK IMPACTS*

Resource Area	Temporary Impacts	Permanent Impacts	Total Impacts	Proposed Mitigation
Inland Bank				
Sudbury	28 LF	10 LF	38 LF	28± LF Restored in Place
Framingham	161 LF	0 LF	161 LF	161 LF Restored in Place
Total	189 LF	10 LF	199 LF	

*Impact calculations provided by Howard Stein Hudson.

TABLE 5-2
SUMMARY OF PROPOSED WETLAND IMPACTS*

Resource Area	Temporary Impacts	Permanent Impacts	Total Impacts	Proposed Mitigation
Bordering Vegetated Wetland				
Sudbury	875 SF	253 SF	1,128 SF	506 SF Replication Area in Sudbury (2:1); 875 SF Restored In Place
Framingham	229 SF	0 SF	229 SF	Not Applicable
Total	1,104 SF	253 SF	1,357 SF	

*Impact calculations provided by Howard Stein Hudson.

TABLE 5-3
IMPACT ANALYSIS

Phase	Trail	Proposed Impact Area (SF)					
		Sudbury		Framingham		Total	
		Turtle Habitat	Non-Turtle Habitat	Turtle Habitat	Non-Turtle Habitat	Non-Turtle Habitat	Turtle Habitat
I	Monson	0	4,819	1,248	4,538	9,357	1248
	Gen John Nixon	11,051	13,088	0	0	13,088	11,051
	Ellis Land	0	0	1,418	5,813	5813	1418
	White Ridge	2,387	3,126	409	1,400	4,526	2,796
II	Sisson	2,673	1,850	0	0	1,850	2,673
	Thirty Rod Road	1,244	7,928	0	0	7,928	1,244
	Jethro	0	0	2,730	5,274	5,274	2,730
III	Ghost	0	2,604	0	0	2,604	0
	Nipmuc	316	2,341	0	0	2,341	316
	Big/Little Sachem Bridges	56	229	0	0	229	56
IV	Belden Bridge	36	125	0	0	125	36
Subtotal (SF)		17,763	36,110	5,805	17,025	53,135	23,568
Subtotal (Acres)		0.41	0.83	0.13	0.39	1.22	0.54
TOTAL		53,873 (1.24 Acres)		22,830 (0.52 Acres)		76,703 (1.76 Acres)	



500A Washington Street, Quincy, MA 02169

If you have any questions, please do not hesitate to contact me at 617.405.4140 or cml@lucasenviro.com. Thank you for your consideration in this matter.

Sincerely,
LUCAS ENVIRONMENTAL, LLC

A handwritten signature in blue ink that reads "Christopher M. Lucas".

Christopher M. Lucas, PWS, CWS, RPSS
Environmental Consultant/Wetland & Soil Scientist

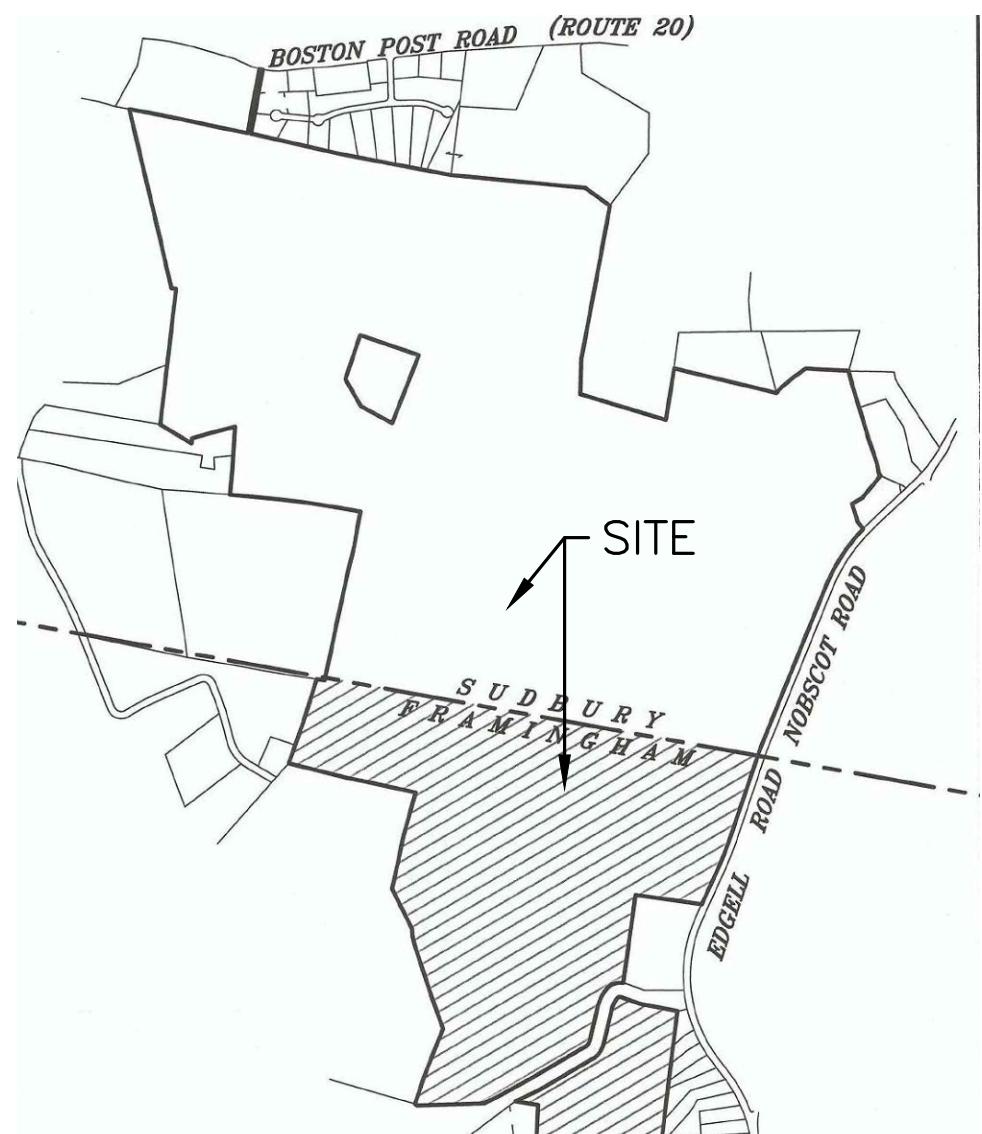
cc: MassDEP Division of Wetlands & Waterways, Northeast Regional Office
Massachusetts Natural Heritage & Endangered Species Program (electronic copy)
Howard Stein Hudson (electronic copy)
Property Owner &Applicant – Mayflower Council, Boy Scouts of America (electronic copy)



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

SITE PLAN FOR NOBSCOT SCOUT RESERVATION TRAIL PROJECT SUDBURY AND FRAMINGHAM, MA.

- GENERAL NOTES:**
- EXISTING PROPERTY LINE AND UTILITY INFORMATION SHOWN IS BASED ON AN EXISTING SURVEY CONDUCTED BY FELDMAN LAND SURVEYORS REVISED THROUGH 04-13-2022.
 - WETLAND DELINEATION COMPLETED BY LUCAS ENVIRONMENTAL, LLC UPDATED THROUGH MARCH 17, 2022.
 - "WF" SERIES REFER TO BORDERING VEGETATED WETLANDS, UNLESS OTHERWISE NOTED OR LABELED.
 - "BF" SERIES REFER TO INLAND BANK, UNLESS OTHERWISE NOTED OR LABELED.
 - THE 100-FOOT BUFFER ZONE IN THE TOWN OF SUDBURY IS DESIGNATED AS THE ADJACENT UPLAND RESOURCE AREA.
 - WF-J CONTAINS A CERTIFIED VERNAL POOL.
 - THE LIMIT OF WORK AREA IS LOCATED WITHIN ESTIMATED HABITAT FOR RARE WILDLIFE (EH 622) AND PRIORITY HABITAT FOR RARE SPECIES (PH 669).
 - THE ACCURACY AND COMPLETENESS OF THE UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY 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 1-888-344-7233.
 - THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO THE ENGINEER.
 - WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE APPROPRIATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION.
 - ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, PRIOR TO EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORATION OR REPAVING.
 - THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITIES EXCEPT THOSE NOTED TO BE ABANDONED, REMOVED AND DISPOSED.
 - THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REQUIREMENTS AT HIS/HER OWN EXPENSE, OUTSIDE OF THE PROJECT LIMITS.
 - THE SILT FENCE WILL BE INSTALLED AS CONSTRUCTION PROGRESSES IN AREAS SHOWN ON THE PLANS. IT WILL NOT BE INSTALLED SIMULTANEOUSLY THROUGHOUT THE SITE.
 - THE SILT FENCE IS TO BE USED AS THE TURTLE PROTECTION BARRIER IN ADDITION TO USE AS AN EROSION CONTROL DEVICE.
 - CONTRACTOR SHALL INSTALL A PLYWOOD CONSTRUCTION ACCESS BARRIER FOR TURTLE PROTECTION. THE BARRIER SHALL BE REMOVED AND REPLACED DAILY OR WHEN ACCESS IS NECESSARY.
 - 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	PARTIAL EXISTING CONDITIONS PLAN
SHEET 3	KEY PLAN
SHEET 4-21	CONSTRUCTION PLANS
SHEET 22	DETAIL SHEET

OWNER

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

ASSESSORS MAP L BLOCK 05 LOT 0001
ASSESSORS MAP L BLOCK 05 LOT 0003
ASSESSORS MAP L 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.

**NOBSCOT SCOUT
RESERVATION TRAIL
PROJECT
FRAMINGHAM AND SUDBURY, MA
WORCESTER COUNTY**

REVISIONS:			
NO	BY	DATE	DESCRIPTION

**NOBSCOT SCOUT
RESERVATION TRAIL
PROJECT
1 NOBSCOT ROAD
SUDBURY MA 01776**

**NOTICE OF INTENT
PERMIT SET**

**COVER
SHEET**



DATE:	10/24/2022
PROJECT NUMBER:	16033.02
DESIGNED BY:	JBC
DRAWN BY:	JBC
CHECKED BY:	REL

1
SHEET 1 OF 22

Mehan



I CERTIFY THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY.



10/21/22
DATE

TIMOTHY R. AGURKIS, PLS (MA# 52782)
TRA@FELDMANGEOT.COM

PARTIAL EXISTING CONDITIONS PLAN
NOBSCOT RESERVATION

**SUDBURY &
FRAMINGHAM, MASS.**

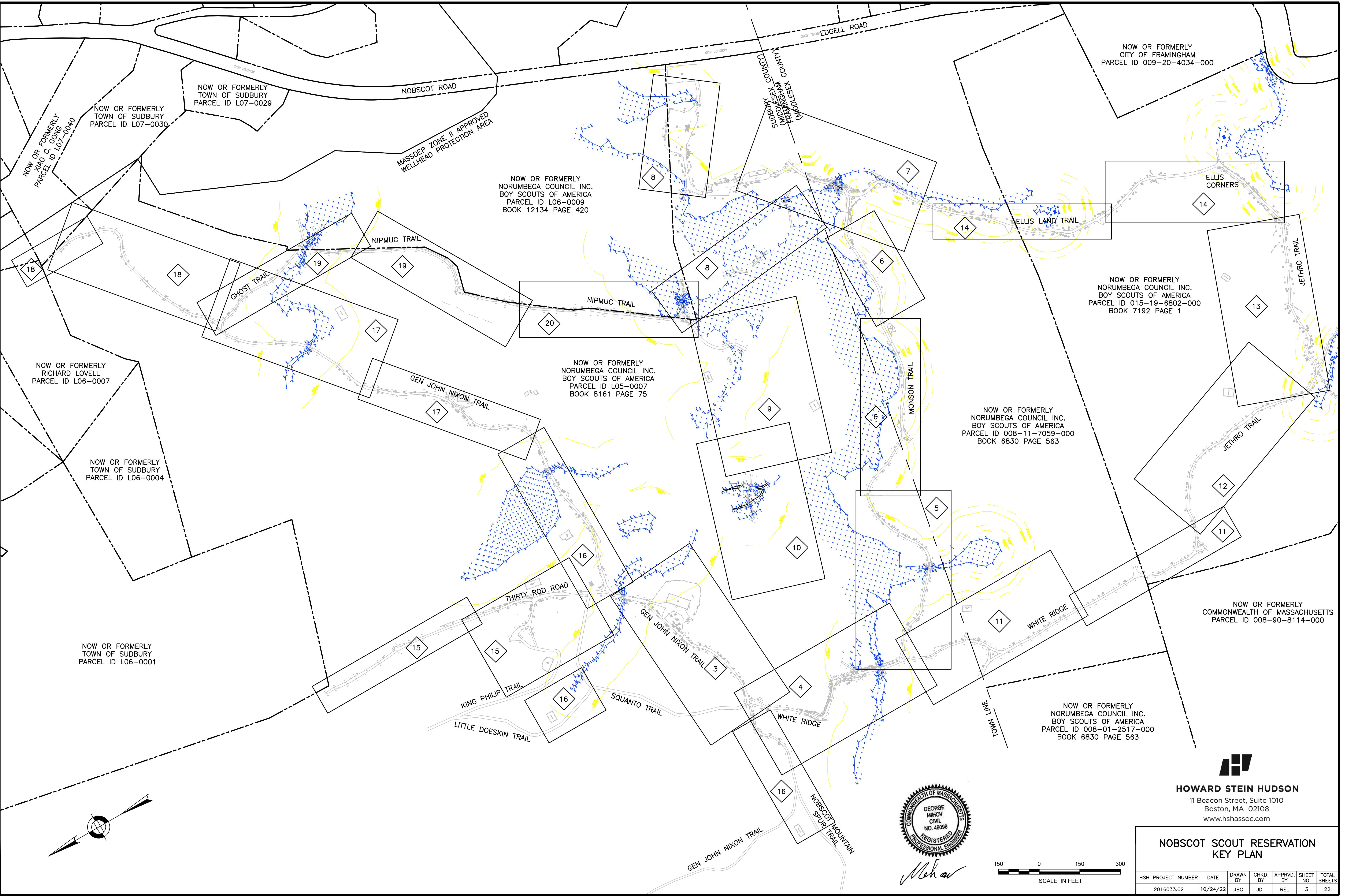
APRIL 5, 2022
PHONE: (617)357-9740
www.feldmangeospatial.com

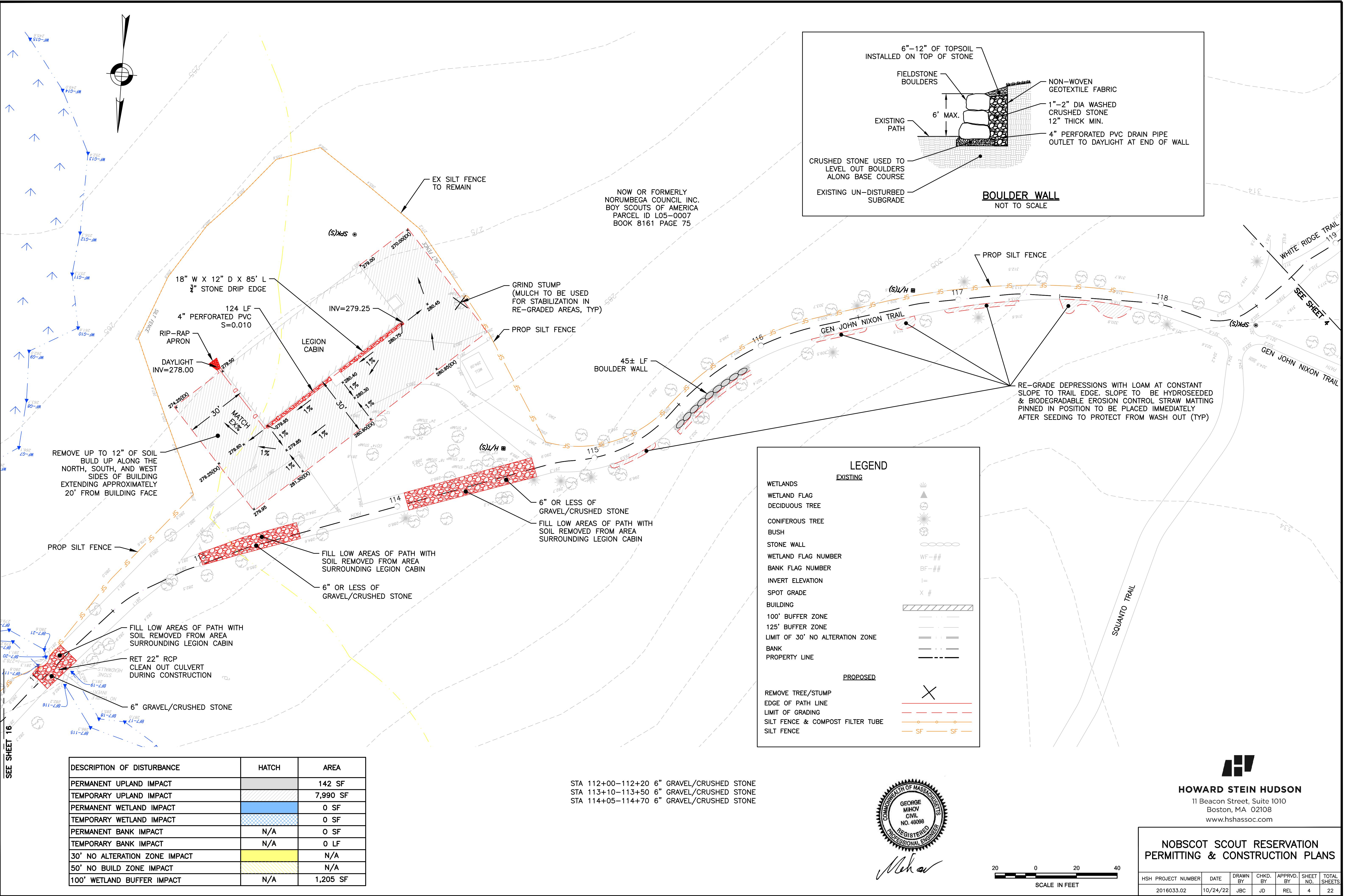
FELDMAN
GEOSPATIAL

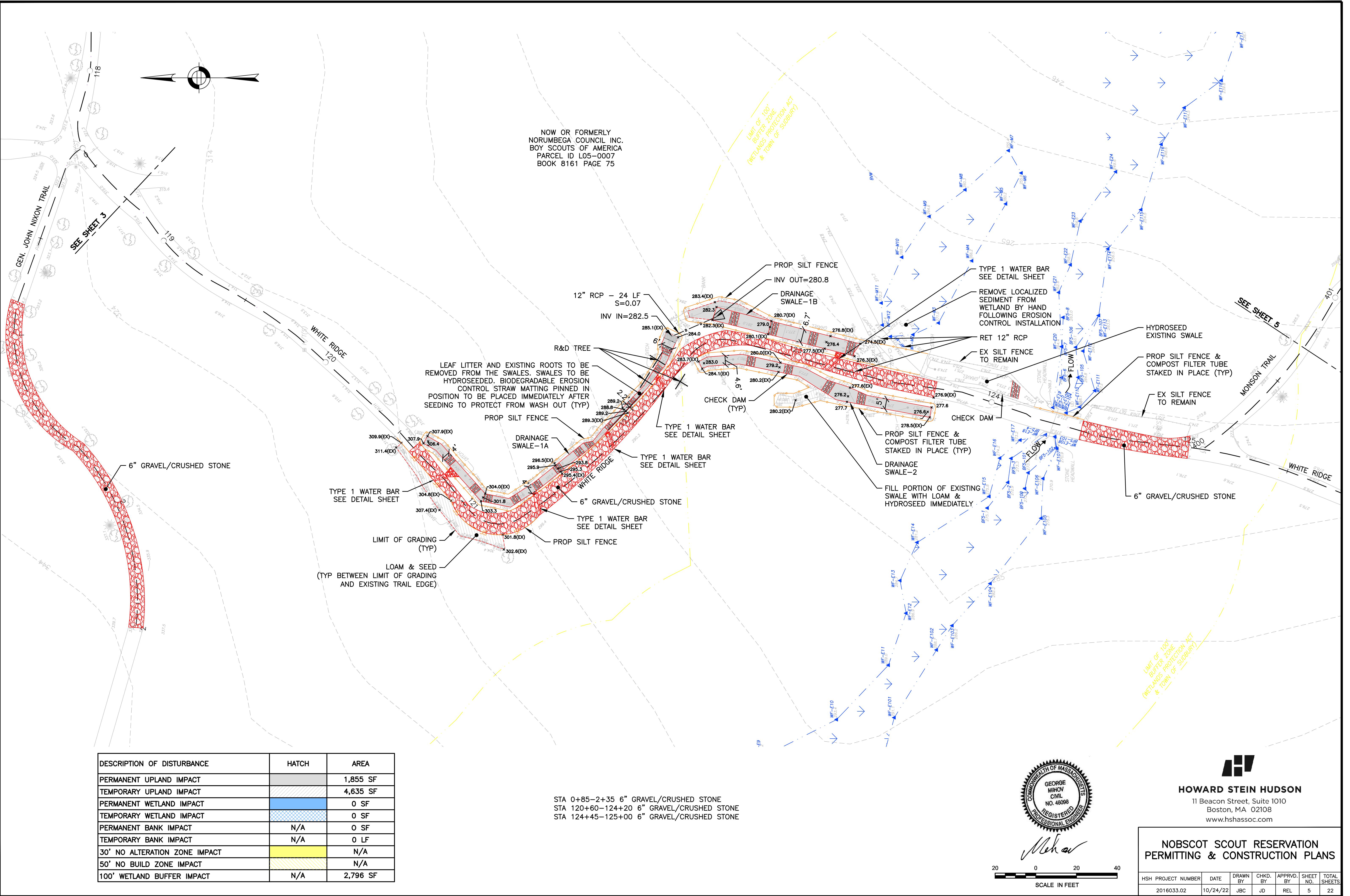
200 0 100 200 400 800

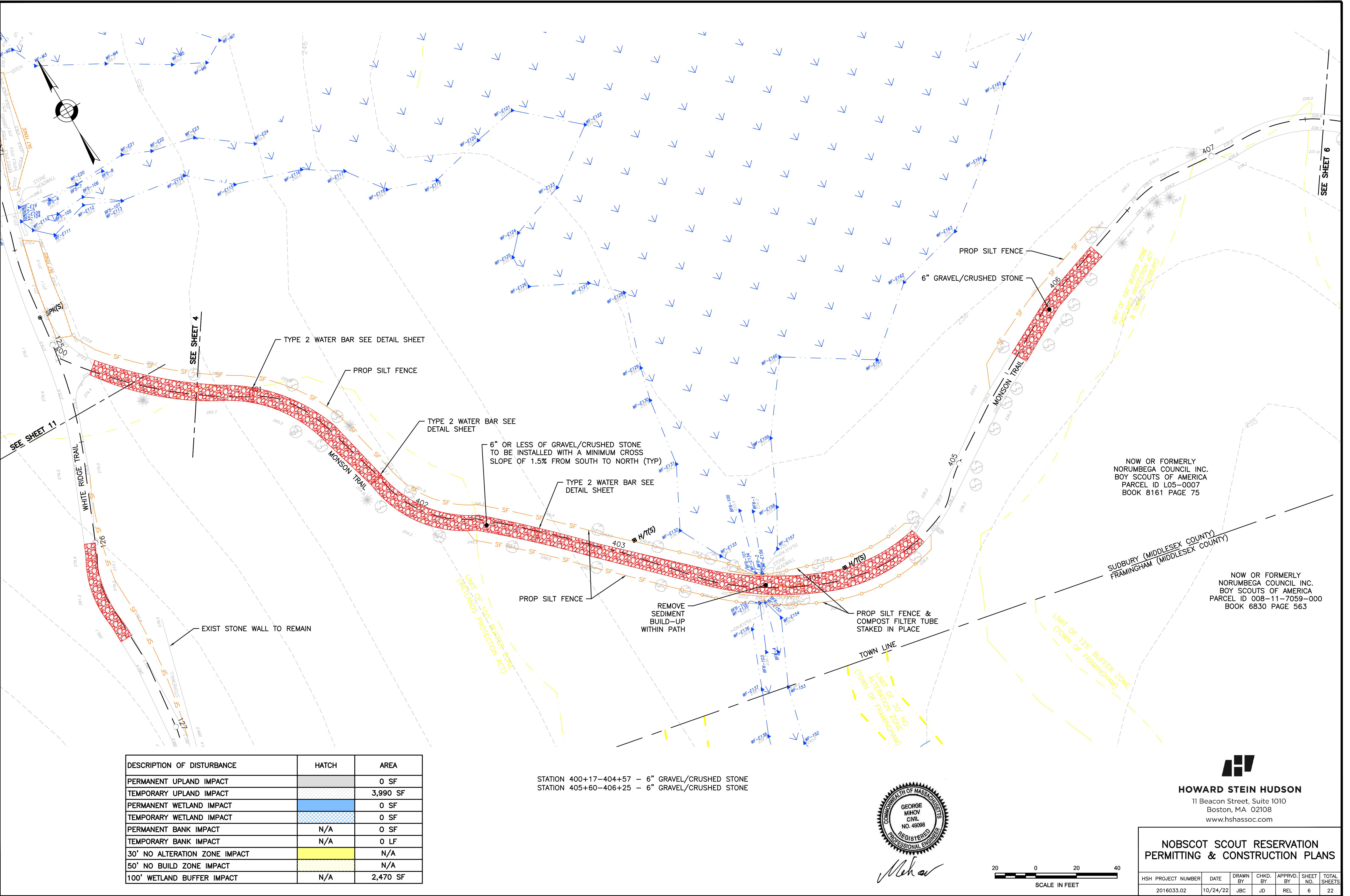
SCALE: 1'=200'

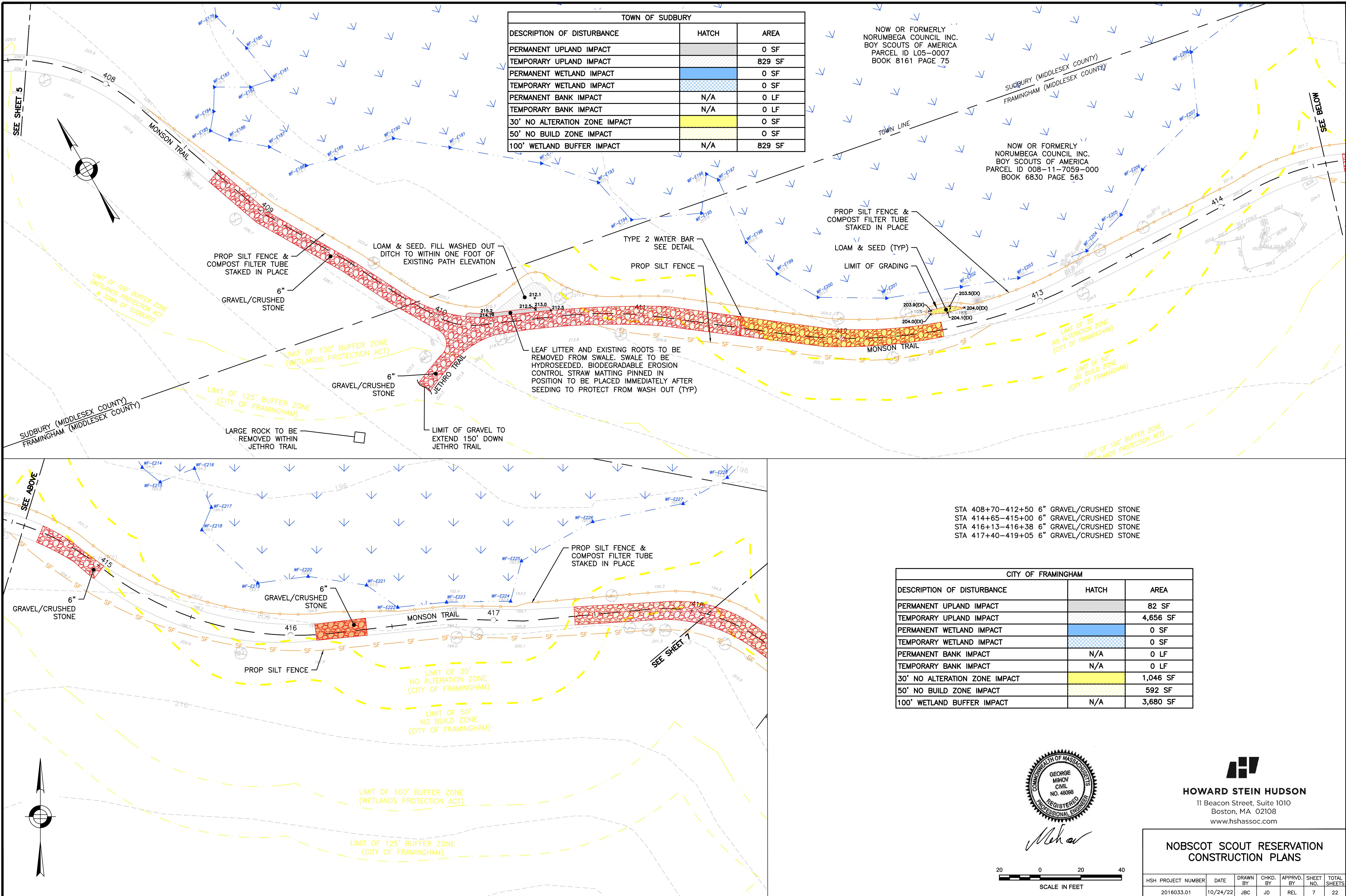
RESEARCH	FIELD CHIEF	PROJ MGR	APPROVED	SHEET NO. OF
CALC	CADD	FIELD CHECKED	ORD FILE	JOB NO. 2200117
FILENAME: S:\PROJECTS\2022\2200117\DWG\2200117-EC.dwg				

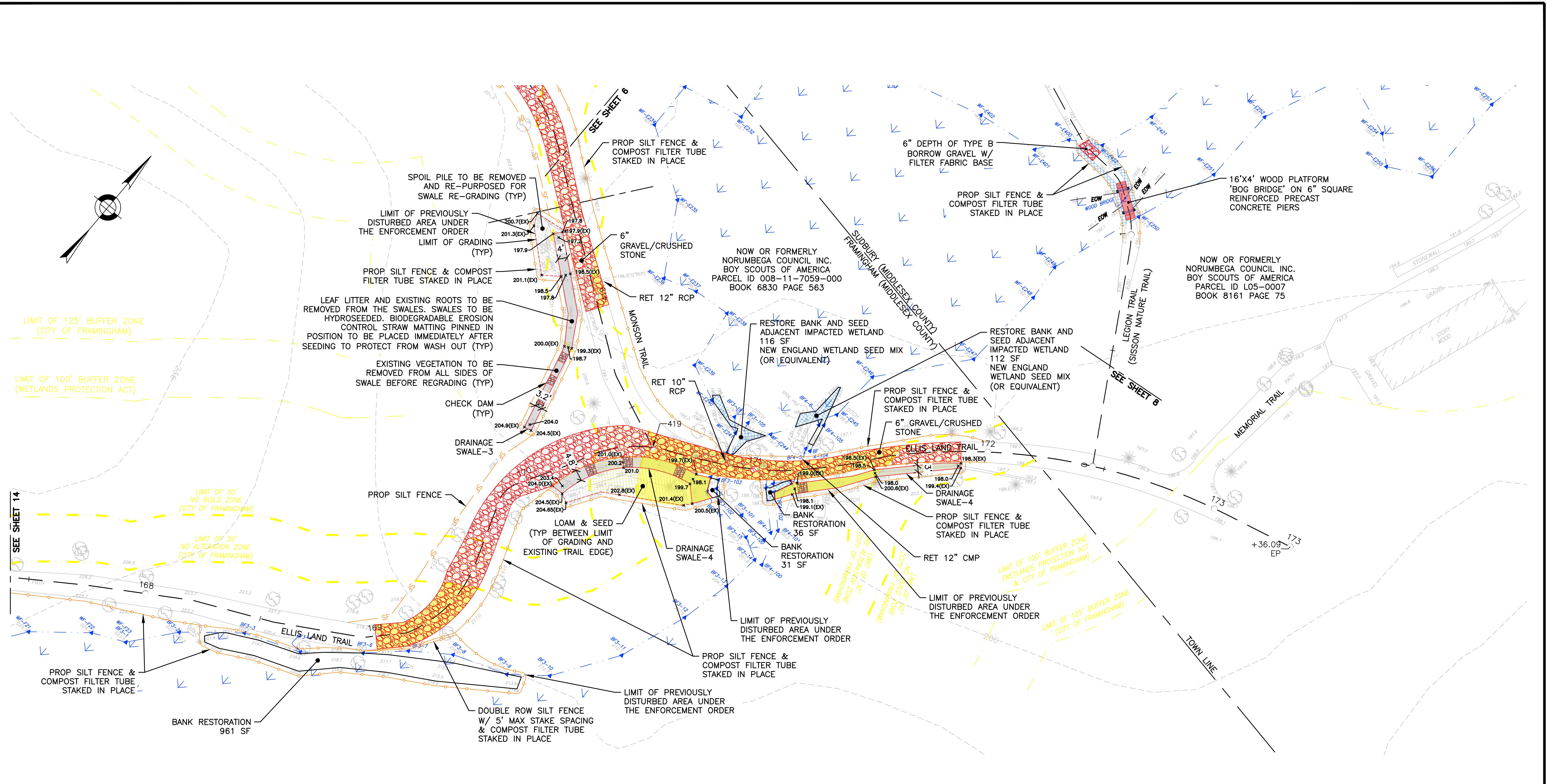












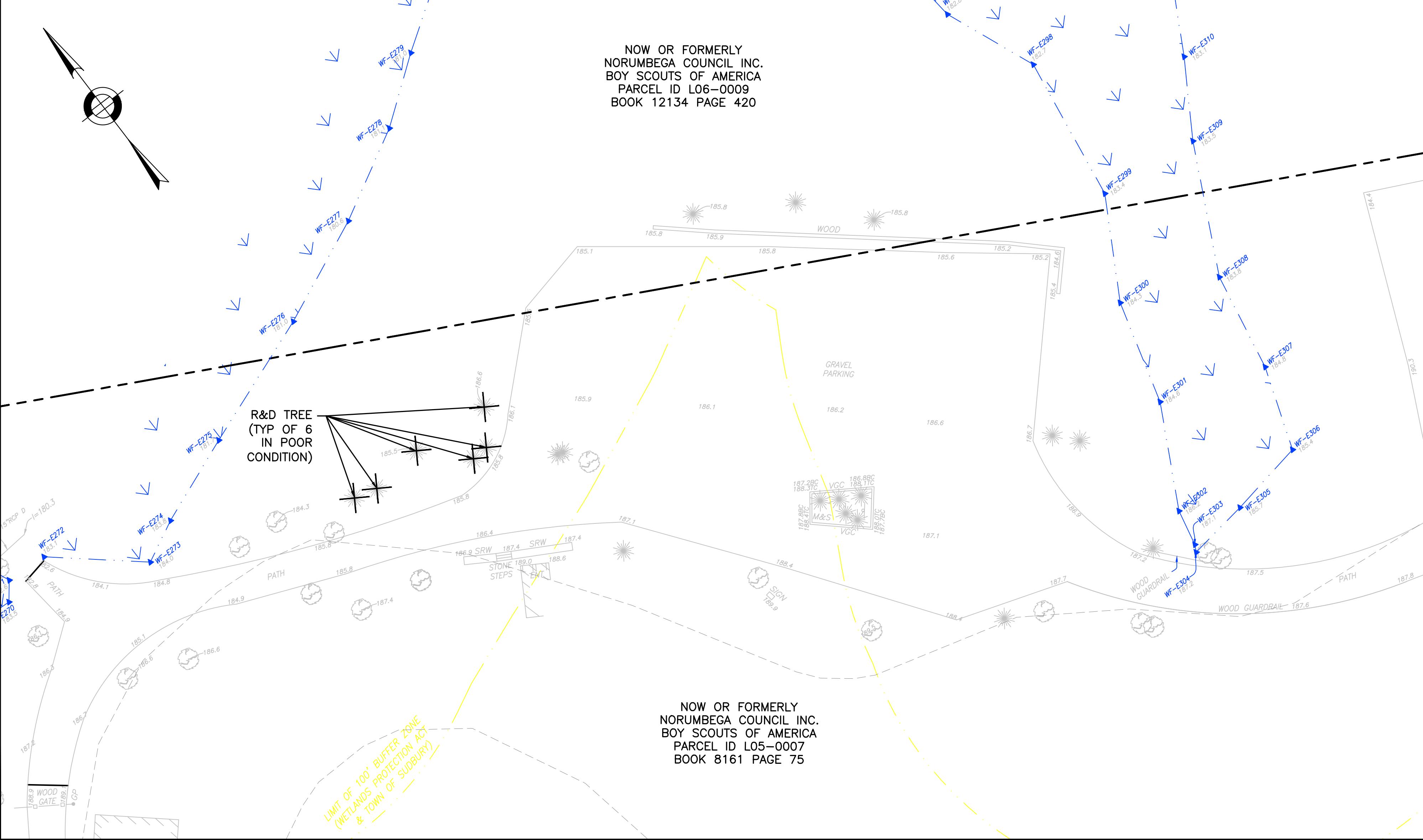
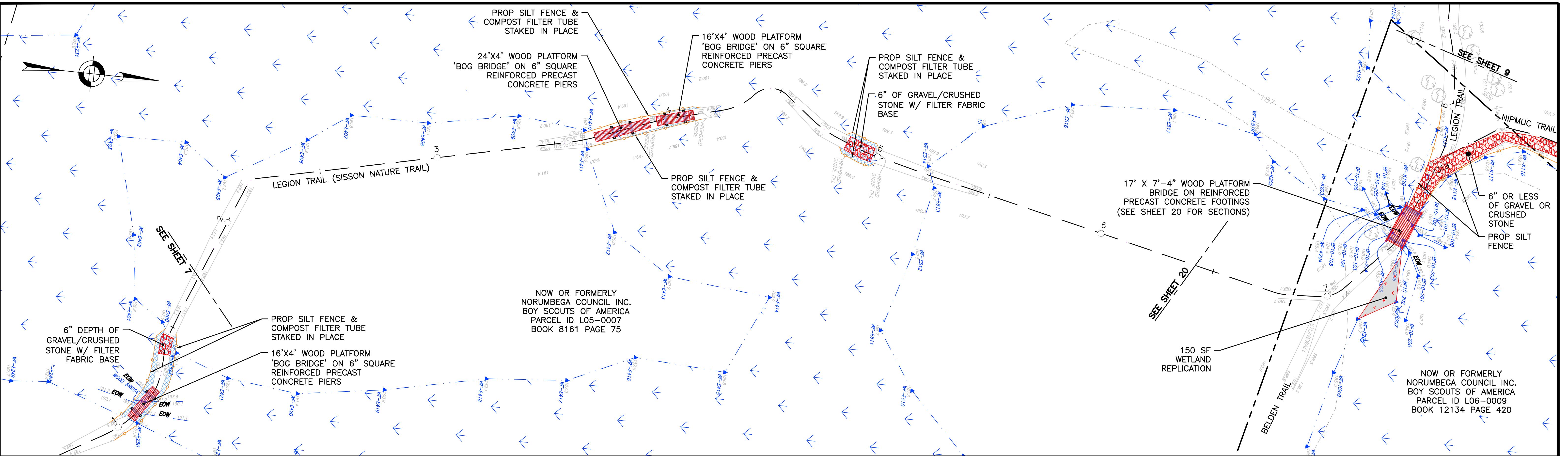
CITY OF FRAMINGHAM		
DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		958 SF
TEMPORARY UPLAND IMPACT		5,247 SF
PERMANENT WETLAND IMPACT	■	0 SF
TEMPORARY WETLAND IMPACT	■■■	229 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	161 LF
30' NO ALTERATION ZONE IMPACT	■■■	2,151 SF
50' NO BUILD ZONE IMPACT		4,715 SF
100' WETLAND BUFFER IMPACT	N/A	6,205 SF

TOWN OF SUDBURY		
DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		0 SF
TEMPORARY UPLAND IMPACT	■■■	2 SF
PERMANENT WETLAND IMPACT	■	11 SF
TEMPORARY WETLAND IMPACT	■■■	201 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	0 LF
30' NO ALTERATION ZONE IMPACT	■■■	0 SF
50' NO BUILD ZONE IMPACT		0 SF
100' WETLAND BUFFER IMPACT	N/A	2 SF

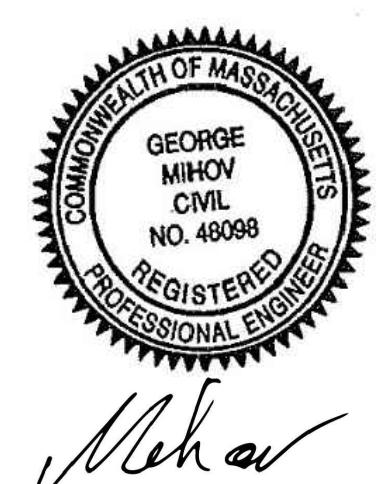


HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	8	22

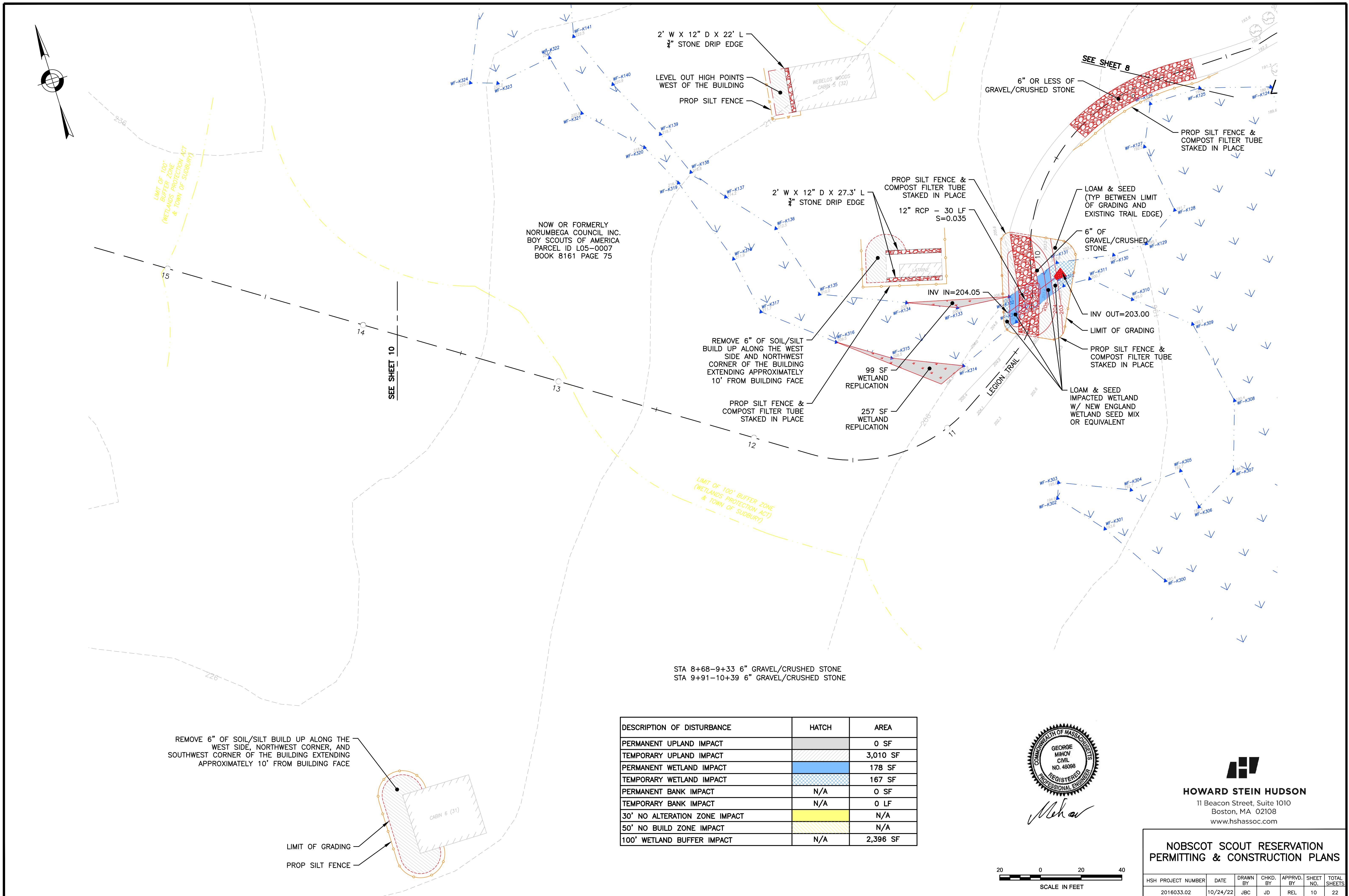


DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		11 SF
TEMPORARY UPLAND IMPACT		0 SF
PERMANENT WETLAND IMPACT		47 SF
TEMPORARY WETLAND IMPACT		348 SF
PERMANENT BANK IMPACT	N/A	0 SF
TEMPORARY BANK IMPACT	N/A	0 LF
30' NO ALTERATION ZONE IMPACT		N/A
50' NO BUILD ZONE IMPACT		N/A
100' WETLAND BUFFER IMPACT	N/A	11 SF



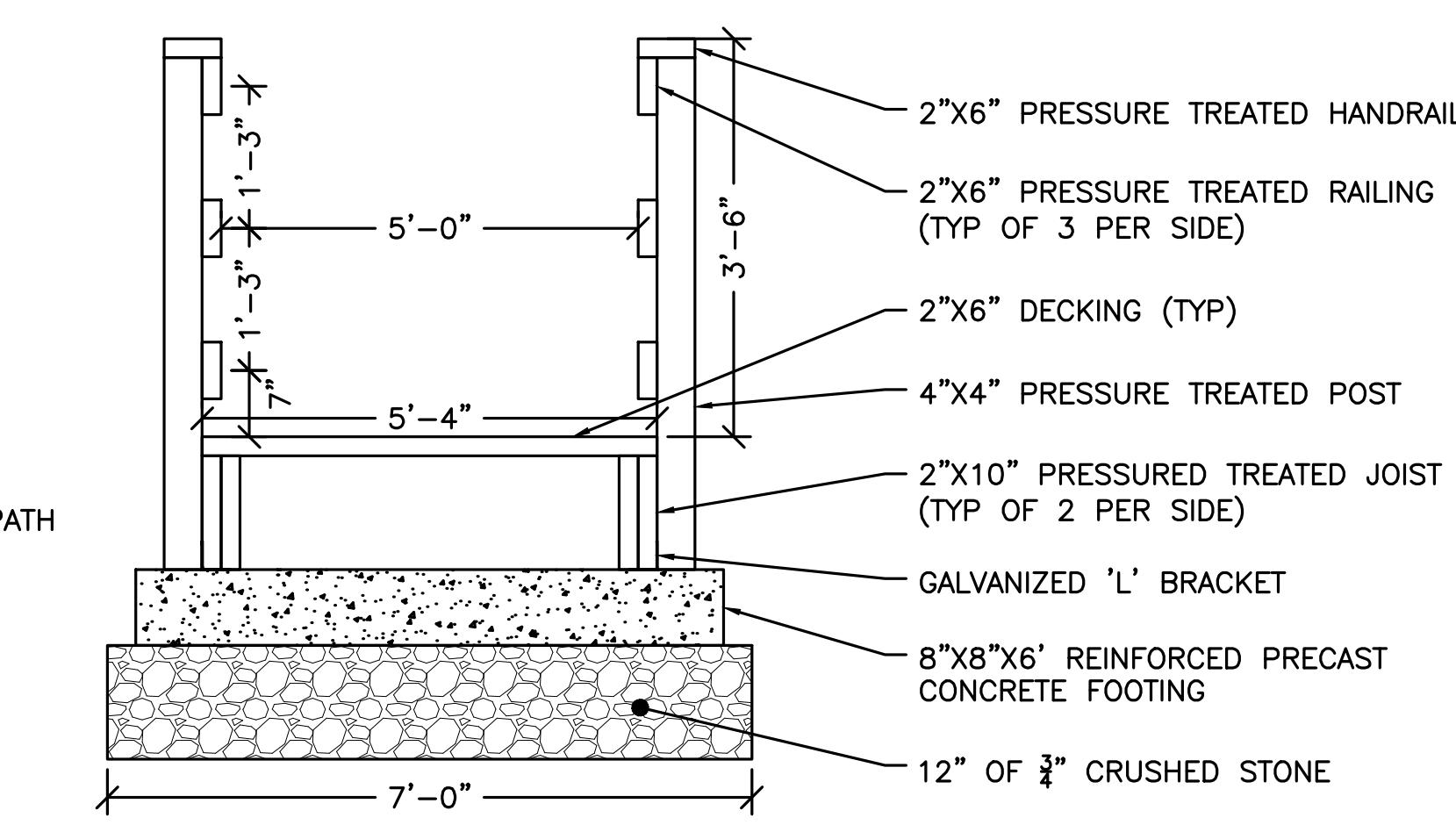
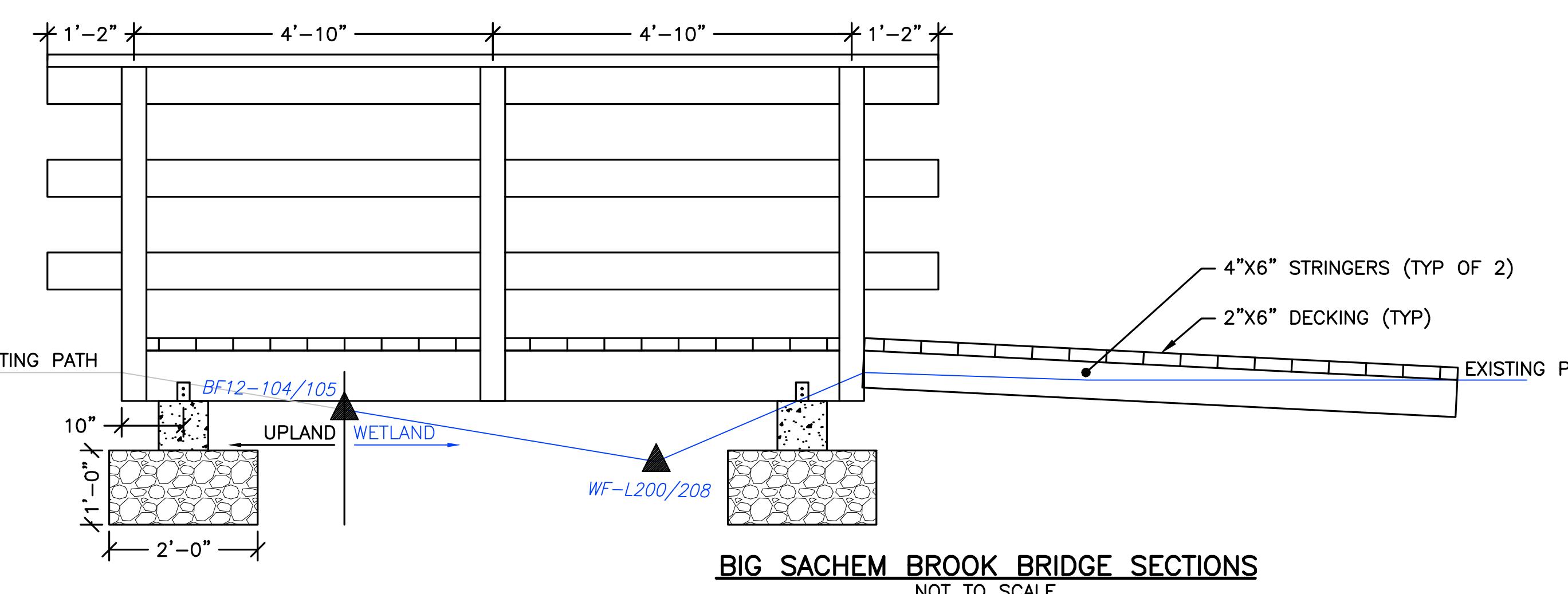
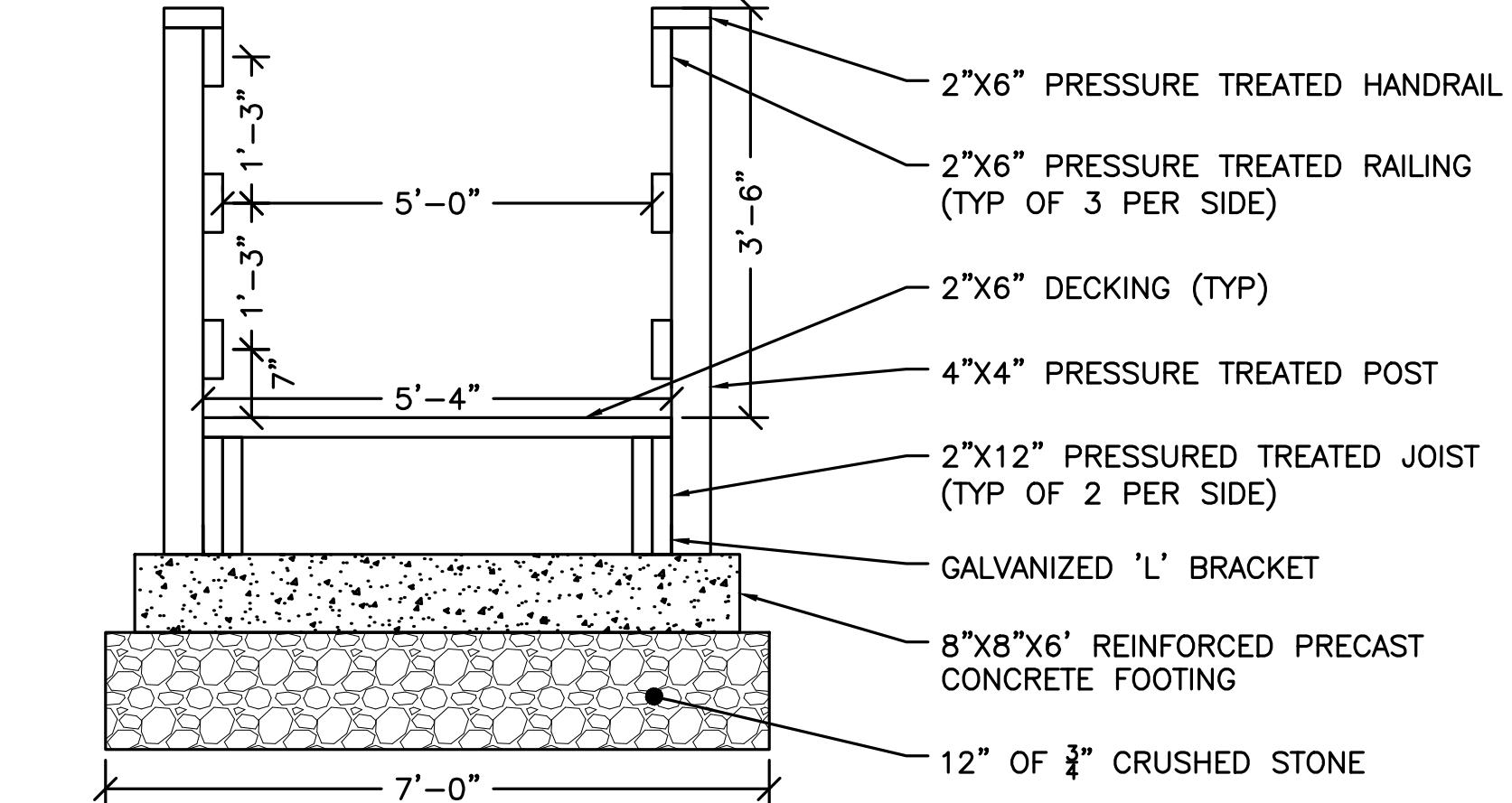
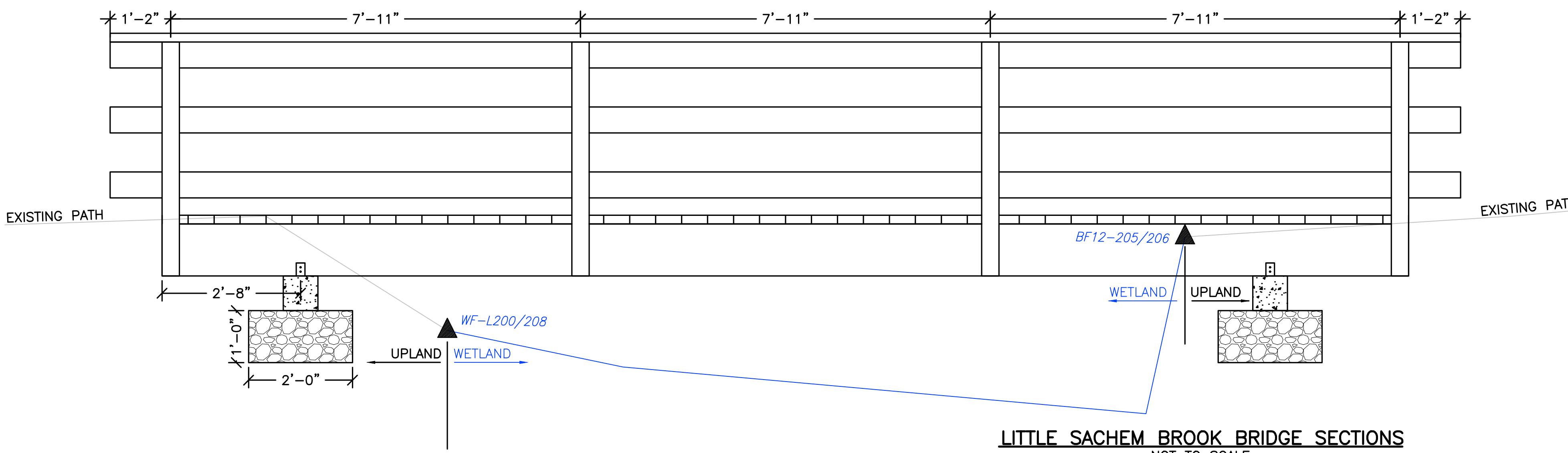
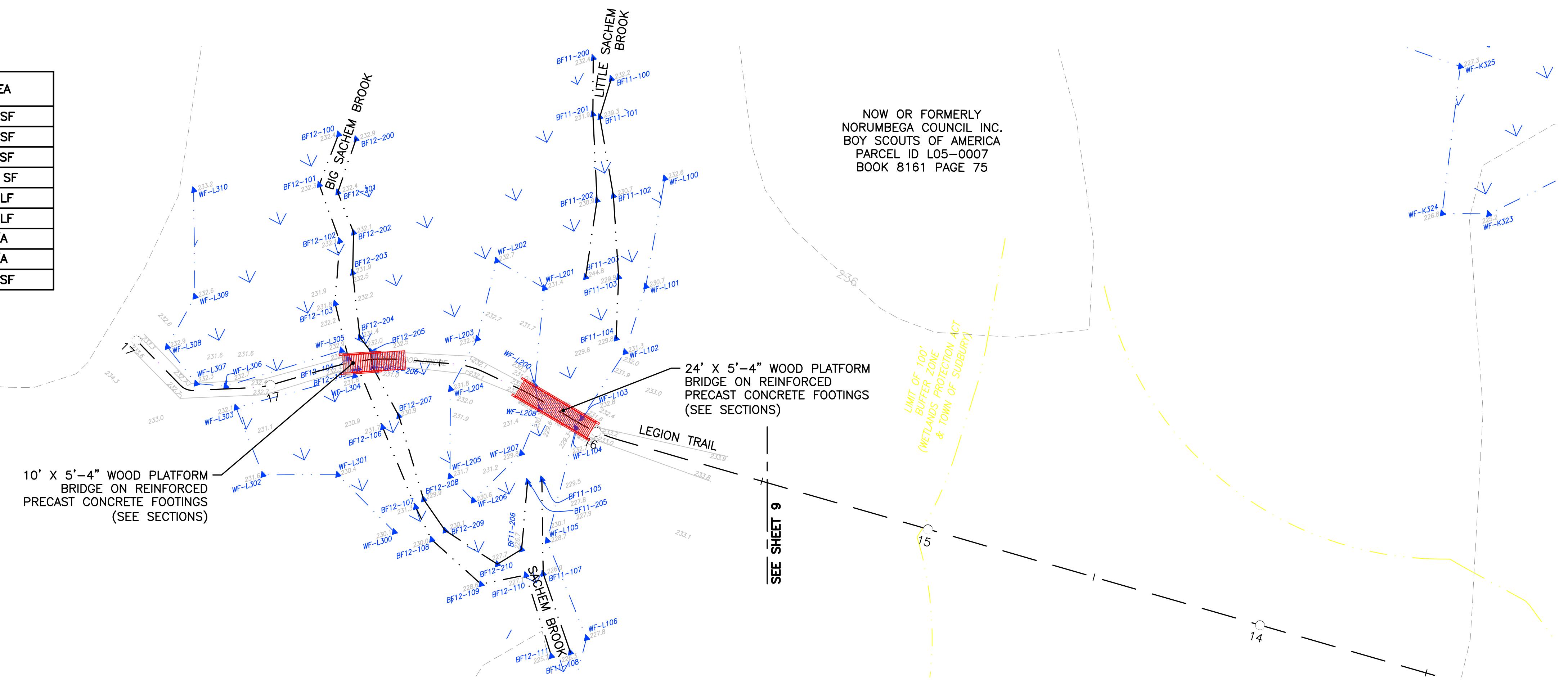
HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	9	22



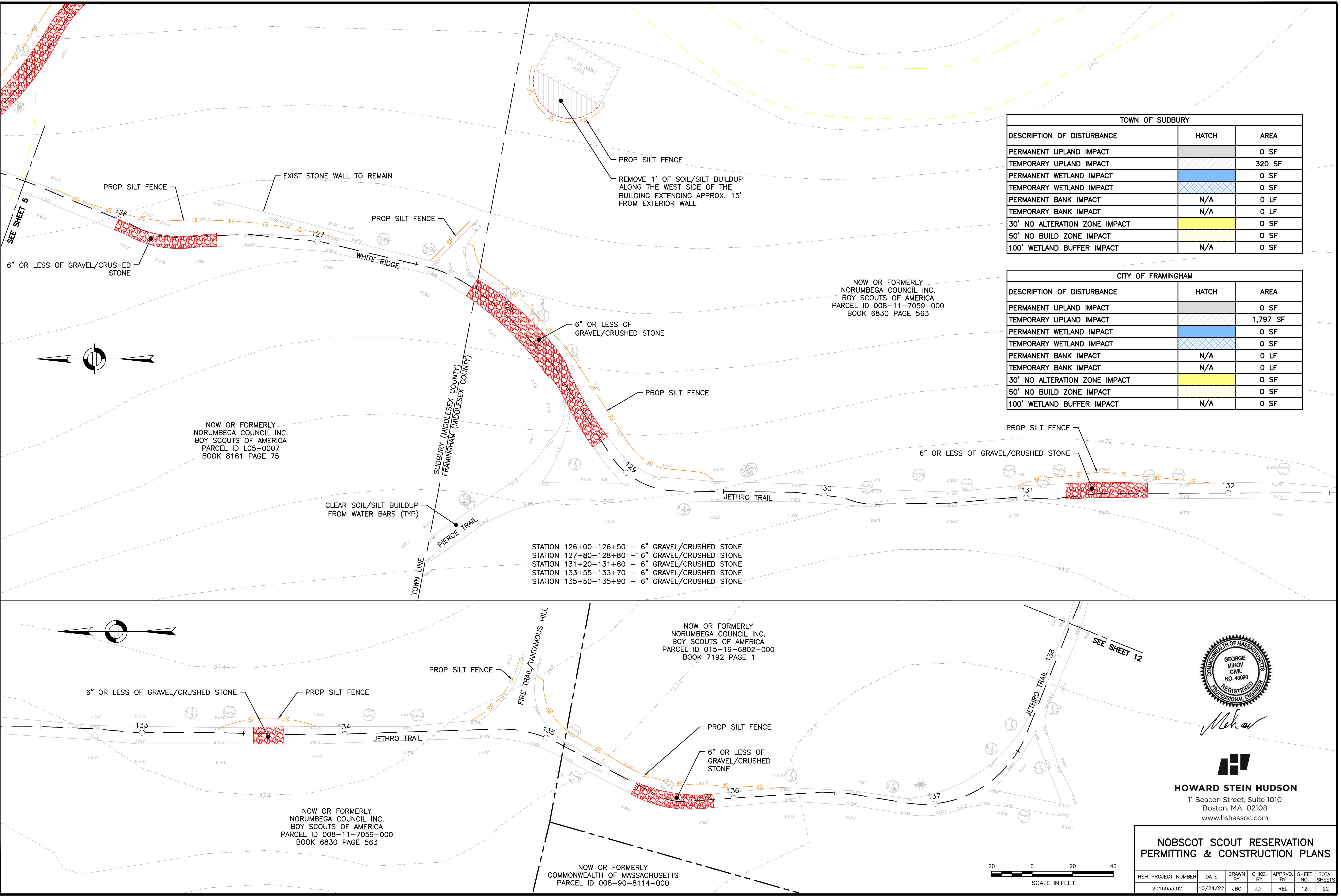
10/24/2022 L:\16033\CURRENT\CUTSHEETS\16033_NOI PLANS.dwg
Joseph Connolly

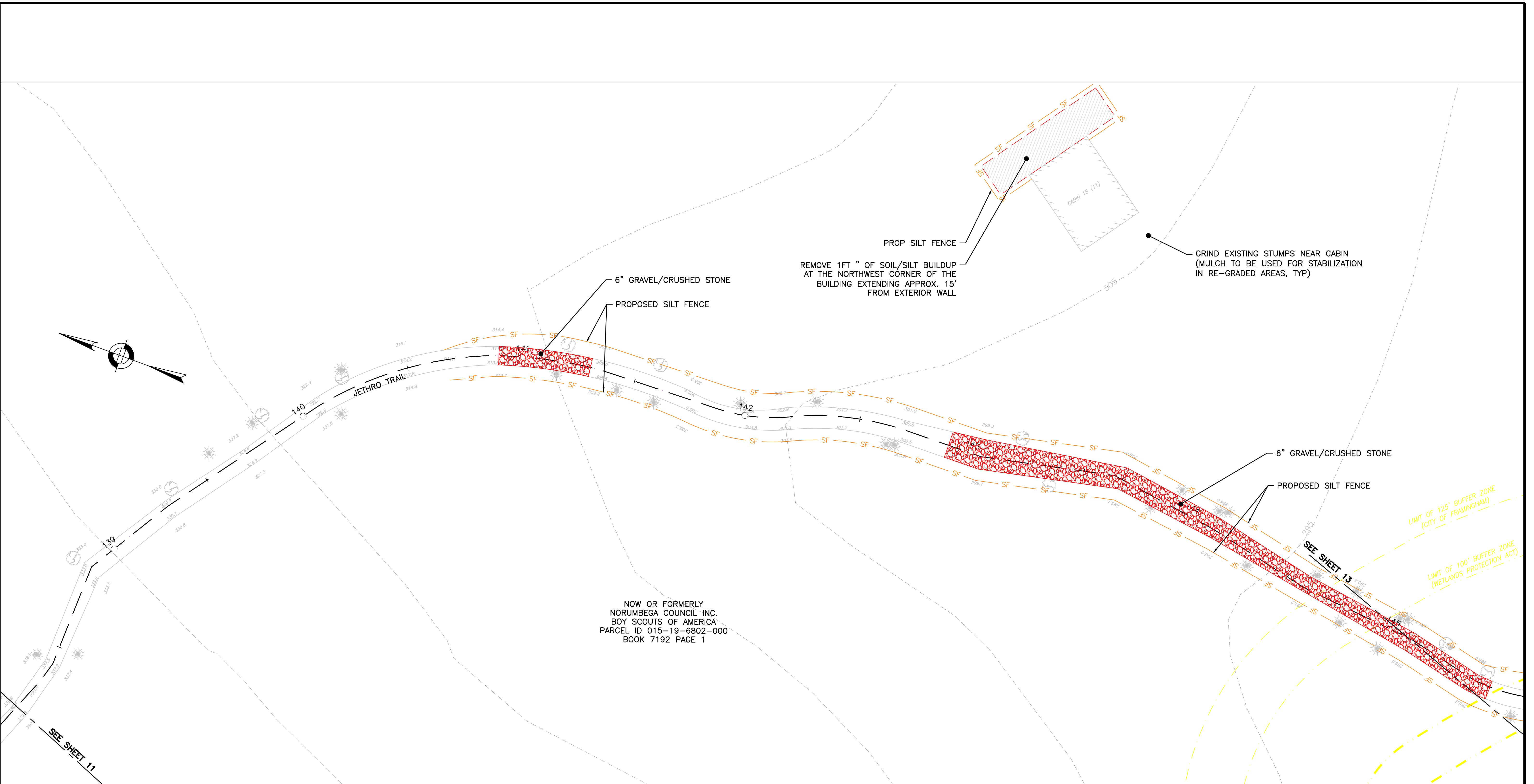
DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		36 SF
TEMPORARY UPLAND IMPACT		32 SF
PERMANENT WETLAND IMPACT	Blue	17 SF
TEMPORARY WETLAND IMPACT	Blue Dotted	125 SF
PERMANENT BANK IMPACT	N/A	10 LF
TEMPORARY BANK IMPACT	N/A	12 LF
30' NO ALTERATION ZONE IMPACT	Yellow	N/A
50' NO BUILD ZONE IMPACT		N/A
100' WETLAND BUFFER IMPACT	N/A	68 SF



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

NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	11	22





DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		0 SF
TEMPORARY UPLAND IMPACT		3,655 SF
PERMANENT WETLAND IMPACT		0 SF
TEMPORARY WETLAND IMPACT		0 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	0 LF
30' NO ALTERATION ZONE IMPACT		0 SF
50' NO BUILD ZONE IMPACT		0 SF
100' WETLAND BUFFER IMPACT	N/A	462 SF

STATION 140+90-141+30 - 6" GRAVEL/CRUSHED STONE
STATION 142+90-145+50 - 6" GRAVEL/CRUSHED STONE

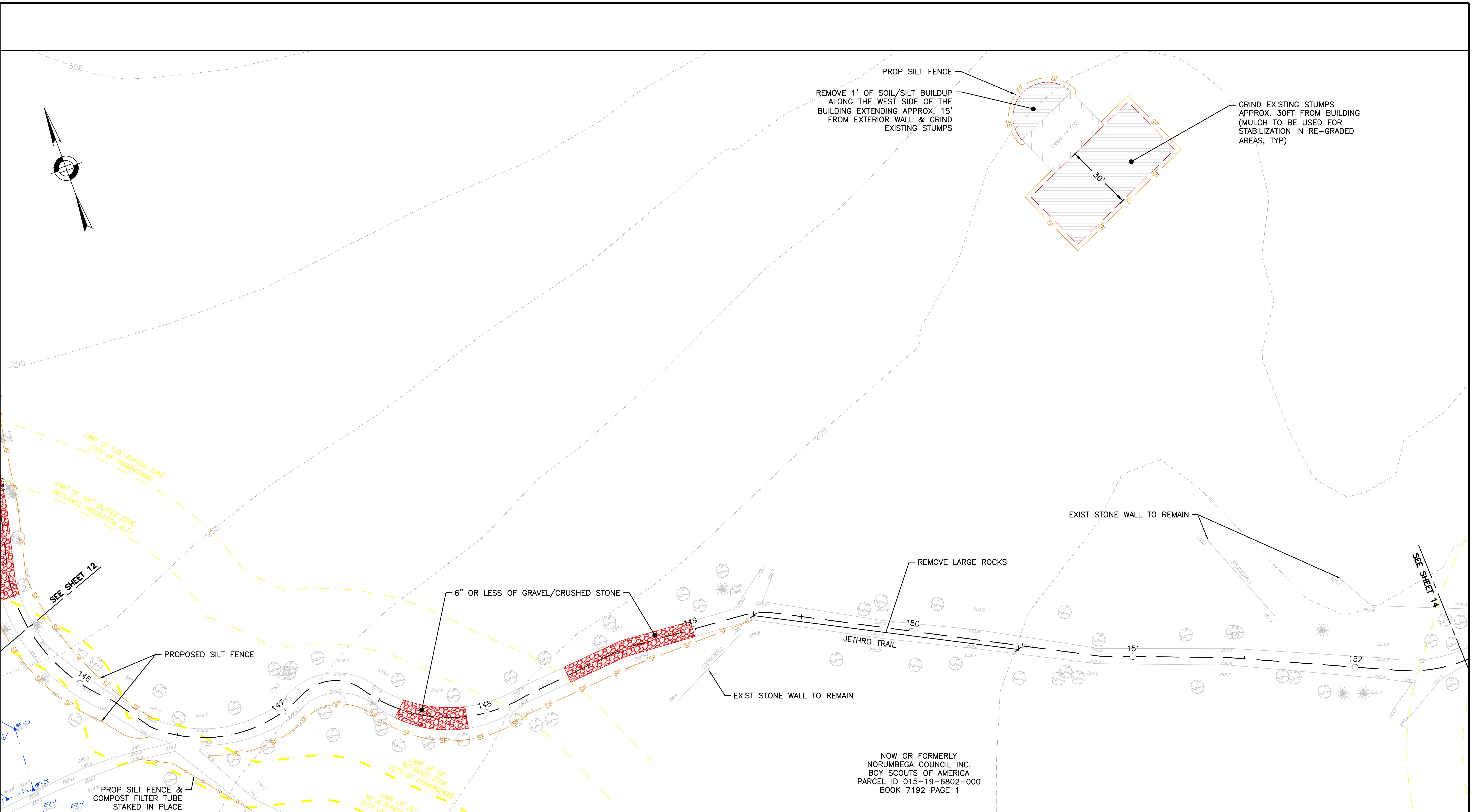


Mihov

20 0 20 40
SCALE IN FEET

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

NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	HEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	13	22



DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		0 SF
TEMPORARY UPLAND IMPACT		2,933 SF
PERMANENT WETLAND IMPACT		0 SF
TEMPORARY WETLAND IMPACT	Diagonal Hatching	0 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	0 LF
30' NO ALTERATION ZONE IMPACT	Yellow Hatching	0 SF
50' NO BUILD ZONE IMPACT		0 SF
100' WETLAND BUFFER IMPACT	N/A	300 SF

STATION 147+60-147+90 - 6" GRAVEL/CRUSHED STONE
 STATION 148+40-149+00 - 6" GRAVEL/CRUSHED STONE
 STATION 149+30-150+50 - REMOVE LARGE ROCKS



George Mihov
Civil
No. 48098
REGISTERED
PROFESSIONAL ENGINEER

10/24/2022 L:\\16033\\CURRENT\\OUT\\SHEETS\\16033_SF.dwg

Joseph Connolly

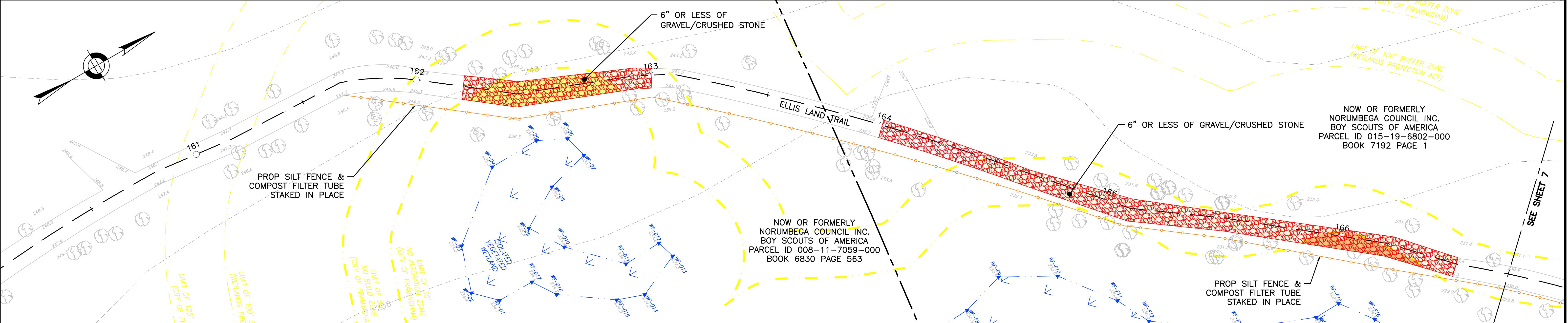
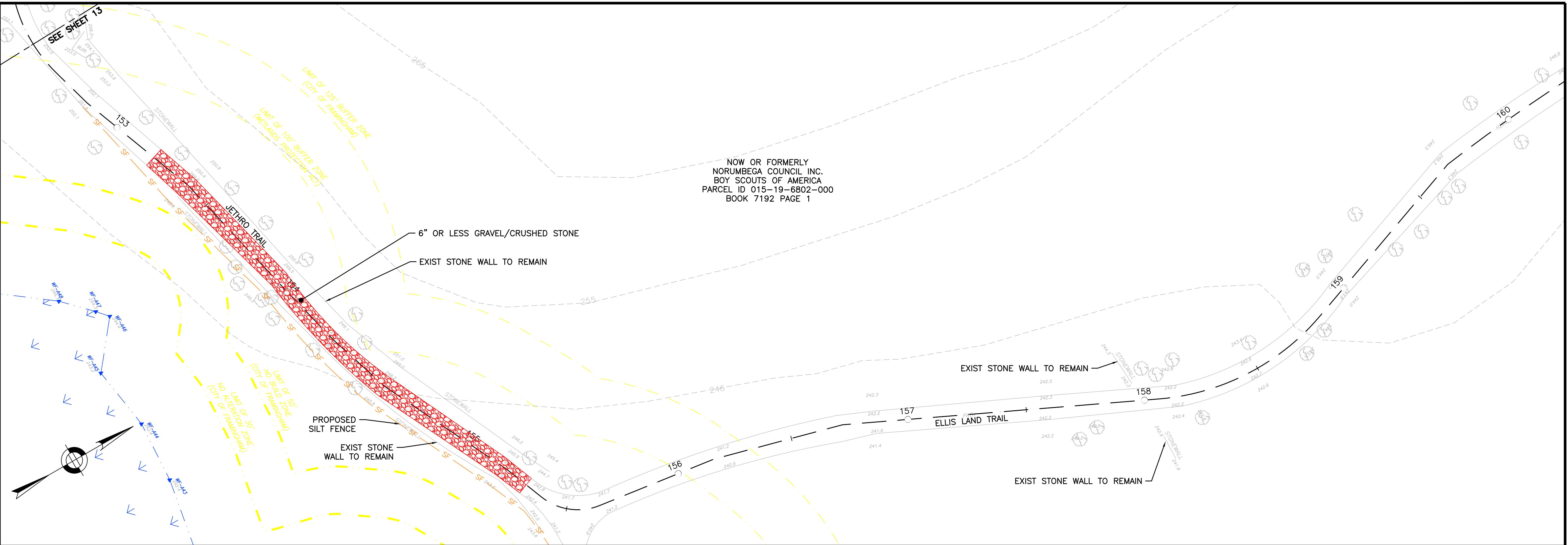
20 0 20 40
SCALE IN FEET

**NOBSCOT SCOUT RESERVATION
PERMITTING & CONSTRUCTION PLANS**

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	REL	SHEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD		REL	14	22



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



DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		0 SF
TEMPORARY UPLAND IMPACT	/	4,591 SF
PERMANENT WETLAND IMPACT		0 SF
TEMPORARY WETLAND IMPACT	+	0 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	0 LF
30' NO ALTERATION ZONE IMPACT		782 SF
50' NO BUILD ZONE IMPACT	/	1,950 SF
100' WETLAND BUFFER IMPACT	N/A	4,591 SF

STATION 153+20-155+30 - 6" GRAVEL/CRUSHED STO
STATION 162+20-163+00 - 6" GRAVEL/CRUSHED STO
STATION 164+00-166+50 - 6" GRAVEL/CRUSHED STO

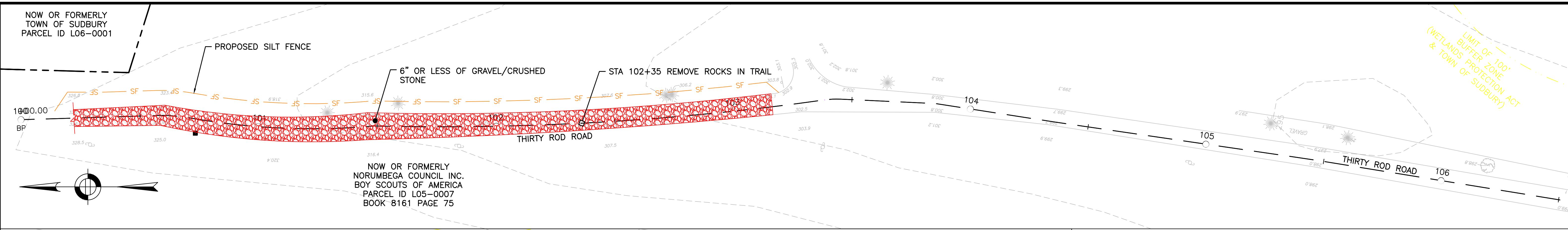


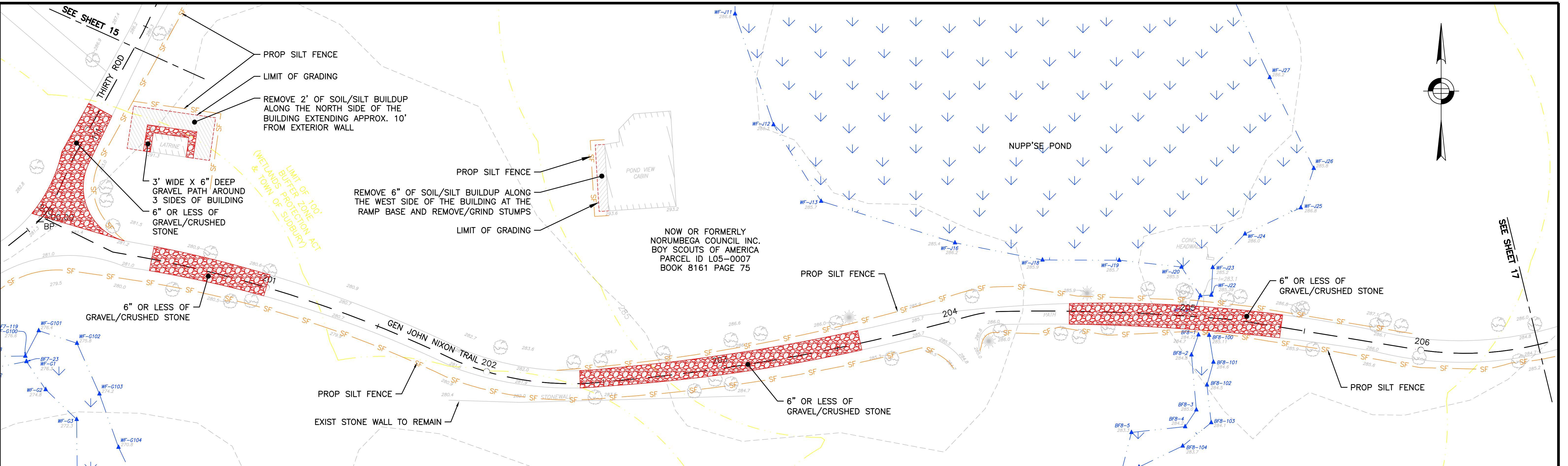
Nehar

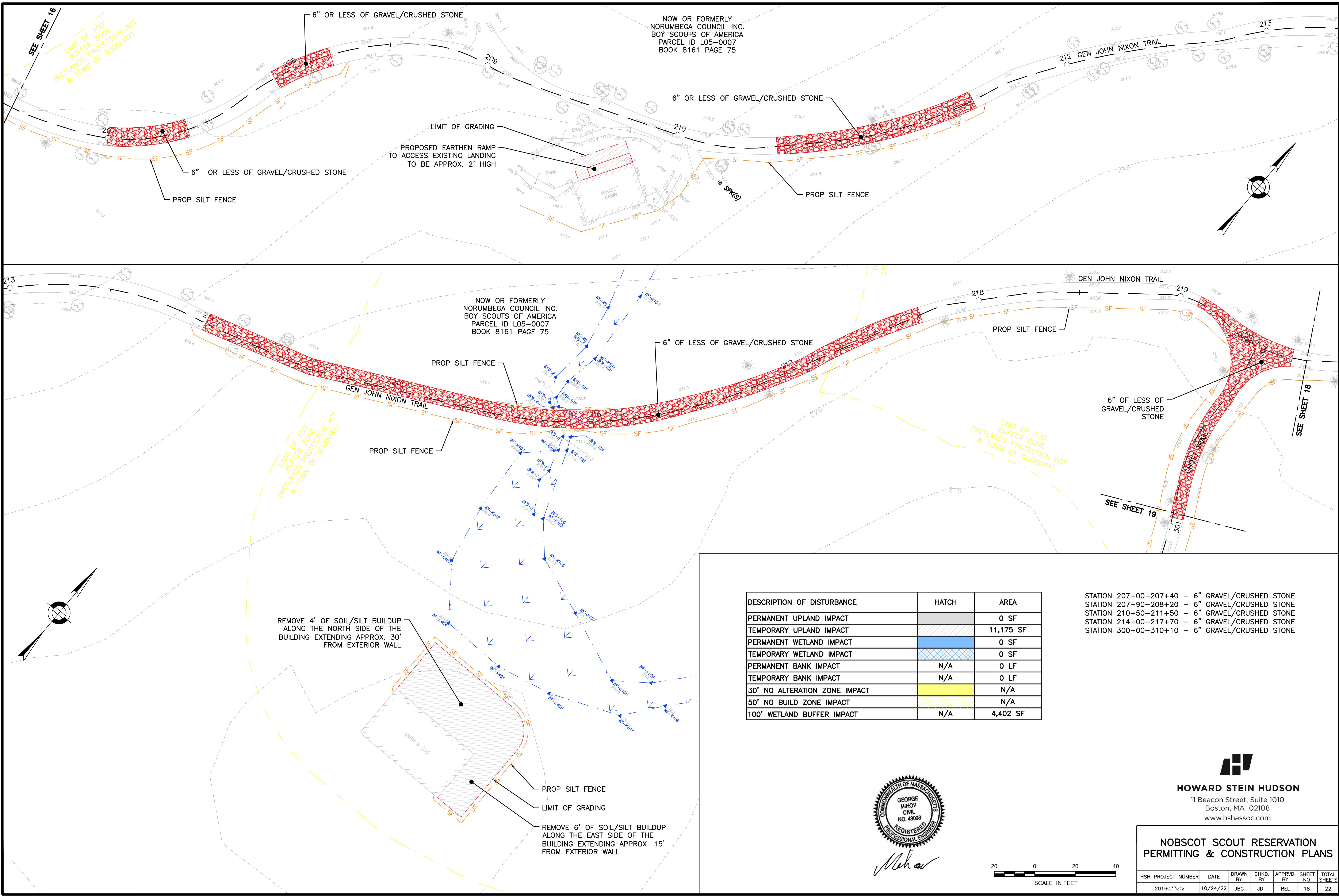
HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS

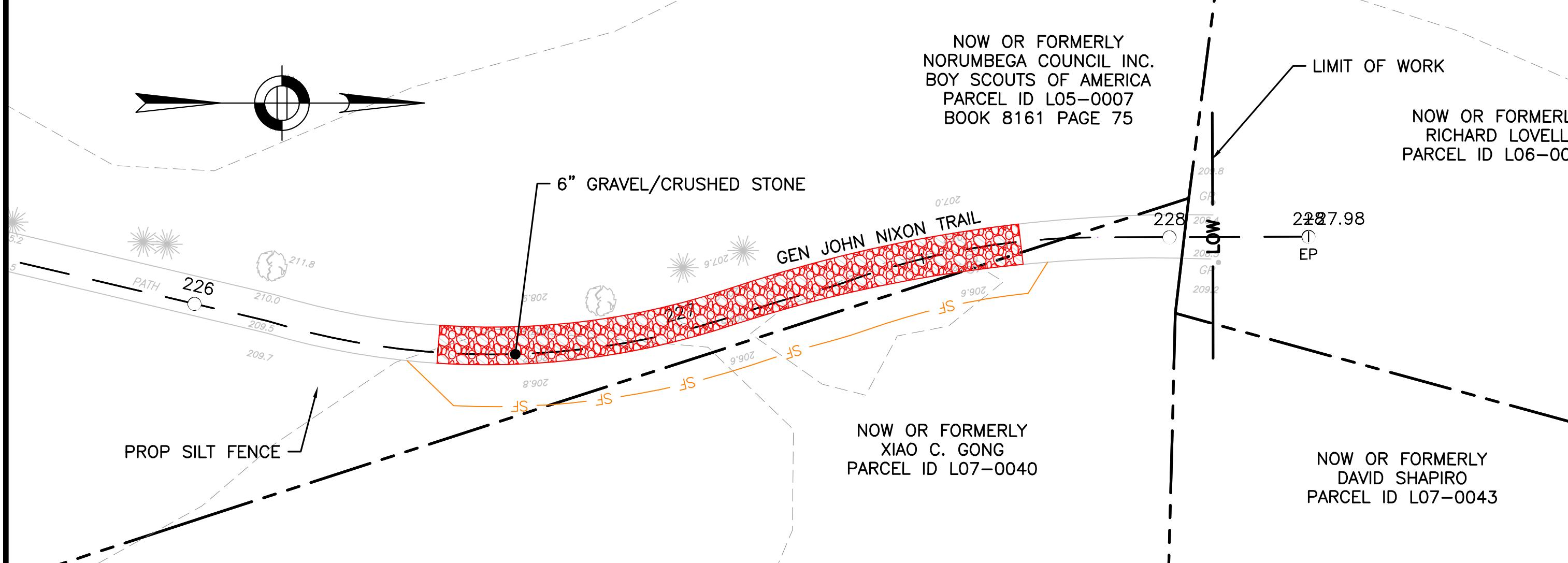
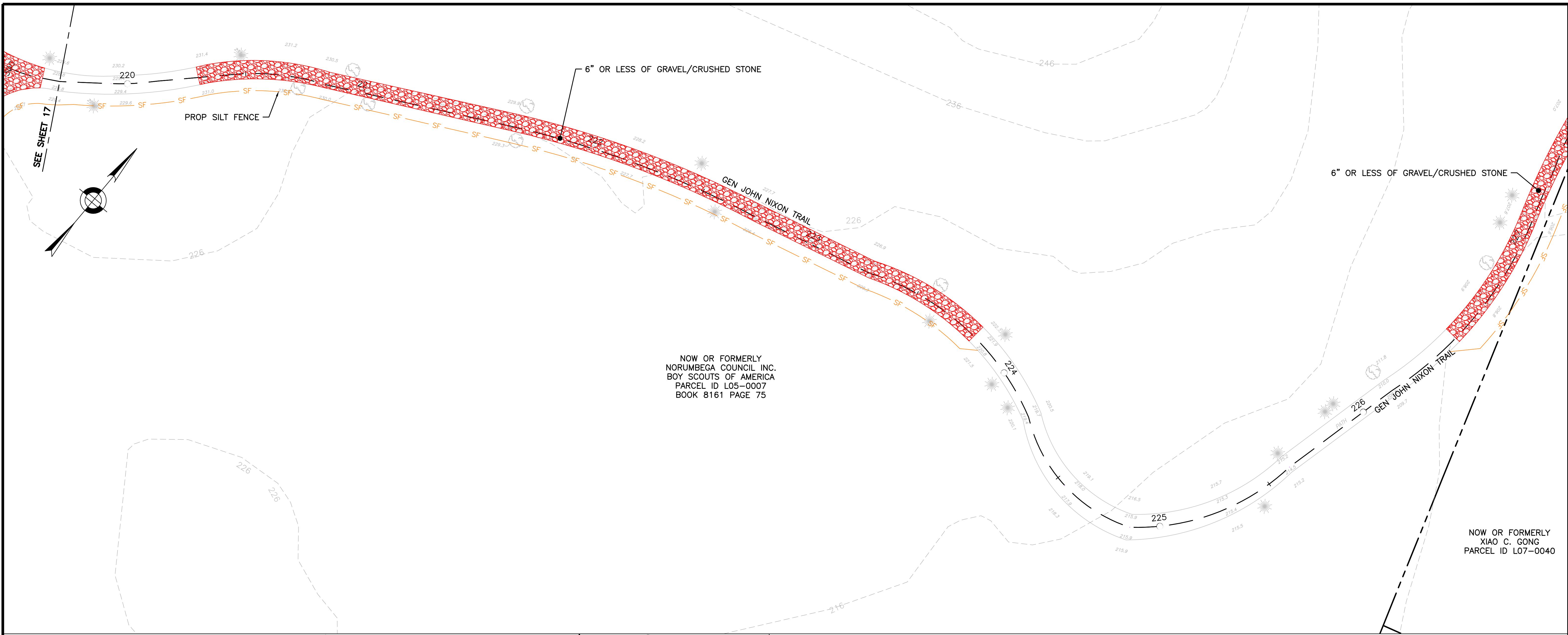
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	15	22







10/24/2022 L:\16033\CURRENT\CTSHEETS\16033 NOI PLANS.dwg



DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		0 SF
TEMPORARY UPLAND IMPACT	/	3,513 SF
PERMANENT WETLAND IMPACT		0 SF
TEMPORARY WETLAND IMPACT	+	0 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	0 LF
30' NO ALTERATION ZONE IMPACT		N/A
50' NO BUILD ZONE IMPACT	/	N/A
100' WETLAND BUFFER IMPACT	N/A	0 SF



Mehar

HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hsbassoc.com

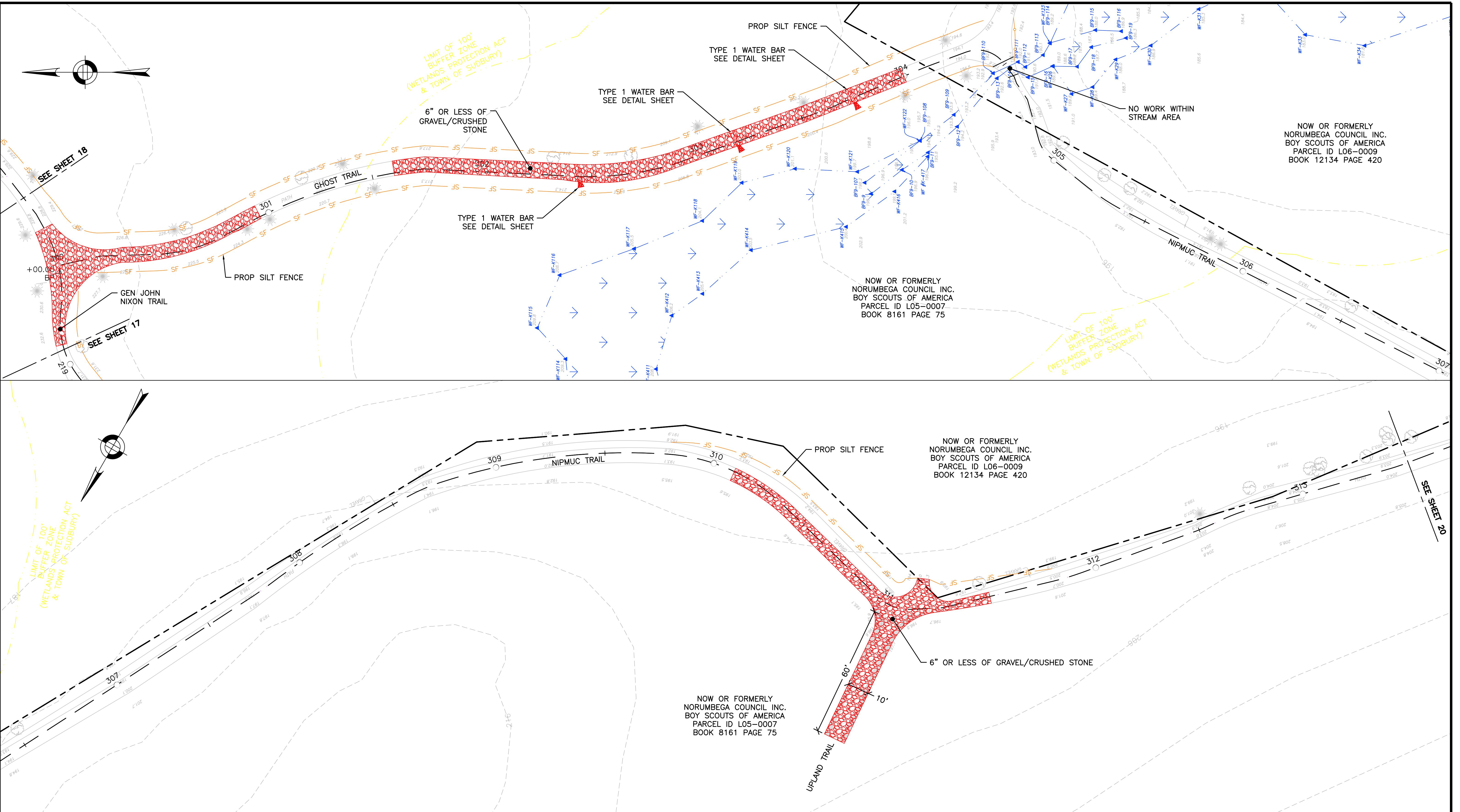
NOT SCOUT REFEREE

SCOUT RESERVE CONSTRUCTION

DESIGN & CONSTRUCT

NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	19	22



DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		316 SF
TEMPORARY UPLAND IMPACT		3,069 SF
PERMANENT WETLAND IMPACT		0 SF
TEMPORARY WETLAND IMPACT		0 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	0 LF
30' NO ALTERATION ZONE IMPACT		N/A
50' NO BUILD ZONE IMPACT		N/A
100' WETLAND BUFFER IMPACT	N/A	1,787 SF

STATION 301+60-304+00 - 6" GRAVEL/CRUSHED STONE
STATION 310+10-311+50 - 6" GRAVEL/CRUSHED STONE

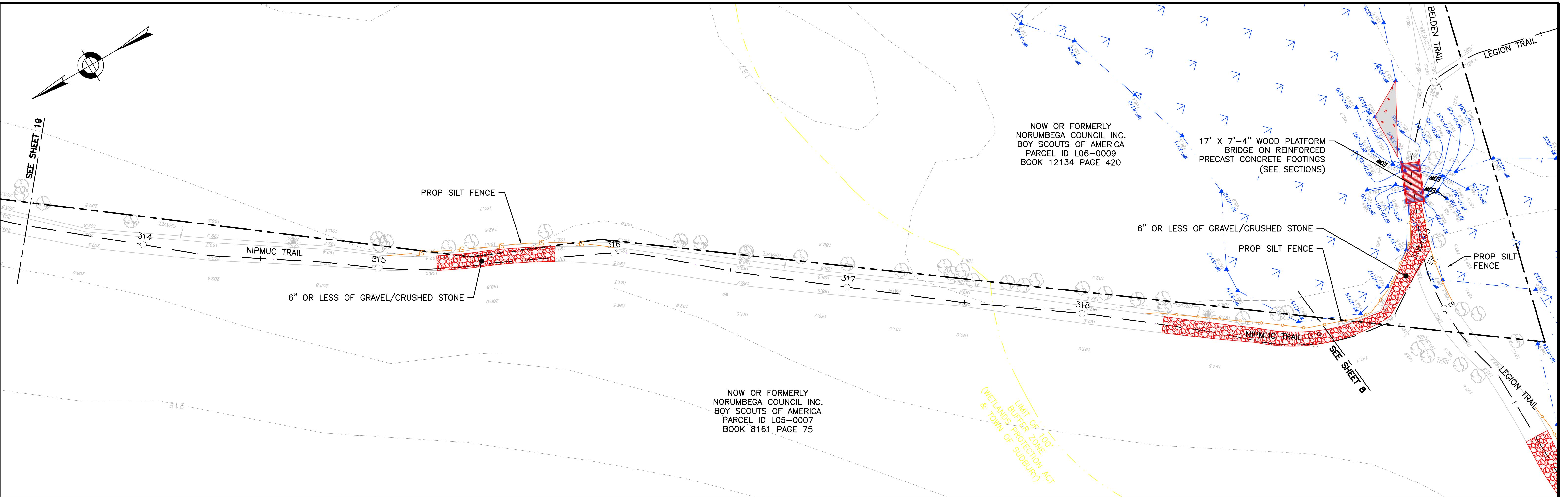


Mehan

20 0 20 40
SCALE IN FEET

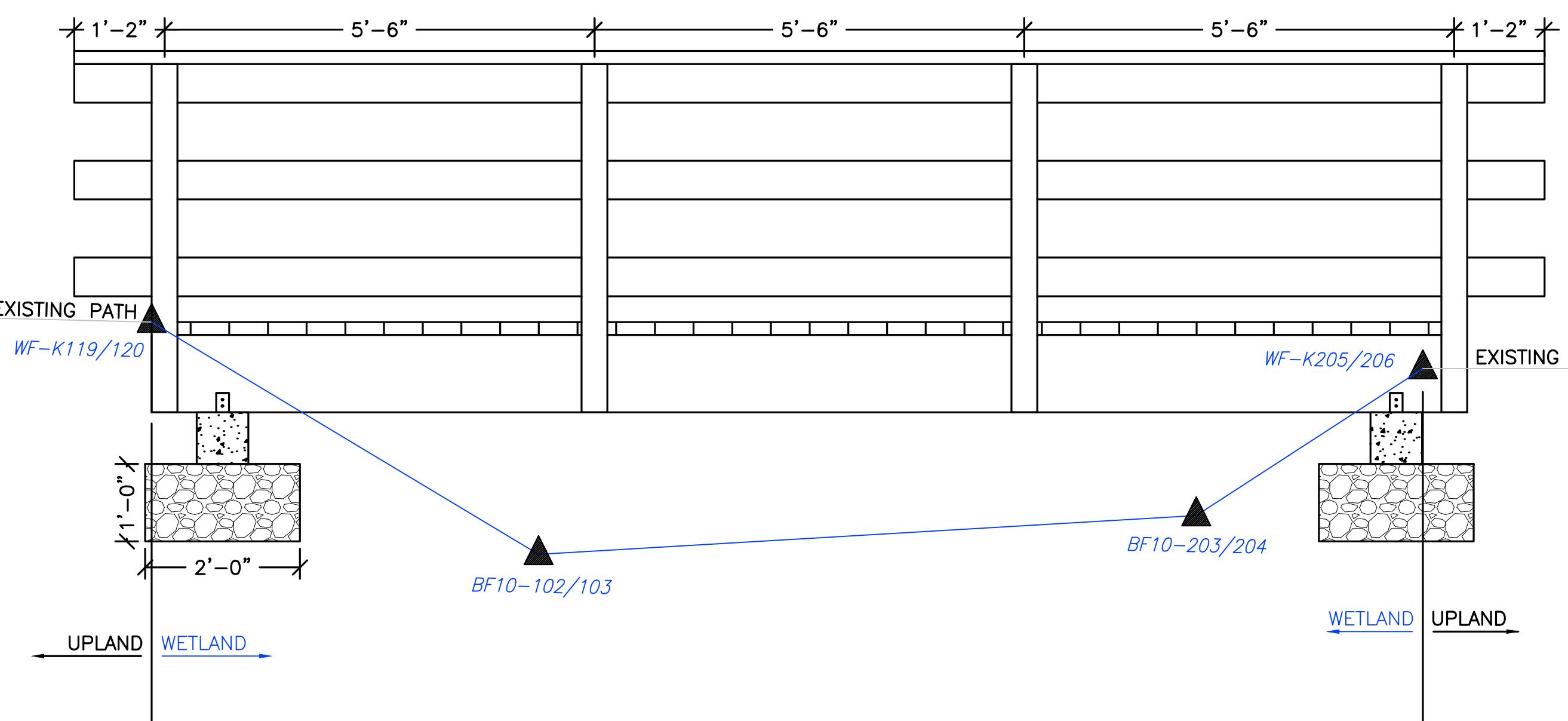
HOWARD STEIN HUDSON
11 Beacon Street, Suite 1010
Boston, MA 02108
www.hshassoc.com

NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	HEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	20	22

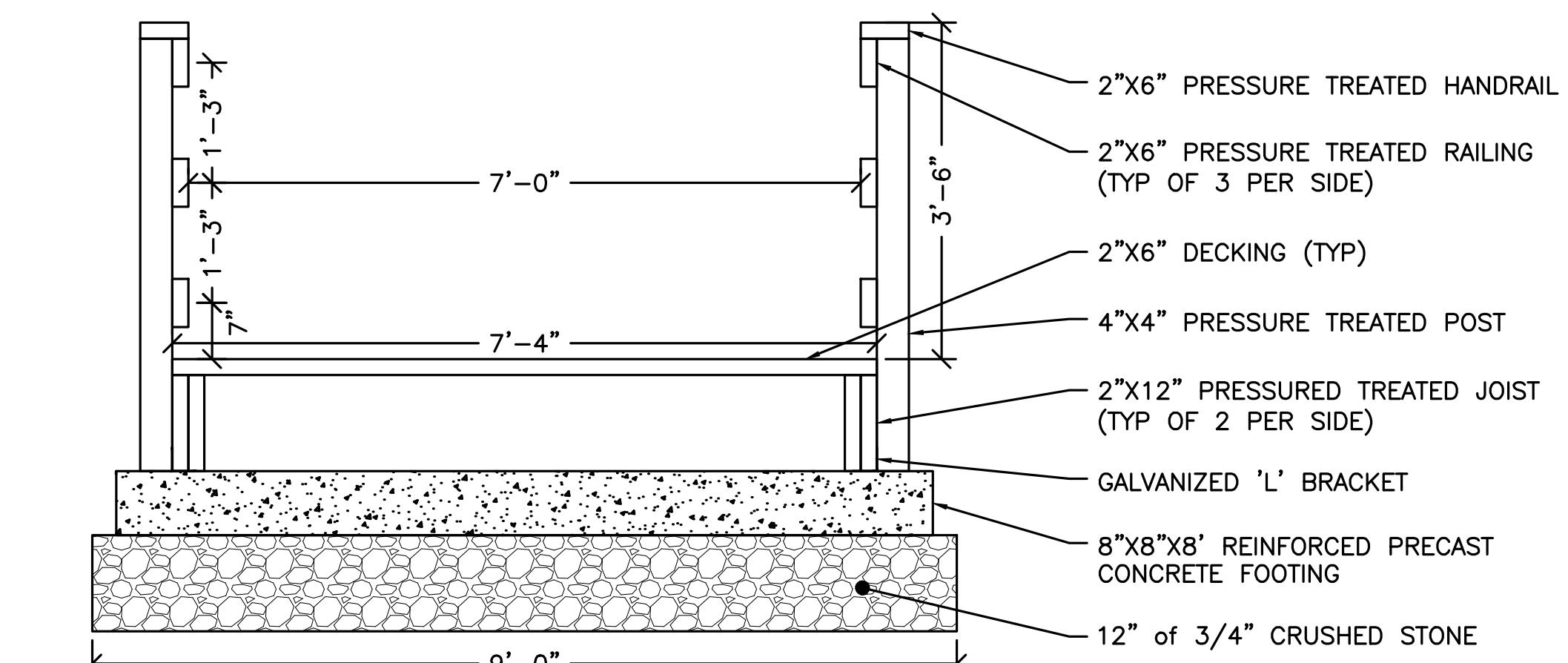


STATION 7+53+7+78 - 6" GRAVEL/CRUSHED STONE
STATION 315+25-315+75 - 6" GRAVEL/CRUSHED STONE
STATION 318+25-319+65 - 6" GRAVEL CRUSHED STONE

DESCRIPTION OF DISTURBANCE	HATCH	AREA
PERMANENT UPLAND IMPACT		0 SF
TEMPORARY UPLAND IMPACT		786 SF
PERMANENT WETLAND IMPACT		0 SF
TEMPORARY WETLAND IMPACT		34 SF
PERMANENT BANK IMPACT	N/A	0 LF
TEMPORARY BANK IMPACT	N/A	16 LF
30' NO ALTERATION ZONE IMPACT		N/A SF
50' NO BUILD ZONE IMPACT		N/A
100' WETLAND BUFFER IMPACT	N/A	470 SF



BELDEN BRIDGE SECTIONS
NOT TO SCALE



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

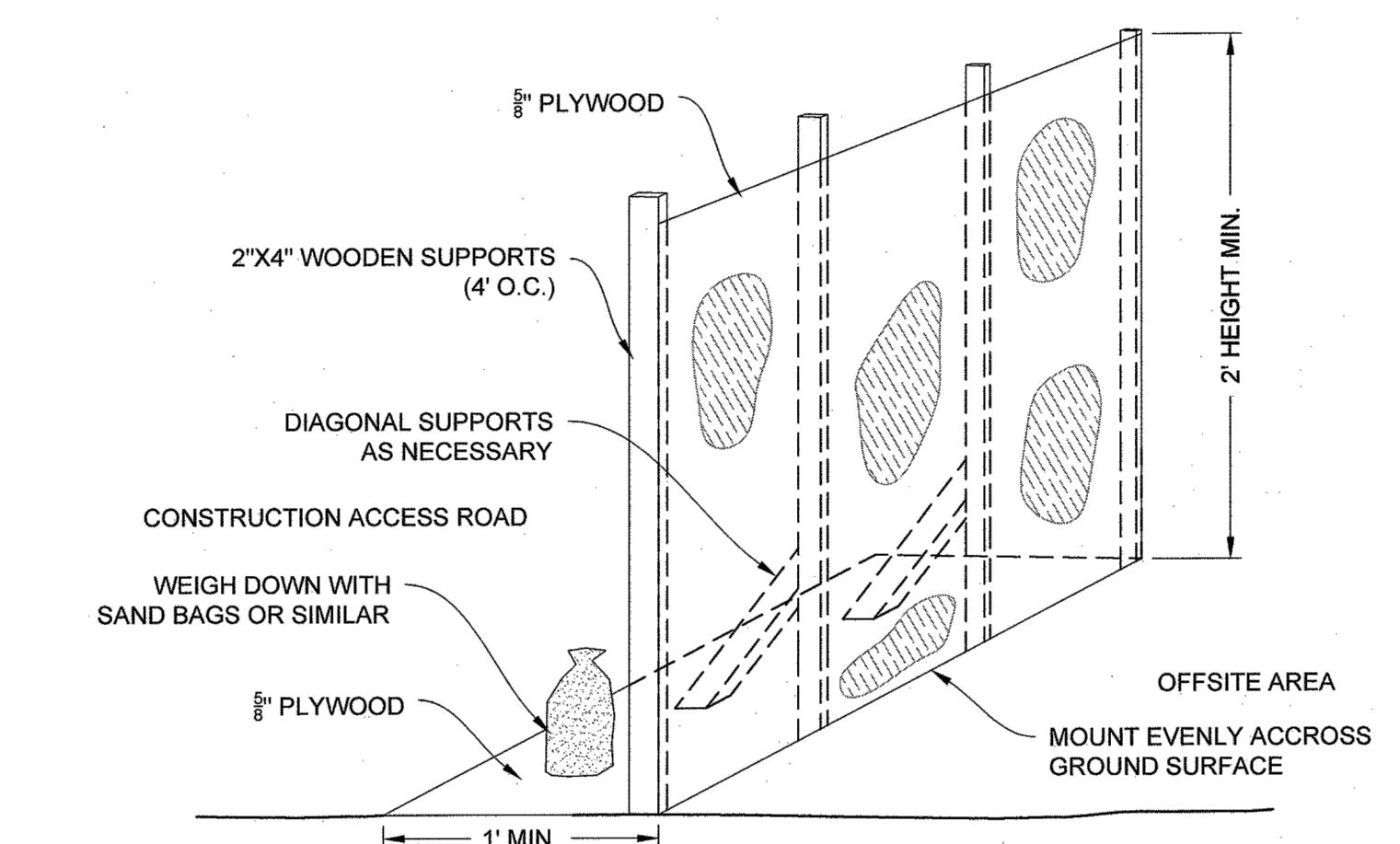
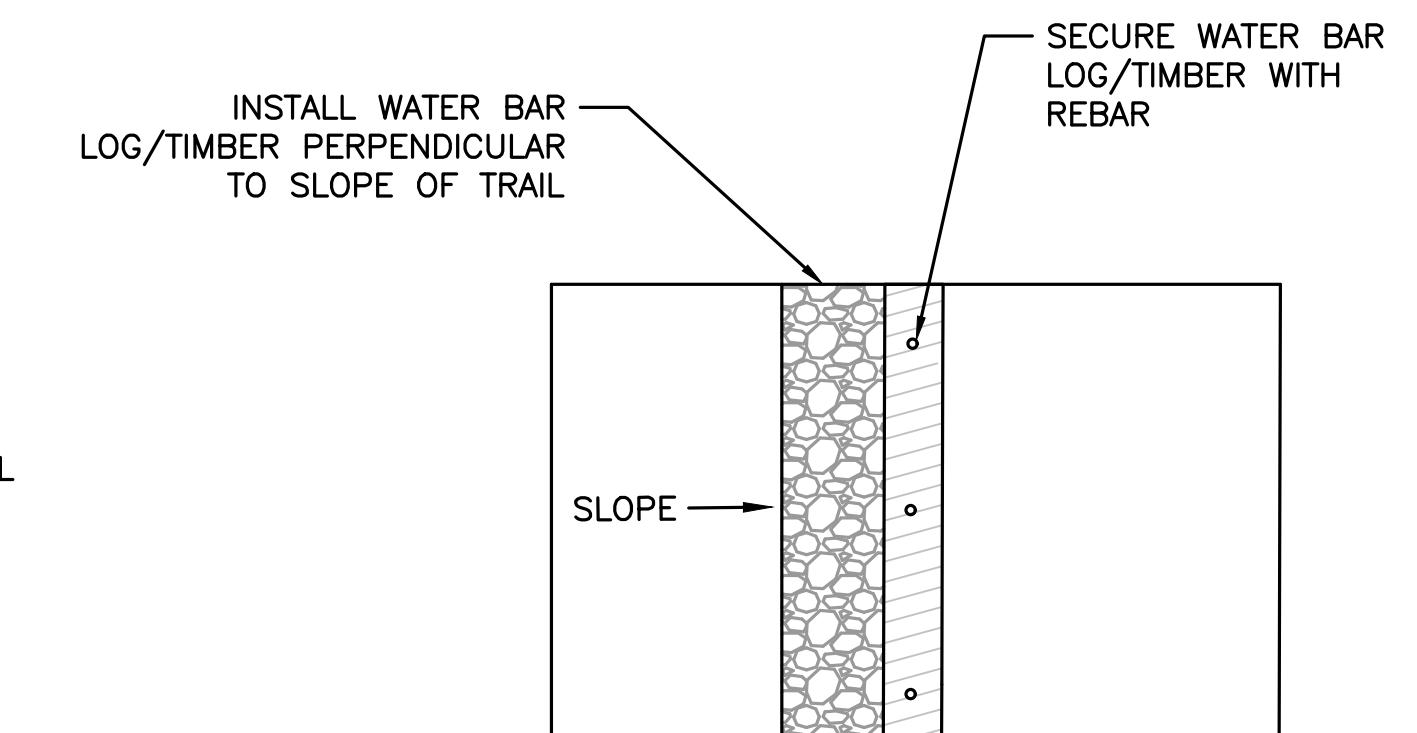
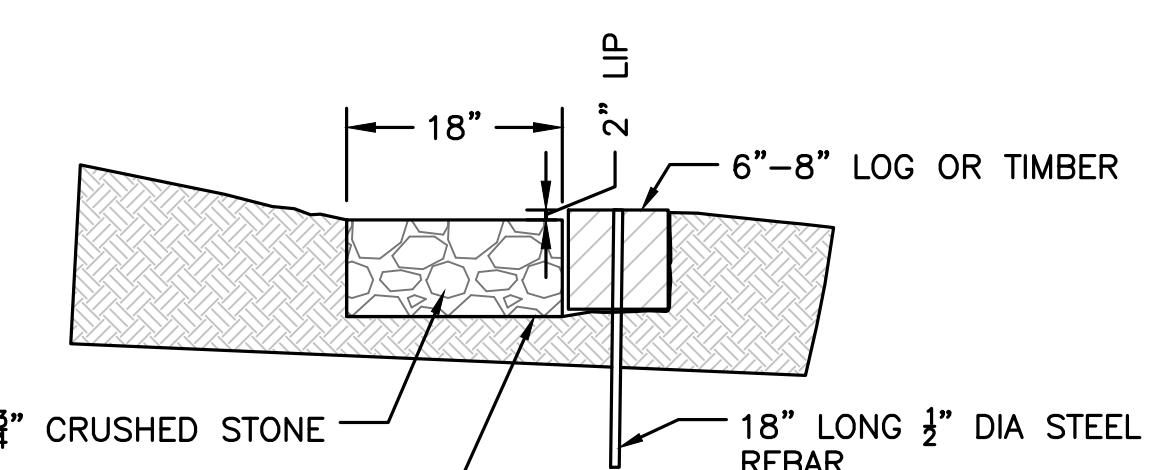
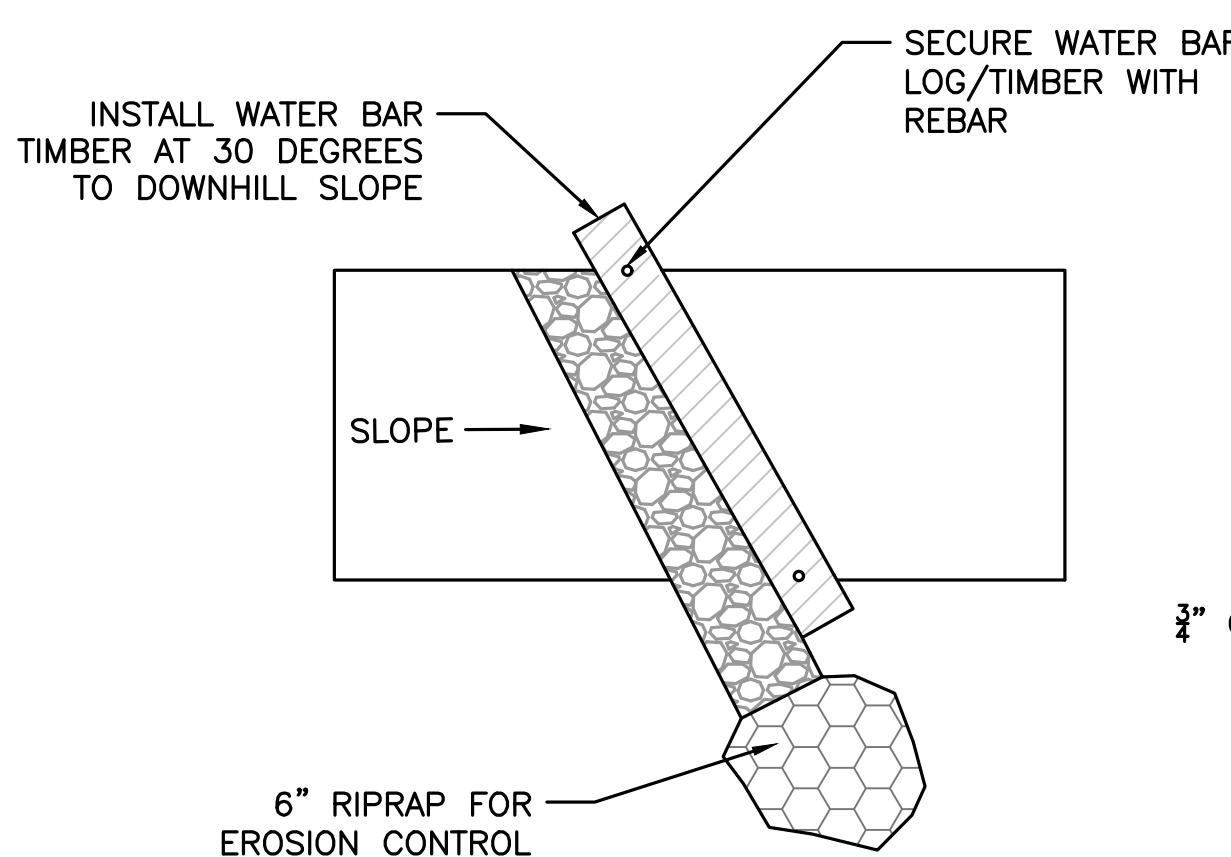
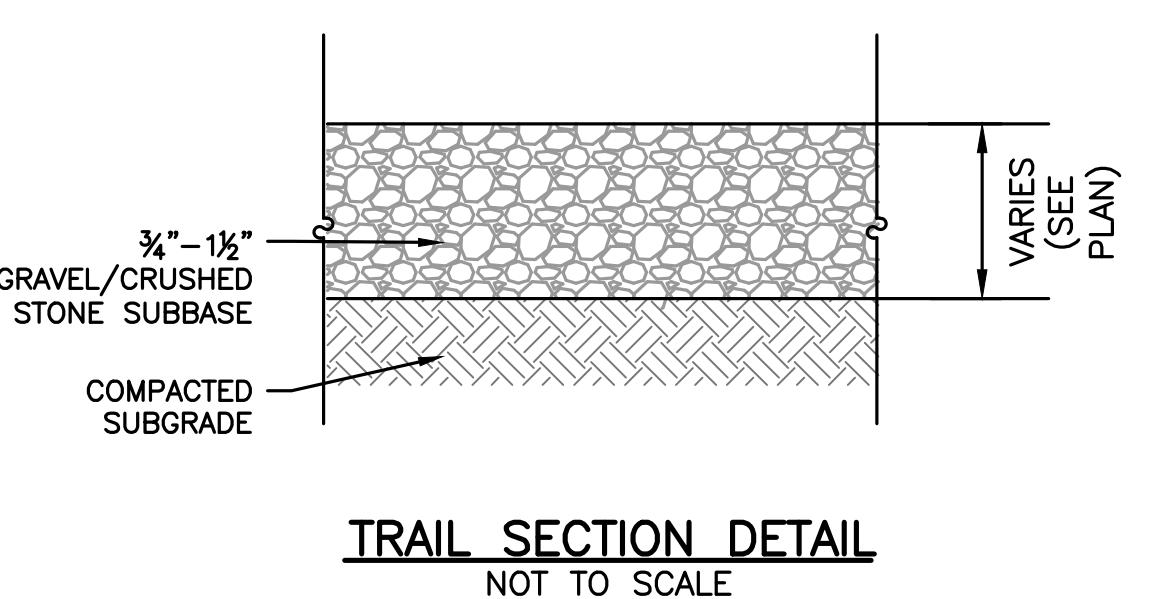
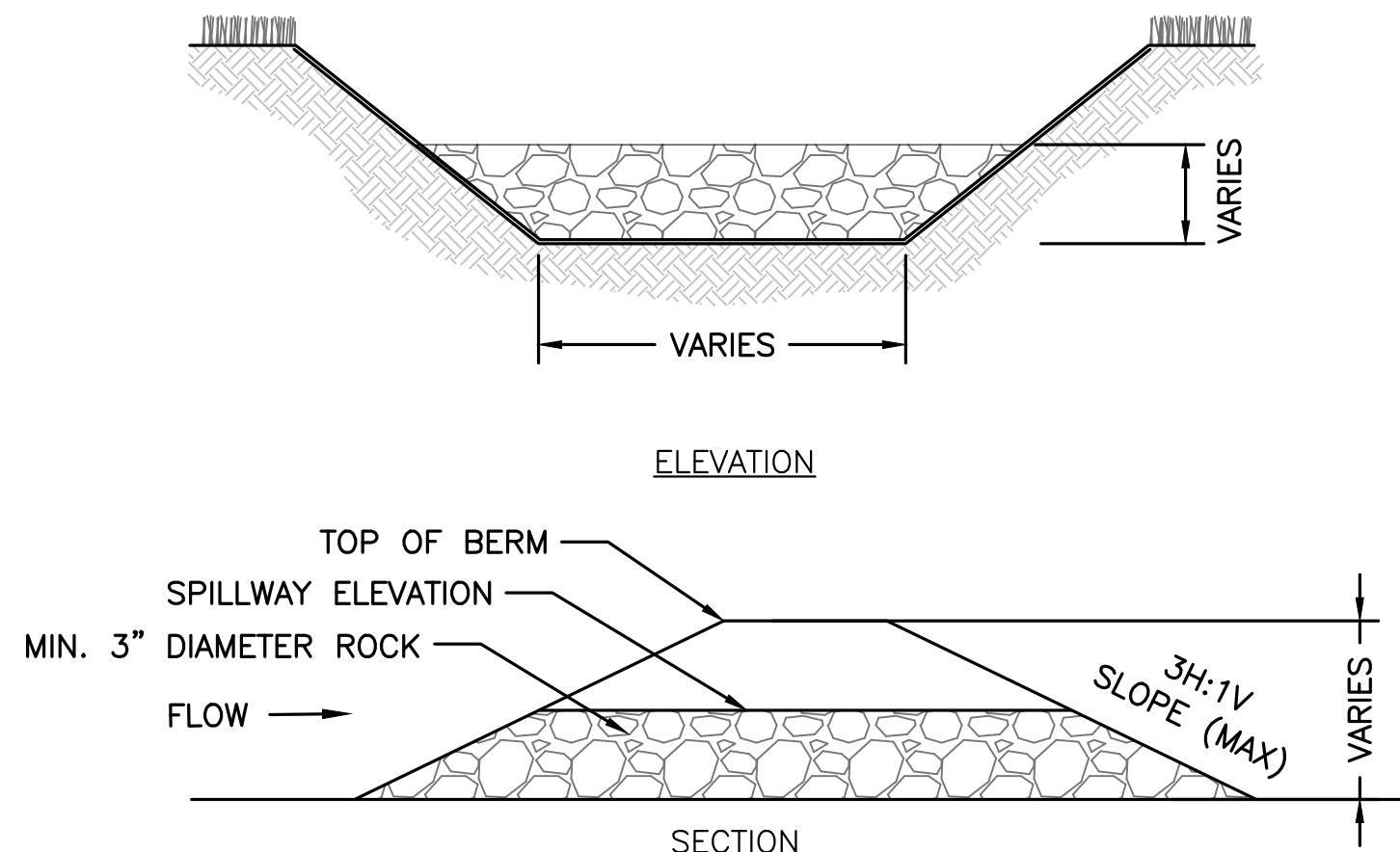
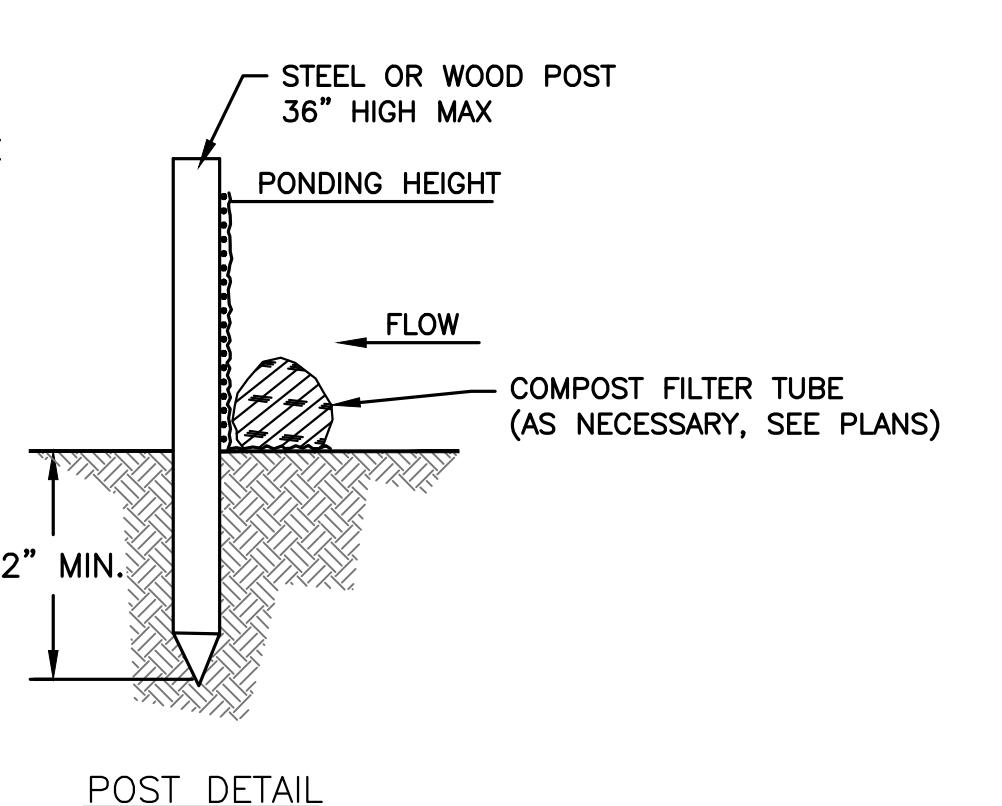
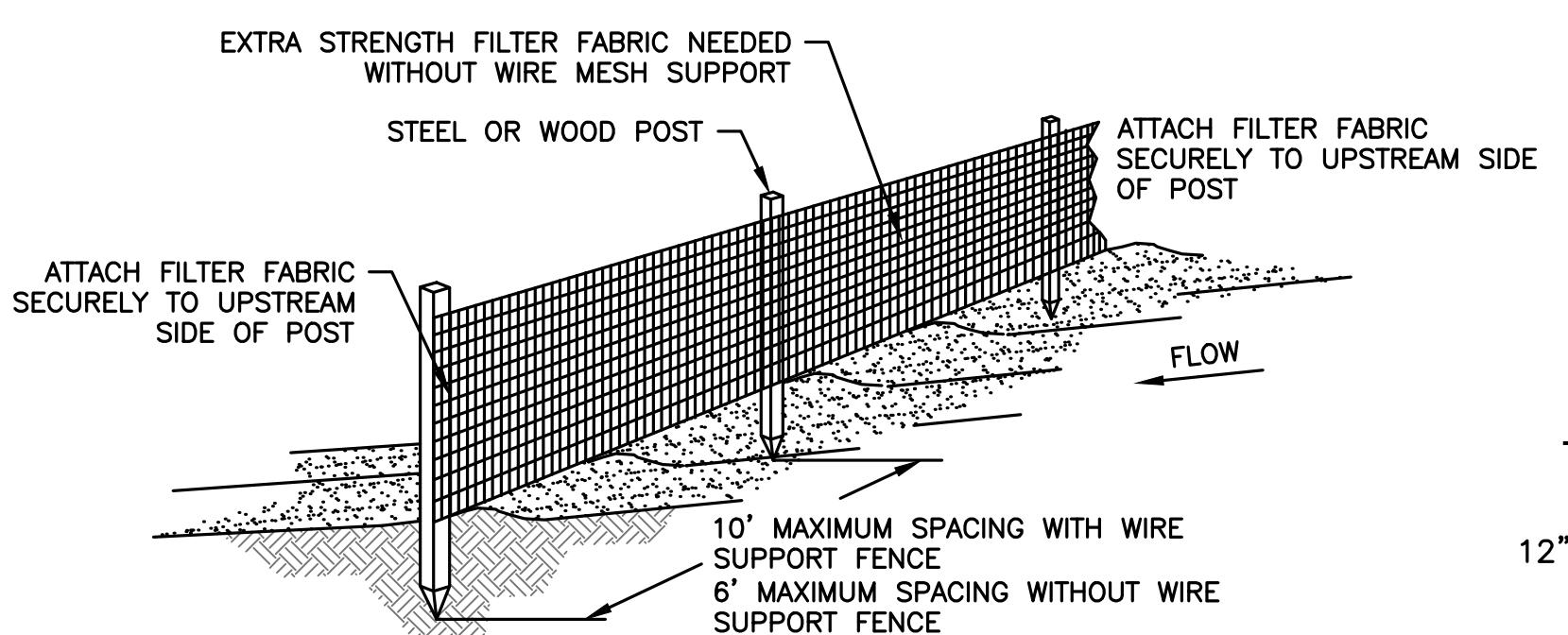
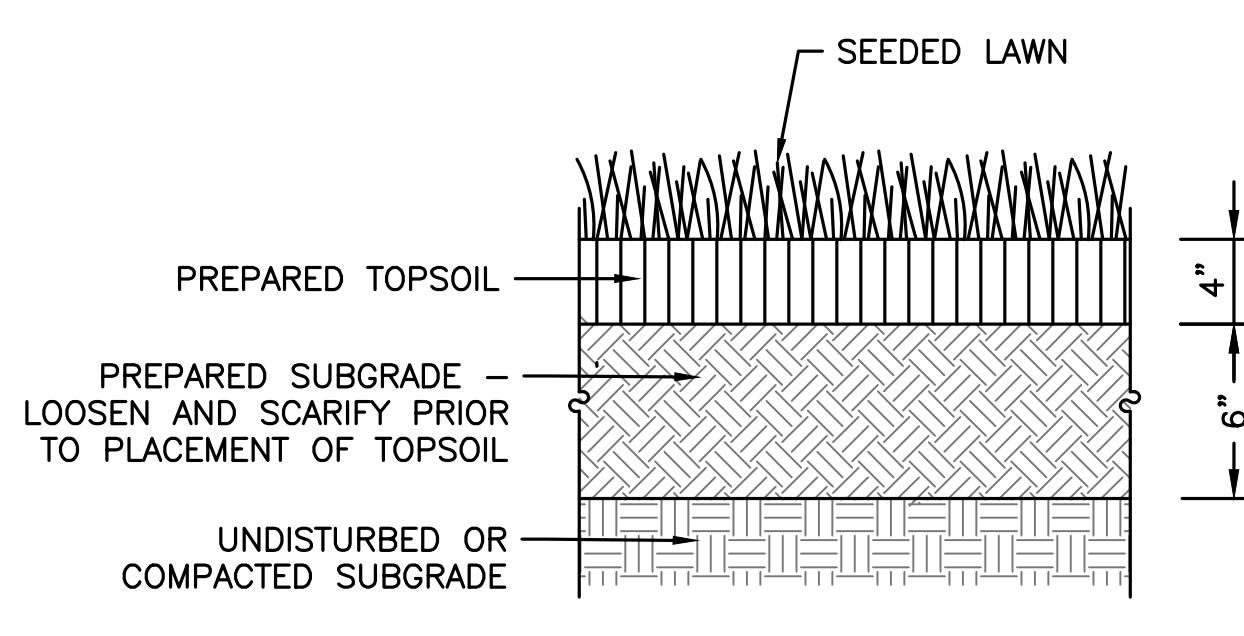
NOBSCOT SCOUT RESERVATION PERMITTING & CONSTRUCTION PLANS						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	HEET NO.	TOTAL SHEETS
2016033.02	10/24/22	JBC	JD	REL	21	22



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

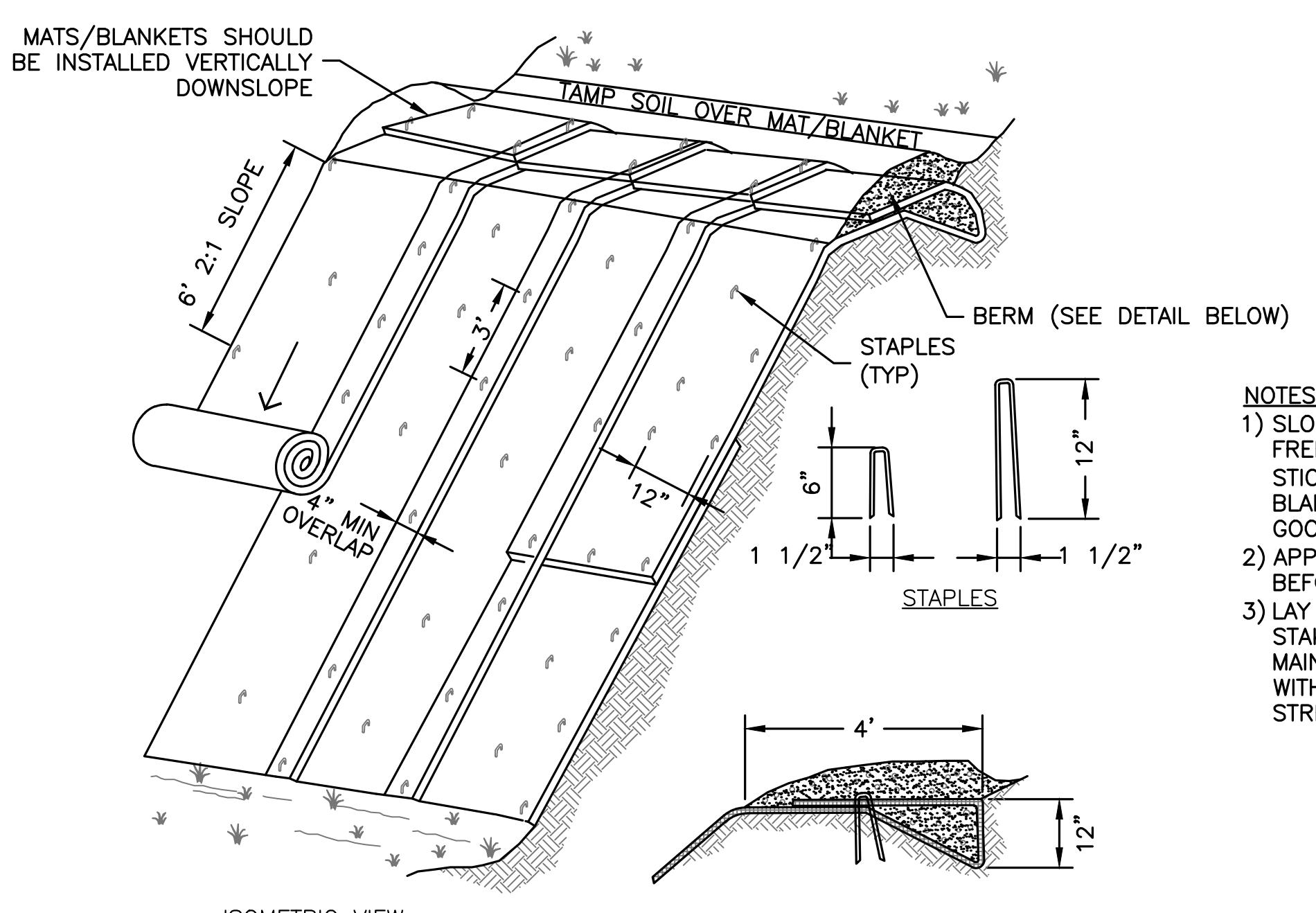
PREPARED FOR:
KNOX TRAIL COUNCIL
BOY SCOUTS OF AMERICA
490 UNION AVENUE
FRAMINGHAM, MA 01702

NOBSCOT SCOUT RESERVATION TRAIL PROJECT FRAMINGHAM AND SUDSBURY, MA WORCESTER COUNTY

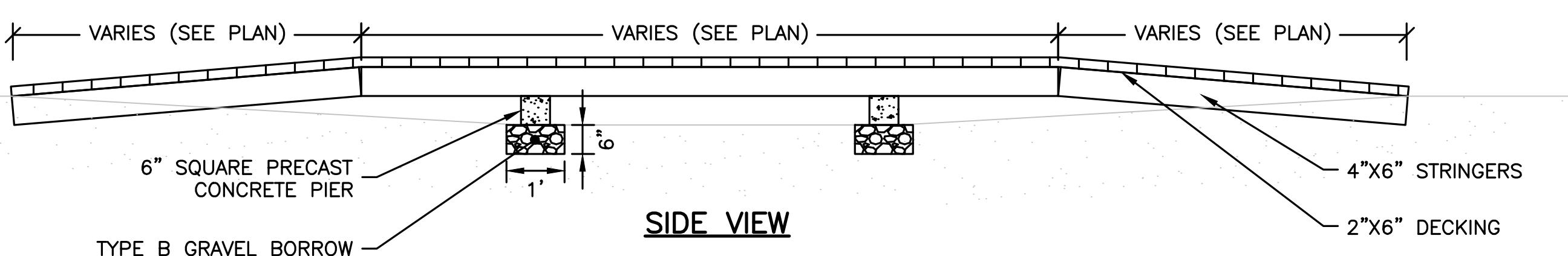
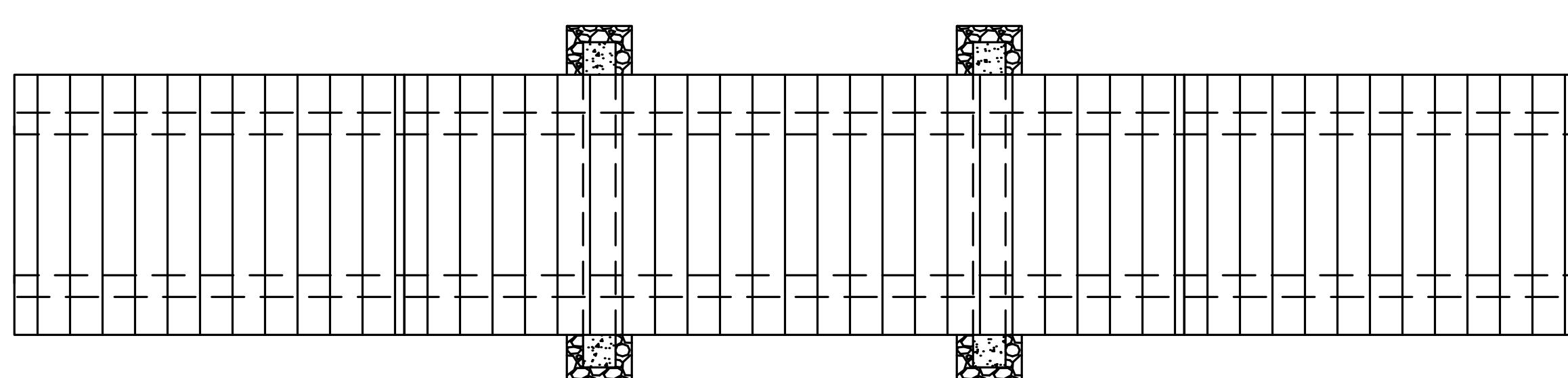


- NOTE:**
1. THE PLYWOOD BARRIER WILL BE REMOVED DURING THE CONSTRUCTION DAY AND REPLACED EACH EVENING OR AT THE END OF THE WORK DAY.
 2. EACH SECTION OF PLYWOOD BARRIER SHALL OVERLAP THE ADJACENT SECTION TO ENSURE THAT ALL OPENINGS ARE BLOCKED COMPLETELY.

TURTLE BARRIER ENTRANCE DETAIL



- NOTES:**
- 1) SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 - 2) APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
 - 3) LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.



BOG BRIDGE DETAIL



NOTICE OF INTENT PERMIT SET

DETAILS

DATE:	10/24/2022
PROJECT NUMBER:	16033.02
DESIGNED BY:	JBC
DRAWN BY:	JBC
CHECKED BY:	REL