

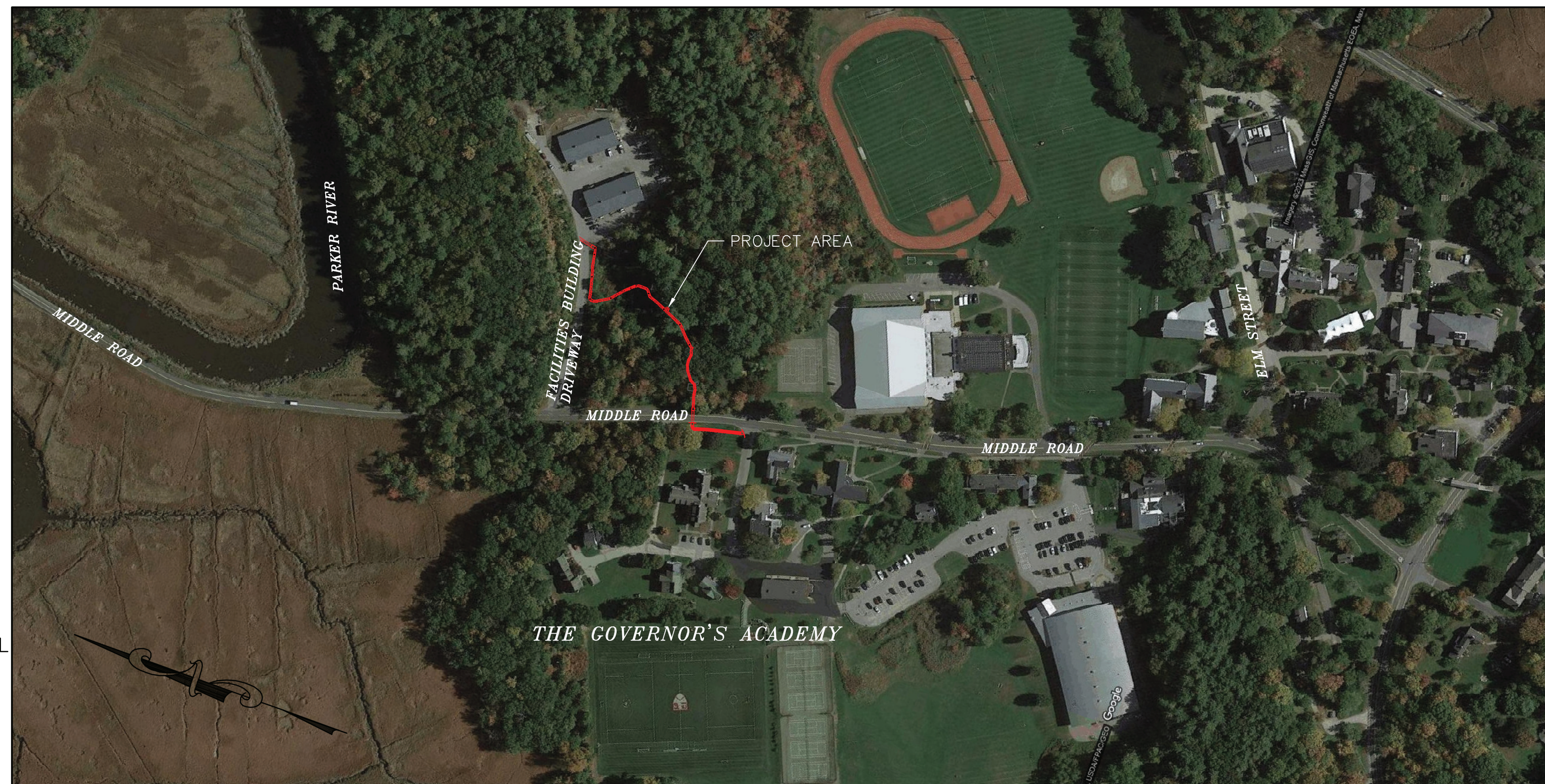
# THE GOVERNOR'S ACADEMY PEDESTRIAN WALKWAY

MIDDLE ROAD  
NEWBURY, MASSACHUSETTS

MARCH 1, 2023

REV: MARCH 7, 2023

REV: MARCH 15, 2023

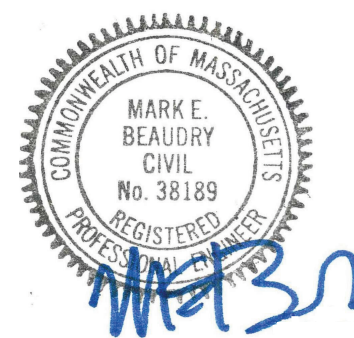


LOCUS MAP  
SCALE: 1"=200'

PROJECT LOCATION THE RESIDENTIAL-AGRICULTURAL  
ZONING DISTRICT  
R15-0-11: 313 NEWBURYPORT  
TURNPIKE  
R15-0-5: 306 MIDDLE ROAD

OWNER/APPLICANT THE GOVERNORS ACADEMY  
1 ELM STREET  
BYFIELD, MA 01922

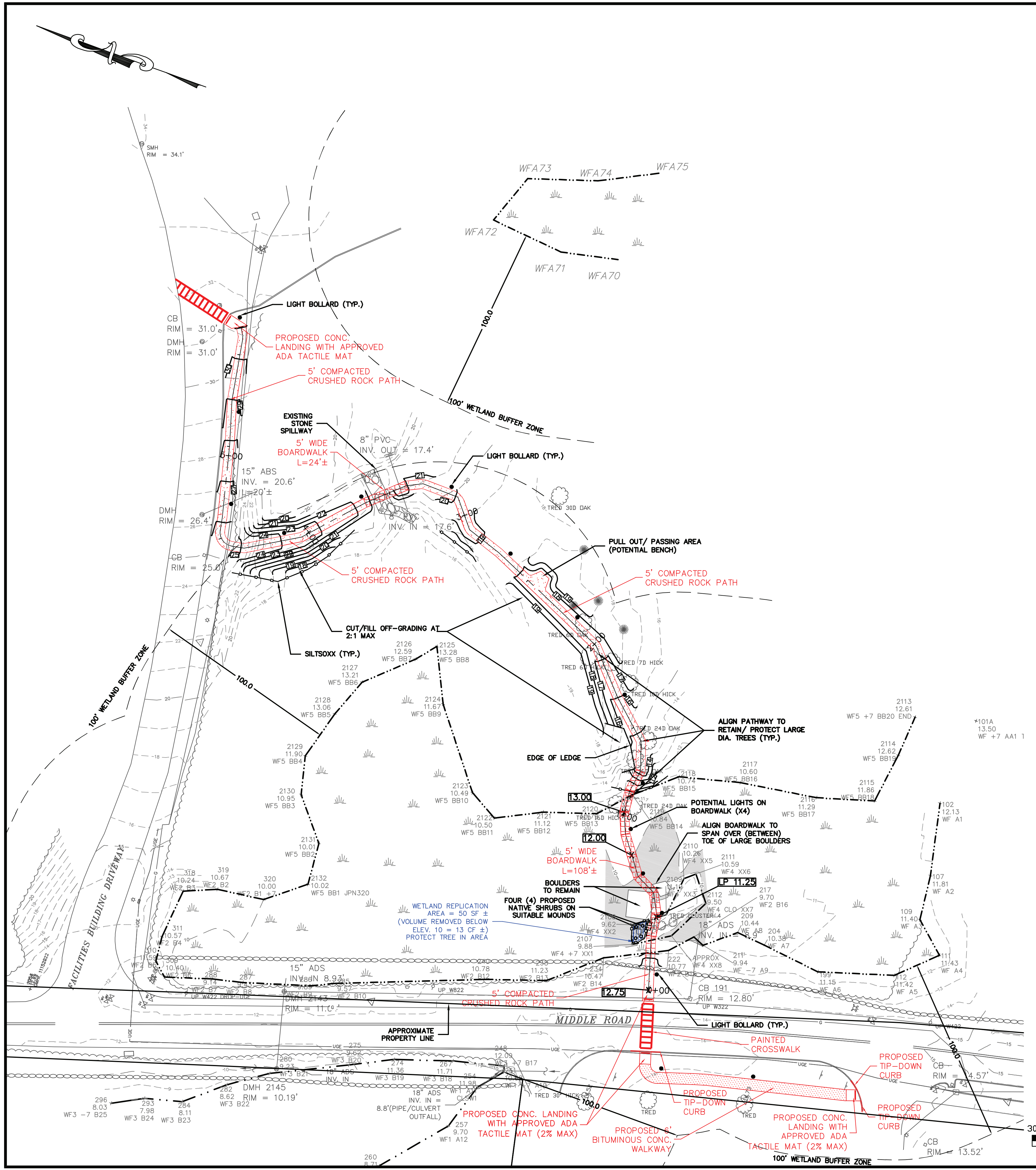
SITE CIVIL ENGINEER CIVILWORKS NEW ENGLAND  
CIVIL ENGINEERING  
181 Watson Road, P.O. Box 1166  
Dover, New Hampshire 03820  
(603) 749-0443



LAND SURVEYOR MCENEANEY SURVEY ASSOCIATES OF NEW ENGLAND  
P.O. BOX 681  
24 CHESTNUT STREET  
DOVER, NH 03820  
(603) 742-0911

SHEET INDEX  
COVER SHEET  
SITE PLAN  
PLAN & PROFILE  
WETLAND REPLICATION PLAN  
EROSION & SEDIMENT CONTROL PLAN  
DETAIL SHEET 1

SHEET  
C-1  
C-2  
C-3  
C-4  
C-5



**PROJECT LOCATION INFORMATION:**

1. THE SUBJECT PROJECT AREA IS LOCATED WITHIN THE RESIDENTIAL-AGRICULTURAL ZONING DISTRICT.
2. PROJECT AREA: R15-0-11; 313 NEWBURYPORT TURNPIKE R15-0-5; 306 MIDDLE ROAD
3. THE GOVERNOR'S ACADEMY IS THE OWNER AND APPLICANT.

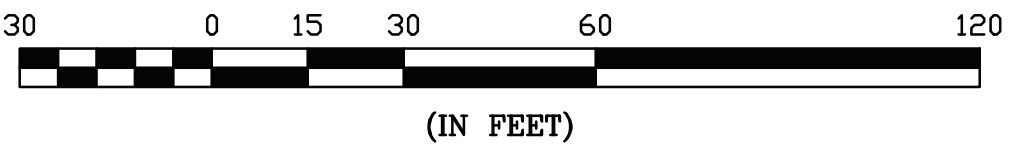
**NOTES:**

1. THE TOPOGRAPHY, SITE DETAIL & SURFACE IMPROVEMENTS DEPICTED HEREON WERE OBTAINED FROM AN INSTRUMENT SURVEY CONDUCTED ON THE GROUND BY McEENEAY SURVEY ASSOCIATES (MSA) IN AUGUST AND NOVEMBER OF 2022.
2. THE LOCATION OF ALL UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE AND ARE BASED UPON A PARTIAL FIELD SURVEY AND COMPILATION OF PLANS OF RECORD. CIVILWORKS NEW ENGLAND (CNE) DOES NOT WARRANTY NOR GUARANTEE THE LOCATION OF ALL UTILITIES DEPICTED OR NOT DEPICTED. THE CONTRACTOR, PRIOR TO COMMENCEMENT OF CONSTRUCTION, SHALL VERIFY THE LOCATION OF ALL UTILITIES AND CONTACT DIG SAFE AT 811.
3. THIS PLAN DOES NOT SHOW ANY UNRECORDED OR UNWRITTEN EASEMENTS WHICH MAY EXIST. A REASONABLE AND DILIGENT ATTEMPT HAS BEEN MADE TO OBSERVE ANY APPARENT, VISIBLE USES OF THE LAND; HOWEVER, THIS DOES NOT CONSTITUTE A GUARANTEE THAT NO SUCH EASEMENTS EXIST.
4. PROPERTY LINES ARE NOT DEPICTED HEREON. THIS PLAN IS NOT TO BE USED FOR THE RECONSTRUCTION OF BOUNDARY LINES OR FOR TITLE INSURANCE PURPOSES. MSA/ CNE DID NOT PERFORM A BOUNDARY SURVEY.
5. THE SUBJECT PREMISES IS PARTIALLY LOCATED IN THE FOLLOWING FLOOD ZONES PER FEMA FLOOD INSURANCE RATE MAP NUMBER 25009C0119G DATED JULY 16, 2014:
  - FLOOD ZONE AE - ELEV. 10.0
  - HATCHED IN VICINITY OF WALKWAY (ONLY) - [Hatched Box]

**GENERAL NOTES:**

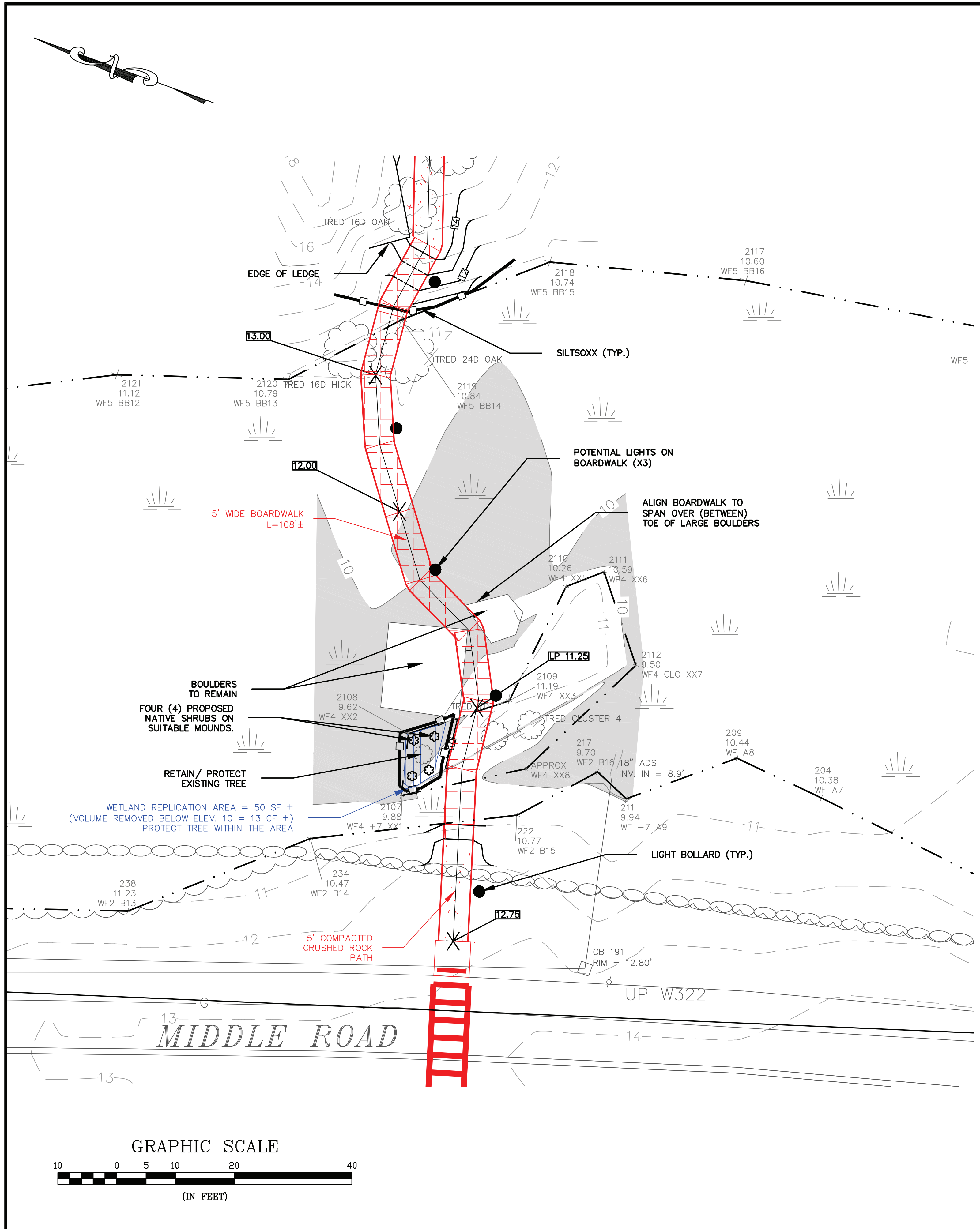
1. THIS PLAN PREPARED FOR PERMIT ONLY AND IS NOT INTENDED FOR CONSTRUCTION UNTIL AUTHORIZED FOR SUCH BY CNE.
2. WETLAND FLAGGING PERFORMED BY DEROSA ENVIRONMENTAL CONSULTING GROUP, INC. IN JULY, SEPTEMBER AND OCTOBER OF 2022.
3. WETLAND REPLICATION TO BE PERFORMED PER WETLAND REPLICATION PLAN PREPARED BY CIVILWORKS NEW ENGLAND.
4. ALL WORK TO BE DONE WITHIN PUBLIC RIGHT-OF-WAYS SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF THE TOWN BYFIELD/NEWBURY.
5. ALL UTILITY CONNECTIONS TO BE COMPLETED IN ACCORDANCE WITH THE TOWN OF BYFIELD/NEWBURY AND UTILITY COMPANY SPECIFICATIONS.
6. SEE BVW REPLICATION SEQUENCE OF WORK BELOW AND SHEET C-3 FOR PLANTING SPECIFICATIONS.
7. BOARDWALK AND DIAMOND PIER TO BE INSTALLED BY HAND/ USING HAND CARRIED TOOLS. NO HEAVY EQUIPMENT SHALL ENTER THE WETLANDS.
8. ALL PROPOSED WALKWAY COMPONENTS SHALL COMPLY WITH APPLICABLE ADA/AAB REQUIREMENTS INCLUDING BUT NOT LIMITED TO, WALKWAY AND BOARDWALK SURFACES, SLOPES AND CROSS-SLOPES.
9. LIGHTING FIXTURE ELECTRICAL CONDUIT TO BE CONNECTED TO FACILITIES DRIVEWAY LIGHTING CIRCUIT, BE UNDERGROUND AND WITHIN LIMIT OF GRADING.

GRAPHIC SCALE



NOT FOR CONSTRUCTION FOR PERMIT USE ONLY		CIVILWORKS NEW ENGLAND 181 Watson Road, PO Box 1166 Dover, New Hampshire 03821 603.749.0445	
DATE: 3-1-23	SCALE: 1"=30'	DESIGN BY: MEB	PROJECT NO: 22034
DRAWN BY: SD/AM	APPROVED BY: MEB	NOI SUBMISSION	REVISION
NO. 1	NO. 1	NO. 1	NO. 1
		<b>THE GOVERNORS ACADEMY</b> 1 ELM STREET BYFIELD, MA 01922	
<b>SITE PLAN</b>		<b>PROPOSED WALKWAY PROJECT</b> MIDDLE ROAD BYFIELD, MA	
C-1			





**WETLAND REPLICATION COMPENSATORY FLOOD STORAGE CALCULATIONS:**

PERMANENT WETLAND ALTERATION = 14 FOOTING POSTS X 1 SF/FOOTING = 14 SF

**PROVIDE MINIMUM OF 28 SF WETLAND REPLICATION**

TOTAL FLOODPLAIN FILL = 8 POSTS (CONSERVATIVE) EXTEND BELOW FEMA ELEV. 10. ALLOW 0.25 CF/POST = 2 CF (CONSERVATIVE)  
 PROVIDE MINIMUM OF 2 CF COMPENSATORY VOLUME (CUT) IN WETLAND REPLICATION AREA. (BELOW ELEV. 10)

**BVW REPLICATION SEQUENCE OF WORK:**

1. BVW FLAGS SHALL BE MAINTAINED DURING THE IMPLEMENTATION OF THE BVW REPLICATION AND THE REQUIRED MONITORING PERIOD.
2. PRIOR TO THE COMMENCEMENT OF WORK ON THE BVW REPLICATION AREA A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE BETWEEN THE CONTRACTOR AND AN APPROVED WETLAND SCIENTIST.
3. THE PERIMETER OF THE REPLACEMENT AREA WILL BE FIELD MEASURED AND MARKED WITH FLAGGING OR STAKES.
4. EQUIPMENT/EXCAVATOR SHALL IN NO SITUATION ENTER BVW AREA. EXCAVATOR SHALL MOBILIZE ON THE UPLAND AREA OF THE BVW ON THE MIDDLE ROAD SIDE, REACHING OVER THE BVW AREA TO THE WETLAND REPLICATION AREA. CLEARED VEGETATION CAN BE REUSED AS TEMPORARY MATTING IF NECESSARY.
5. EROSION CONTROLS SHALL BE INSTALLED BETWEEN THE REPLACEMENT AREA AND INDIGENOUS BVW TO REMAIN UNALTERED. TO PROVIDE A BLENDED TRANSITION FROM THE UNALTERED BVW TO THE REPLACEMENT AREA EXCAVATION WILL NEED TO OCCUR ALONG THE DELINEATED BVW. THEREFOR, EROSION CONTROL WILL BE INSTALLED IMMEDIATELY FOLLOWING THE PERIMETER EXCAVATION AND PRIOR TO ADDITIONAL EXCAVATION OF THE BVW REPLICATION AREA. TO PRESERVE EXISTING TREE, EXCAVATION WILL BE VERY GRADUAL, AVOIDING ROOT SYSTEMS, PRIOR TO EXCAVATING DEEPER.
6. EXISTING WOODY VEGETATION FROM THE BVW REPLICATION AREA WILL BE REMOVED WITH THE EXCEPTION OF THE TREE. MATURE TREES WILL BE AVOIDED FOR ACCESS. SAPLINGS AND SHRUBS CAN BE CUT TO PROVIDE ACCESS. WITHIN THE BVW REPLICATION AREA ALL WOODY AND HERBACEOUS VEGETATION WILL BE REMOVED.
7. THE A-HORIZON AND O-HORIZON WITHIN THE BVW REPLICATION AREA WILL BE REMOVED AND STOCKPILED FOR FUTURE USE, IF ANY.
8. ONCE THE A AND O HORIZONS HAVE BEEN REMOVED THE SUBSOILS WILL BE EXCAVATED TO OBTAIN THE REQUISITE DEPTH. SUBSOILS WILL BE EXCAVATED TO MATCH THE EXISTING, ADJACENT BVW GRADES.
9. THE SOILS WILL THEN BE OVER-EXCAVATED AT VARIOUS DEPTHS (APPROXIMATELY 0 TO 10 INCHES) TO OBTAIN THE APPROPRIATE HYDROPERIOD AND MICROTOPOGRAPHY. HUMMOCKS WILL BE ESTABLISHED TO PROVIDE SUITABLE PLANTING MOUNDS FOR 4 NATIVE SHRUBS.
10. EXCAVATED SUBSOILS WILL BE STOCKPILED ON SITE FOR FUTURE USED IN CONSTRUCTION, IF DEEMED APPROPRIATE.
11. ALL EXCESS EXCAVATED SUBSOILS WILL BE TRUCKED OFF-SITE OR BROUGHT TO AN UPLAND AREA OUTSIDE OF WPA JURISDICTION.
12. THE EXCAVATED BVW REPLICATION AREA SHALL BE INSPECTED BY AN APPROVED WETLAND SCIENTIST PRIOR TO THE PLACEMENT OF WETLAND SOILS.
13. ONCE THE BVW REPLICATION AREA HAS BEEN OVER EXCAVATED EXPOSED SOILS WILL BE LOOSENEED TO RELIEVE SOIL COMPACT. THE AREA WILL THEN BE COVERED WITH 8 TO 12-INCHES OF THE WETLAND SOIL.
14. WETLAND SOILS MAY BE SOURCED FROM AGRESOURCE, INC., IPSWICH, MA OR A SIMILAR ALTERNATIVE VENDOR THAT IS SUBJECT TO THE APPROVAL FROM THE CONSERVATION COMMISSION OR CONSERVATION COMMISSION AGENT.
15. AFTER THE SOILS HAVE BEEN PLACED AND FINE GRADED THE BVW REPLICATION AREA WILL BE SEEDED AND PLANTED.
16. TO ESTABLISH AN HERBACEOUS GROUND COVER AS WELL AS WOODY VEGETATION, THE BVW REPLICATION AREA WILL BE SEEDED WITH A NATIVE WET AND SEED MIX, NEW WETLAND PLANTS WETMIX OR SIMILAR, AT THE NURSERY RECOMMENDED APPLICATION RATE. THE BVW REPLICATION AREA SHALL BE PLANTED AS SPECIFIED BY THE BVW REPLICATION PLANTING LIST PRESENTED BELOW. THE NUMBER OF PLANTS HAS BEEN BASED ON AN OVERALL DENSITY OF SHRUBS AT 6-FOC. A TOTAL OF 4 NATIVE SHRUBS SHALL BE PLANTED IN NATURALISTIC CLUMPS. EATURES (I.E. STUMPS AND WOODY DEBRIS) SHALL BE PLACED PRIOR TO PLANTING.
17. A VISUAL INSPECTION OF THE NEARBY BVW WILL BE MADE AND ANY ADDITIONAL INVASIVE PLANT SPECIES WILL BE REMOVED BY HAND.
18. DISTURBED SOILS WITHIN THE ADJACENT BUFFER ZONE WILL BE GRADED TO ACHIEVE STABLE SIDE-SLOPES AND SEEDED WITH A NON-INVASIVE CONSERVATION MIX AND MULCHED WITH STRAW.
19. THE BVW REPLICATION AREA SHALL BE MONITORED BY AN APPROVED WETLAND SCIENTIST FOR TWO CONSECUTIVE GROWING SEASONS BEGINNING ON THE FIRST FULL GROWING SEASON AFTER THE IMPLEMENTATION OF THE RESTORATION WORK. THE WETLAND SCIENTIST SHALL SUBMIT A YEARLY MONITORING REPORT WITH COLOR PHOTOGRAPHS TAKEN FROM ESTABLISHED REFERENCED POINT TO THE BYFIELD/NEWBURY CONSERVATION COMMISSION. IN THE EVENT THAT A BVW REPLICATION AREA IS NOT IN COMPLIANCE WITH THE APPROVED PLAN AND 310 CMR 10.55(4), THE WETLAND SCIENTIST SHALL INCLUDE A "CORRECTIVE PLAN OF ACTION" WITH THE YEARLY MONITORING REPORT. THE CORRECTIVE PLAN OF ACTION SHALL BE IMPLEMENTED FOLLOWING REVIEW AND APPROVAL BY THE BYFIELD/NEWBURY CONSERVATION COMMISSION.
20. REFER TO WETLAND REPLICATION AREA DETAIL AND ENLARGEMENT ON SHEET C-4.

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

WETLAND REPLICATION PLAN

C-3

THE GOVERNORS ACADEMY  
1 ELM STREET  
BYFIELD, MA 01922

PROPOSED  
WALKWAY PROJECT  
MIDDLE ROAD  
BYFIELD, MA

DATE: 3-1-23  
SCALE: 1"=10'  
DRAWN BY: SD/AM  
DESIGN BY: MEB  
APPROVED BY: MEB 2  
PROJECT NO: 22034  
FILE: 22034-SITE

DATE: 3-15-23  
MEB  
NOI SUBMISSION

DATE: 3-7-23  
MEB  
APP'D

NO. 1

REVISION

CIVILWORKS NEW ENGLAND  
CIVIL & ENVIRONMENTAL ENGINEERING  
181 Watson Road, PO Box 1166  
Dover, New Hampshire 03821  
603.748.0443

COMMONWEALTH OF MASSACHUSETTS  
MARK E. BEAUDRY  
CIVIL  
No. 38189  
REGISTERED PROFESSIONAL ENGINEER

**DESCRIPTION**

THE INTENT OF THIS PLAN IS TO SHOW THE IMPROVEMENTS ASSOCIATED WITH THE CONSTRUCTION OF CRUSHED ROCK WALKWAY AND BOARDWALK.

**DISTURBED AREA**

±7,080 SQUARE FEET OF DISTURBANCE  
±82 FEET OF BOARDWALK OVER WETLAND

**INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS**

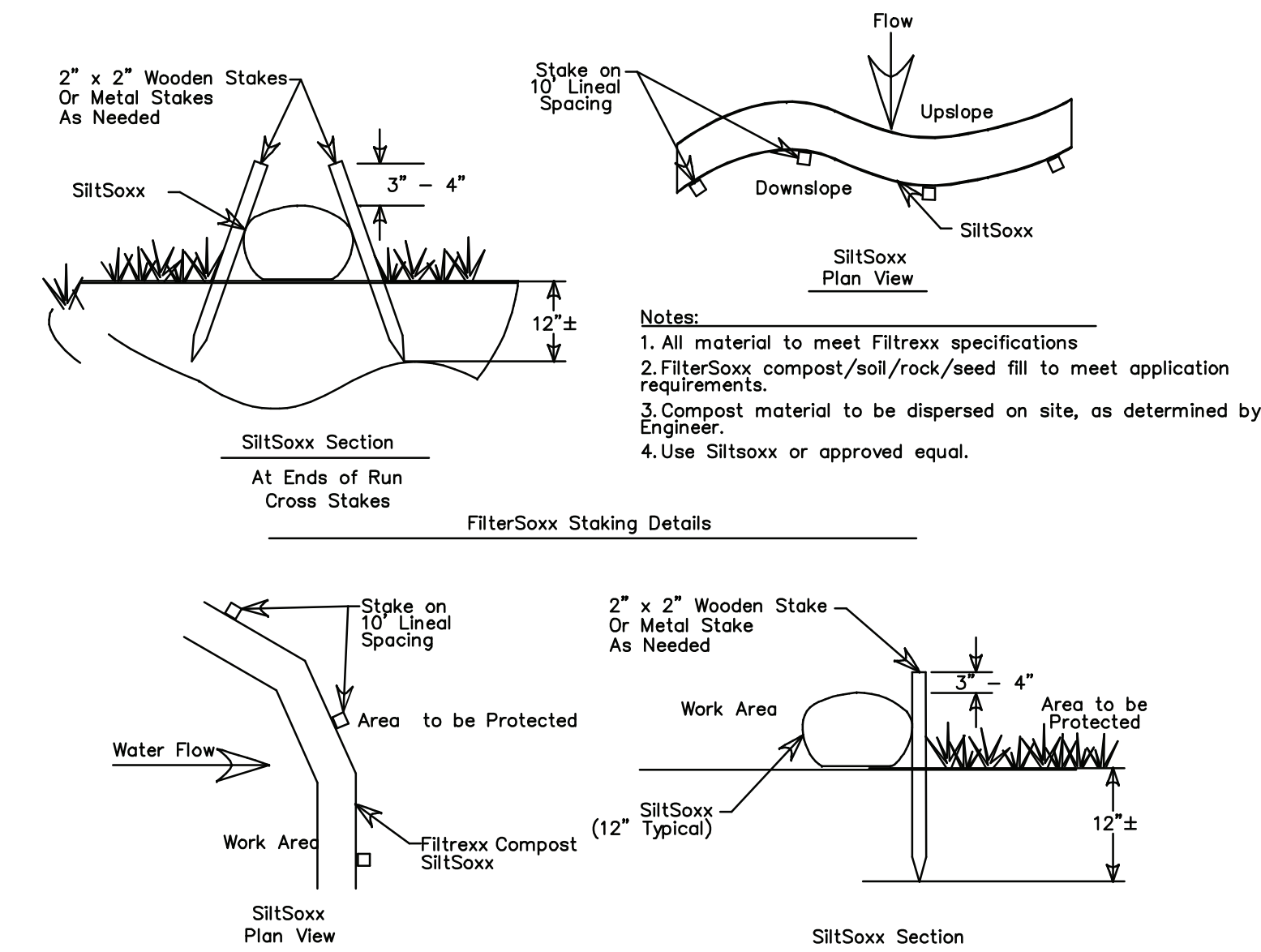
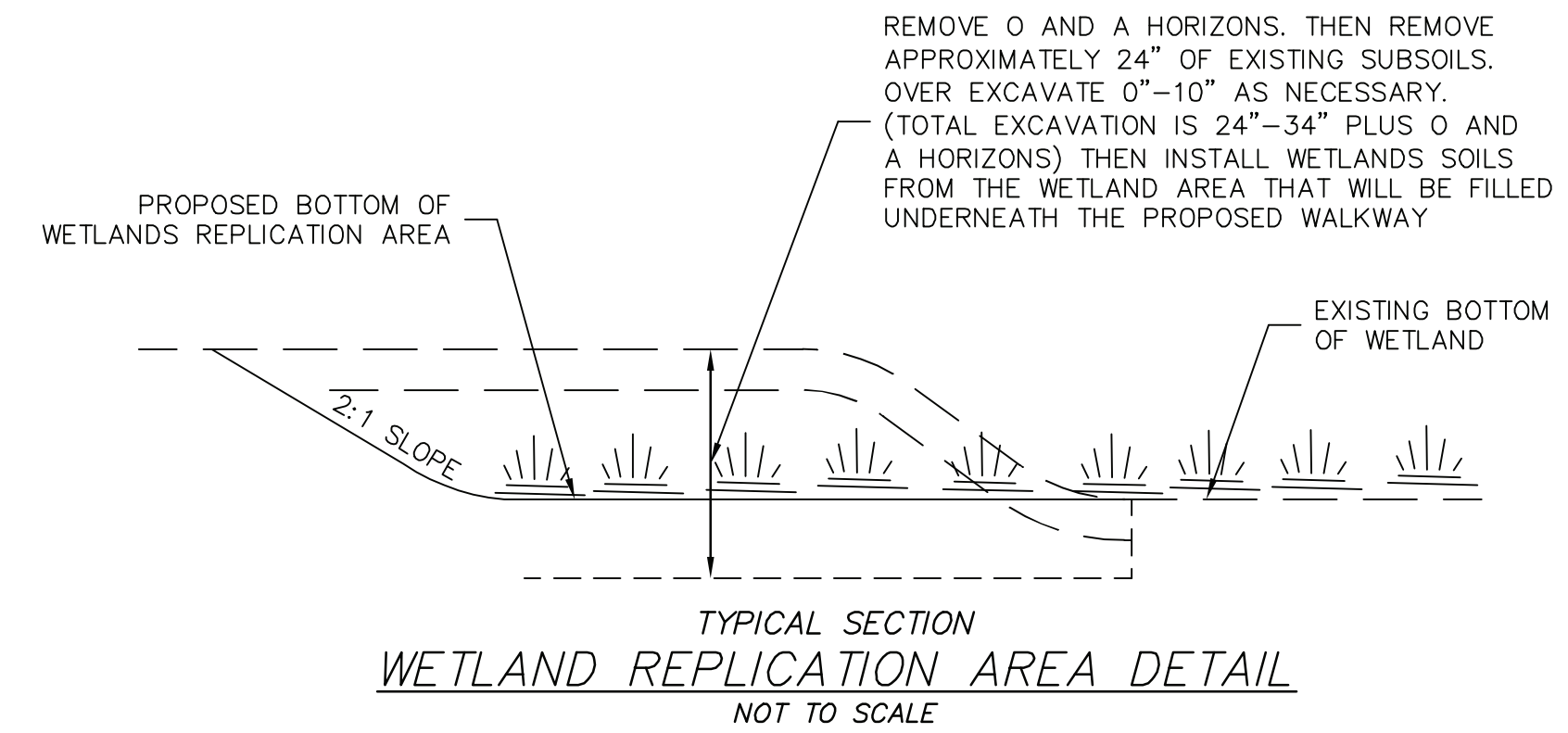
1. EPA NOTICE OF INTENT IS NOT REQUIRED FOR THIS SITE.
2. PLACE TEMPORARY EROSION AND SEDIMENT CONTROL BMP'S PRIOR TO EARTH MOVING ACTIVITIES.
3. ALL EROSION CONTROL AND PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO COMMENCING EARTH MOVING OPERATIONS.
4. REFER TO REPLICATION NOTES ON C-3 FOR MORE INFORMATION.
5. REGRADE SITE TO SUBGRADE.
6. INSTALL UNDERGROUND ELECTRICAL UTILITIES AND FOUNDATIONS FOR BOARDWALK AND LIGHT BOLLARDS.
7. PLACE GRAVELS AND FINE GRADE.
8. STABILIZE, PATHWAY WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
9. ALL CUT AND FILL SLOPES SHALL BE LOAMED AND SEEDED (AS APPLICABLE) WITHIN 72 HOURS OF ACHIEVING FINISH GRADE.
10. ALL EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EVERY 1/4" OF RAINFALL.
11. IN ALL CASES THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION AND IN NO CASE SHALL EXCEED 1 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
12. WHEN ALL SITE WORK IS COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
13. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED
  - A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED(BIT. CONC. SIDEWALK) OR CRUSHD ROCK IN WALKWAYS AREA.
  - B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED
  - C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED; OR
  - D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED

**MAINTENANCE OF**

**EROSION & SEDIMENT CONTROL FACILITIES**

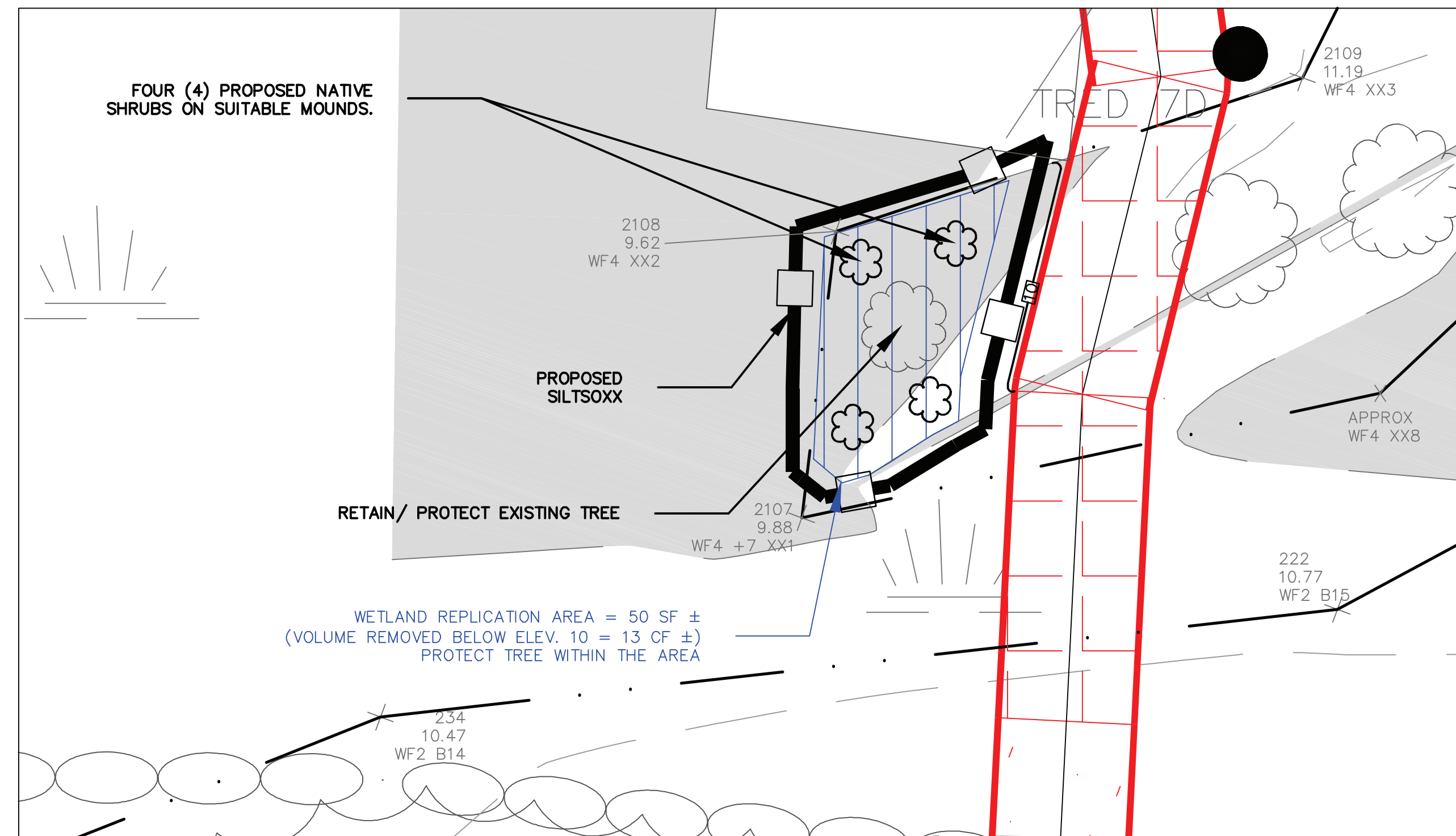
THE PROJECT CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE OF ALL FACILITIES DURING CONSTRUCTION AND THE PROPERTY OWNER IS RESPONSIBLE AFTER CONSTRUCTION IS COMPLETE.

1. SILT BARRIERS
  - A. SEQUENCE OF INSTALLATION  
SEDIMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.
  - B. MAINTENANCE
    - a. CHECK DAMS AND SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM.
    - b. SHOULD THE BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
    - c. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE THIRD (1/3) THE HEIGHT OF THE BARRIER.
    - d. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.



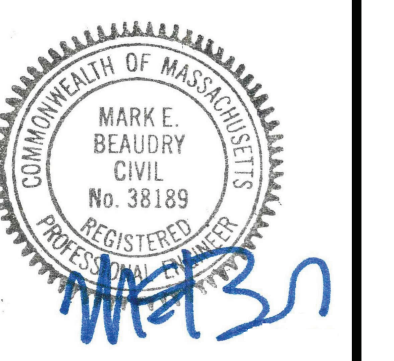
- Notes:**
1. All material to meet Filtrrexx specifications, use Filtrrexx Siltsoxx or approved equal
  2. Siltsoxx compost/soil/rock/seed fill to meet application requirements.
  3. Siltsoxx depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.
  4. Compost material to be dispersed on site, as determined by Engineer.

**SILT SOXX DETAILS**  
NOT TO SCALE



**WETLAND REPLICATION AREA ENLARGEMENT**  
SCALE: 1"=4'

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY	
DATE: 3-1-23	NO. 1
SCALE: DETAILS	NO. 1
DRAWN BY: SD/AM	NO. 1
DESIGN BY: MEB	NO. 1
APPROVED BY: MEB	NO. 1
PROJECT NO: 22034	NO. 1
FILE: 22034-SITE	NO. 1
PB SITE PLAN REVIEW SUBM.	3-15-23
NOI SUBMISSION	3-7-23
REVISION	APPD
CIVILWORKS NEW ENGLAND 181 Watson Road, PO Box 1166 Dover, New Hampshire 03821 603.749.0445	



**EROSION & SEDIMENT CONTROL PLAN**

THE GOVERNORS ACADEMY  
1 ELM STREET  
BYFIELD, MA 01922

PROPOSED  
WALKWAY PROJECT  
MIDDLE ROAD  
BYFIELD, MA

C-4

