

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION

PLAN AND PROFILE OF
BORDER TO BOSTON TRAIL
IN THE TOWNS OF
BOXFORD & GEORGETOWN
ESSEX COUNTY

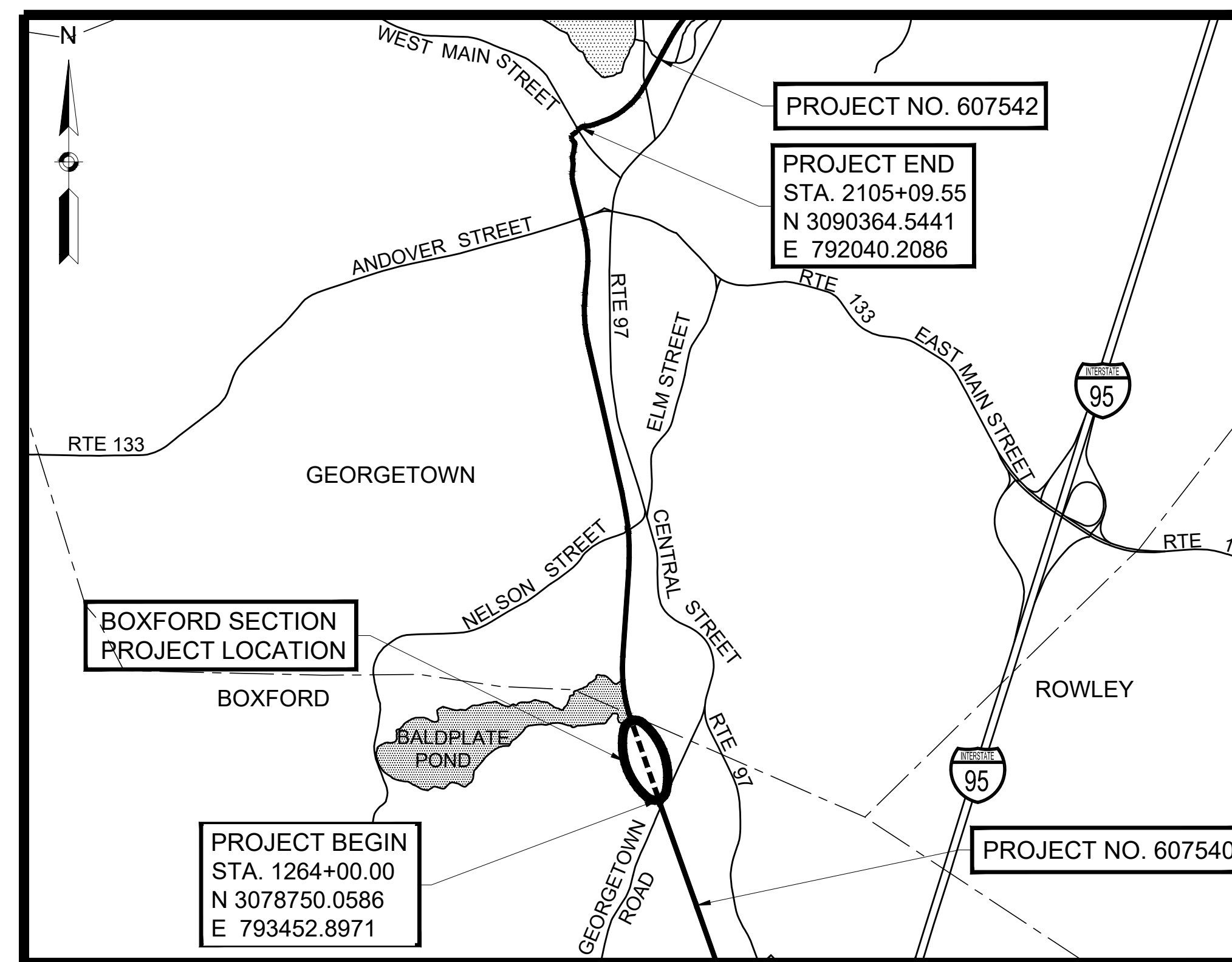
FEDERAL AID PROJECT NO.

BORDER TO BOSTON TRAIL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	1	13

PROJECT FILE NO. 607541
TITLE SHEET

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
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3	GENERAL NOTES
4	KEY PLAN
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SCALE 1" = 2,000'

LENGTH OF PROJECT = 1,685 FEET = .3191 MILES
AREA OF ALTERATION = 34,355 SQUARE FEET = .7887 ACRES

NOTICE OF INTENT PLANS

DECEMBER 5, 2023

NOT FOR CONSTRUCTION

12-05-2023	NOI	0
DATE	DESCRIPTION	REV #



65 NETWORK DRIVE | BURLINGTON, MA 01803

APPROVED

CHIEF ENGINEER

DATE

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	3	13
PROJECT FILE NO.		607541	

GENERAL NOTES

SURVEY NOTES:

1. THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE COMPILED FROM PHOTOGRAMMETRIC METHODS BY WSP SELLS, FLOWN IN NOVEMBER, 2010, AND SUPPLEMENTED WITH GROUND SURVEY BY GREEN INTERNATIONAL AFFILIATES, INC. IN NOVEMBER, 2010 - NOVEMBER, 2011.
2. WETLANDS WERE DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS IN OCTOBER, 2010 AND SEPTEMBER, 2011. THE WETLAND FLAGS WERE FIELD LOCATED BY GREEN INTERNATIONAL AFFILIATES, INC IN NOVEMBER, 2010 AND OCTOBER, 2011.
3. UNDERGROUND UTILITIES SHOWN ARE BASED UPON FIELD OBSERVATIONS AND PLANS OF RECORD. THESE UTILITIES ARE NOT WARRANTED TO BE CORRECT NOR IS IT WARRANTED THAT ALL UNDERGROUND UTILITIES ARE SHOWN.
4. BEARINGS ARE BASED UPON MASSACHUSETTS STATE PLANE COORDINATE SYSTEM.
5. CONTOURS AND ELEVATIONS SHOWN ARE BASED UPON N.A.V.D. 1988.
6. EXISTING RIGHT OF WAY LINES SHOWN ARE THE RESULT OF AN ON THE GROUND SURVEY PERFORMED BY GREEN INTERNATIONAL AFFILIATES IN 2011 AND PLANS AND DEEDS OF RECORD.
7. EXISTING PROPERTY LINES SHOWN ARE PLOTTED FROM AVAILABLE ASSESSOR INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE ONLY.
8. UTILITY POLES SHOWN ARE PLOTTED AT 1' DIAMETER IN AN ATTEMPT TO SHOW THE POLE SIZE APPROXIMATELY TO SCALE. A NUMBER OF UTILITY POLES WERE FIELD MEASURED AND THE RANGE OF MEASUREMENTS WAS BETWEEN 0.8' AND 1.3'. GREEN INTERNATIONAL AFFILIATES USED A SIZE OF 1' BUT IT SHOULD BE NOTED THAT UTILITY POLES SIZES VARY AND NO ATTEMPT WAS MADE TO SHOW ACTUAL POLE SIZES TO SCALE.

UTILITY NOTES:

1. ALL UNDERGROUND UTILITIES AS SHOWN WERE COMPILED USING FIELD SURVEY INFORMATION AND AVAILABLE RECORD INFORMATION.
2. RECORD UTILITY INFORMATION FROM THE VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES, ARE APPROXIMATE ONLY AND ACTUAL LOCATIONS SHALL BE DETERMINED IN THE FIELD.
3. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE SHALL BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN, (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS) PRIOR TO DESIGNING, EXCAVATING, BLASTING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORING OR REPAVING.
4. THE LOCATION OF EXISTING PIPES OR OTHER UNDERGROUND STRUCTURES OR PROPERTY LINES ARE NOT WARRANTED TO BE EXACT, NOR IS IT WARRANTED THAT ALL UNDERGROUND PIPES OR STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL CALL "DIG SAFE" (811, OR 1-888-344-7233) 72 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION TO OBTAIN ACCURATE UTILITY LOCATIONS.
5. SUBSURFACE UTILITY LOCATIONS HAVE BEEN PLOTTED TO MEET UTILITY QUALITY LEVEL "C" AS DESCRIBED IN ASCE STANDARD 38-02 AND SUMMARIZED BELOW. THE UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS BASED ON ABOVE-GROUND FIELD OBSERVATION AND EXISTING RECORD INFORMATION RECEIVED FROM UTILITY STAKE-HOLDERS.
6. INVERTS SHOWN ON PLAN ARE NOT GUARANTEED TO BE ACCURATE. DUE TO THE LIMITATIONS OF FIELD OBSERVATION AND SURVEY TECHNIQUES THE INVERTS ARE SHOWN AS APPROXIMATE ONLY AND SHALL NOT BE WARRANTED TO BE CORRECT. ADDITIONAL FIELD INVESTIGATION IS NECESSARY WHERE ACCURATE MEASUREMENTS ARE REQUIRED FOR DESIGN OF CRITICAL AREAS.
7. THE EXISTING CONDITIONS PLAN IS TO BE USED FOR THE SPECIFIED PROJECT ONLY AND IS NOT WARRANTED TO BE COMPLETE FOR ANY OTHER FUTURE PROJECTS.

SUMMARY OF UTILITY MAPPING QUALITY LEVELS:

THE FOLLOWING IS A SUMMARY OF THE SURVEY MAPPING LEVELS FOR UTILITIES AS DESCRIBED IN ASCE STANDARD 38-02, "STANDARD GUIDELINE FOR THE DEPICTION OF EXISTING SUBSURFACE UTILITY DATA". THESE GUIDELINES ARE MORE FULLY DESCRIBED IN THE ASCE STANDARD.

UTILITY QUALITY LEVEL A:

PRECISE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES OBTAINED BY THE ACTUAL EXPOSURE (OR VERIFICATION OF PREVIOUSLY EXPOSED AND SURVEYED UTILITIES) AND SUBSEQUENT MEASUREMENT OF SUBSURFACE UTILITIES, USUALLY AT A SPECIFIC POINT. MINIMALLY INTRUSIVE EXCAVATION EQUIPMENT IS TYPICALLY USED TO MINIMIZE THE POTENTIAL FOR UTILITY DAMAGE. A PRECISE HORIZONTAL AND VERTICAL LOCATION, AS WELL AS OTHER UTILITY ATTRIBUTES, IS SHOWN ON PLAN DOCUMENTS. ACCURACY IS TYPICALLY SET TO 15-MM VERTICAL AND TO APPLICABLE HORIZONTAL SURVEY AND MAPPING ACCURACY AS DEFINED OR EXPECTED BY THE PROJECT OWNER.

UTILITY QUALITY LEVEL B:

INFORMATION OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROXIMATE HORIZONTAL POSITION OF SUBSURFACE UTILITIES. QUALITY LEVEL B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

UTILITY QUALITY LEVEL C:

INFORMATION OBTAINED BY SURVEYING AND PLOTTING VISIBLE ABOVE-GROUND UTILITY FEATURES AND BY USING PROFESSIONAL JUDGMENT IN CORRELATING THIS INFORMATION TO QUALITY LEVEL D INFORMATION.

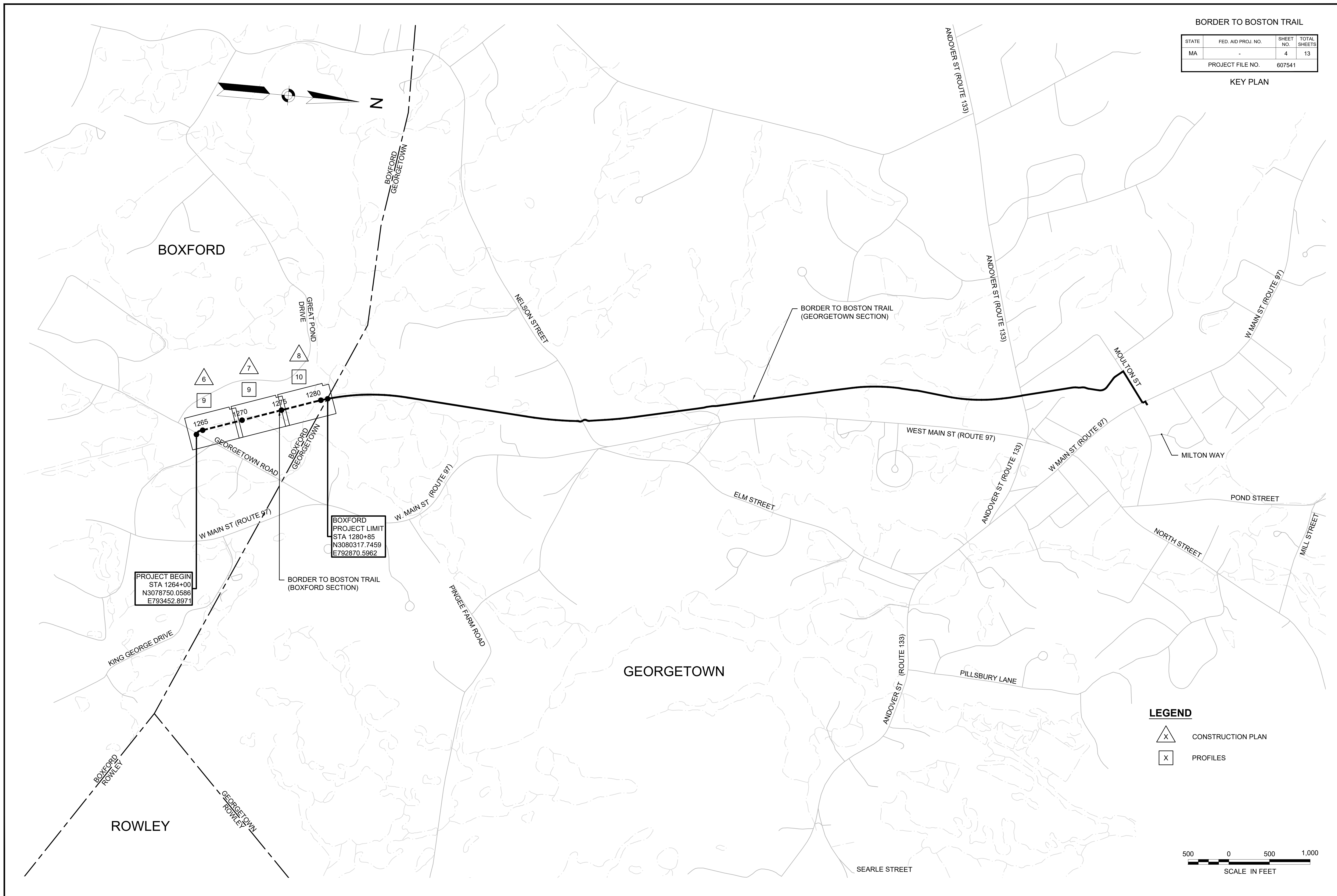
UTILITY QUALITY LEVEL D:

INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS. INFORMATION DERIVED FROM EXISTING RECORDS OR ORAL RECOLLECTIONS.

BORDER TO BOSTON TRAIL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	4	13
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KEY PLAN



LEGEND

-  CONSTRUCTION PLAN
-  PROFILES



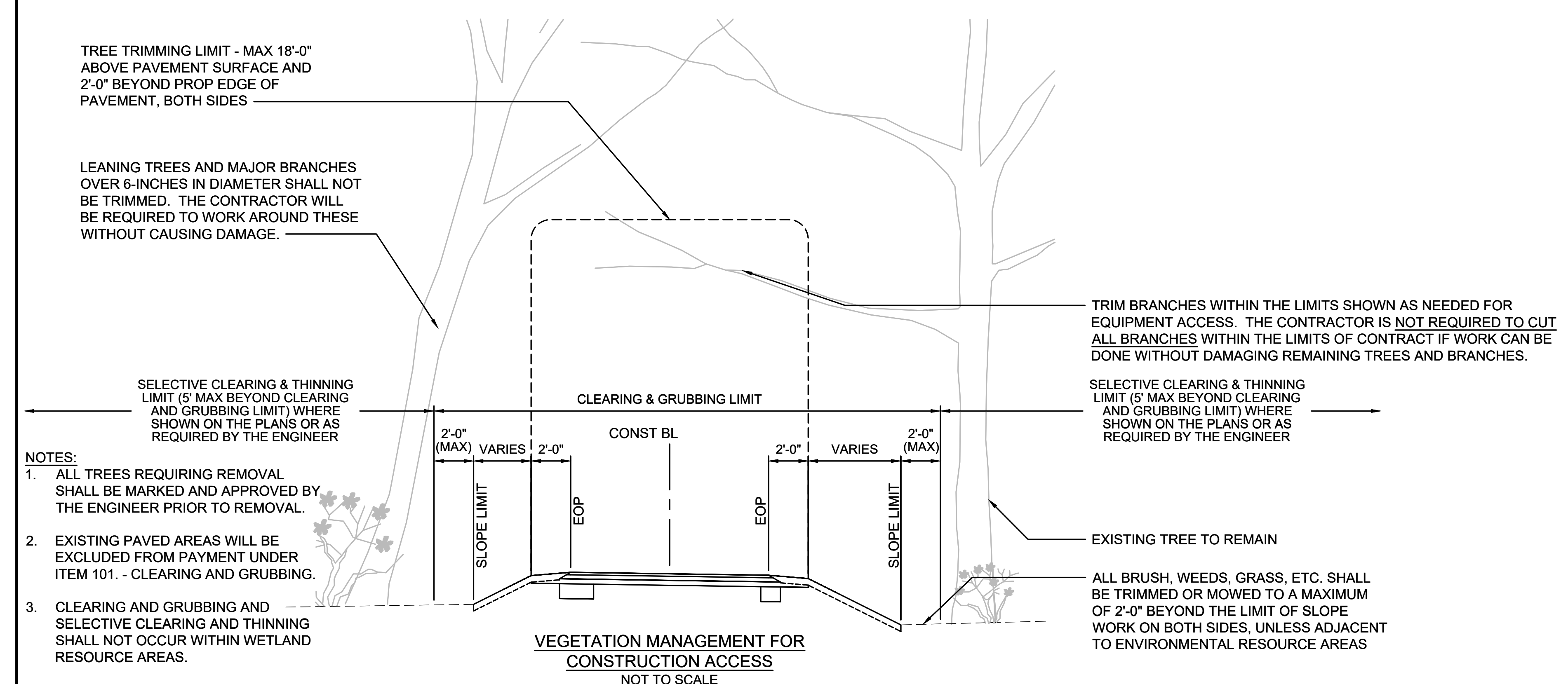
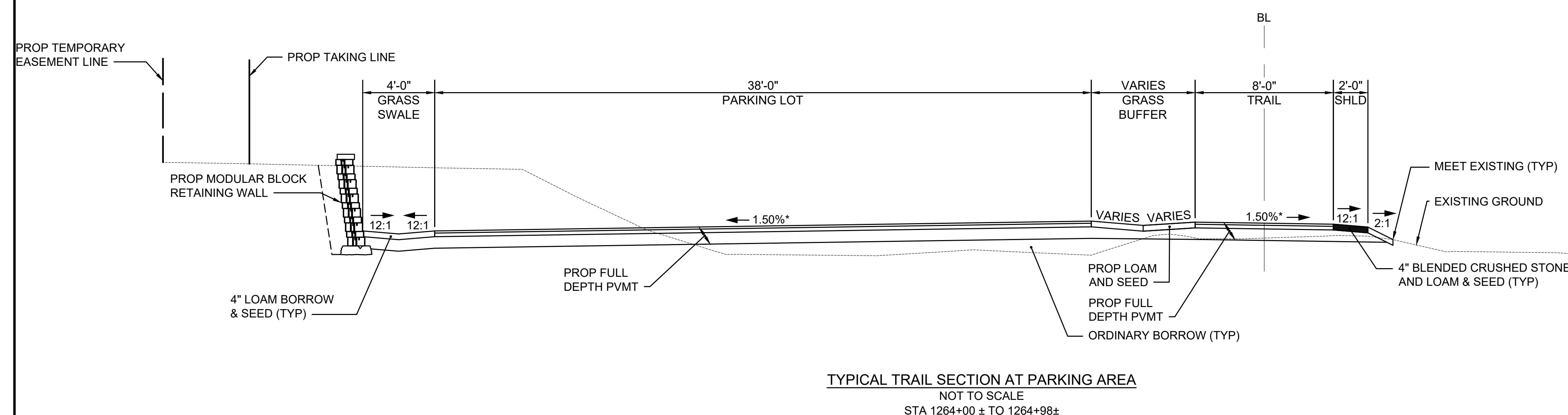
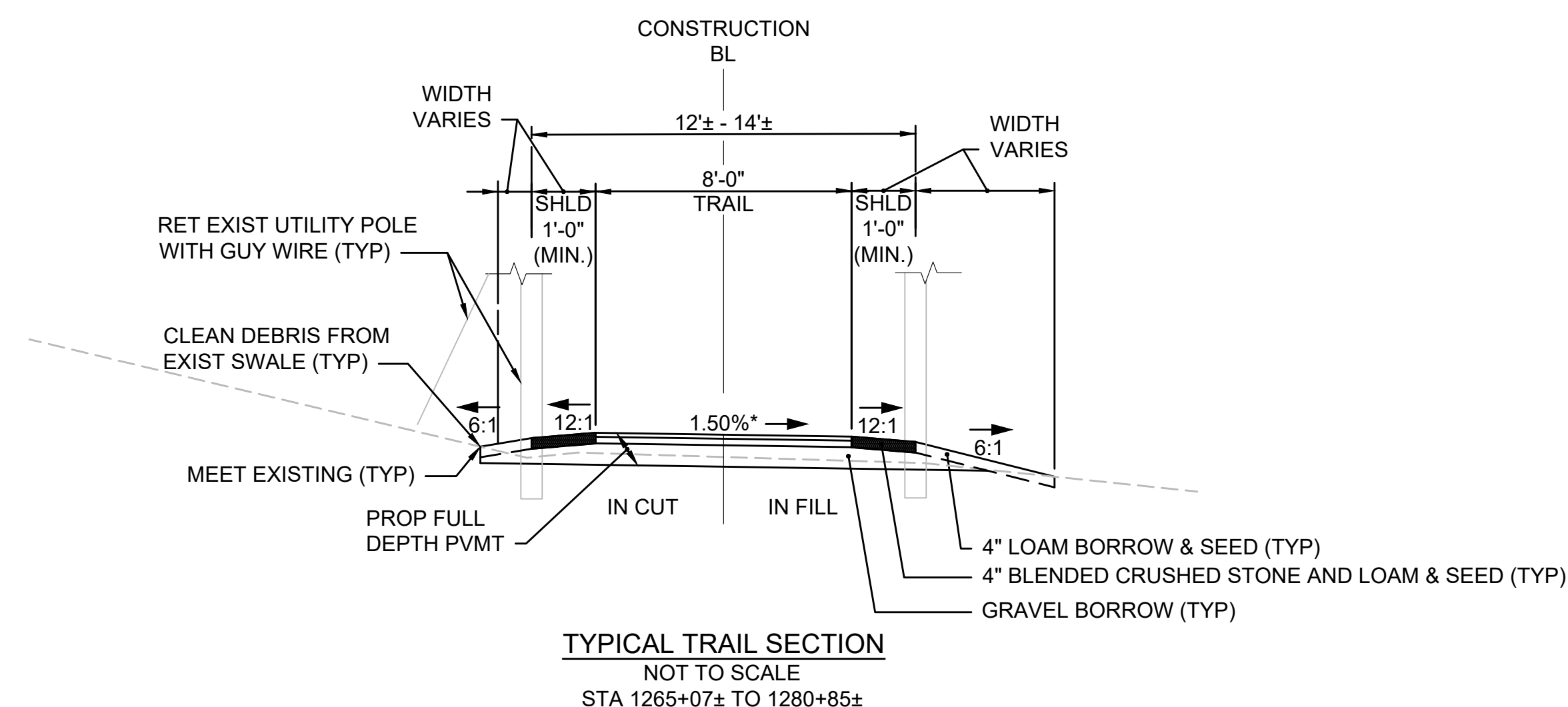
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	5	13
PROJECT FILE NO.		607541	

TYPICAL SECTIONS

TACK COAT SHALL BE APPLIED BETWEEN ALL PAVEMENT COURSES IN ACCORDANCE WITH SUBSECTION 450.43G2 AND BELOW.

TACK COAT NOTE:
ASPHALT EMULSION FOR TACK COAT SHALL BE GRADE RS-1H, PER THE SPECIFICATIONS. TACK COAT SHALL BE SPRAY APPLIED AT THE RATE OF:

- 0.06 TO 0.08 GAL/SY OVER NEW HMA SURFACES, NOT OPENED TO TRAFFIC
- 0.06 TO 0.08 GAL/SY OVER EXISTING TIGHT SMOOTH PAVEMENT
- 0.07 TO 0.09 GAL/SY OVER MILLED SURFACES
- 0.06 TO 0.09 GAL/SY OVER NEW HMA PATCHES



- NOTES:
1. ALL TREES REQUIRING REMOVAL SHALL BE MARKED AND APPROVED BY THE ENGINEER PRIOR TO REMOVAL.
 2. EXISTING PAVED AREAS WILL BE EXCLUDED FROM PAYMENT UNDER ITEM 101. - CLEARING AND GRUBBING.
 3. CLEARING AND GRUBBING AND SELECTIVE CLEARING AND THINNING SHALL NOT OCCUR WITHIN WETLAND RESOURCE AREAS.

- PAVEMENT NOTES**
- PROPOSED FULL DEPTH PAVEMENT TRAIL AND PARKING LOT SECTIONS**
- SURFACE: 1-1/2" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5)
 - INTERMEDIATE: 2-1/2" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)
 - BASE: 8" GRAVEL BORROW, TYPE b
 - SHOULDERS: 4" STONE DUST FOR SHOULDERS (ONLY USED IN 8' WIDE TRAIL SECTIONS, SEE PLAN SHEETS)
- PROPOSED FULL DEPTH HOT MIX ASPHALT DRIVEWAY SECTIONS**
- SURFACE: 1-1/2" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5)
 - INTERMEDIATE: 2-1/2" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)
 - BASE: 8" GRAVEL BORROW, TYPE b
- PROPOSED FULL DEPTH HOT MIX ASPHALT WALKWAY SECTIONS**
- SURFACE: 1-1/4" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5)
 - INTERMEDIATE: 1-3/4" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)
 - BASE: 8" GRAVEL BORROW, TYPE b
- MILL AND OVERLAY SECTIONS**
- SURFACE: 1-1/2" MILL, OVERLAY WITH 1-1/2" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5)
- CEMENT CONCRETE SIDEWALK SECTIONS**
- SURFACE: 4" CEMENT CONCRETE (4000 psi, 3/4", 610 lbs. AIR ENTRAINED)
 - BASE: 8" GRAVEL BORROW, TYPE b
- CEMENT CONCRETE PEDESTRIAN RAMP SECTIONS**
- CEMENT CONCRETE TRAILHEAD SECTIONS**
- SURFACE: 6" CEMENT CONCRETE (4000 psi, 3/4", 610 lbs. AIR ENTRAINED)
 - BASE: 8" GRAVEL BORROW, TYPE b
- GRANITE CURB SETTING ADJACENT TO CEMENT CONCRETE SIDEWALK AND PEDESTRIAN RAMPS**
- SEE METHOD OF SETTING GRANITE CURB (AGAINST EXISTING PAVEMENT) DETAIL SHEET 79 & MASSDOT STANDARD DETAIL E106.3.0
- SURFACE: 1-1/2" SUPERPAVE SURFACE COURSE 9.5 (SSC-9.5)
 - INTERMEDIATE: 3" SUPERPAVE INTERMEDIATE COURSE 19.0 (SIC-19.0)
 - BASE: 7.5"± CEMENT CONCRETE
6" GRAVEL BORROW, TYPE c
- PROPOSED GRAVEL APRON AND WALKWAY SECTIONS**
- SURFACE: 4" STONE DUST FOR SHOULDERS
 - BASE: 8" GRAVEL BORROW, TYPE b
- * - TOLERANCE FOR CONSTRUCTION ±0.5% (TYP)

BORDER TO BOSTON TRAIL

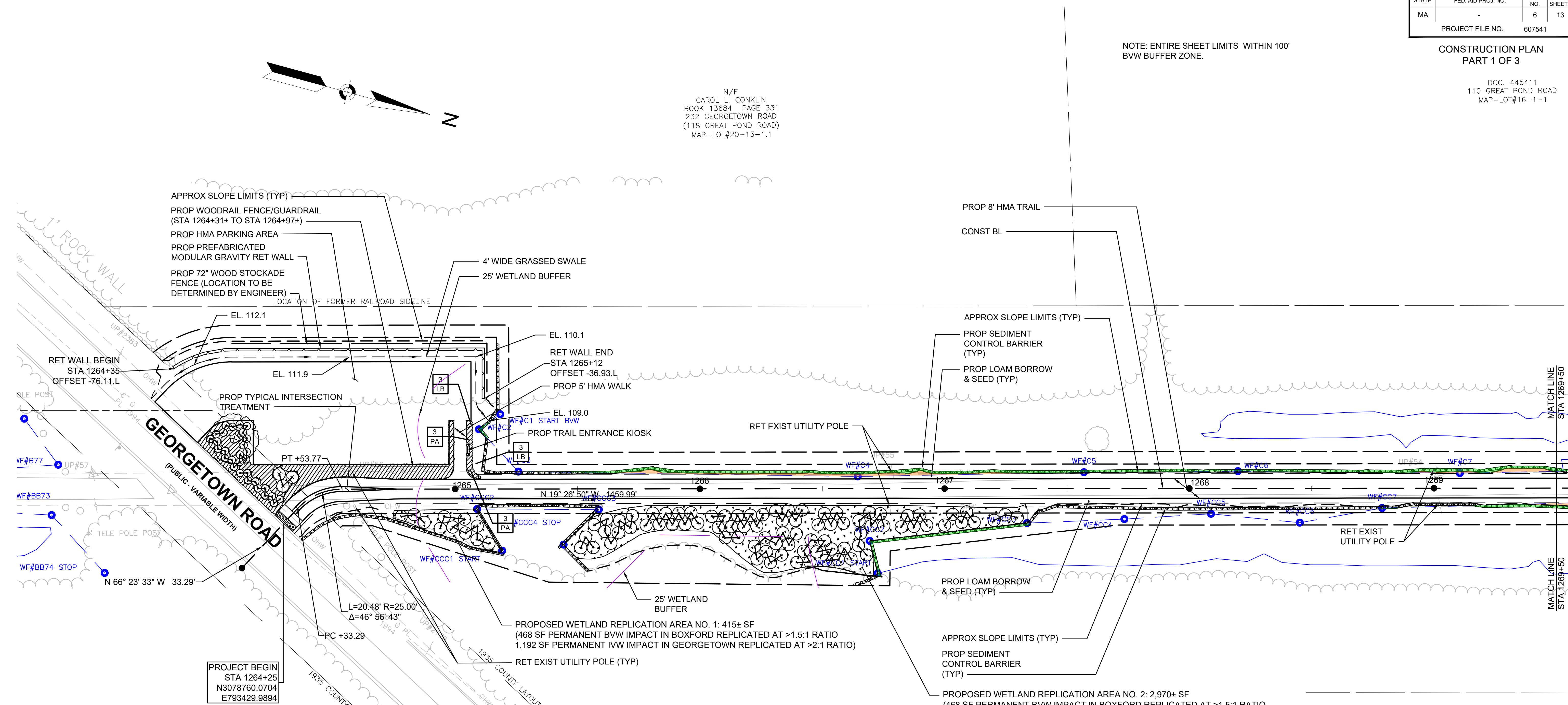
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	6	13
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CONSTRUCTION PLAN
PART 1 OF 3

DOC. 445411
110 GREAT POND ROAD
MAP-LOT#16-1-1

NOTE: ENTIRE SHEET LIMITS WITHIN 100'
BVW BUFFER ZONE.

N/F
CAROL L. CONKLIN
BOOK 13684 - PAGE 331
232 GEORGETOWN ROAD
(118 GREAT POND ROAD)
MAP-LOT#20-13-1.1



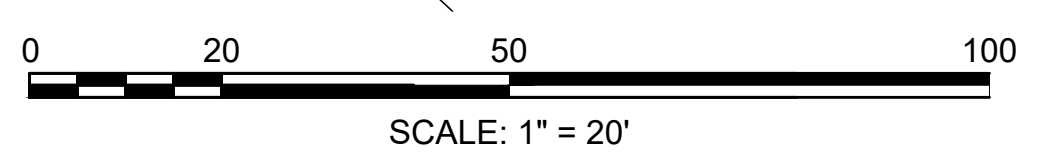
PROJECT BEGIN
STA 1264+25
N3078760.0704
E793429.9894

RESOURCE AREA IMPACTS					
RESOURCE AREA	SHEET NO.	TYPE	LEGEND	LOCATION	IMPACT AREA (SF)
BORDERING VEGETATED WETLAND (BVW)	6-8	PERMANENT	[Orange Box]	STA 1269+38, RT TO STA 1277+20, RT	193 SF (7 AREAS COMBINED)
	6-8	TEMPORARY	[Green Box]	STA 1266+69, RT TO STA 1277+34, RT	807 SF (7 AREAS COMBINED)
	6-8	PERMANENT	[Orange Box]	STA 1265+66, LT TO STA 1279+48, LT	275 SF (7 AREAS COMBINED)
	6-8	TEMPORARY	[Green Box]	STA 1265+09, LT TO STA 1279+50, LT	795 SF (8 AREAS COMBINED)
25-FT BUFFER	6-8	PERMANENT	-	STA 1264+85 TO STA 1280+85	13,581 SF (1 AREA)
	6-8	TEMPORARY	-	STA 1264+85 TO STA 1280+85	14,050 SF (3 AREAS COMBINED)
WETLAND REPLICATION	6	REPLICATION	[Dotted Box]	STA 1266+30, RT TO STA 1267+31, RT	3,385 SF (2 AREAS)

- RESOURCE AREA LEGEND:**
- WF#XXXX WETLAND LINE
 - 200-FT RIVERFRONT AREA
 - 100-FT WETLAND BUFFER
 - 25-FT WETLAND BUFFER
 - 100-YEAR FLOODPLAIN

N/F
BOXFORD MEETING PLACE CONDOMINIUM TRUST
BOXFORD MEETING PLACE, LLC
M. DONNA MANDRIOTA, TRUSTEE
CERT# C228
L.C. DOC 494494
L.C. DOC 494495
256 GEORGETOWN RD
MAP-LOT#16-1-4.2

N/F
BOXFORD MEETING PLACE CONDOMINIUM
BOXFORD MEETING PLACE, LLC
M. DONNA MANDRIOTA, TRUSTEE
CERT# C228
L.C. DOC 494494
L.C. DOC 494495
256 GEORGETOWN RD
MAP-LOT#16-1-4.2



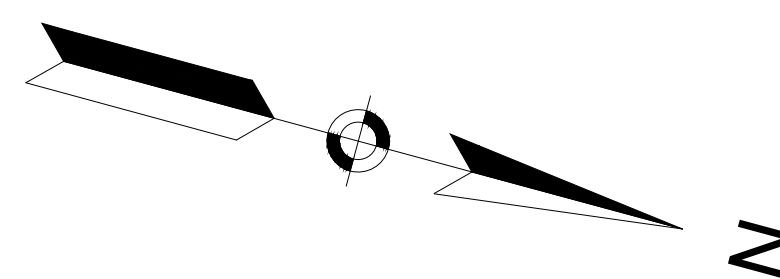
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SHEET NO. 7

607541_EV(BOXFORD NOI PLANS).DWG (PART 1) 2023-Dec-06

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	7	13
PROJECT FILE NO.		607541	

CONSTRUCTION PLAN
PART 2 OF 3

N/F
COLLINS S. WAGES
DAVID J. WAGES
BOOK 422 PAGE 77766
L.C. CERT. 64728
DOC. 445411
110 GREAT POND ROAD
MAP-LOT#16-1-1



N/F
PAUL JUNG
KELLY JUNG
BOOK 379 PAGE 72466
L.C. CERT. 63409
DOC. 374044
104 GREAT POND ROAD
MAP-LOT#16-1-1.1

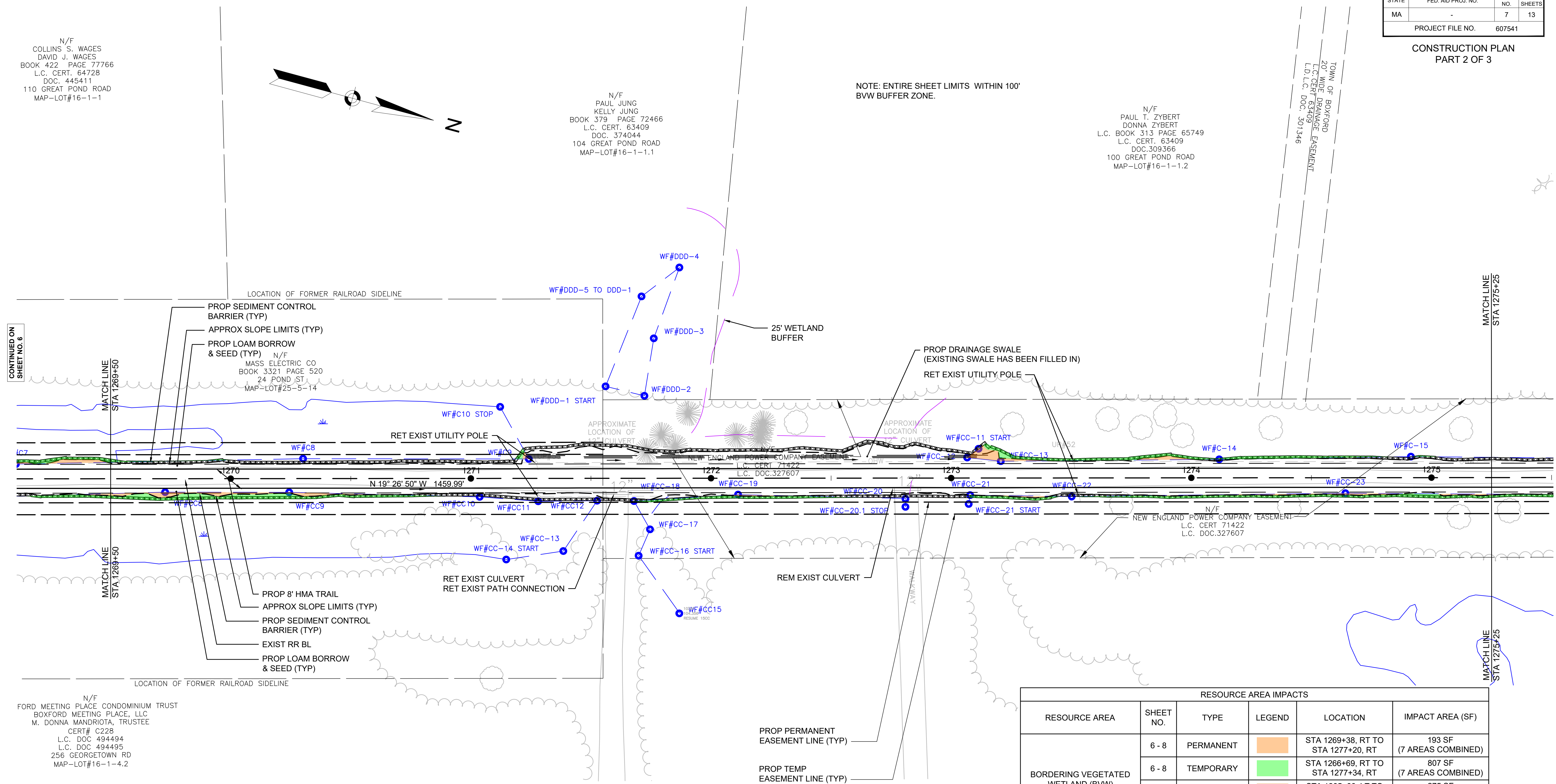
NOTE: ENTIRE SHEET LIMITS WITHIN 100'
BVW BUFFER ZONE.

N/F
PAUL T. ZYBERT
DONNA ZYBERT
L.C. BOOK 313 PAGE 65749
L.C. CERT. 63409
DOC. 309366
100 GREAT POND ROAD
MAP-LOT#16-1-1.2

TOWN OF BOXFORD
20' WIDE DRAINAGE
L.C. CERT. 63409
L.D. L.C. DOC. 301346

CONTINUED ON
SHEET NO. 6

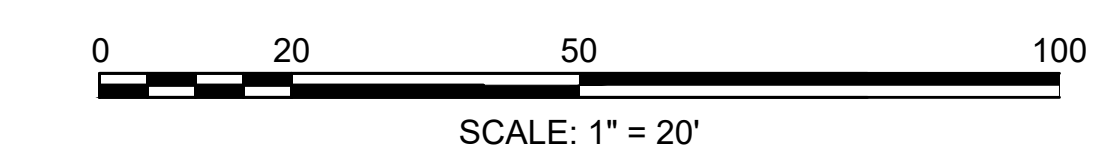
CONTINUED ON
SHEET NO. 8



RESOURCE AREA IMPACTS					
RESOURCE AREA	SHEET NO.	TYPE	LEGEND	LOCATION	IMPACT AREA (SF)
BORDERING VEGETATED WETLAND (BVW)	6-8	PERMANENT	[Orange Box]	STA 1269+38, RT TO STA 1277+20, RT	193 SF (7 AREAS COMBINED)
	6-8	TEMPORARY	[Green Box]	STA 1266+69, RT TO STA 1277+34, RT	807 SF (7 AREAS COMBINED)
	6-8	PERMANENT	[Orange Box]	STA 1265+66, LT TO STA 1279+48, LT	275 SF (7 AREAS COMBINED)
	6-8	TEMPORARY	[Green Box]	STA 1265+09, LT TO STA 1279+50, LT	795 SF (8 AREAS COMBINED)
25-FT BUFFER	6-8	PERMANENT	-	STA 1264+85 TO STA 1280+85	13,581 SF (1 AREA)
	6-8	TEMPORARY	-	STA 1264+85 TO STA 1280+85	14,050 SF (3 AREAS COMBINED)
WETLAND REPLICATION	6	REPLICATION	[Dotted Box]	STA 1266+30, RT TO STA 1267+31, RT	3,385 SF (2 AREAS)

RESOURCE AREA LEGEND:

- WF#XXXX WETLAND LINE
- [Orange Box] 200-FT RIVERFRONT AREA
- [Green Box] 100-FT WETLAND BUFFER
- [Purple Box] 25-FT WETLAND BUFFER
- [Blue Box] 100-YEAR FLOODPLAIN



N/F
FORD MEETING PLACE CONDOMINIUM TRUST
BOXFORD MEETING PLACE, LLC
M. DONNA MANDRIOTA, TRUSTEE
CERT# C228
L.C. DOC 494494
L.C. DOC 494495
256 GEORGETOWN RD
MAP-LOT#16-1-4.2

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	8	13
PROJECT FILE NO.		607541	

CONSTRUCTION PLAN
PART 3 OF 3

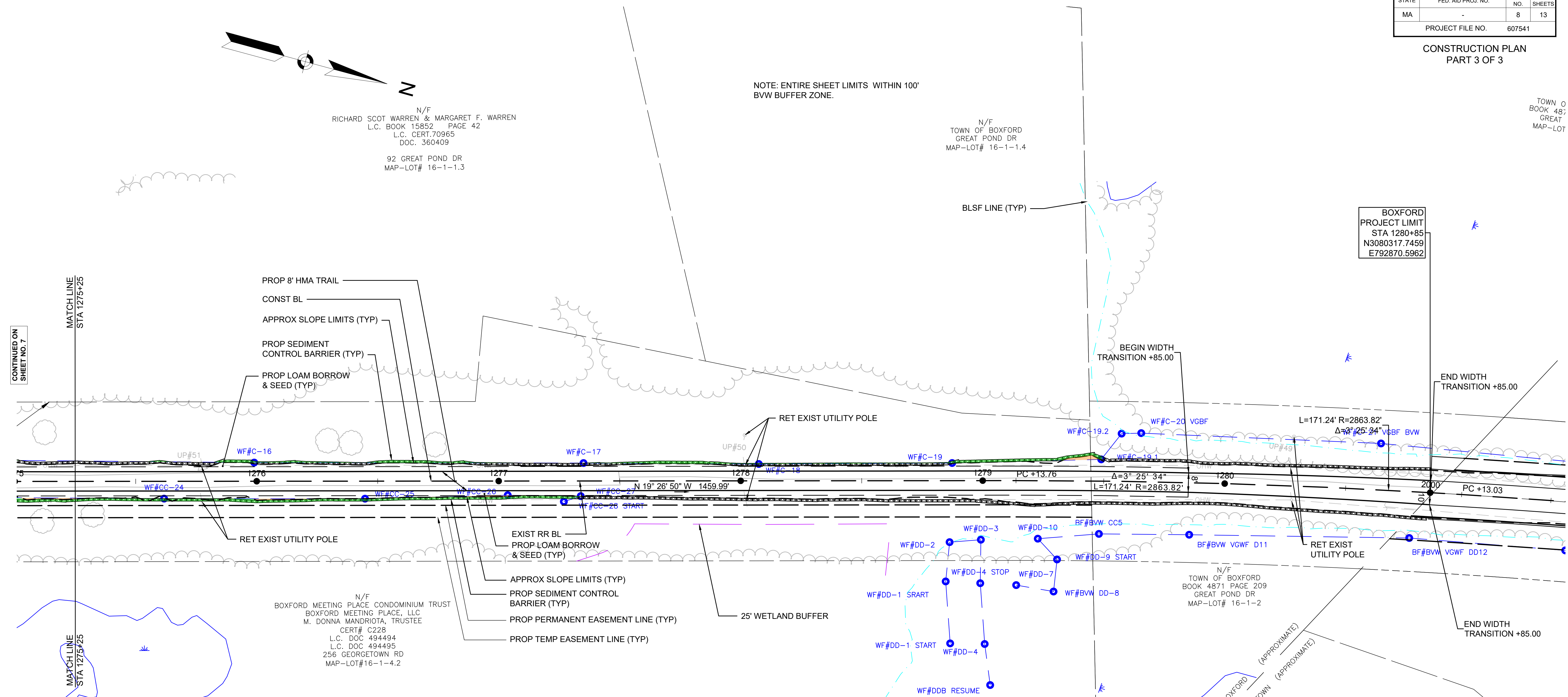
TOWN OF
BOOK 48;
GREAT
MAP-LOT

NOTE: ENTIRE SHEET LIMITS WITHIN 100'
BVW BUFFER ZONE.

N/F
RICHARD SCOT WARREN & MARGARET F. WARREN
L.C. BOOK 15852 PAGE 42
L.C. CERT. 70965
DOC. 360409
92 GREAT POND DR
MAP-LOT# 16-1-1.3

N/F
TOWN OF BOXFORD
GREAT POND DR
MAP-LOT# 16-1-1.4

BOXFORD
PROJECT LIMIT
STA 1280+85
N3080317.7459
E792870.5962



CONTINUED ON
SHEET NO. 7

MATCHLINE
STA 1275+25

MATCHLINE
STA 1275+25

N/F
BOXFORD MEETING PLACE CONDOMINIUM TRUST
BOXFORD MEETING PLACE, LLC
M. DONNA MANDRIOTA, TRUSTEE
CERT# C228
L.C. DOC 494494
L.C. DOC 494495
256 GEORGETOWN RD
MAP-LOT#16-1-4.2

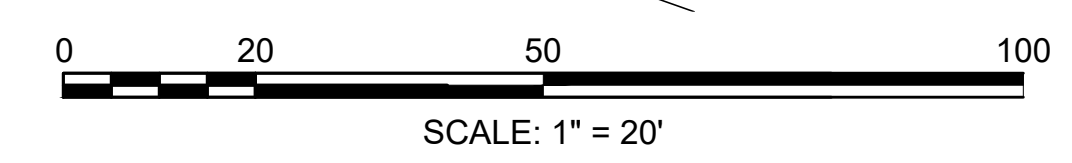
N/F
TOWN OF BOXFORD
BOOK 4871 PAGE 209
GREAT POND DR
MAP-LOT# 16-1-2

N/F
SHAWN D. ROCHE
TERI L. ROCHE
BOOK 18071 PAGE 469
CENTRAL ST
MAP-LOT# 8-2

RESOURCE AREA IMPACTS					
RESOURCE AREA	SHEET NO.	TYPE	LEGEND	LOCATION	IMPACT AREA (SF)
BORDERING VEGETATED WETLAND (BVW)	6-8	PERMANENT		STA 1269+38, RT TO STA 1277+20, RT	193 SF (7 AREAS COMBINED)
	6-8	TEMPORARY		STA 1266+69, RT TO STA 1277+34, RT	807 SF (7 AREAS COMBINED)
	6-8	PERMANENT		STA 1265+66, LT TO STA 1279+48, LT	275 SF (7 AREAS COMBINED)
	6-8	TEMPORARY		STA 1265+09, LT TO STA 1279+50, LT	795 SF (8 AREAS COMBINED)
25-FT BUFFER	6-8	PERMANENT	-	STA 1264+85 TO STA 1280+85	13,581 SF (1 AREA)
	6-8	TEMPORARY	-	STA 1264+85 TO STA 1280+85	14,472 SF (3 AREAS COMBINED)
WETLAND REPLICATION	6	REPLICATION		STA 1266+30, RT TO STA 1267+31, RT	3,385 SF (2 AREAS)

RESOURCE AREA LEGEND:

	WF#XXXX	WETLAND LINE
		200-FT RIVERFRONT AREA
		100-FT WETLAND BUFFER
		25-FT WETLAND BUFFER
		100-YEAR FLOODPLAIN

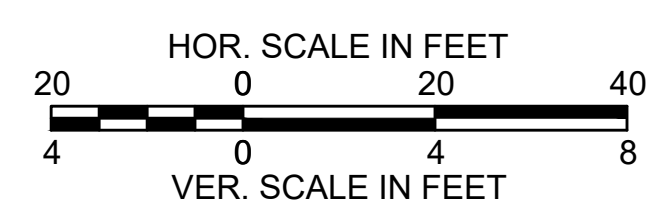
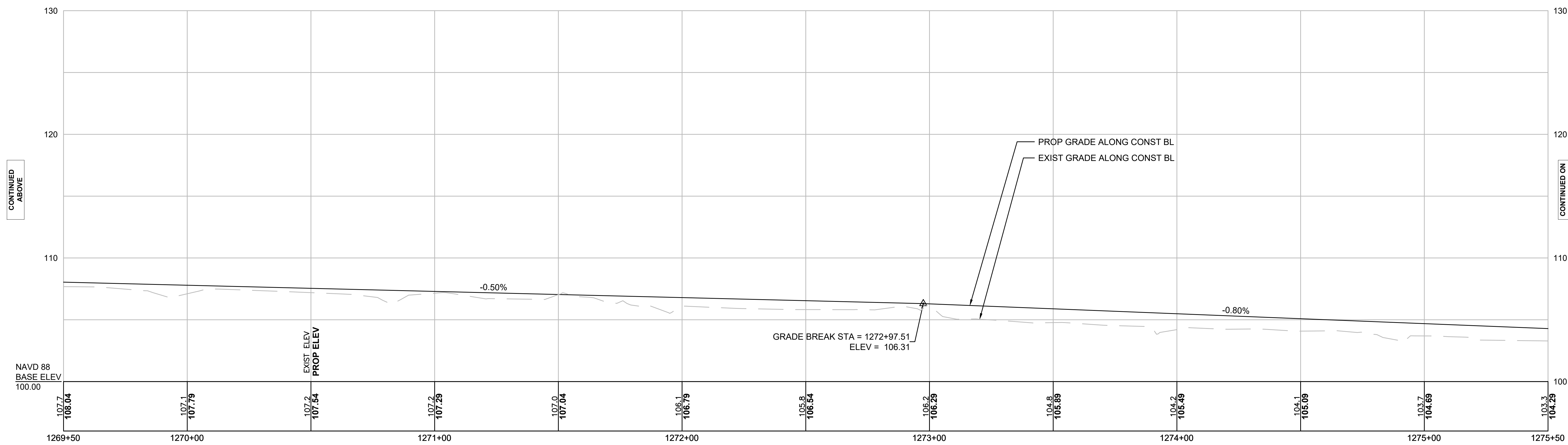
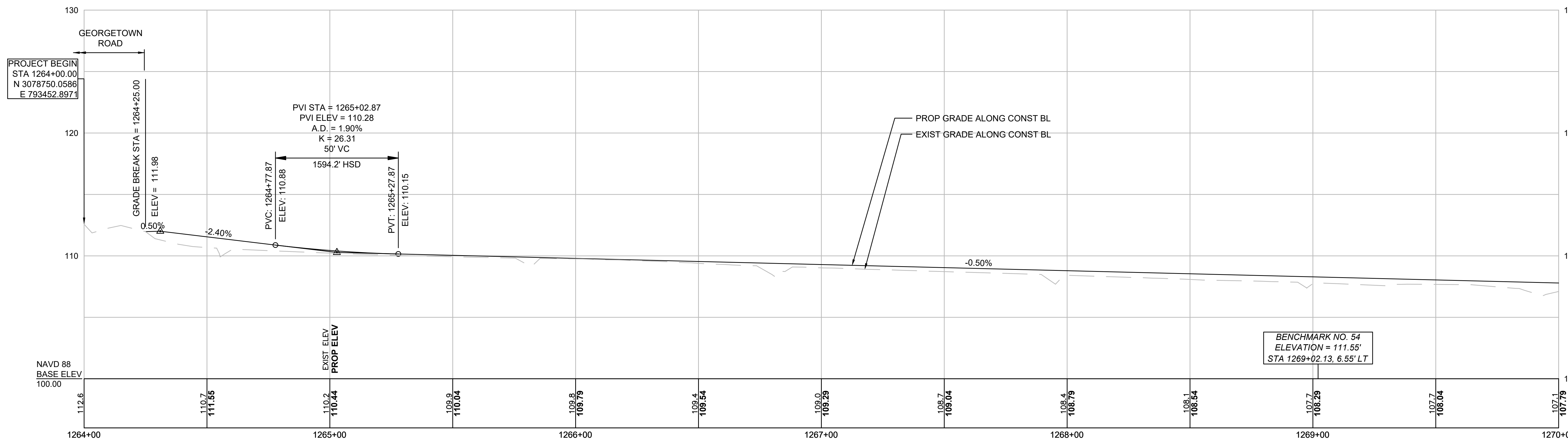


607541_EV(BOXFORD NOI PLANS).DWG (PART 3) 2023-Sep-13

BORDER TO BOSTON TRAIL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	9	13
PROJECT FILE NO.		607541	

PROFILES
PART 1 OF 2



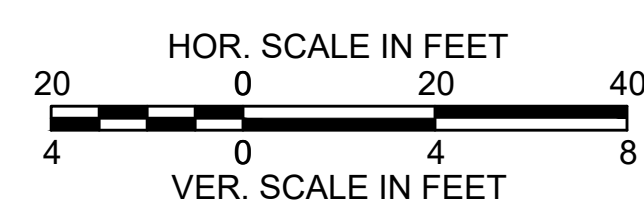
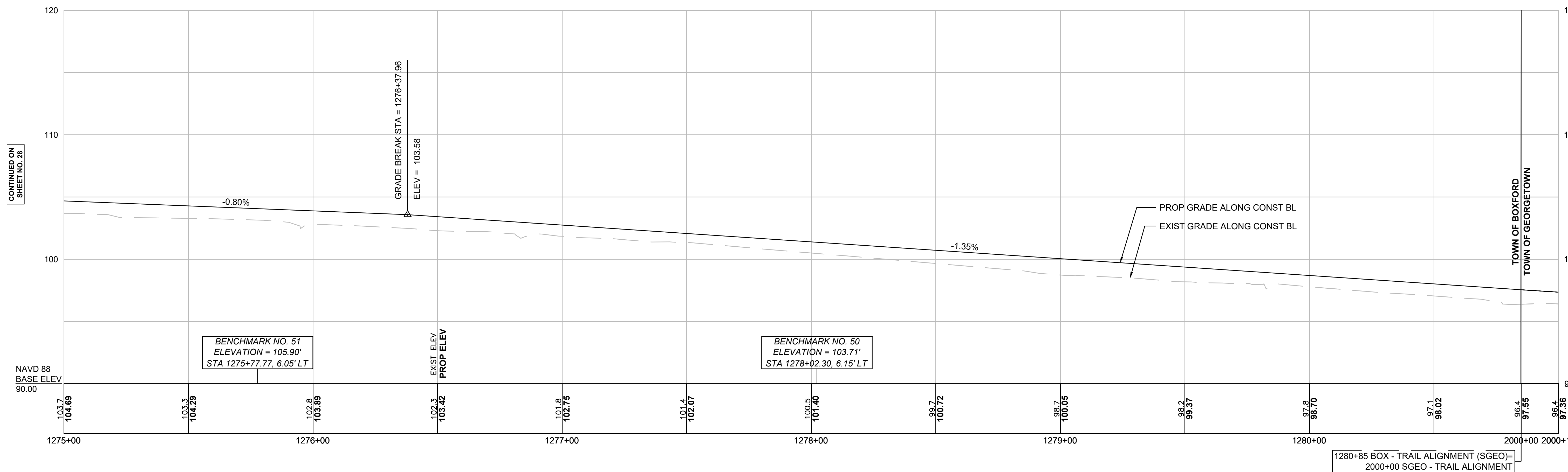
FOR CONSTRUCTION PLAN SEE SHEET NO 6 - 7

607541_E:\BOSTON\BOSTON\PROFILES.DWG (PART 1) 2023-Sep-13

BORDER TO BOSTON TRAIL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	10	13
PROJECT FILE NO.		607541	

PROFILES
PART 2 OF 2

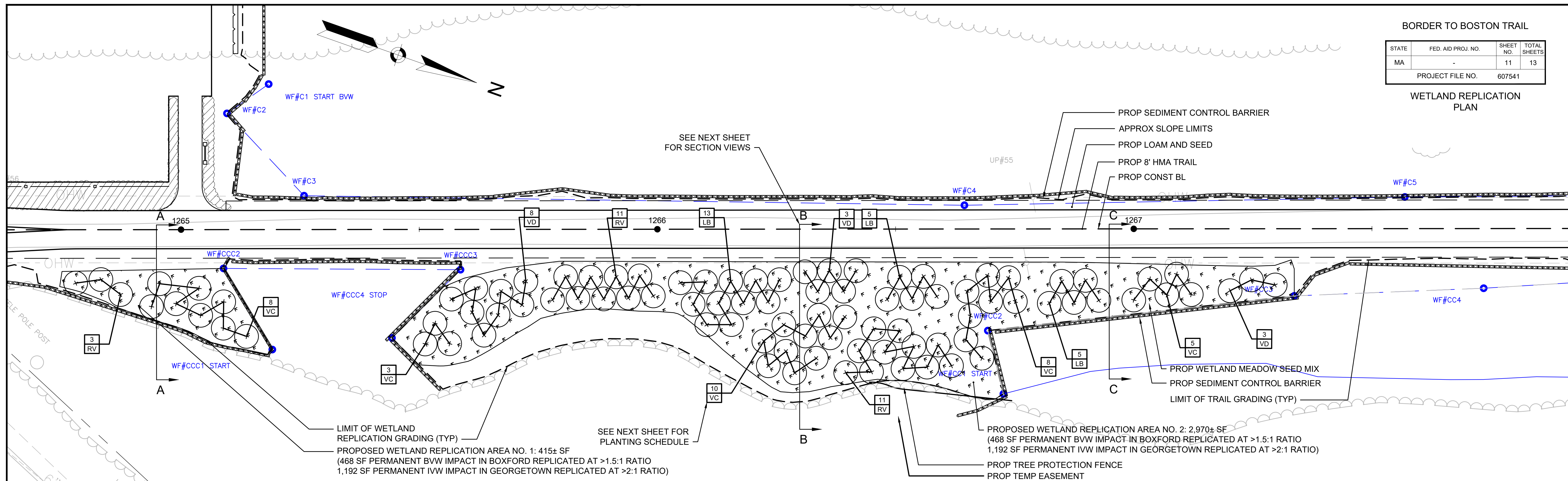


FOR CONSTRUCTION PLAN SEE SHEET NO 7 - 8

BORDER TO BOSTON TRAIL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	11	13
PROJECT FILE NO.		607541	

WETLAND REPLICATION PLAN



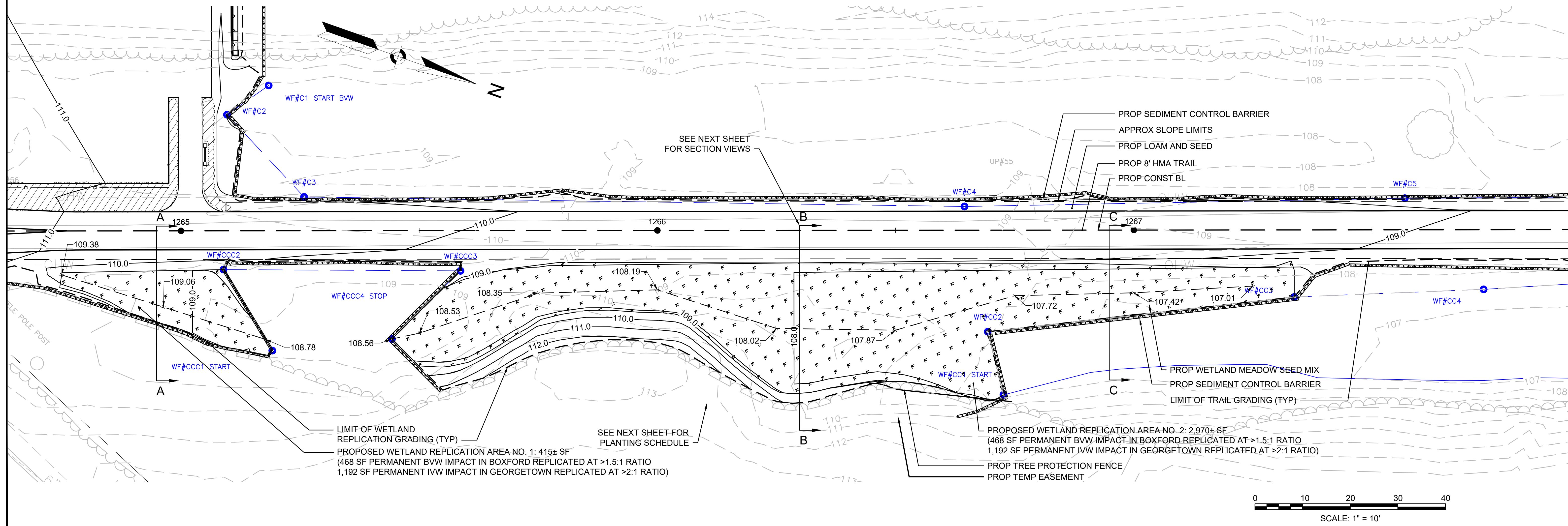
SEE NEXT SHEET FOR SECTION VIEWS

SEE NEXT SHEET FOR PLANTING SCHEDULE

PROPOSED WETLAND REPLICATION AREA NO. 1: 415± SF
 (468 SF PERMANENT BVW IMPACT IN BOXFORD REPLICATED AT >1.5:1 RATIO
 1,192 SF PERMANENT IVW IMPACT IN GEORGETOWN REPLICATED AT >2:1 RATIO)

PROPOSED WETLAND REPLICATION AREA NO. 2: 2,970± SF
 (468 SF PERMANENT BVW IMPACT IN BOXFORD REPLICATED AT >1.5:1 RATIO
 1,192 SF PERMANENT IVW IMPACT IN GEORGETOWN REPLICATED AT >2:1 RATIO)

PROP TREE PROTECTION FENCE
 PROP TEMP EASEMENT



SEE NEXT SHEET FOR SECTION VIEWS

SEE NEXT SHEET FOR PLANTING SCHEDULE

PROPOSED WETLAND REPLICATION AREA NO. 1: 415± SF
 (468 SF PERMANENT BVW IMPACT IN BOXFORD REPLICATED AT >1.5:1 RATIO
 1,192 SF PERMANENT IVW IMPACT IN GEORGETOWN REPLICATED AT >2:1 RATIO)

PROPOSED WETLAND REPLICATION AREA NO. 2: 2,970± SF
 (468 SF PERMANENT BVW IMPACT IN BOXFORD REPLICATED AT >1.5:1 RATIO
 1,192 SF PERMANENT IVW IMPACT IN GEORGETOWN REPLICATED AT >2:1 RATIO)

PROP TREE PROTECTION FENCE
 PROP TEMP EASEMENT



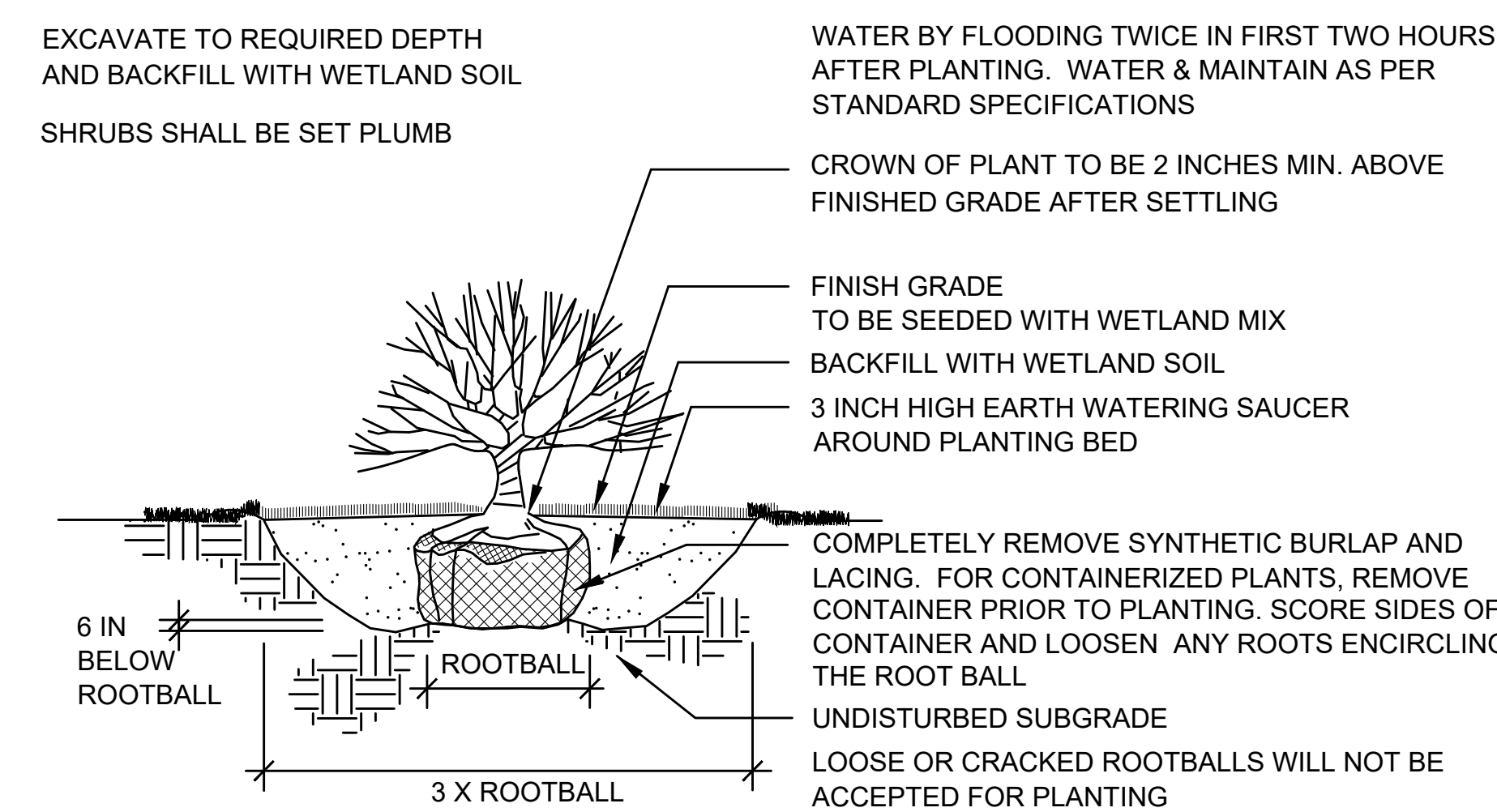
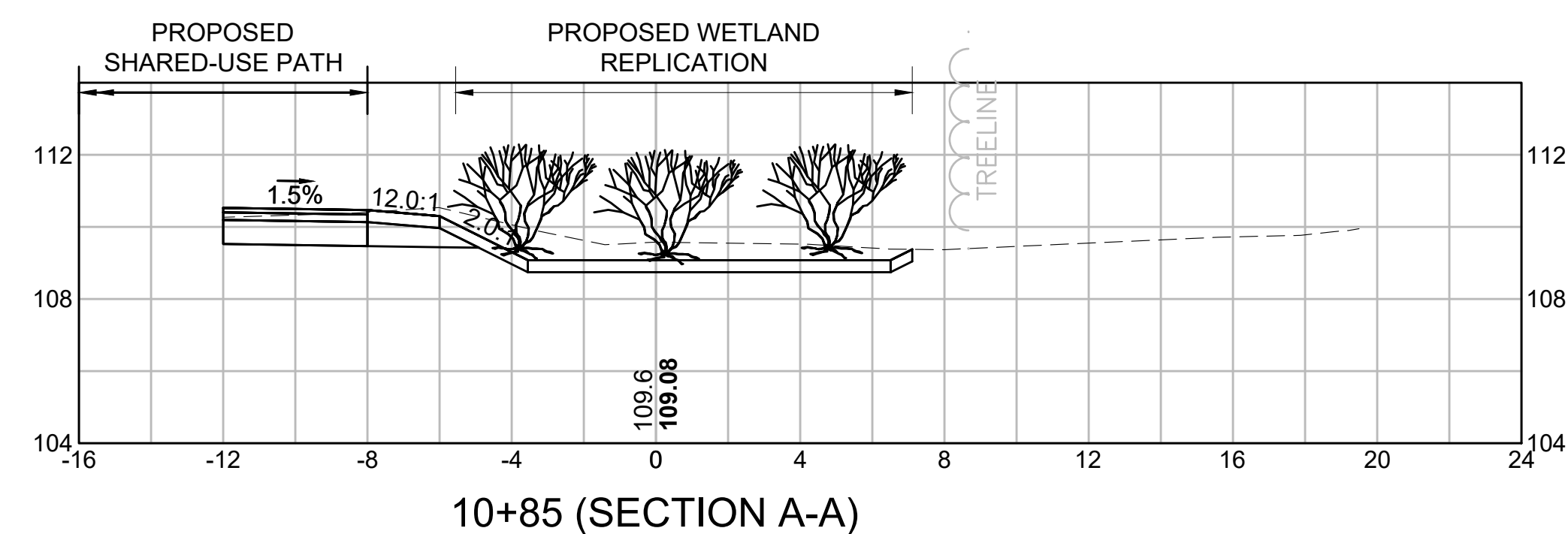
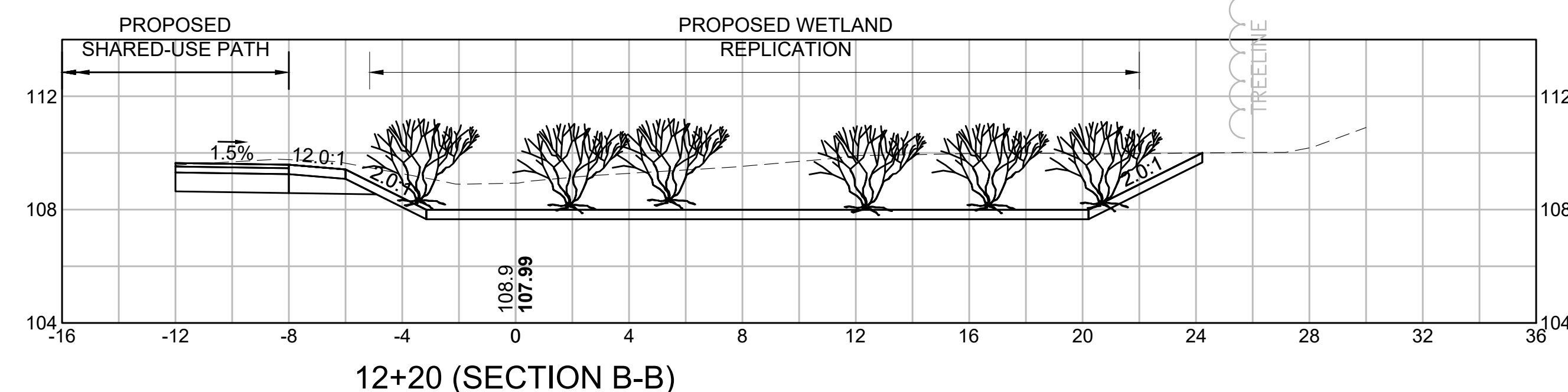
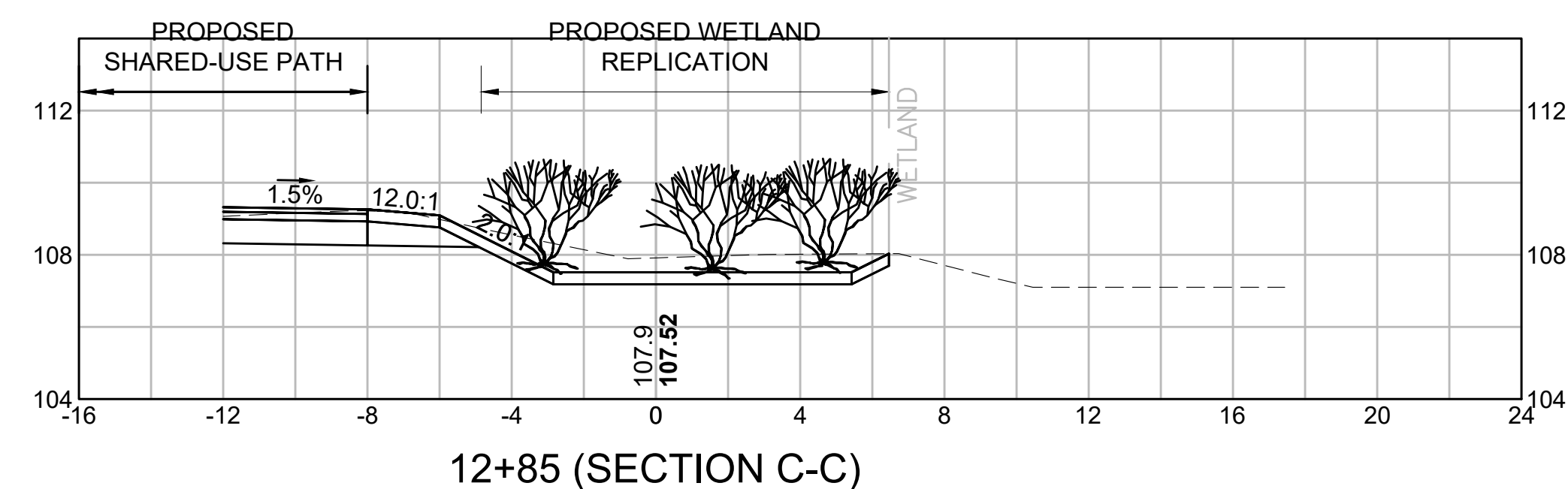
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MA	-	12	13
PROJECT FILE NO.		607541	

WETLAND REPLICATION
DETAILS

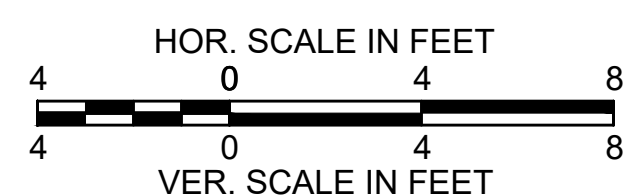
WETLAND REPLICATION PLANTING SCHEDULE					
QTY	ID	BOTANICAL NAME	COMMON NAME	SIZE	COMMENT
<i>SHRUBS</i>					
34	VC	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	2'-3' HT.	
14	VD	VIBURNUM DENTATUM	ARROWWOOD	2'-3' HT.	
25	RV	RHODODENDRON VISCOSUM	SWAMP AZALEA	2'-3' HT.	
23	LB	LINDERA BENZOIN	COMMON SPICEBUSH	2'-3' HT.	

WETLAND REPLICATION/RESTORATION NOTES:

1. ALL WETLAND REPLICATION/RESTORATION SHALL BE CONDUCTED UNDER THE SUPERVISION AND REQUIREMENTS OF THE PROJECT WETLAND SPECIALIST.
2. AREAS OF TEMPORARY WETLAND ALTERATION ASSOCIATED WITH THE PROPOSED CONSTRUCTION (E.G. FOR ACCESS AROUND CULVERT PIPES, RETAINING WALL CONSTRUCTION, ETC.), WILL BE RESTORED IN-KIND AT THE REQUIREMENTS OF THE SUPERVISING WETLAND SCIENTIST BY RESTORING NATURAL WETLAND SOIL PROFILES (WHERE NEEDED) AND SEEDING WITH FACW MEADOW MIX.
3. THE WETLAND REPLICATION AREA (WRA) SHALL BE INSTALLED BY REMOVING EXISTING SOIL AND LOWERING THE ELEVATION OF THE WRA TO ROUGHLY 12 INCHES BELOW THE ELEVATION OF THE ADJACENT WETLAND. THE EXCAVATED AREA SHALL THEN BE BACKFILLED WITH 12 INCHES OF WETLAND SOIL TO COMPLY WITH MASSDOT SPECIFICATIONS.
4. FOLLOWING WETLAND SOIL PLACEMENT, THE WRA SHALL BE PLANTED WITH THE SHRUBS SPECIFIED HEREIN, AND SEEDED WITH WETLAND MIX - FACW MEADOW MIX.
5. SEEDED AREAS SHALL BE STABILIZED VIA HYDRO-SEEDING, STRAW MULCH, AND/OR EROSION CONTROL BLANKETS AT THE REQUIREMENTS OF THE WETLAND SPECIALIST.

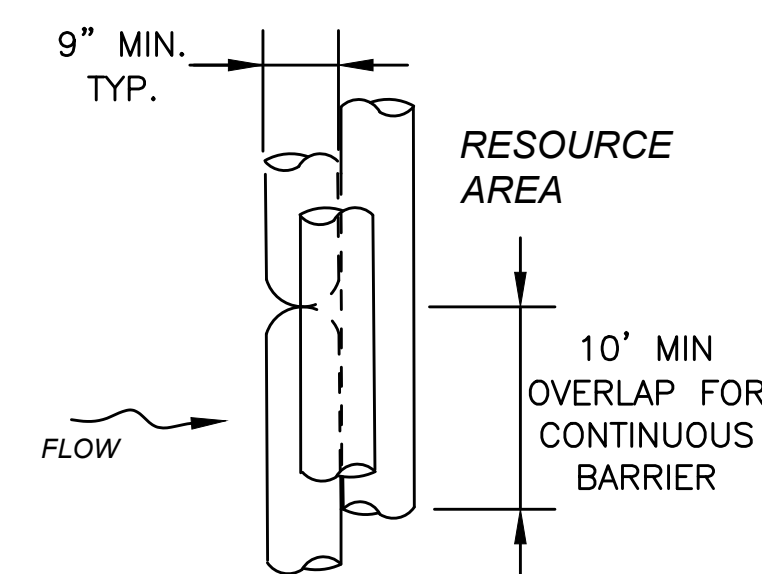


A SHRUB PLANTING
NOT TO SCALE

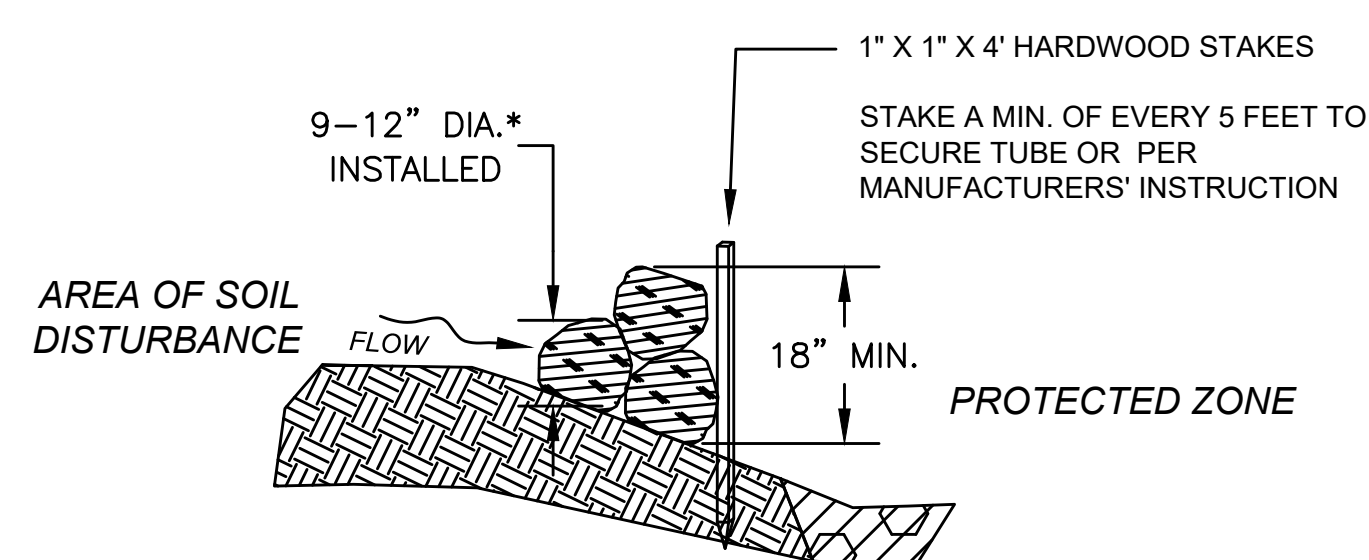


STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	-	13	13
PROJECT FILE NO.		607541	

CONSTRUCTION DETAILS



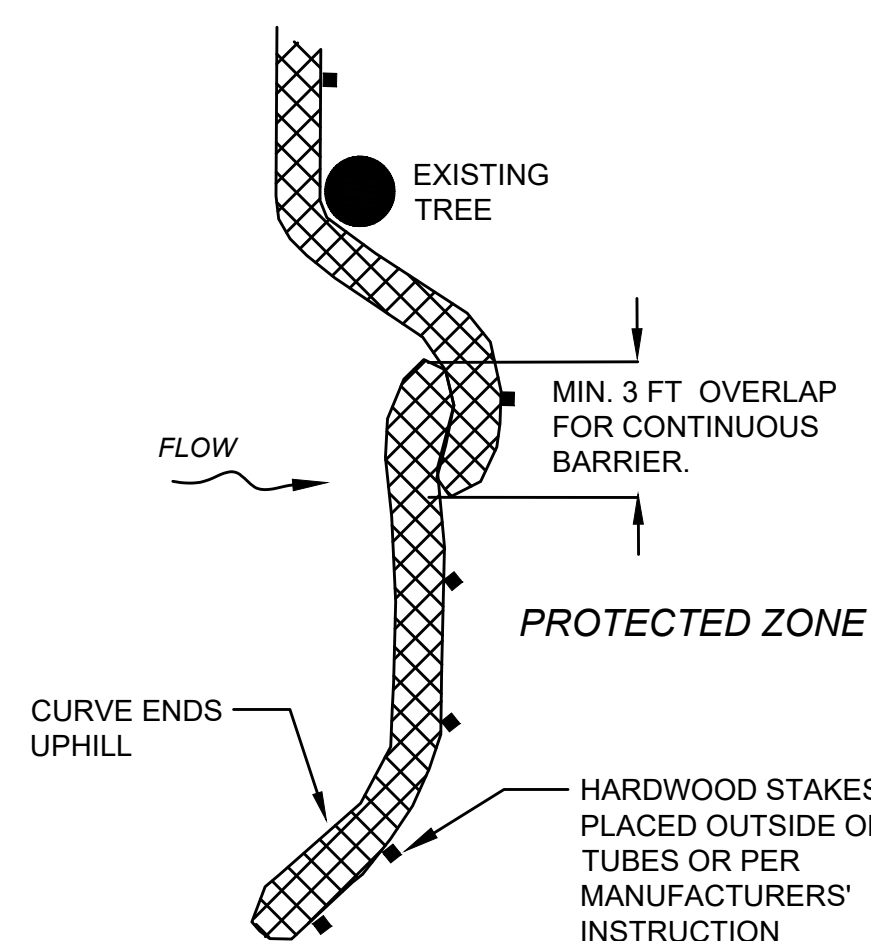
PLAN VIEW



SECTION

COMPOST FILTER TUBE BERM (SLOPES 2:1 OR STEEPER)

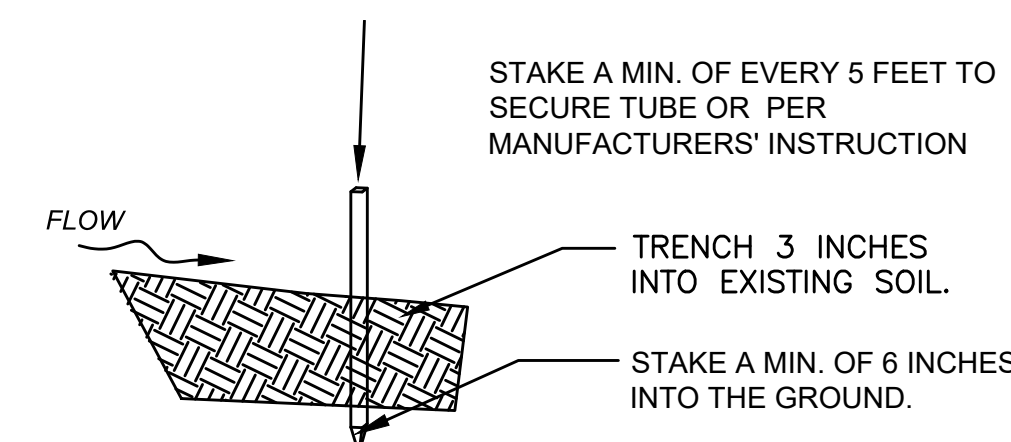
NOT TO SCALE



PLAN VIEW

SEDIMENT BARRIERS

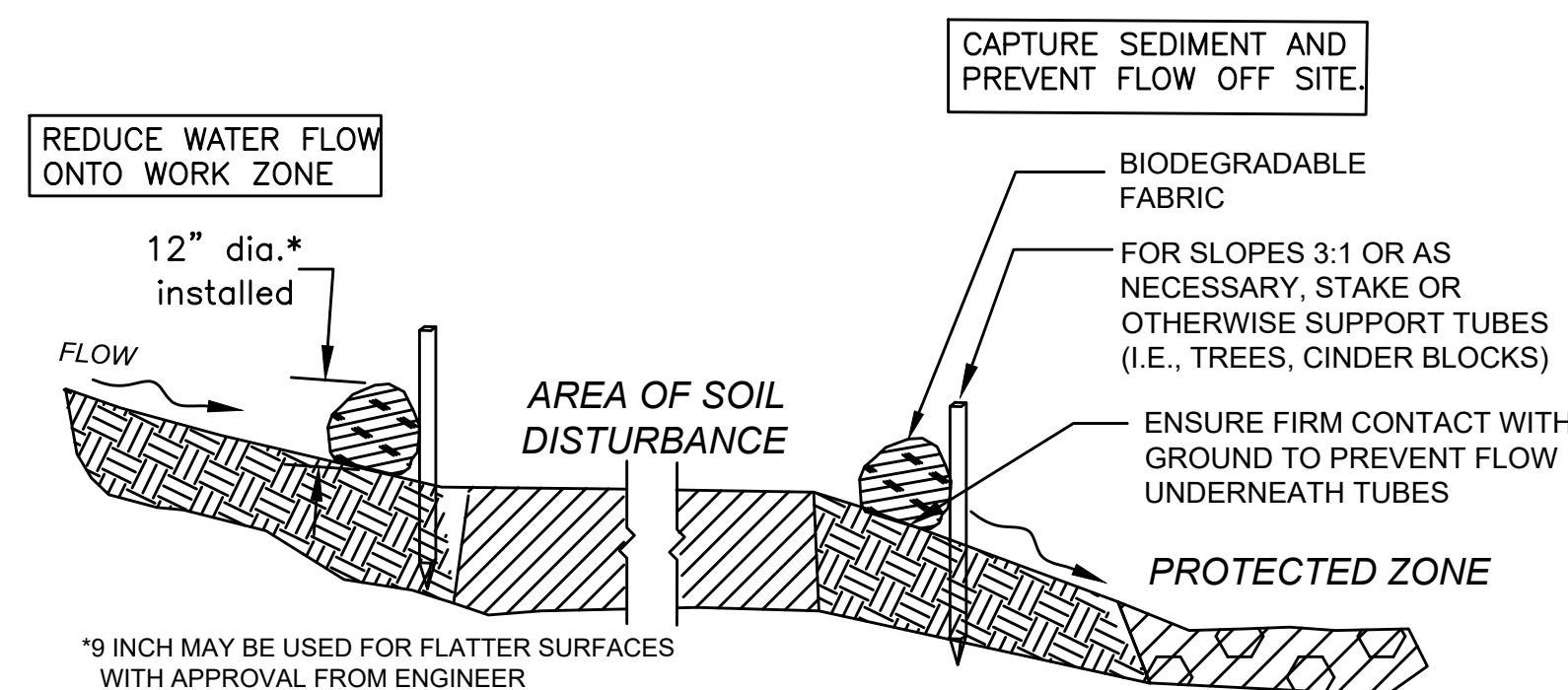
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SECTION

SEDIMENT BARRIERS - HARDWOOD STAKES

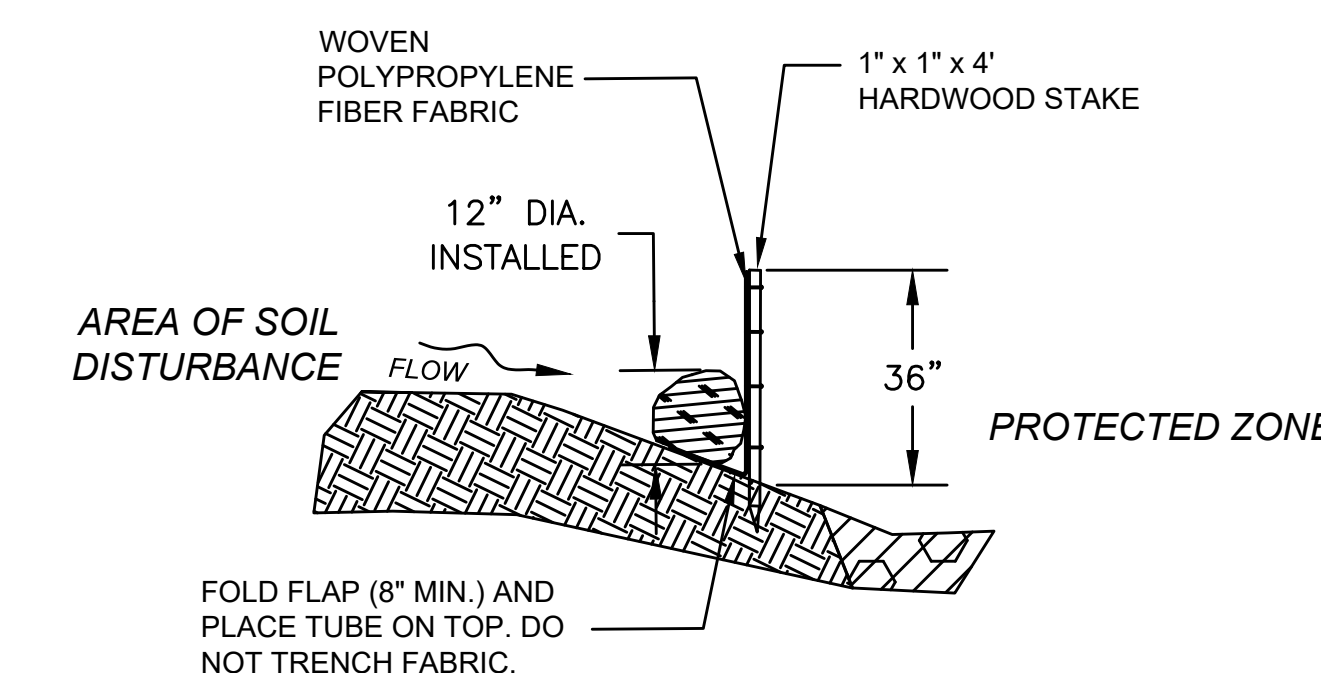
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SECTION

SEDIMENT BARRIERS - COMPOST FILTER TUBES

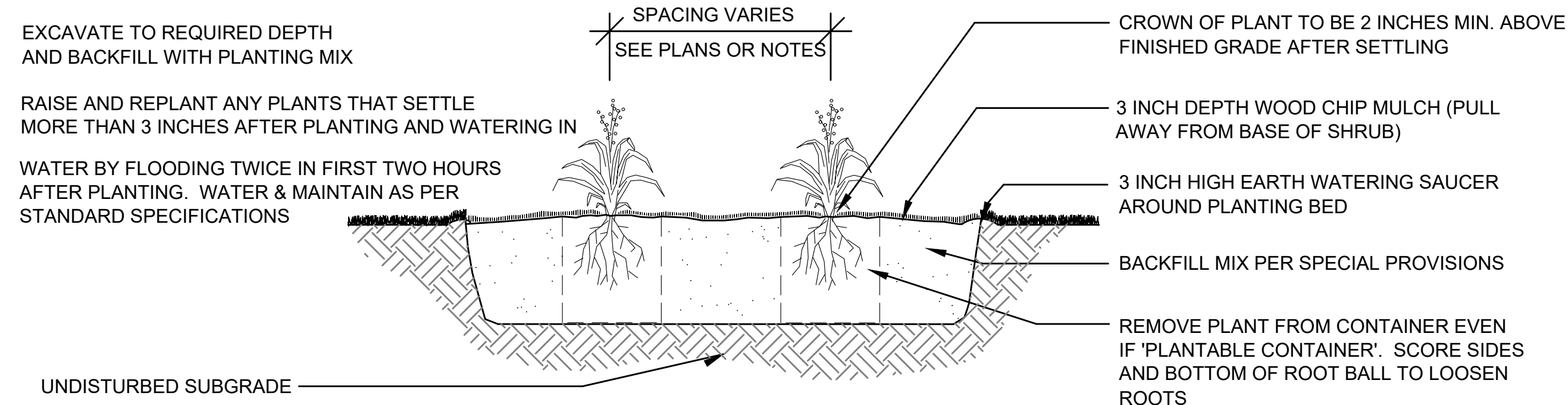
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SECTION

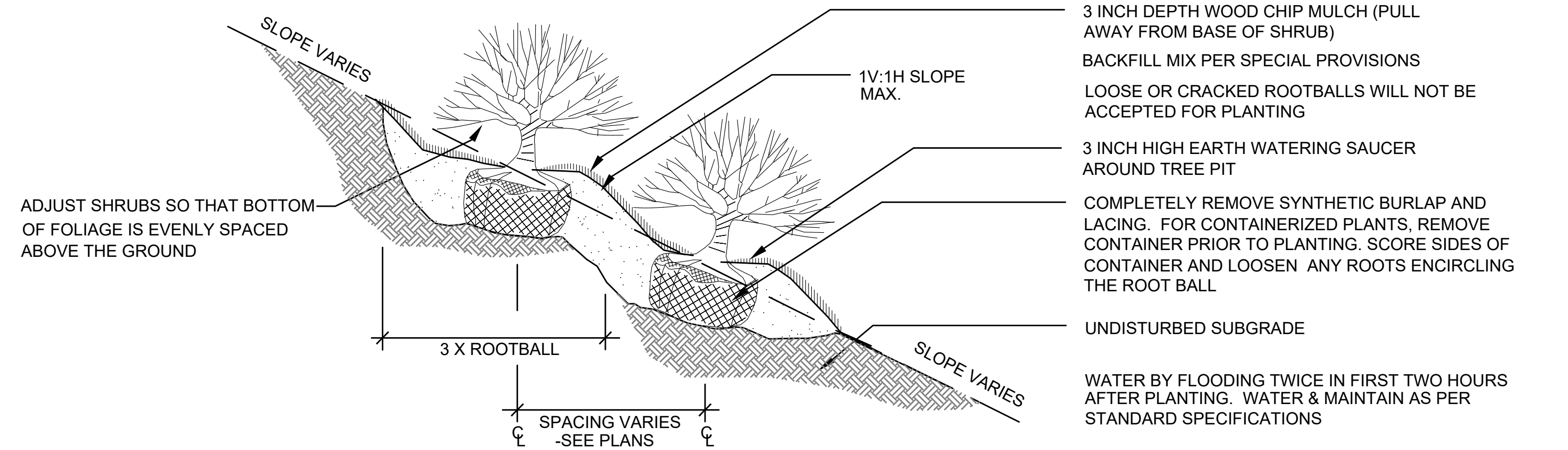
COMPOST FILTER TUBE & SILT FENCE

NOT TO SCALE



1 PERENNIAL PLANTING

NOT TO SCALE



2 CONTAINERIZED SHRUB PLANTING (SLOPE) DETAIL

NOT TO SCALE

MASTER PLANT SCHEDULE

ID	BOTANICAL NAME	COMMON NAME	SIZE	COMMENT	GEORGETOWN RD PARKING LOT	WETLAND REPLICATION AREA	BALDPLATE POND TRAIL HEAD	NELSON STREET TRAIL HEAD	HARMONY LANE SCREENING	TOTAL
TREES										
BP	BETULA POPULIFOLIA	GREY BIRCH	2-2 1/2" CAL.	MULTI-STEM	1					1
PS	PINUS STROBUS	WHITE PINE	9'-10' HT.						6	6
SS	SASSAFRAS ALBIDUM	SASSAFRAS	1-1 1/2" CAL.	MULTI-STEM				3	9	12
JV	JUNIPERUS VIRGINIANA	EASTERN RED CEDAR	9'-10' HT.						8	8
SHRUBS										
AA	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	4'-5' HT.	-					10	10
AA	ARONIA ARBUTIFOLIA	RED CHOKEBERRY	3'-4' HT.	-				3		3
AM	ARONIA MELANOCARPA	BLACK CHOKEBERRY	2'-3' HT.	-	9					9
CA	CEONOTHUS AMERICANUS	NEW JERSEY TEA	2'-3' HT.	-	4			6		10
CP	COMPTONIA PEREGRINA	SWEET FERN	2'-3' HT.	-	30					30
HV	HAMAMELIS VIRGINIANA	WITCHHAZEL	4'-5' HT.	-	3			3		6
KA	KALMIA ANGUSTIFOLIA	SHEEPLAUREL	2'-3' HT.	-	5					5
LB	LINDERA BENZOIN	COMMON SPICEBUSH	2'-3' HT.	-		23				23
RV	RHODODENDRON VISCOSUM	SWAMP AZALEA	2'-3' HT.	-		25				25
ST	SPIREA TOMENTOSA	STEEPLEBUSH	1'-2' HT.	-			14			14
VC	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	2'-3' HT.	-		34				34
VD	VIBURNUM DENTATUM	ARROWWOOD	2'-3' HT.	-		14				14