Site Plans

Access Driveway to Future Boxford Department of Public Works Facility

7 Spofford Road
Boxford, MA

Site Plans Index

No.	Drawing Title	Latest Issue
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LOCUS PLAN

0 500 1,000

SCALE IN FEET

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TEC, Inc.

282 Merrimack Street
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169 Ocean Blvd
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DESIGNED BY	BM
DRAWN BY	JM/WNB
CHECKED BY	PFE
DATE	01/19/2023
SCALE	AS NOTED

PREPARED FOR

Town of Boxford
Boxford, MA 01921

REVISIONS

ISSUED FOR

Permitting

PROJECT TITLE

Department of Public Works Access Driveway

PROJECT LOCATION

7 Spofford Rd
Boxford, MA

DRAWING TITLE

Cover & Index Sheet

COMMONWEALTH OF MASSACHUSETTS
PETER F. ELLISON
CIVIL
NO. 52981
REGISTERED PROFESSIONAL ENGINEER
1/19/2023

PROJECT NO. T1204.07

TEC CAD FILE T1204.07_COV

DRAWING NO. C-1

SHEET 1 OF 8

PERMITTING SET - NOT FOR CONSTRUCTION

GENERAL NOTES

1. CONTRACTOR SHALL NOTIFY DIG-SAFE (1-888-344-7233) AND THE LOCAL MUNICIPAL WATER & SEWER DEPT. AT LEAST 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SECURITY AND JOB SAFETY. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH OSHA STANDARDS AND LOCAL REQUIREMENTS. A 6-FOOT TEMPORARY CHAINLINK FENCE SHALL BE PROVIDED AROUND ALL CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL LEAVE NO UNSECURED OPEN EXCAVATIONS.
3. UPON AWARD OF CONTRACT, CONTRACTOR SHALL MAKE NECESSARY CONSTRUCTION NOTIFICATIONS AND APPLY FOR AND OBTAIN NECESSARY PERMITS, PAY FEES, AND POST BONDS ASSOCIATED WITH THE WORK INDICATED ON THE DRAWINGS, IN THE SPECIFICATIONS, AND IN THE CONTRACT DOCUMENTS. DO NOT CLOSE OR OBSTRUCT ROADWAYS, SIDEWALK, AND FIRE HYDRANTS, WITHOUT APPROPRIATE PERMITS.
4. TRAFFIC SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
5. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
6. IN THE EVENT THAT SUSPECTED CONTAMINATED SOIL, GROUNDWATER, AND OTHER MEDIA ARE ENCOUNTERED DURING EXCAVATION AND CONSTRUCTION ACTIVITIES BASED ON VISUAL, OLFACTORY, OR OTHER EVIDENCE, THE CONTRACTOR SHALL STOP WORK IN THE VICINITY OF THE SUSPECT MATERIAL TO AVOID FURTHER SPREADING OF THE MATERIAL, AND SHALL NOTIFY THE OWNER IMMEDIATELY SO THAT THE APPROPRIATE TESTING AND SUBSEQUENT ACTION CAN BE TAKEN.
7. CONTRACTOR SHALL PREVENT DUST, SEDIMENT, AND DEBRIS FROM EXITING THE SITE AND SHALL BE RESPONSIBLE FOR CLEANUP, REPAIRS AND CORRECTIVE ACTION IF SUCH OCCURS.
8. CONTRACTOR SHALL CONTROL STORMWATER RUNOFF DURING CONSTRUCTION TO PREVENT ADVERSE IMPACTS TO OFF SITE AREAS, AND SHALL BE RESPONSIBLE TO REPAIR RESULTING DAMAGES, IF ANY, AT NO COST TO THE OWNER.
9. EXISTING CONDITIONS WERE PROVIDED BY AN ON-THE-GROUND FIELD SURVEY BY HANCOCK ASSOCIATES IN NOVEMBER 2022.

GRADING, DRAINAGE AND UTILITY NOTES

1. THE LOCATIONS, SIZES, AND TYPES OF EXISTING UNDERGROUND UTILITIES ARE SHOWN AS AN APPROXIMATE REPRESENTATION ONLY. THE OWNER OR ITS REPRESENTATIVE(S) HAVE NOT INDEPENDENTLY VERIFIED THIS INFORMATION AS SHOWN ON THE PLANS. THE UTILITY INFORMATION SHOWN DOES NOT GUARANTEE THE ACTUAL EXISTENCE, SERVICEABILITY, OR OTHER DATA CONCERNING THE UTILITIES, NOR DOES IT GUARANTEE AGAINST THE POSSIBILITY THAT ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN ON THE PLANS. PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION THE CONTRACTOR SHALL VERIFY AND DETERMINE THE EXACT LOCATION, SIZES, AND ELEVATION OF EXISTING UTILITIES.
2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, OR EXISTING CONDITIONS DIFFER FROM THOSE SHOWN SUCH THAT THE WORK CANNOT BE COMPLETED AS INTENDED, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED IN WRITING TO THE OWNER'S REPRESENTATIVE FOR THE RESOLUTION OF THE CONFLICT. FAILURE TO PROVIDE OR PERFORM THE ABOVE PRIOR TO PERFORMING ANY WORK SHALL NOT BE GROUNDS FOR EXTRA PAYMENTS TO THE CONTRACTOR.
3. AT ALL LOCATIONS WHERE EXISTING CURBING OR PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING CURB OR PAVEMENT SHALL BE SAW CUT TO A CLEAN, SMOOTH EDGE. BLEND NEW PAVEMENT, CURBS, AND EARTHWORK SMOOTHLY INTO EXISTING BY MATCHING LINES, GRADES, AND JOINTS.
4. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES, AS REQUIRED.
5. INSTALL ALL UTILITIES (INCLUDING CONCRETE PADS) PER UTILITY COMPANY, DPW, AND STATE STANDARDS.
6. EXISTING TREES AND SHRUBS OUTSIDE THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON PRIOR APPROVAL OF THE OWNER.
7. CONTRACTOR SHALL PROTECT ALL UNDERGROUND DRAINAGE, SEWER AND UTILITY FACILITIES FROM EXCESSIVE VEHICULAR LOADS DURING CONSTRUCTION. ANY DAMAGE TO THESE FACILITIES RESULTING FROM CONSTRUCTION LOADS WILL BE RESTORED TO ORIGINAL CONDITION (AT NO ADDITIONAL COST TO THE OWNER) BY THE CONTRACTOR.
8. THE CONTRACTOR SHALL REMOVE ALL EROSION CONTROL BARRIERS AFTER REVEGETATION OF DISTURBED AREAS AND AFTER APPROVAL BY THE LOCAL APPROVING AUTHORITY.
9. EXCAVATION REQUIRED IN THE PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT NO COST TO THE OWNER.
10. STOCKPILED TOPSOIL SHALL BE PLACED NEATLY IN AN AREA APPROVED BY THE OWNER/REPRESENTATIVE.
11. THE CONTRACTOR SHALL SCHEDULE THEIR WORK TO ALLOW THE FINISHED SUBGRADE ELEVATIONS TO DRAIN PROPERLY WITHOUT PUDDLING. SPECIFICALLY, ALLOW WATER TO ESCAPE WHERE PROPOSED CURB MAY RETAIN RUNOFF PRIOR TO APPLICATION OF THE FINISH SUBGRADE AND/OR SURFACE PAVING.
12. UNLESS OTHERWISE INDICATED, ABANDONED EXISTING UTILITY LINES SHALL BE CAPPED AND ABANDONED IN PLACE UNLESS THEY CONFLICT WITH PROPOSED IMPROVEMENTS, WHERE THEY SHALL THEN BE REMOVED. CAP REMAINING PORTIONS WHERE PARTIALLY REMOVED.

GENERAL SYMBOLS

EXISTING	PROPOSED	
		CATCH BASIN
		DRAIN MANHOLE
		SANITARY SEWER CLEANOUT
E	E	ELECTRIC MANHOLE
T	T	TELEPHONE MANHOLE
		MANHOLE
HH	HH	HANDHOLE
B	B	BOLLARD
WG	WG	WATER GATE
		FIRE HYDRANT
GG	GG	GAS GATE
TFS	TFS	STREET SIGN
		LIGHT POLE
		WALL MOUNTED LIGHT
		UTILITY BOX
UPL	UPL	UTILITY POLE
GPL	GPL	GUY POLE
		GUY WIRE
MW	MW	MONITORING WELL
TP-1	TP-1	TEST PIT (W/ I.D.)
EOP	EOP	EDGE OF PAVEMENT
MCC	MCC	MONOLITHIC CONCRETE CURB
GC	VGC	GRANITE CURB (TYPE VA 4)
GE	GE	GRANITE EDGING
BB	BB	BITUMINOUS BERM
		GUARD RAIL
X		CHAINLINK FENCE
		DRAINAGE LINE
S	S	SEWER LINE
W	W	WATER LINE
G	G	GAS LINE
UGE/T	UGE/T	UNDERGROUND ELECTRIC/TELEPHONE LINE
		ELEC., TELE., CATV, CONDUIT
OHW	OHW	OVERHEAD WIRE
		STONE WALL
		TREE LINE
		RETAINING WALL
		RIP-RAP

ABBREVIATIONS

GENERAL

ABAN	ABANDON
AC	ACRES
ADJ	ADJUST
APPROX	APPROXIMATE
BC	BOTTOM OF CURB
BLDG	BUILDING
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
CC	CONCRETE CURB
CEM	CEMENT
CI	CURB INLET
CLF	CHAIN LINK FENCE
CONC	CONCRETE
CW	CROSSWALK
DIA	DIAMETER
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EX	EXISTING
FND	FOUNDATION
FDC	FIRE DEPT. CONNECTION
FFE	FINAL FLOOR ELEVATION
GC	GRANITE CURB
GE	GRANITE EDGING
HMA	HOT MIX ASPHALT
HP	HIGH POINT
LA	LANDSCAPE AREA
LF	LINEAR FEET
LOG	LIMIT OF GRADING
LOW	LIMIT OF WORK
MAX	MAXIMUM
MCC	MONOLITHIC CONCRETE CURB
ME	MATCH EXISTING
MIN	MINIMUM
NTS	NOT TO SCALE
PCC	PRECAST CONRETE CURB
PROP	PROPOSED
PVMT	PAVEMENT
R	RADIUS
REM	REMOVE
REMOD	REMODEL
RET	RETAIN
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
SW	SIDEWALK
TC	TOP OF CURB
TFS	TRAFFIC SIGN
TOS	TOP OF SLOPE
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VGC	VERTICAL GRANITE CURB
WCR	WHEELCHAIR RAMP

UTILITIES

ACCMP	ASPHALT COATED CORRUGATED METAL PIPE
CB	CATCH BASIN
CAP	CORRUGATED ALUMINUM PIPE
CIP	CAST IRON PIPE
CIT	CHANGE IN TYPE
CLDI	CEMENT LINED DUCTILE IRON
COND	CONDUIT
DCB	DOUBLE CATCH BASIN
DIP	DUCTILE IRON PIPE
DMH	DRAINAGE MANHOLE
ETC	ELECTRIC, TELEPHONE, & CABLE
F&G	FRAME AND GRATE
F&C	FRAME AND COVER
GPL	GUY POLE
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HYD	HYDRANT
INV	INVERT ELEVATION
LP	LIGHT POLE
MW	MONITORING WELL
OHW	OVERHEAD WIRE
PE CTS	POLYETHYLENE COPPER TUBING SIZE
PVC	POLYVINYL CHLORIDE PIPE
PWW	PAVED WATER WAY
RCP	REINFORCED CONCRETE PIPE (CLASS III)
SMH	SEWER MANHOLE
TSV	TAPPING SLEEVE AND VALVE
UPL	UTILITY POLE
VCP	VITRIFIED CLAY PIPE
WV	WATER VALVE

ALIGNMENT/GRADING

CC	CENTER OF CURVE
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PI	POINT OF INTERSECTION
PNT	POINT
PRC	POINT OF REVERSE CURVE
PT	POINT OF TANGENT

PAVEMENT MARKINGS AND SIGNING SYMBOLS

EXISTING	PROPOSED	
CW	CW	CROSSWALK, 12" WHITE LINE (WIDTH NOTED)
SL	SL	STOP LINE, 12" WHITE LINE 4' BEHIND CW (TYP.)
SL	SWL, SWLL	SOLID WHITE LINE/SOLID WHITE LANE LINE-4"
	BWLL	BROKEN WHITE LANE LINE-4"
	DWLL	DOTTED WHITE LANE LINE-4"
SYL	SYL	SOLID YELLOW LINE-4"
DYL	DYCL	DOUBLE YELLOW CENTER LINE- 2-4" LINES
		ADA-ACCESSIBLE PARKING SPACE

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DESIGNED BY	BM
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CHECKED BY	PFE
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SCALE	NTS

PREPARED FOR

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Boxford, MA 01921

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Permitting

PROJECT TITLE

Department of Public Works Access Driveway

PROJECT LOCATION

7 Spofford Rd
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DRAWING TITLE

Legend & General Notes

COMMONWEALTH OF MASSACHUSETTS
PETER F. ELLISON
CIVIL
NO. 52981
REGISTERED PROFESSIONAL ENGINEER
1/19/2023

PROJECT NO. T1204.07
TEC CAD FILE T1204.07_LEG
DRAWING NO. C-2
SHEET 2 OF 8

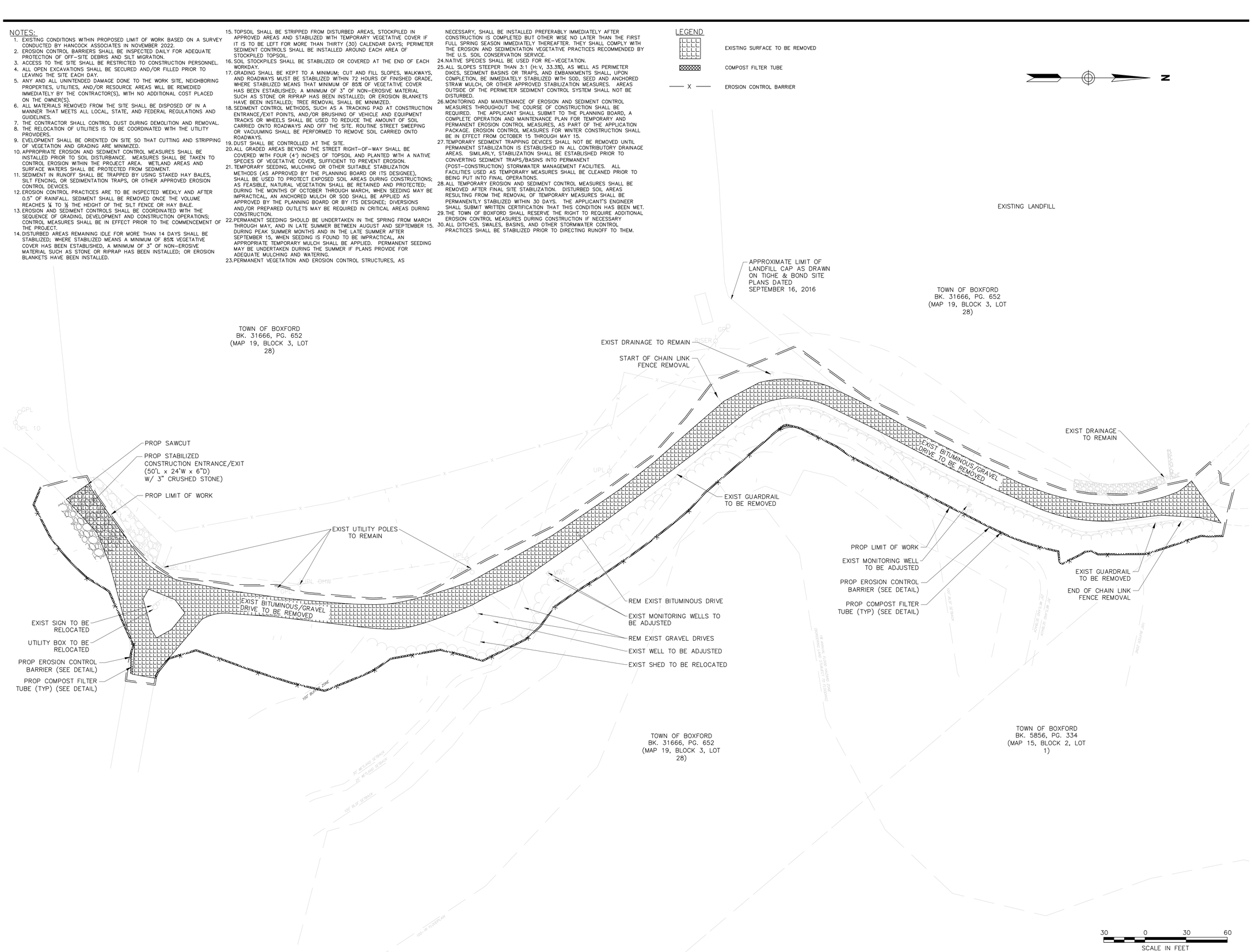
PERMITTING SET - NOT FOR CONSTRUCTION

NOTES:

1. EXISTING CONDITIONS WITHIN PROPOSED LIMIT OF WORK BASED ON A SURVEY CONDUCTED BY HANCOCK ASSOCIATES IN NOVEMBER 2022.
2. EROSION CONTROL BARRIERS SHALL BE INSPECTED DAILY FOR ADEQUATE PROTECTION OF OFF-SITE DEBRIS AND SILT MIGRATION.
3. ACCESS TO THE SITE SHALL BE RESTRICTED TO CONSTRUCTION PERSONNEL.
4. ALL OPEN EXCAVATIONS SHALL BE SECURED AND/OR FILLED PRIOR TO LEAVING THE SITE EACH DAY.
5. ANY AND ALL UNINTENDED DAMAGE DONE TO THE WORK SITE, NEIGHBORING PROPERTIES, UTILITIES, AND/OR RESOURCE AREAS WILL BE REMEDIED IMMEDIATELY BY THE CONTRACTOR(S), WITH NO ADDITIONAL COST PLACED ON THE OWNER(S).
6. ALL MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A MANNER THAT MEETS ALL LOCAL, STATE, AND FEDERAL REGULATIONS AND GUIDELINES.
7. THE CONTRACTOR SHALL CONTROL DUST DURING DEMOLITION AND REMOVAL.
8. THE RELOCATION OF UTILITIES IS TO BE COORDINATED WITH THE UTILITY PROVIDERS.
9. EVELOPMENT SHALL BE ORIENTED ON SITE SO THAT CUTTING AND STRIPPING OF VEGETATION AND GRADING ARE MINIMIZED.
10. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SOIL DISTURBANCE. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
11. SEDIMENT IN RUNOFF SHALL BE TRAPPED BY USING STAKED HAY BALES, SILT FENCING, OR SEDIMENTATION TRAPS, OR OTHER APPROVED EROSION CONTROL DEVICES.
12. EROSION CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER 0.5" OF RAINFALL. SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES ¼ TO ½ THE HEIGHT OF THE SILT FENCE OR HAY BALE.
13. EROSION AND SEDIMENT CONTROLS SHALL BE COORDINATED WITH THE SEQUENCE OF GRADING, DEVELOPMENT AND CONSTRUCTION OPERATIONS; CONTROL MEASURES SHALL BE IN EFFECT PRIOR TO THE COMMENCEMENT OF THE PROJECT.
14. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED; WHERE STABILIZED MEANS A MINIMUM OF 85% VEGETATIVE COVER HAS BEEN ESTABLISHED, A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR EROSION BLANKETS HAVE BEEN INSTALLED.
15. TOPSOIL SHALL BE STRIPPED FROM DISTURBED AREAS, STOCKPILED IN APPROVED AREAS AND STABILIZED WITH TEMPORARY VEGETATIVE COVER IF IT IS TO BE LEFT FOR MORE THAN THIRTY (30) CALENDAR DAYS; PERIMETER SEDIMENT CONTROLS SHALL BE INSTALLED AROUND EACH AREA OF STOCKPILED TOPSOIL.
16. SOIL STOCKPILES SHALL BE STABILIZED OR COVERED AT THE END OF EACH WORKDAY.
17. GRADING SHALL BE KEPT TO A MINIMUM; CUT AND FILL SLOPES, WALKWAYS, AND ROADWAYS MUST BE STABILIZED WITHIN 72 HOURS OF FINISHED GRADE, WHERE STABILIZED MEANS THAT MINIMUM OF 85% OF VEGETATIVE COVER HAS BEEN ESTABLISHED; A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED; OR EROSION BLANKETS HAVE BEEN INSTALLED; TREE REMOVAL SHALL BE MINIMIZED.
18. SEDIMENT CONTROL METHODS, SUCH AS A TRACKING PAD AT CONSTRUCTION ENTRANCE/EXIT POINTS, AND/OR BRUSHING OF VEHICLE AND EQUIPMENT TRACKS OR WHEELS SHALL BE USED TO REDUCE THE AMOUNT OF SOIL CARRIED ONTO ROADWAYS AND OFF THE SITE. ROUTINE STREET SWEEPING OR VACUUMING SHALL BE PERFORMED TO REMOVE SOIL CARRIED ONTO ROADWAYS.
19. DUST SHALL BE CONTROLLED AT THE SITE.
20. ALL GRADED AREAS BEYOND THE STREET RIGHT-OF-WAY SHALL BE COVERED WITH FOUR (4") INCHES OF TOPSOIL AND PLANTED WITH A NATIVE SPECIES OF VEGETATIVE COVER, SUFFICIENT TO PREVENT EROSION.
21. TEMPORARY SEEDING, MULCHING OR OTHER SUITABLE STABILIZATION METHODS (AS APPROVED BY THE PLANNING BOARD OR ITS DESIGNEE), SHALL BE USED TO PROTECT EXPOSED SOIL AREAS DURING CONSTRUCTIONS; AS FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED; DURING THE MONTHS OF OCTOBER THROUGH MARCH, WHEN SEEDING MAY BE IMPRACTICAL, AN ANCHORED MULCH OR SOD SHALL BE APPLIED AS APPROVED BY THE PLANNING BOARD OR BY ITS DESIGNEE; DIVERSIONS AND/OR PREPARED OUTLETS MAY BE REQUIRED IN CRITICAL AREAS DURING CONSTRUCTION.
22. PERMANENT SEEDING SHOULD BE UNDERTAKEN IN THE SPRING FROM MARCH THROUGH MAY, AND IN LATE SUMMER BETWEEN AUGUST AND SEPTEMBER 15. DURING PEAK SUMMER MONTHS AND IN THE LATE SUMMER AFTER SEPTEMBER 15, WHEN SEEDING IS FOUND TO BE IMPRACTICAL, AN APPROPRIATE TEMPORARY MULCH SHALL BE APPLIED. PERMANENT SEEDING MAY BE UNDERTAKEN DURING THE SUMMER IF PLANS PROVIDE FOR ADEQUATE MULCHING AND WATERING.
23. PERMANENT VEGETATION AND EROSION CONTROL STRUCTURES, AS NECESSARY, SHALL BE INSTALLED PREFERABLY IMMEDIATELY AFTER CONSTRUCTION IS COMPLETED BUT OTHER WISE NO LATER THAN THE FIRST FULL SPRING SEASON IMMEDIATELY THEREAFTER. THEY SHALL COMPLY WITH THE EROSION AND SEDIMENTATION VEGETATIVE PRACTICES RECOMMENDED BY THE U.S. SOIL CONSERVATION SERVICE.
24. NATIVE SPECIES SHALL BE USED FOR RE-VEGETATION.
25. ALL SLOPES STEEPER THAN 3:1 (H:V, 33.3%), AS WELL AS PERIMETER DIKES, SEDIMENT BASINS OR TRAPS, AND EMBANKMENTS SHALL, UPON COMPLETION, BE IMMEDIATELY STABILIZED WITH SOD, SEED AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES. AREAS OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM SHALL NOT BE DISTURBED.
26. MONITORING AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE COURSE OF CONSTRUCTION SHALL BE REQUIRED. THE APPLICANT SHALL SUBMIT TO THE PLANNING BOARD, A COMPLETE OPERATION AND MAINTENANCE PLAN FOR TEMPORARY AND PERMANENT EROSION CONTROL MEASURES, AS PART OF THE APPLICATION PACKAGE. EROSION CONTROL MEASURES FOR WINTER CONSTRUCTION SHALL BE IN EFFECT FROM OCTOBER 15 THROUGH MAY 15.
27. TEMPORARY SEDIMENT TRAPPING DEVICES SHALL NOT BE REMOVED UNTIL PERMANENT STABILIZATION IS ESTABLISHED IN ALL CONTRIBUTORY DRAINAGE AREAS. SIMILARLY, STABILIZATION SHALL BE ESTABLISHED PRIOR TO CONVERTING SEDIMENT TRAPS/BASINS INTO PERMANENT (POST-CONSTRUCTION) STORMWATER MANAGEMENT FACILITIES. ALL FACILITIES USED AS TEMPORARY MEASURES SHALL BE CLEANED PRIOR TO BEING PUT INTO FINAL OPERATIONS.
28. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS. THE APPLICANT'S ENGINEER SHALL SUBMIT WRITTEN CERTIFICATION THAT THIS CONDITION HAS BEEN MET.
29. THE TOWN OF BOXFORD SHALL RESERVE THE RIGHT TO REQUIRE ADDITIONAL EROSION CONTROL MEASURES DURING CONSTRUCTION IF NECESSARY
30. ALL DITCHES, SWALES, BASINS, AND OTHER STORMWATER CONTROL PRACTICES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

LEGEND

- EXISTING SURFACE TO BE REMOVED
- COMPOST FILTER TUBE
- X — EROSION CONTROL BARRIER



PERMITTING SET - NOT FOR CONSTRUCTION

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DESIGNED BY	BM
DRAWN BY	SNL
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SCALE	1"=30'

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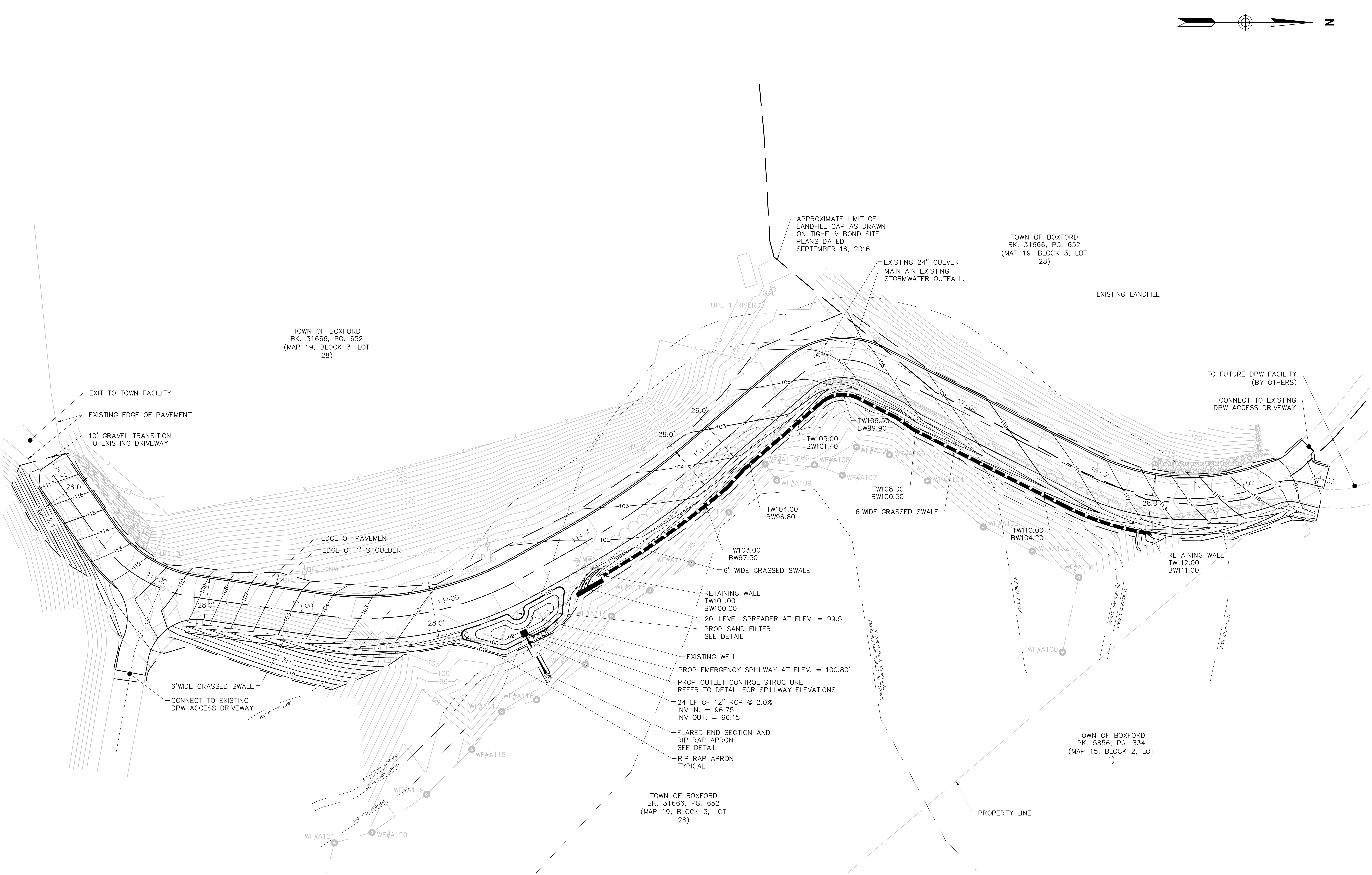
TEC CAD FILE T1204.07_DEMO
DRAWING NO. C-3
SHEET 3 OF 8


N
APPROXIMATE LIMIT OF LANDFILL CAP AS DRAWN ON TIGHE & BOND SITE PLANS DATED SEPTEMBER 16, 2016
EXISTING 24" CULVERT MAINTAIN EXISTING STORMWATER OUTFALL.
TOWN OF BOXFORD BK. 31666, PG. 652 (MAP 19, BLOCK 3, LOT 28)
EXISTING LANDFILL
TOWN OF BOXFORD BK. 31666, PG. 652 (MAP 19, BLOCK 3, LOT 28)
TO FUTURE DPW FACILITY (BY OTHERS)
CONNECT TO EXISTING DPW ACCESS DRIVEWAY
EXIT TO TOWN FACILITY
EXISTING EDGE OF PAVEMENT
10' GRAVEL TRANSITION TO EXISTING DRIVEWAY
EDGE OF PAVEMENT
EDGE OF 1' SHOULDER
TW106.50 BW99.90
TW105.00 BW101.40
TW104.00 BW96.80
TW108.00 BW100.50
6'WIDE GRASSED SWALE
TW110.00 BW104.20
RETAINING WALL TW112.00 BW111.00
TW103.00 BW97.30
6' WIDE GRASSED SWALE
RETAINING WALL TW101.00 BW100.00
20' LEVEL SPREADER AT ELEV. = 99.5'
PROP SAND FILTER SEE DETAIL
EXISTING WELL
PROP EMERGENCY SPILLWAY AT ELEV. = 100.80'
PROP OUTLET CONTROL STRUCTURE REFER TO DETAIL FOR SPILLWAY ELEVATIONS
24 LF OF 12" RCP @ 2.0% INV IN. = 96.75 INV OUT. = 96.15
FLARED END SECTION AND RIP RAP APRON SEE DETAIL
RIP RAP APRON TYPICAL
6'WIDE GRASSED SWALE
CONNECT TO EXISTING DPW ACCESS DRIVEWAY
TOWN OF BOXFORD BK. 31666, PG. 652 (MAP 19, BLOCK 3, LOT 28)
TOWN OF BOXFORD BK. 5856, PG. 334 (MAP 15, BLOCK 2, LOT 1)
PROPERTY LINE
26.0'
28.0'
3:1
2:1
30 0 30 60
SCALE IN FEET

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TEC CAD FILE T1204.07_CONSTR

DRAWING NO.

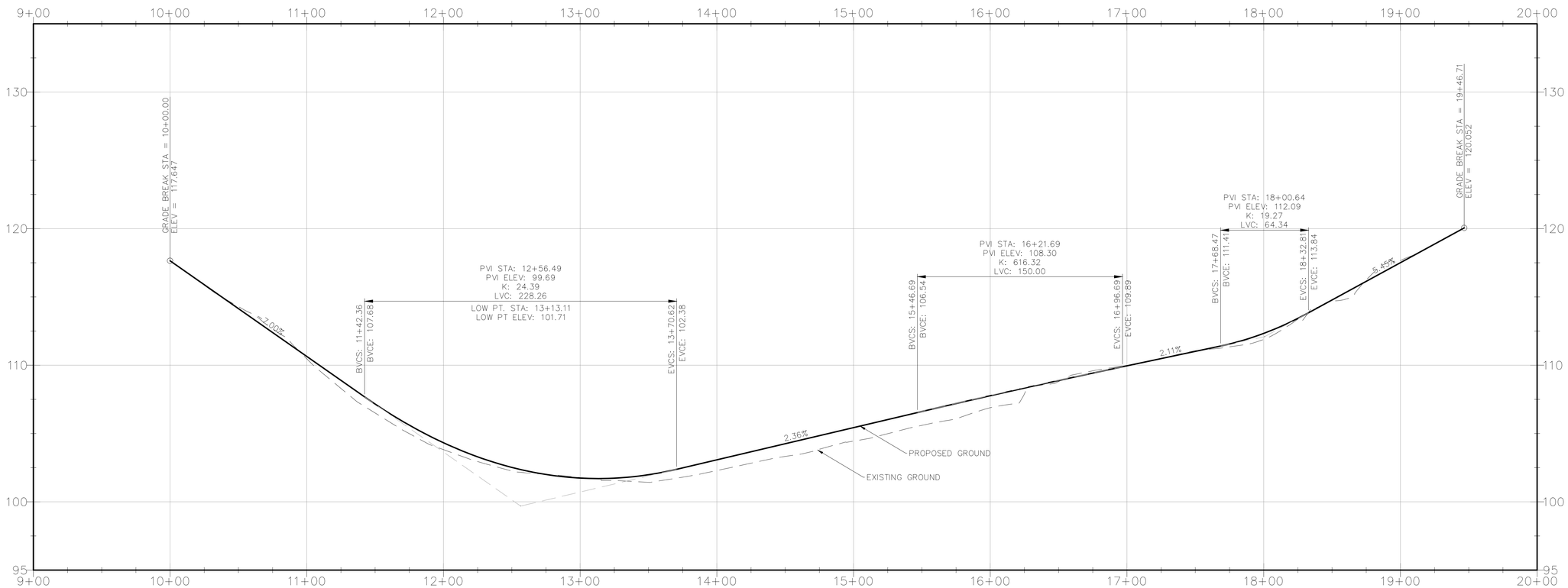
C-4

SHEET 4 OF 8

COMMONWEALTH OF MASSACHUSETTS PETER F. ELLISON CIVIL NO. 52981 REGISTERED PROFESSIONAL ENGINEER

1/19/2023

PERMITTING SET - NOT FOR CONSTRUCTION



PROFILES
H: 1"=40'
V: 1"=4'

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DRAWN BY	BM
CHECKED BY	PFE
DATE	01/19/2023
SCALE	AS NOTED

PREPARED FOR

Town of Boxford
Boxford, MA 01921

REVISIONS

ISSUED FOR

Permitting

PROJECT TITLE

Department of Public Works Access Driveway

PROJECT LOCATION

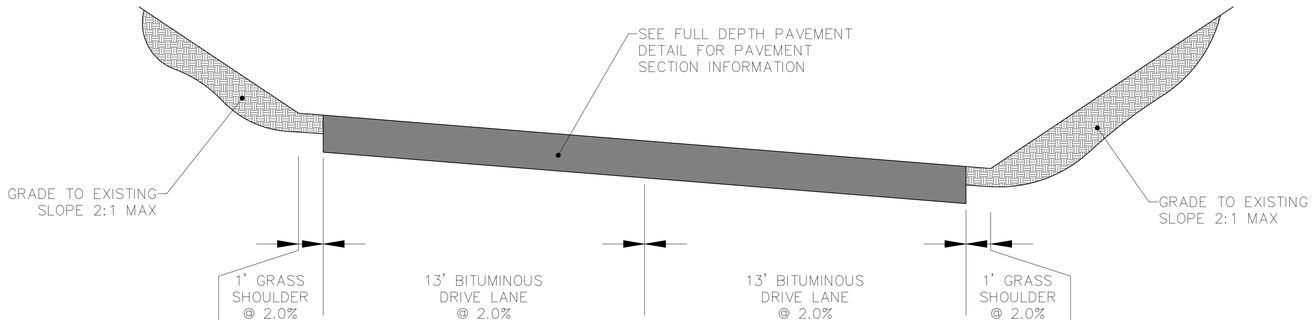
7 Spofford Rd
Boxford, MA

DRAWING TITLE

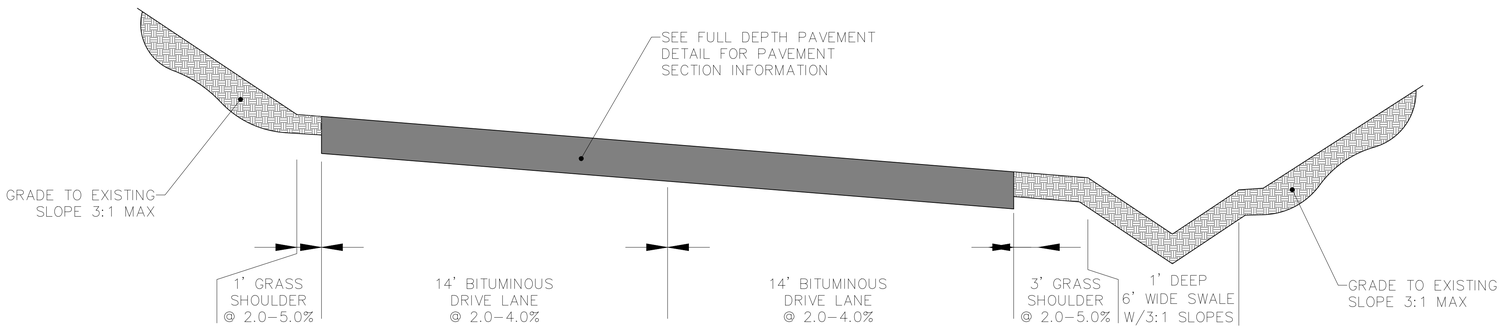
Construction Profile

COMMONWEALTH OF MASSACHUSETTS
PETER F. ELLISON
CIVIL
NO. 32981
REGISTERED PROFESSIONAL ENGINEER
1/19/2023

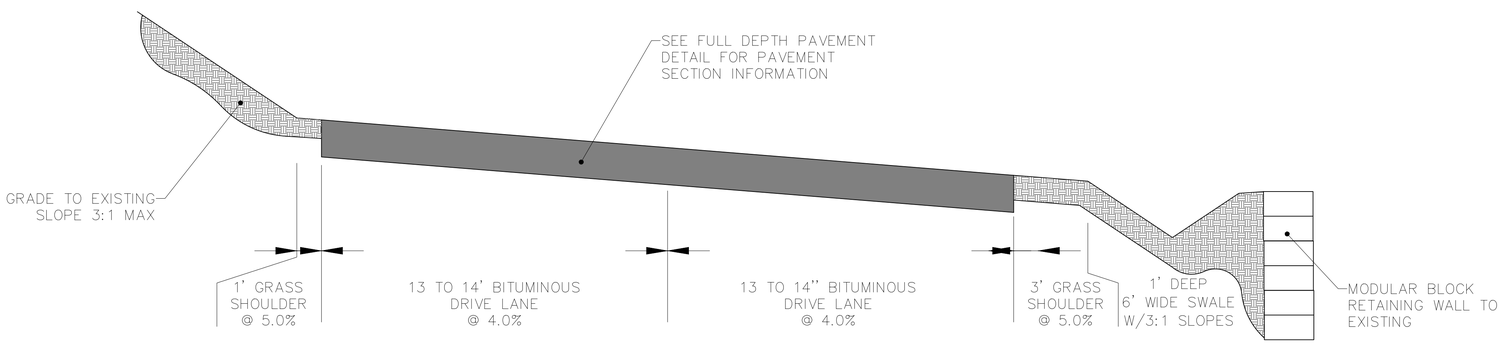
PROJECT NO. T1204.07
TEC CAD FILE T1204.07_CON PROF
DRAWING NO. C-5
SHEET 5 OF 8



TYPICAL SECTION
10+00 – 11+00

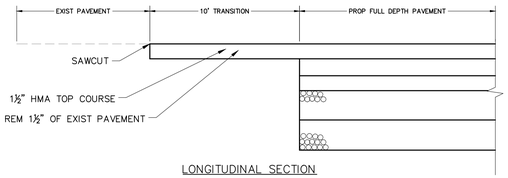


TYPICAL SECTION
11+00 – 14+00 &
18+40 – 19+53



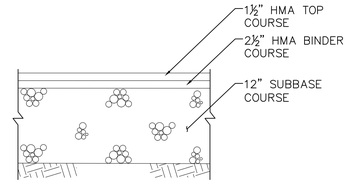
TYPICAL SECTION
14+00 – 18+40

TYPICAL SECTIONS
N.T.S.



LONGITUDINAL SECTION

FULL DEPTH PAVEMENT TRANSITION
N.T.S.



FULL DEPTH PAVEMENT
N.T.S.

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TEC, Inc.

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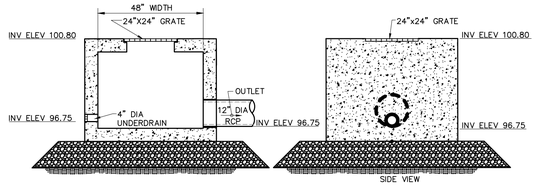
PETER F. ELLISON
CIVIL
NO. 52981
REGISTERED PROFESSIONAL ENGINEER
1/19/2023

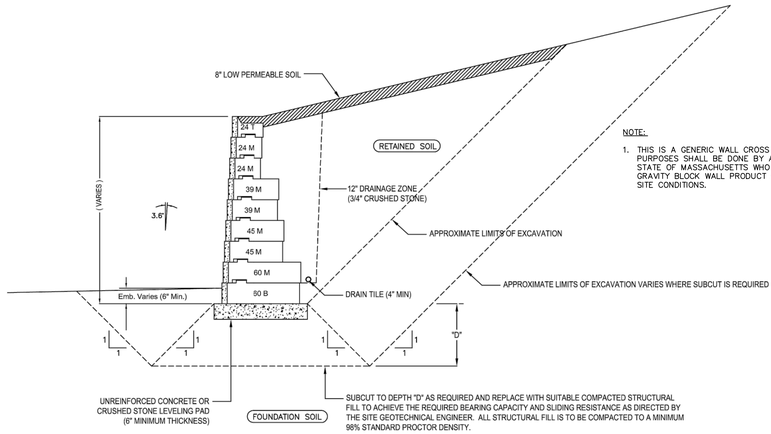
PROJECT NO.
T1204.07
TEC CAD FILE
T1204.07_DET
DRAWING NO.
C-6
SHEET 6 OF 8



NOTES:
1. STRUCTURE SHALL BE 48"x48" (INNER DIMENSIONS) PRECAST CONCRETE BOX STRUCTURE
2. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
3. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.

OUTLET CONTROL STRUCTURE (OCS) DETAIL

N.T.S.

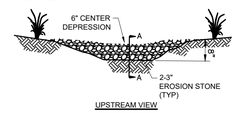


NOTE:
1. THIS IS A GENERIC WALL CROSS SECTION. FINAL DESIGN FOR CONSTRUCTION PURPOSES SHALL BE DONE BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MASSACHUSETTS WHO IS FAMILIAR WITH THE SHEA CONCRETE GRAVITY BLOCK WALL PRODUCT AND HAS TAKEN INTO ACCOUNT THE SPECIFIC SITE CONDITIONS.

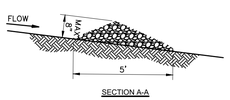
SHEA CONCRETE GRAVITY BLOCK WALL DETAIL

N.T.S.

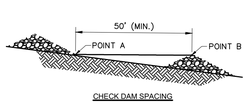
NOTE:
KEY STONE INTO CHANNEL BANKS AND EXTEND IT BEYOND THE ABUTMENTS A MINIMUM OF 18" TO PREVENT FLOW AROUND THE DAM.



UPSTREAM VIEW



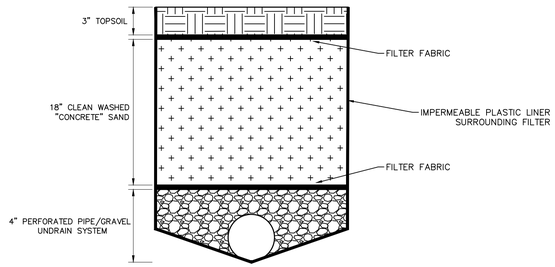
SECTION A-A



CHECK DAM SPACING

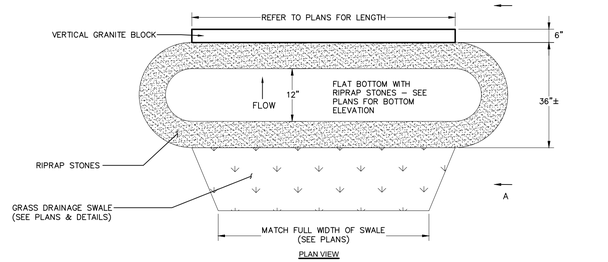
STONE CHECK DAM

N.T.S.

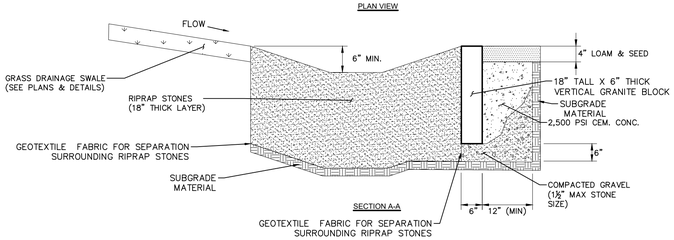


SAND FILTER

N.T.S.



PLAN VIEW

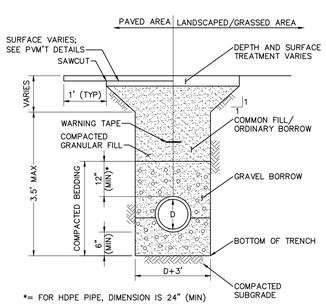


SECTION A-A

NOTES:
1. RIPRAP STONES TO BE SIZED IN ACCORDANCE WITH MASSDOT SPECIFICATION M2.02.03 (STONE FOR PIPE ENDS)
2. VERTICAL GRANITE BLOCK TO MEET MASSDOT SPECIFICATION M9.04.1-1 (GRANITE CURB - Type VA4)

LEVEL SPREADER

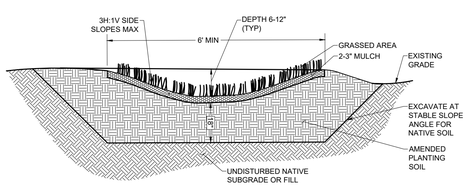
N.T.S.



*= FOR HDPE PIPE, DIMENSION IS 24" (MIN)

UTILITY TRENCH DETAIL

N.T.S.



DRAINAGE SWALE DETAIL

N.T.S.

TEC, Inc.
282 Merrimack Street
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Lawrence, MA 01843
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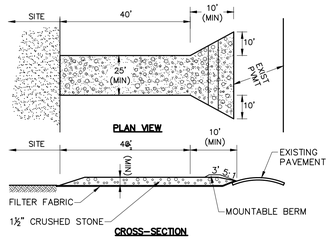
PROJECT NO. T1204.07
TEC CAD FILE T1204.07_DET
DRAWING NO. C-7
SHEET 7 OF 8

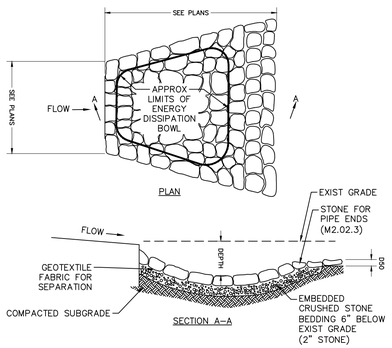
PERMITTING SET - NOT FOR CONSTRUCTION



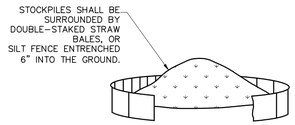
CROSS-SECTION

1. ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED. PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.
3. STABILIZED CONSTRUCTION EXIT SHALL BE REMOVED PRIOR TO FINAL FINISH MATERIALS BEING INSTALLED.

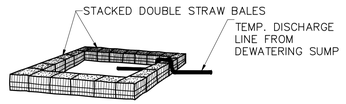
STABILIZED CONSTRUCTION ENTRANCE/EXIT
N.T.S.



RIPRAP APRON
N.T.S.

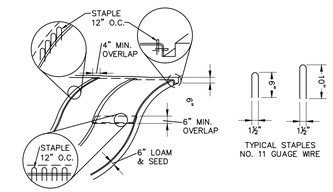


SOIL STOCKPILE
N.T.S.



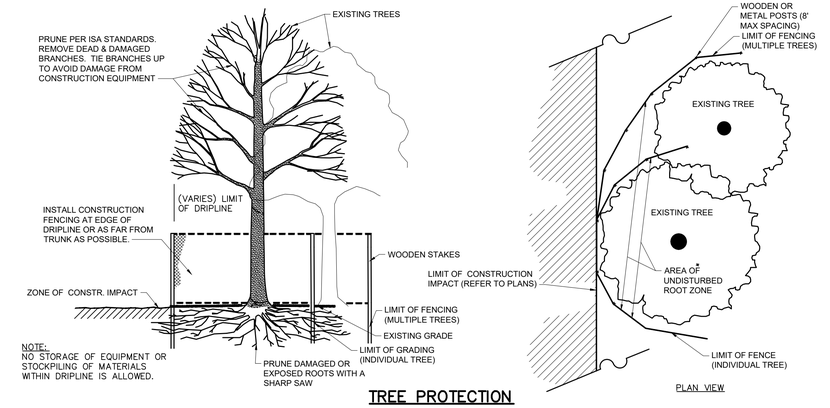
NOTES:
DISCHARGE TO SEDIMENTATION BASIN (AS SHOWN) OR TO SILTATION/DEWATERING BAG SUCH AS FLOGARD DEWATERING BAG MODEL SC-DW1215Z, OR EQUAL APPROVED BY CONSERVATION COMMISSION. ALL DISCHARGE LOCATIONS SHALL BE A MINIMUM OF 50' FROM EXISTING BVW.

TEMPORARY STILLING AREA
N.T.S.

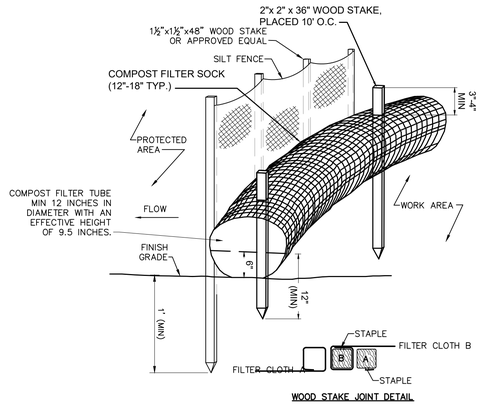


NOTES:
1. BEGIN AT THE TOP OF BLANKET INSTALLATION AREA BY ANCHORING BLANKET IN A 6" DEEP TRENCH. BACKFILL AND COMPACT TRENCH AFTER STAPLING.
2. ROLL THE BLANKET DOWN THE SWALE IN THE DIRECTION OF THE WATER FLOW.
3. THE EDGES OF BLANKETS SHALL BE STAPLED WITH APPROX. 4 INCH OVERLAP WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED.
4. WHEN BLANKETS ARE SPLICED DOWN THE SWALE, PLACE UPPER BLANKET END OVER LOWER END WITH 6 INCH (MIN) OVERLAP AND STAPLE BOTH TOGETHER.
5. METHOD OF INSTALLATION SHALL BE AS PER MANUFACTURERS RECOMMENDATIONS.

EROSION CONTROL MAT SLOPE INSTALLATION
N.T.S.

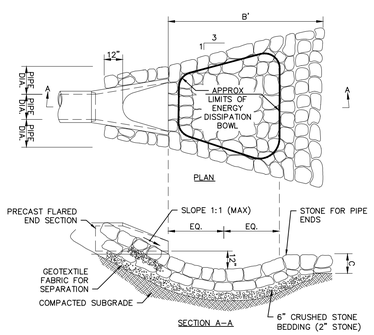


TREE PROTECTION
N.T.S.



EROSION CONTROL BARRIER-COMPOST FILTER TUBE & SILT FENCE
N.T.S.

NOTES:
1. FILTER CLOTH SHALL BE FASTENED SECURELY TO POSTS WITH STAPLES. POSTS SHALL BE SPACED 8'-10' ON CENTER.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
3. ENTRENCH SILT FENCE BUT NOT FILTER TUBE.
4. INSPECTIONS SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED, OR WHEN SEDIMENT ACCUMULATES TO HALF THE HEIGHT OF FENCING.
5. CONFIGURE TUBES AROUND EXISTING FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF. TUBES SHALL BE PLACED PERPENDICULARLY TO STORMWATER FLOW WHERE POSSIBLE.
6. TUBES FOR COMPOST FILTERS SHALL BE JUTE MESH OR APPROVED BIODEGRADABLE MATERIAL. ADDITIONAL TUBES SHALL BE USED AT THE DIRECTION OF THE ENGINEER.
7. TAMP TUBES IN PLACE TO ENSURE GOOD CONTACT WITH SOIL SURFACE. IT IS NOT NECESSARY TO TRENCH TUBES INTO EXISTING GRADE.
8. WHEN STAKING IS NOT POSSIBLE, SUCH AS WHEN TUBES MUST BE PLACED ON PAVEMENT, HEAVY CONCRETE OR CINDER BLOCKS CAN BE USED BEHIND TUBES UP TO 5 FT. APART OR AS REQUIRED TO SECURE TUBES IN PLACE. DO NOT PUNCTURE TUBES WITH STAKES.
9. TUBES CAN BE PLACED DIRECTLY ON EXISTING PAVEMENT WHEN NECESSARY.
10. UPON COMPLETION OF PROJECT, ALL TUBES USED FOR EROSION CONTROL SHALL BE REMOVED FROM PROJECT LIMITS.



NOTE:
SEE PLANS FOR STONE LENGTH AND DEPTH

STONE AT FLARED END SECTION
N.T.S.

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SHEET 8 OF 8

PERMITTING SET - NOT FOR CONSTRUCTION