

THE GOVERNOR'S ACADEMY PEDESTRIAN WALKWAY

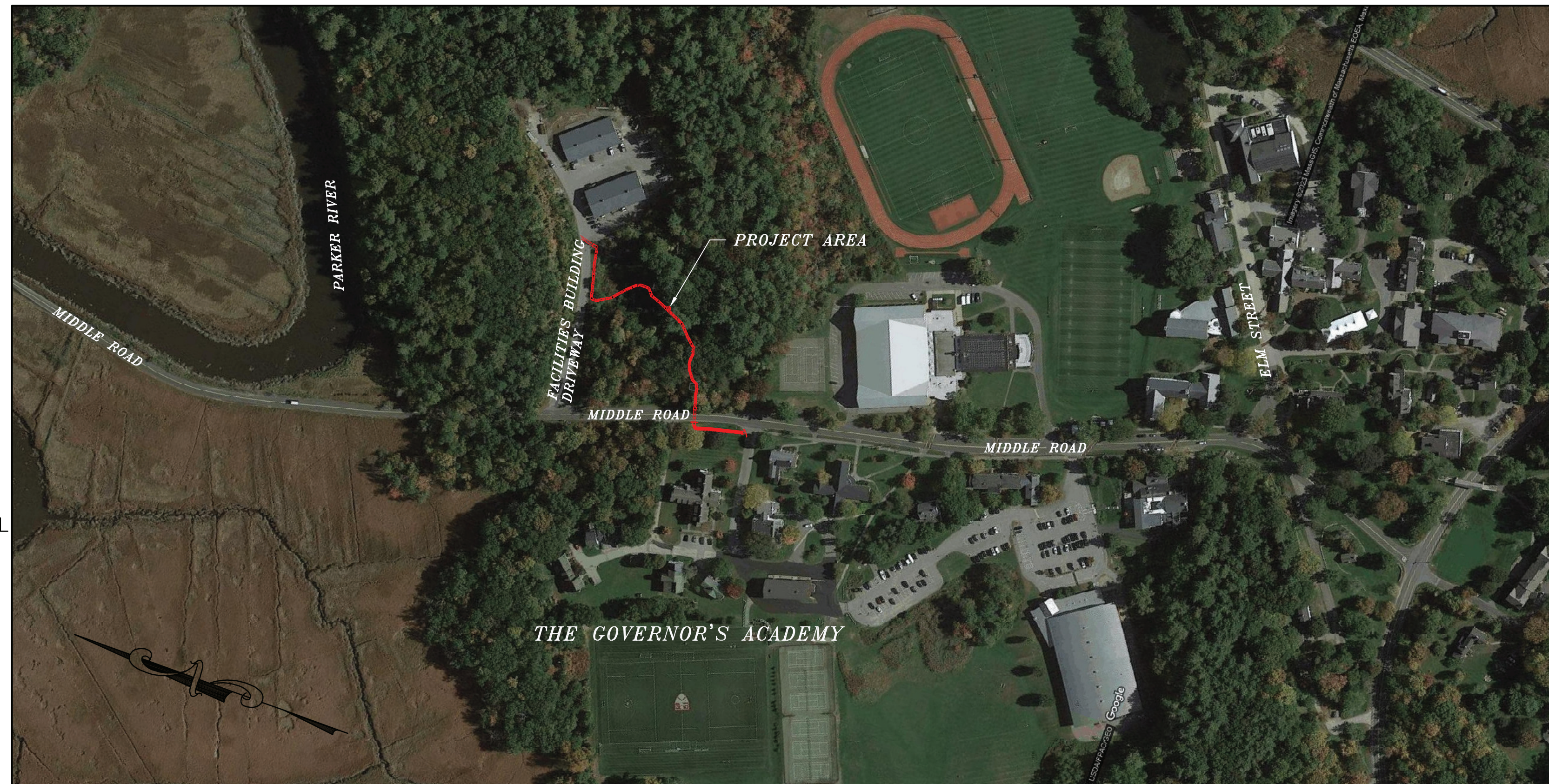
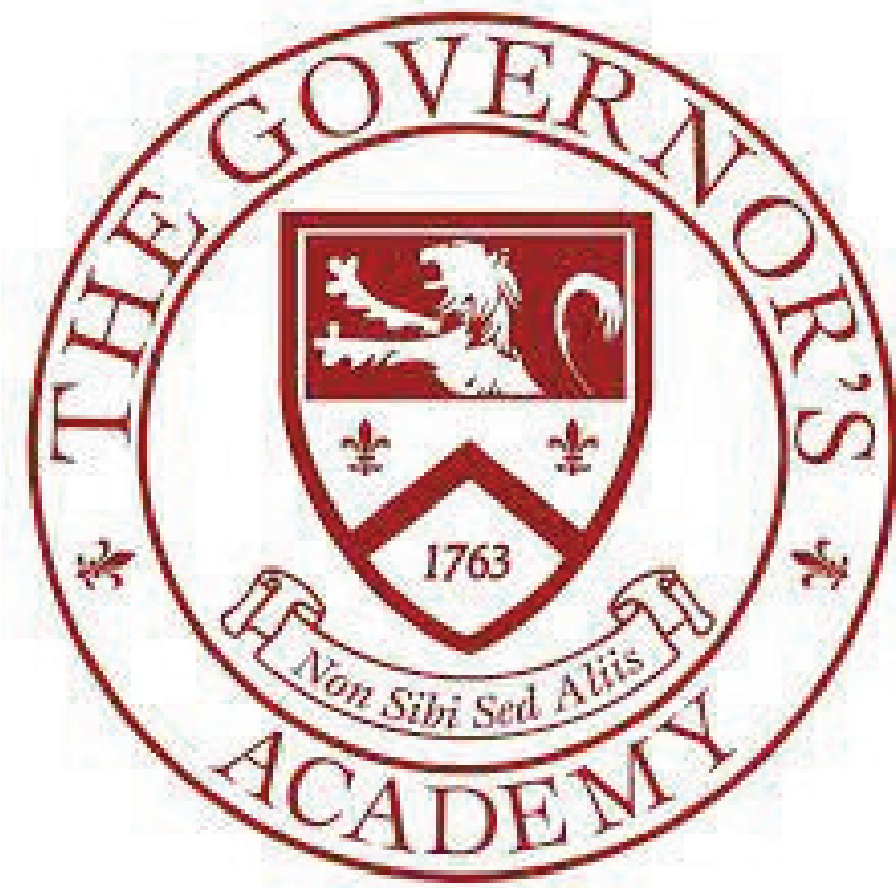
MIDDLE ROAD
NEWBURY, MASSACHUSETTS

MARCH 1, 2023

REV: MARCH 7, 2023

REV: MARCH 15, 2023

REV: APRIL 12, 2023



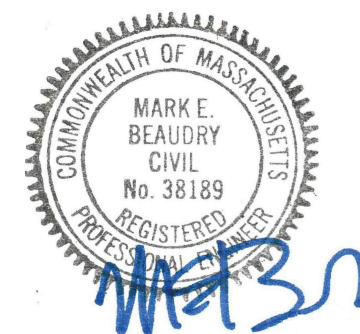
LOCUS MAP
SCALE: 1"=200'

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

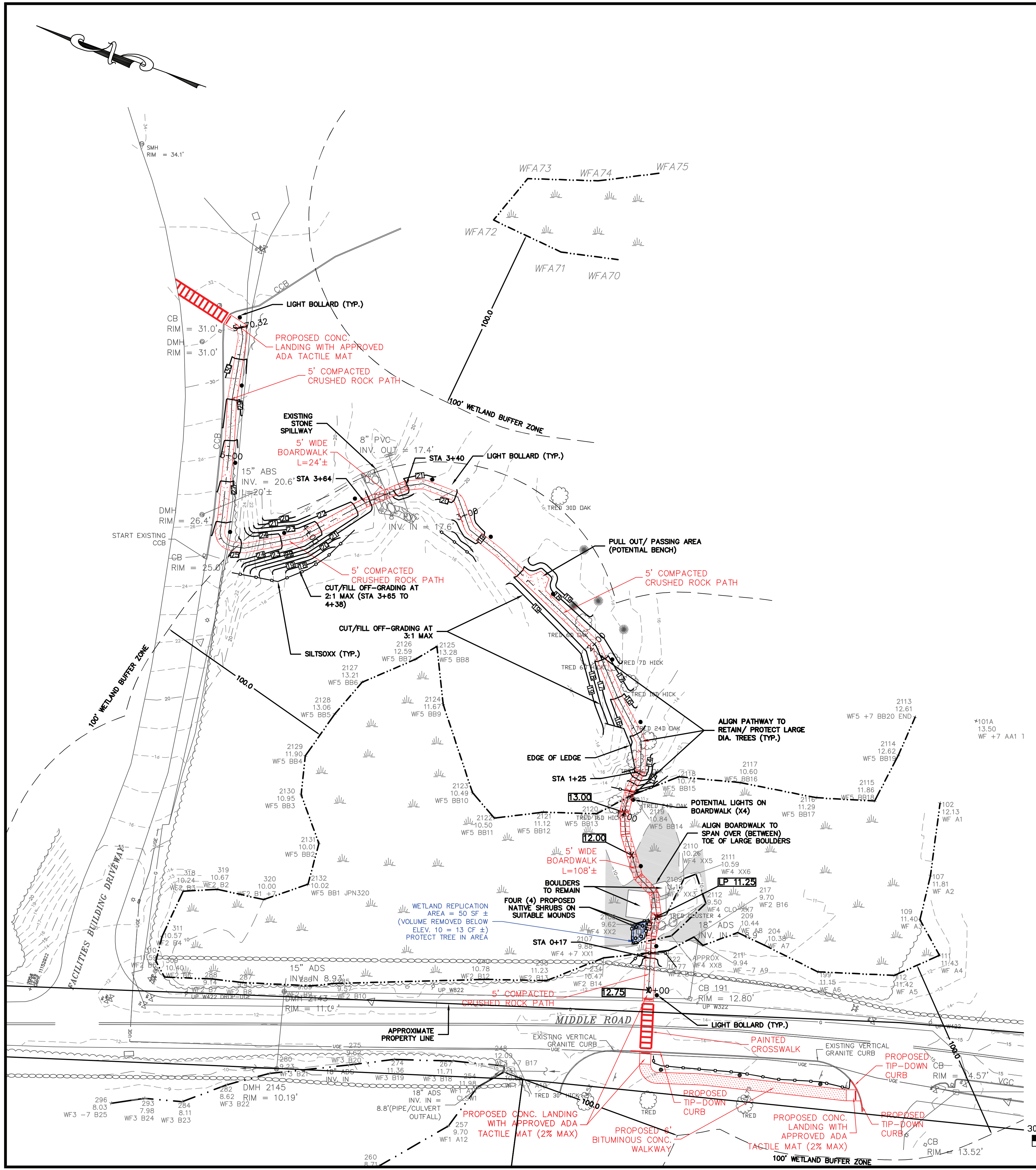
SITE CIVIL ENGINEER CIVILWORKS NEW ENGLAND
CIVIL ENGINEERING
181 Watson Road - P.O. Box 1166 - Dover, New Hampshire 03820
71 7th Street - P.O. Box 161 - Turners Falls, Massachusetts 01376

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 McENEANEY 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 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 BWV 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. THE GOVERNOR'S ACADEMY ANTICIPATES THE LIGHTING WILL BE ON "DUSK TO DAWN".
10. THE PATHWAY ALIGNMENT WILL BE FIELD-ADJUSTED TO PROTECT TREE ROOTS WITH FINAL ROUTE CAPTURED ON THE REQUIRED AS-BUILT PLAN. ADJUSTMENTS WILL BE COORDINATED WITH THE CONSERVATION AGENT AND PLANNING BOARD IF DESIRED.
11. IF LEDGE IS ENCOUNTERED AND CANNOT BE READILY REMOVED, THE PATHWAY ALIGNMENT WILL BE FIELD-ADJUSTED TO AVOID SUCH LEDGE AREA. THE FINAL ROUTE WILL BE SHOWN ON THE AS-BUILT PLAN. ADJUSTMENTS WILL BE COORDINATED WITH THE CONSERVATION AGENT AND THE PLANNING BOARD IF NECESSARY.

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

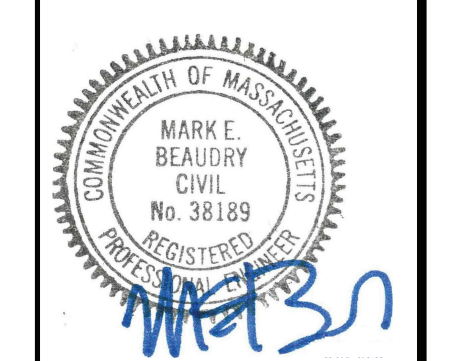
DATE: 3-1-23	SCALE: 1"=30'	DRAWN BY: SD/AM	PB REVIEW RESPONSE	4-12-23	MEB
		DESIGN BY: MEB	PB SITE PLAN REVIEW SUBM.	3-15-23	MEB
		APPROVED BY: MEB	NOI SUBMISSION	3-7-23	MEB
		PROJECT NO: 22034	REVISION		APP'D
		FILE: 22034-SITE	NO.		DATE

CIVILWORKS NEW ENGLAND
CIVIL & WATERFRONT ENGINEERS
 181 Watson Road - P.O. Box 1166 - Dover, New Hampshire 03820
 71 7th Street - P.O. Box 161 - Turners Falls, Massachusetts 01376

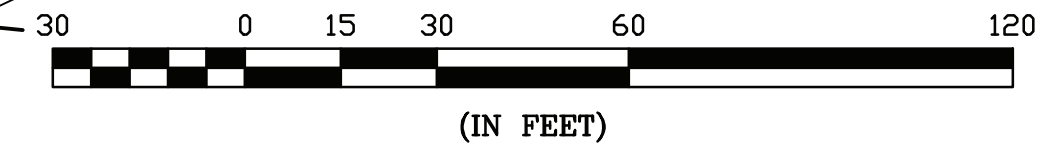
THE GOVERNORS ACADEMY
 1 ELM STREET
 BYFIELD, MA 01922

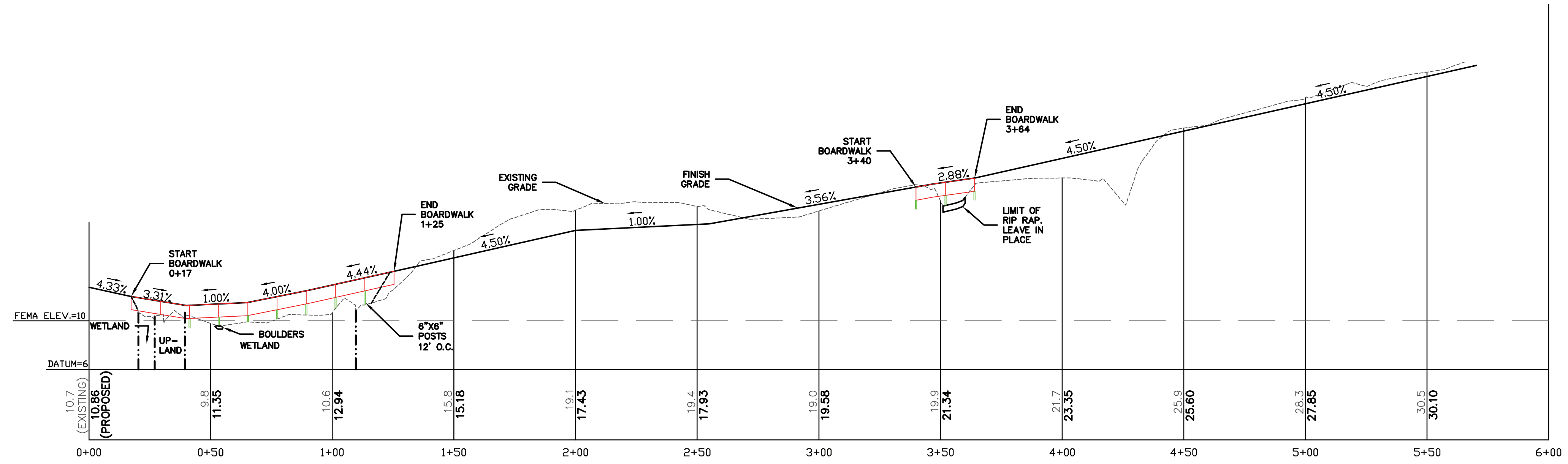
PROPOSED WALKWAY PROJECT
 MIDDLE ROAD
 BYFIELD, MA

C-1

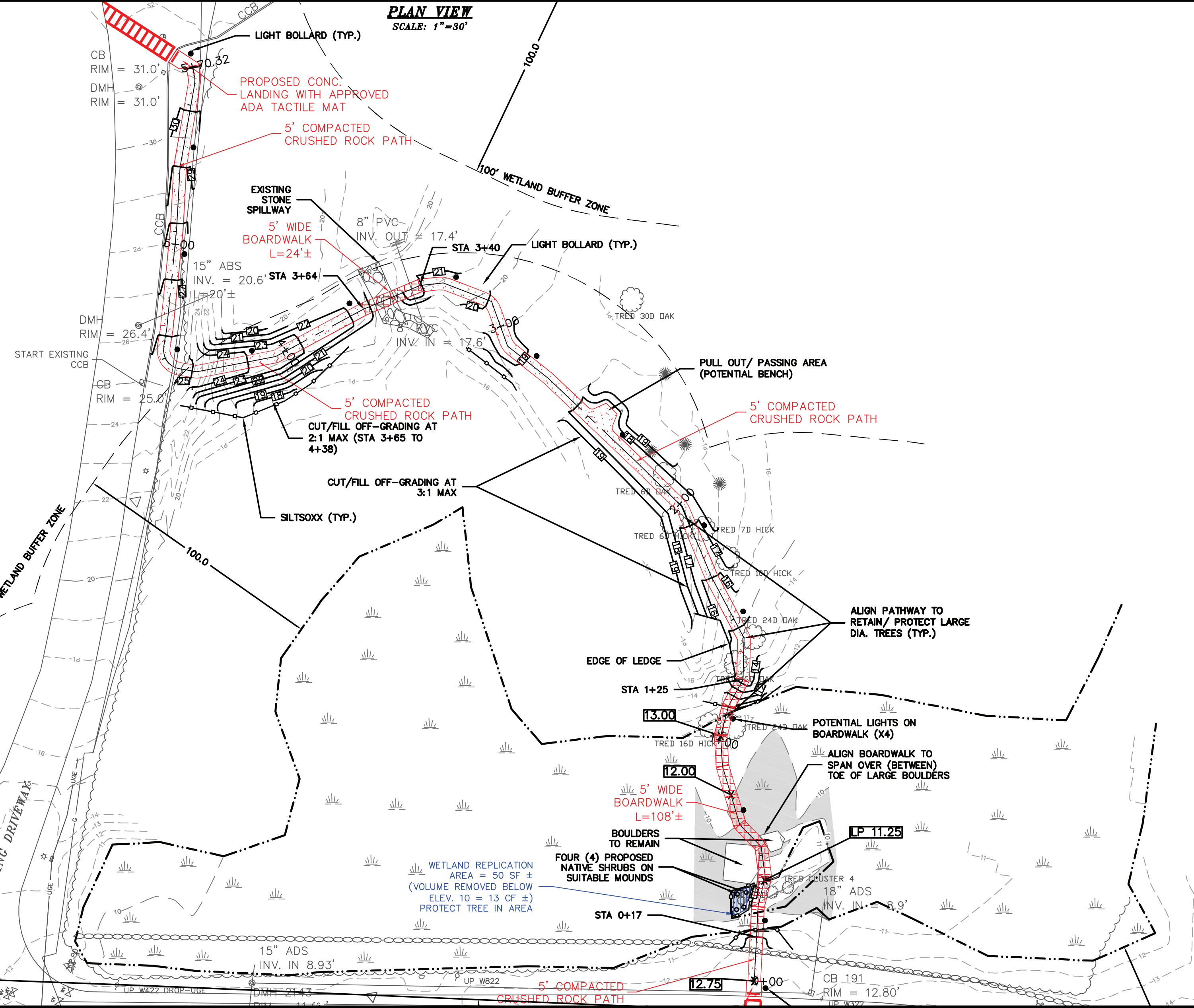


GRAPHIC SCALE

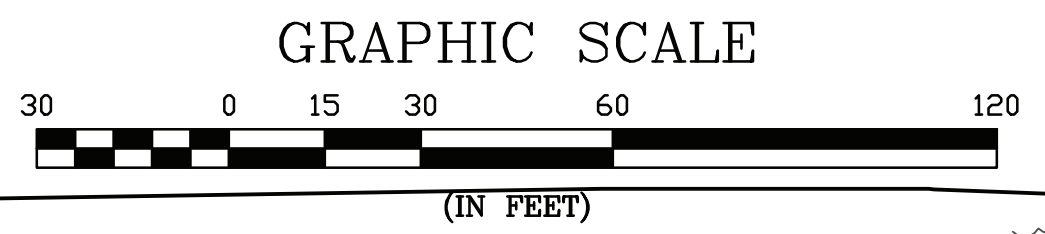
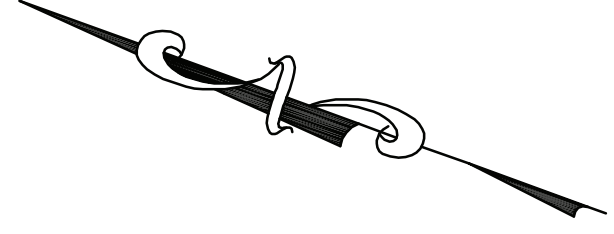




PROFILE VIEW
 SCALE: HORIZONTAL: 1"=30'
 VERTICAL: 1"=6'

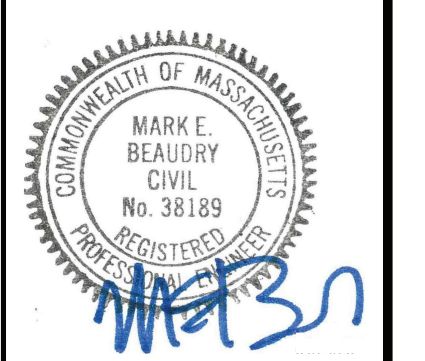


PLAN VIEW
 SCALE: 1"=30'



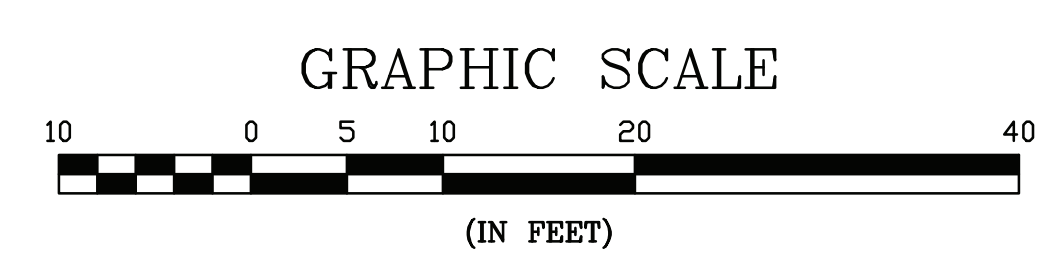
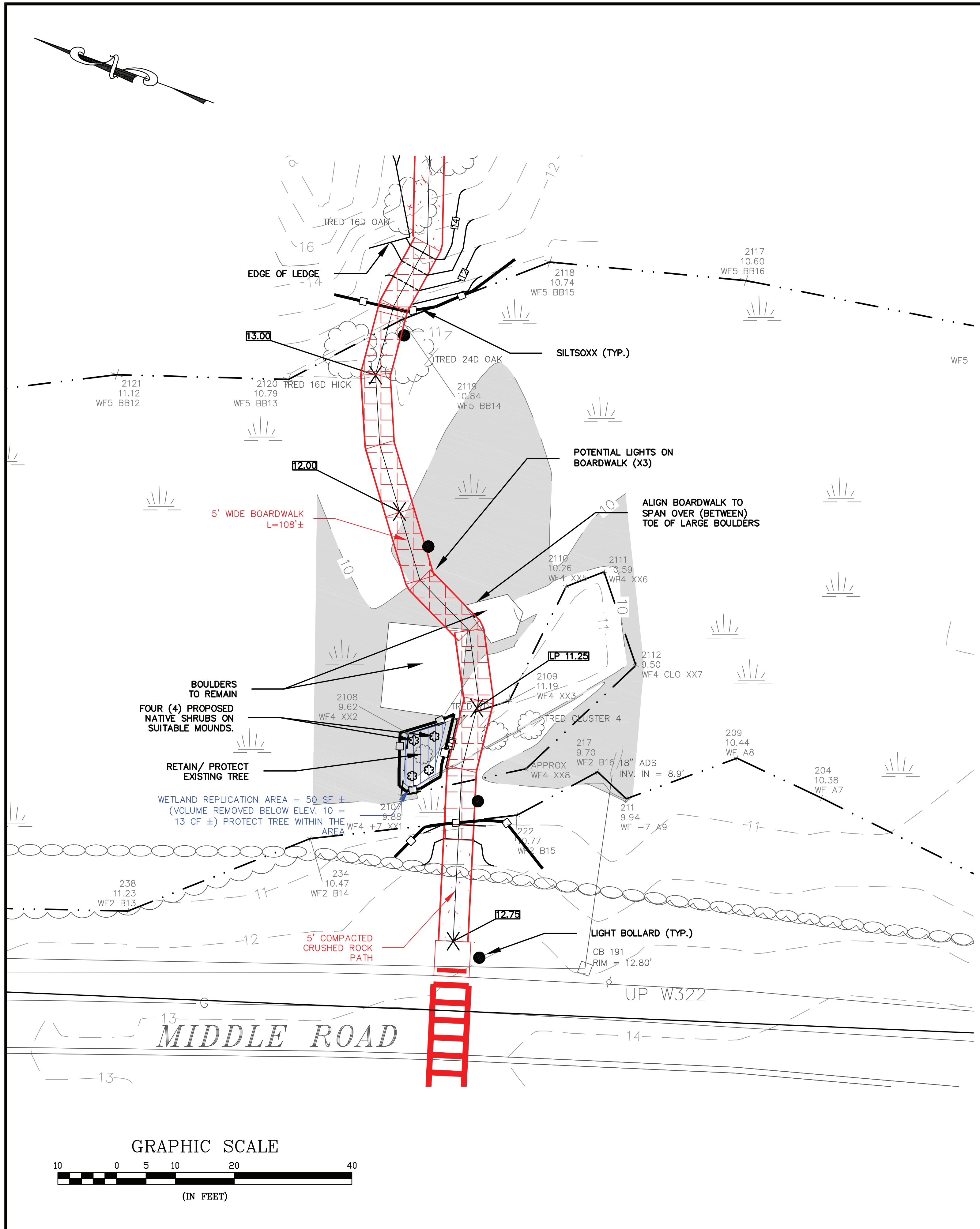
NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

DATE: 3-1-23	SCALE: 1"=30'	DRAWN BY: SD/MM	PB REVIEW RESPONSE	4-12-23	CIVILWORKS NEW ENGLAND <small>CIVIL & WATERFRONT ENGINEERS</small> 181 Watson Road - P.O. Box 1166 - Dover, New Hampshire 03820 7170 Street - P.O. Box 161 - Turners Falls, Massachusetts 01376
SCALE: 1"=30'	DESIGN BY: MEB	3	PB SITE PLAN REVIEW SUBM.	3-15-23	
	PROJECT NO: 22034	2	NOI SUBMISSION	3-7-23	
	FILE: 22034-SITE	1	REVISION	DATE	
				APP'D	



THE GOVERNORS ACADEMY
 1 ELM STREET
 BYFIELD, MA 01922

PROPOSED WALKWAY PROJECT
 MIDDLE ROAD
 BYFIELD, MA



WETLAND REPLICATION AND 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 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 LOOSENED 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

DATE: 3-1-23	SCALE: 1"=10'	DESIGN BY: MEB	APPROVED BY: MEB	PROJECT NO: 22034	FILE: 22034-SITE
DRAWN BY: SD/AM	DESIGN BY: MEB	APPROVED BY: MEB	PROJECT NO: 22034	FILE: 22034-SITE	
PB REVIEW RESPONSE	PB SITE PLAN REVIEW SUBM.	NOI SUBMISSION	REVISION	NO.	
4-12-23	3	2	1		
MEB	MEB	MEB	APP'D	DATE	

CIVILWORKS NEW ENGLAND
 CIVIL & ENVIRONMENTAL ENGINEERS
 181 Watson Road - P.O. Box 1166 - Dover, New Hampshire 03820
 7170th Street - P.O. Box 161 - Turners Falls, Massachusetts 01376

WETLAND REPLICATION PLAN
 THE GOVERNORS ACADEMY
 1 ELM STREET
 BYFIELD, MA 01922

C-3

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 SEEDDED (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

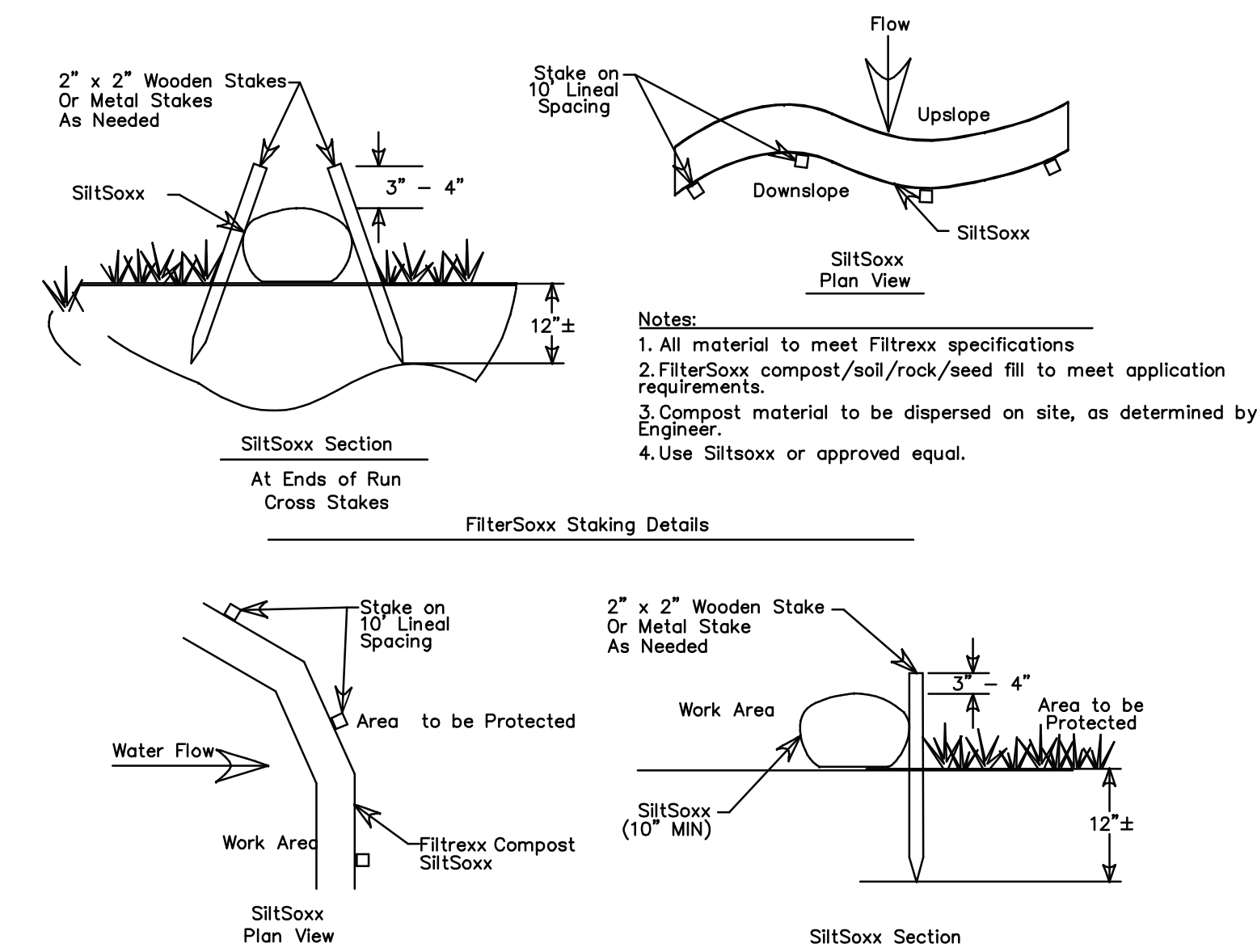
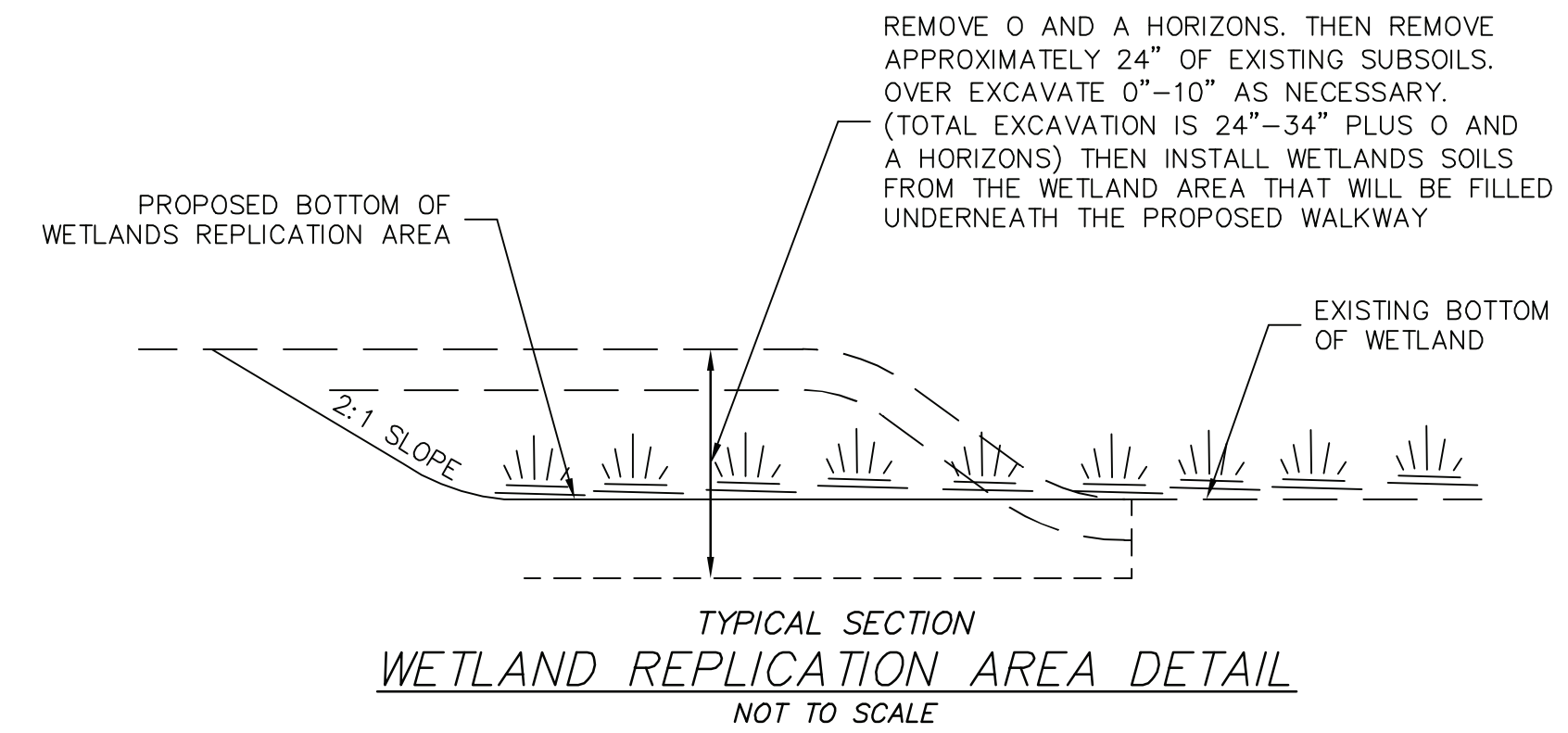
EROSION & SEDIMENT CONTROL FACILITIES

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 SEEDDED.

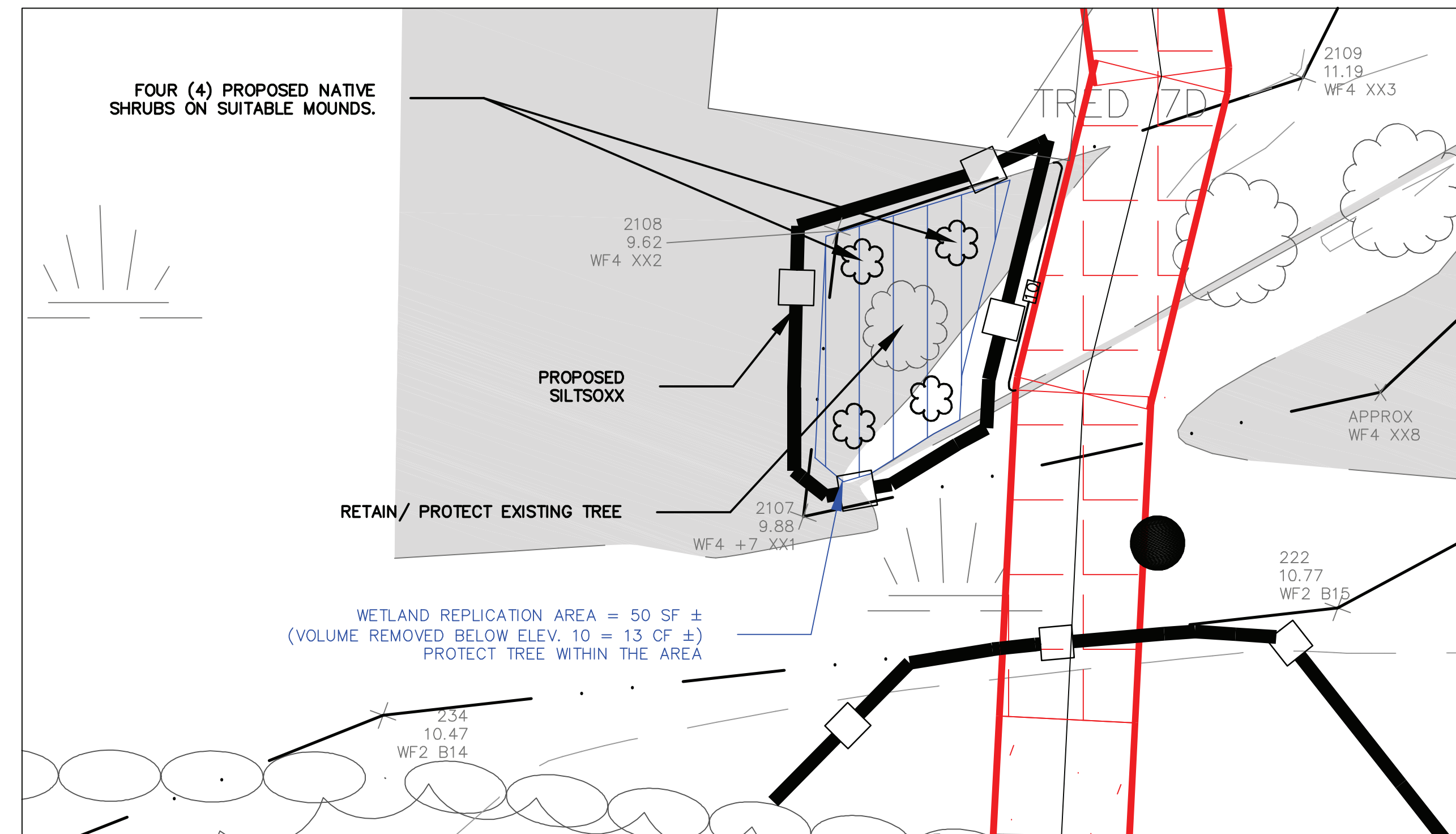
NOTES:

1. THESE EROSION AND SEDIMENT CONTROL NOTES AND DETAILS APPLY TO ENTIRE PROJECT AND NOT JUST WETLAND REPLICATION AREA.
2. USE TURF REINFORCING MATTING ON 2:1 SLOPES. INSTALL PER MANUFACTURING REQUIREMENTS.



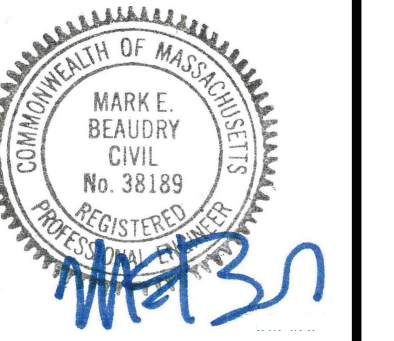
- Notes:**
1. All material to meet Filtrxxx specifications, use Filtrxxx Siltsoxx or approved equal
 2. SiltSoxx compost/soil/rock/seed fill to meet application requirements.
 3. SiltSoxx depicted is for minimum slopes. Greater slopes may require larger socks per the Engineer.
 4. Compost material to 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	SCALE: DETAILS	DESIGN BY: MEB	PROJECT NO: 22034
DRAWN BY: SD/AM	PB REVIEW RESPONSE	APPROVED BY: MEB	FILE: 22034-SITE
	PB SITE PLAN REVIEW SUBM.	NOI SUBMISSION	
		REVISION	
		APPD	
		NO.	
		DATE	
		4-12-23	
		MEB	
		3-15-23	
		MEB	
		3-7-23	
		MEB	

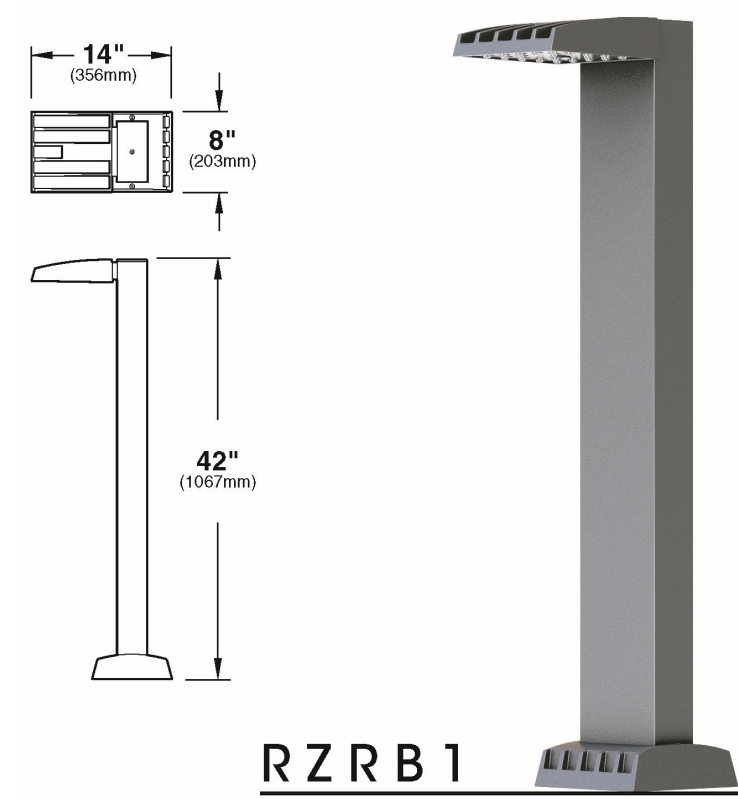


EROSION & SEDIMENT CONTROL PLAN

THE GOVERNORS ACADEMY
1 ELM STREET
BYFIELD, MA 01922

PROPOSED
WALKWAY PROJECT
MIDDLE ROAD
BYFIELD, MA

C-4

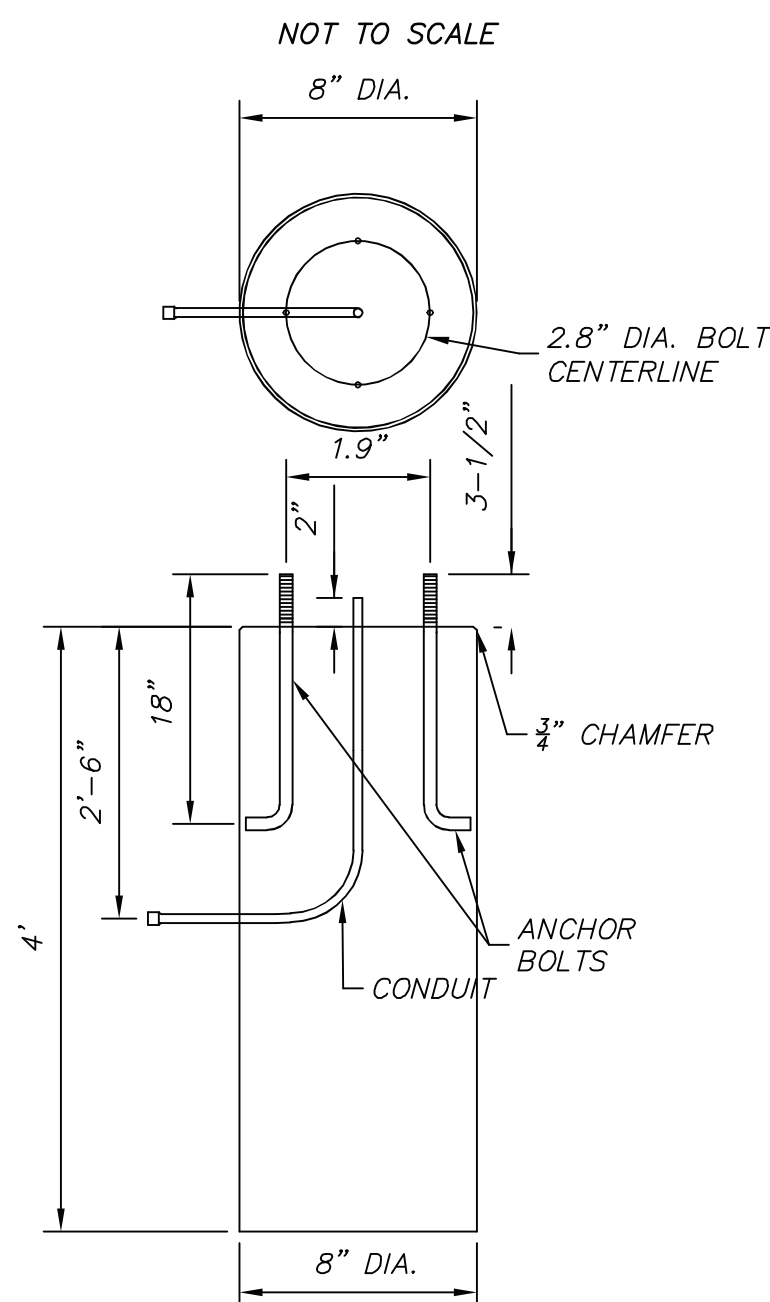


RZR B1

NOTES:

1. LIGHT FIXTURE IS "DARK SKY" COMPLIANT.
2. OR APPROVED EQUAL.

U.S. ARCHITECTURAL LIGHTING – RAZAR BOLLARD-LED

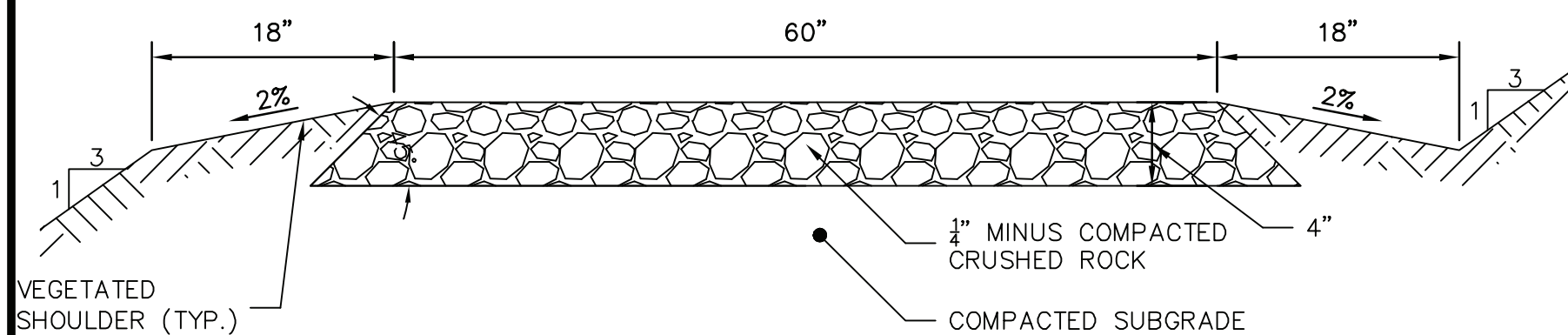


NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. CONDUIT, ANCHOR BOLTS AND TEMPLATE SUPPLIED BY OTHERS.

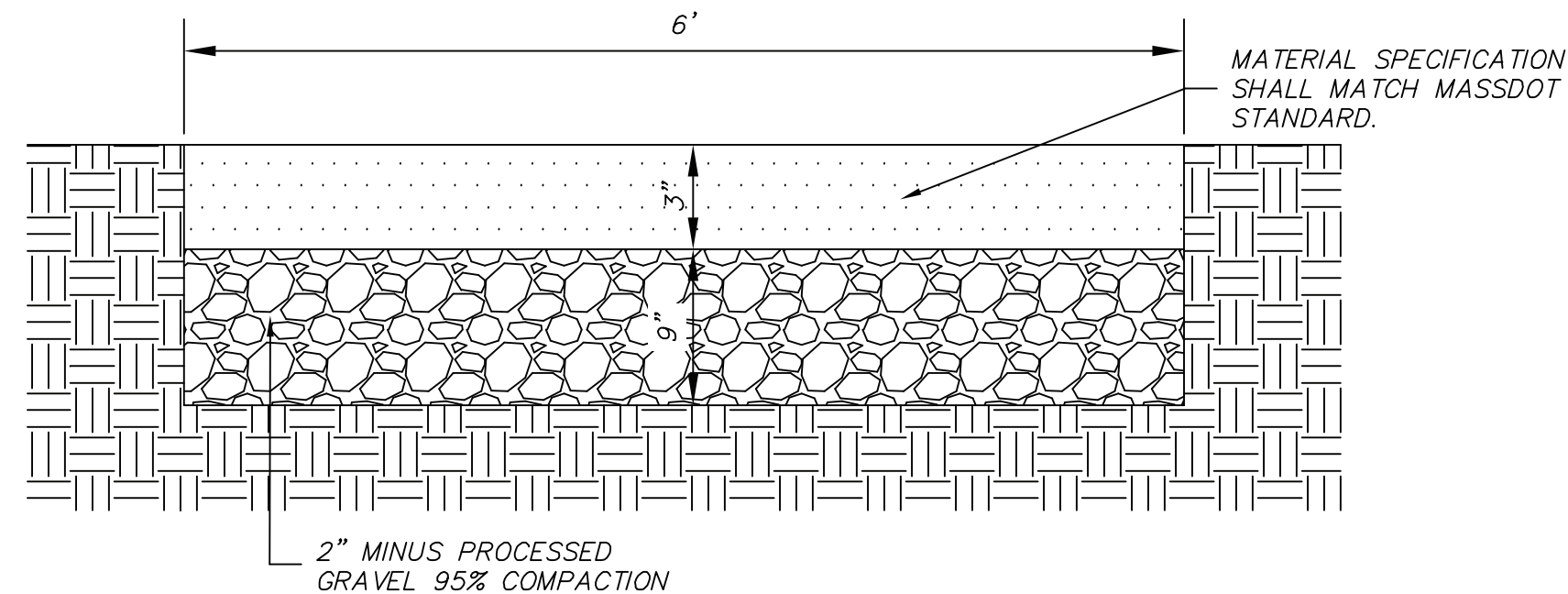
BOLLARD LIGHT BASE

NOT TO SCALE



TYPICAL PATHWAY SECTION

NOT TO SCALE

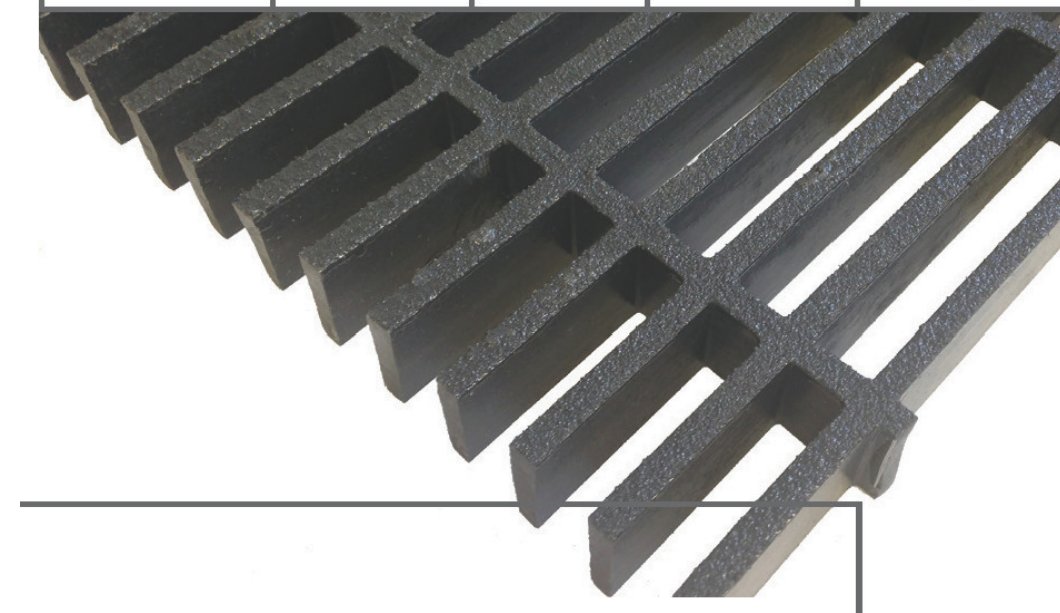


BITUMINOUS SIDEWALK DETAIL

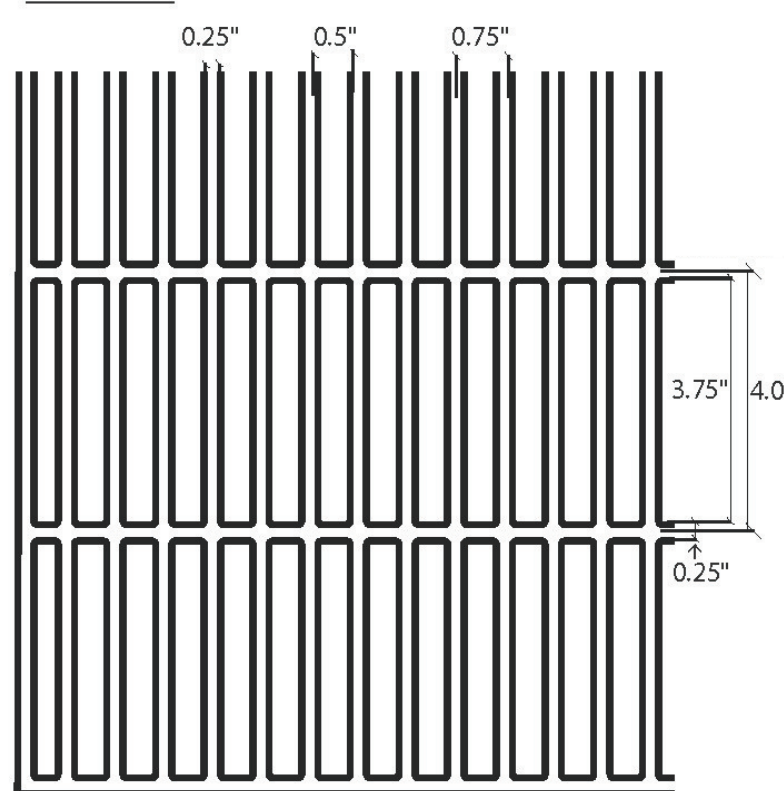
NOT TO SCALE

1" Deep, 3/4" x 4" Rectangular Mesh

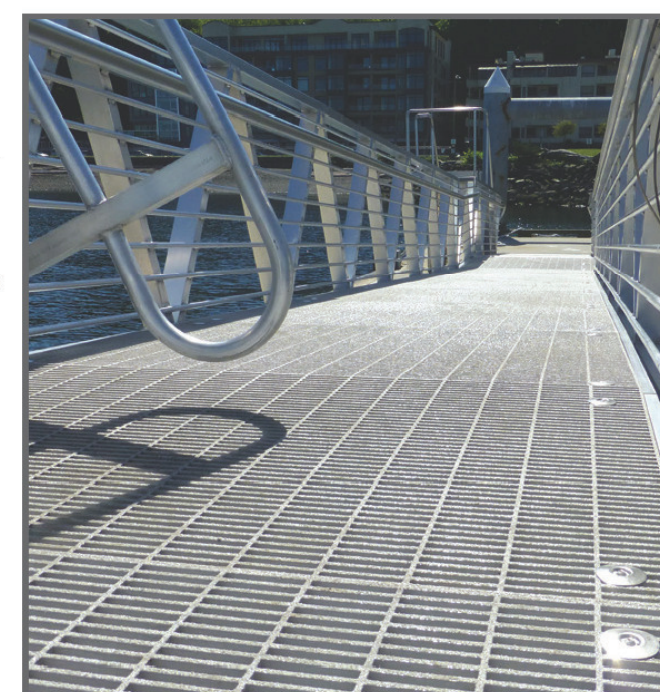
# of Bars/ Ft of Width	Load Bar Width	Open Area	Load Bar Centers	Approx. Weight
16	1/4"	62%	3/4"	3.0 psf



Plan View

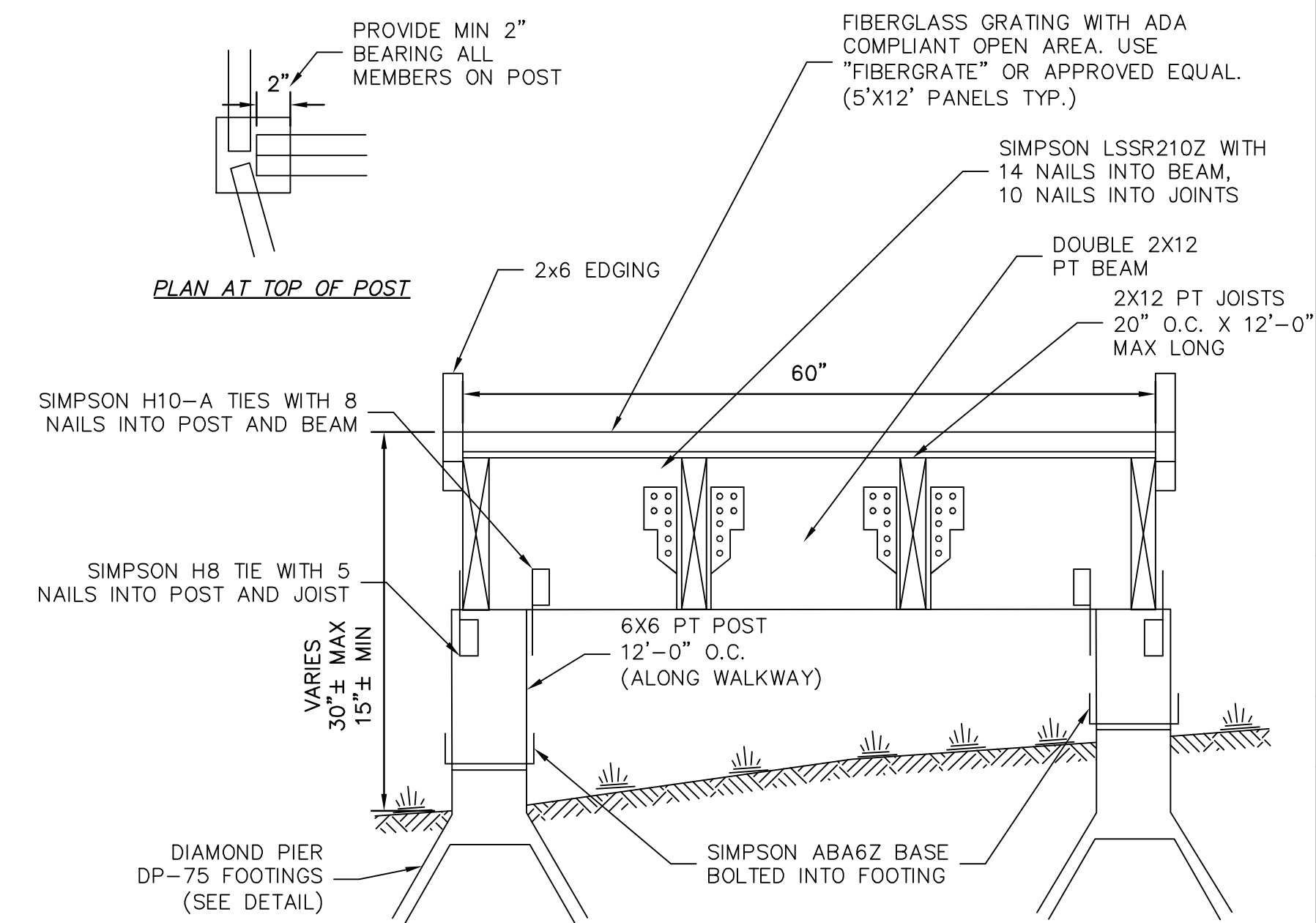


Elevation View



FIBERGRATE COMPOSITE STRUCTURES
ECOGRATE® 62 MOLDED GRATE

NOT TO SCALE

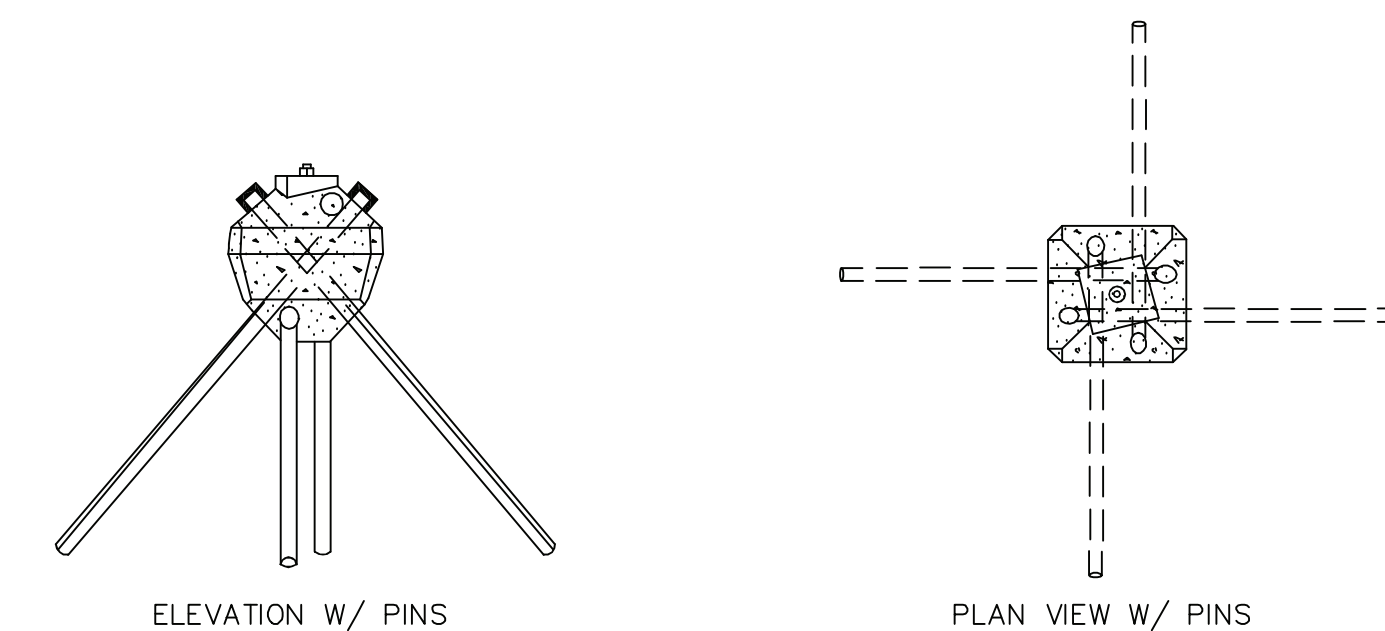


NOTES:

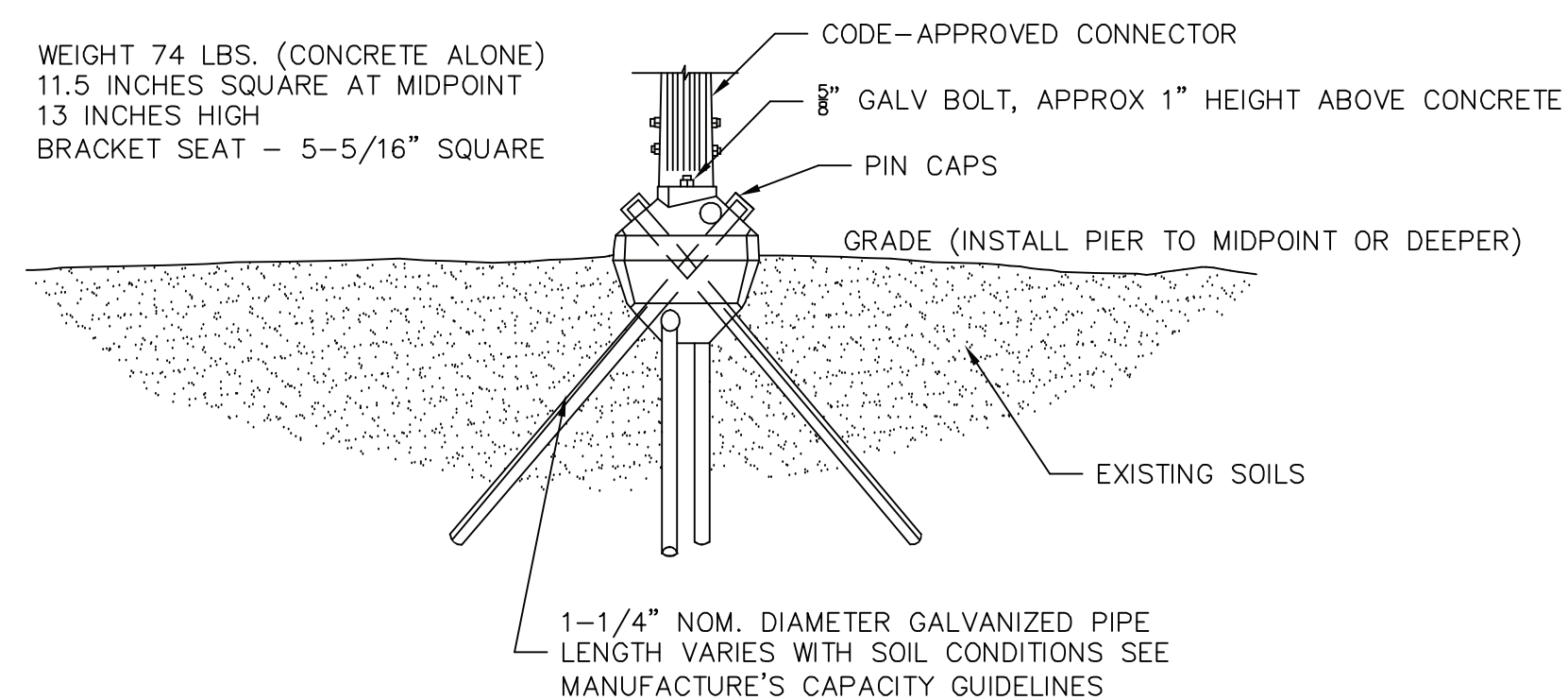
1. LIGHTING AND ELECTRICAL CONDUIT MOUNTED ON/TO BOARDWALK NOT SHOWN.
2. IF SHALLOW ROCK IS ENCOUNTERED SMALL DIAMETER (6" OR 8" MAX) SONOTUBE-TYPE CONCRETE PIERS WITH A "HEAD" NO LARGER THAN THE DIAMOND PIER CAP CAN BE UTILIZED IF NECESSARY. THIS WILL BE CLOSELY COORDINATED PRE-CONSTRUCTION WITH THE CONTRACTOR.

TYPICAL BOARDWALK SECTION

NOT TO SCALE



WEIGHT 74 LBS. (CONCRETE ALONE)
11.5 INCHES SQUARE AT MIDPOINT
13 INCHES HIGH
BRACKET SEAT – 5-5/16" SQUARE



1-1/4" NOM. DIAMETER GALVANIZED PIPE
LENGTH VARIES WITH SOIL CONDITIONS SEE
MANUFACTURE'S CAPACITY GUIDELINES

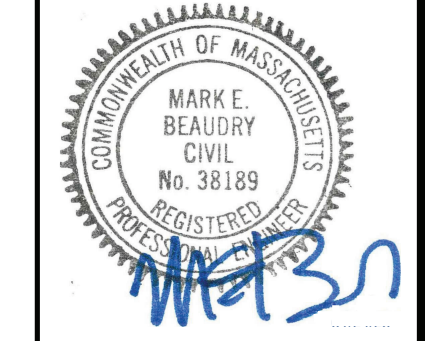
©2018 PIN FOUNDATIONS, INC. ALL RIGHTS RESERVED. DOC0024/01.2018

DIAMOND PIER® DRP-75
PIN FOUNDATIONS, INC.

NOT TO SCALE

NOT FOR CONSTRUCTION FOR PERMIT USE ONLY

DATE	SCALE	DRAWN BY	DESIGN BY	APPROVED BY	PROJECT NO.	FILE
3-1-23	DETAILS	SD/MM	MEB	MEB	22034	22034-SITE
4-12-23			MEB	MEB		
3-15-23			MEB	MEB		
3-7-23			MEB	MEB		



THE GOVERNORS ACADEMY
1 ELM STREET
BYFIELD, MA 01922

PROPOSED WALKWAY PROJECT
MIDDLE ROAD
BYFIELD, MA

DETAIL SHEET 1
C-5

CIVILWORKS NEW ENGLAND
181 Watson Road - P.O. Box 1166 - Dover, New Hampshire 03820
71 7th Street - P.O. Box 161 - Turners Falls, Massachusetts 01376