

COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL
IN THE TOWNS OF HUDSON, STOW, MARLBOROUGH & SUDBURY
MASSACHUSETTS
MIDDLESEX COUNTY

THESE PLANS ARE SUPPLEMENTED BY THE OCTOBER 2017 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.

DCR CONTRACT NO. P19-3295-D1A

INDEX

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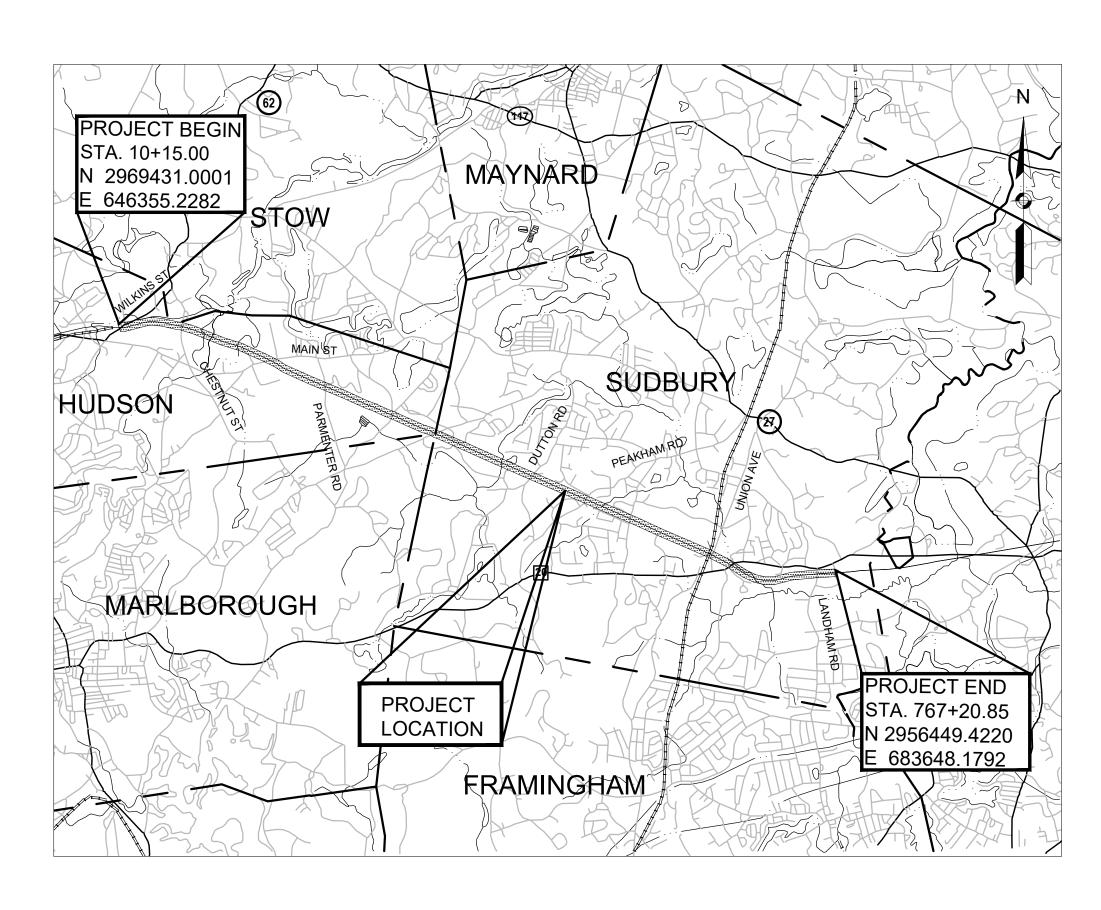
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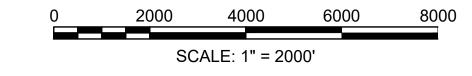
XS-01 - XS-02 CROSS SECTIONS (NOT INCLUDED)



CHARLES D. BAKER, GOVERNOR KARYN E. POLITO, LT. GOVERNOR

KATHLEEN A. THEOHARIDES, SECRETARY
EXECUTIVE OFFICE OF ENERGY & ENVIRONMENTAL AFFAIRS

JIM MONTGOMERY, INTERIM COMMISSIONER DEPARTMENT OF CONSERVATION & RECREATION



LENGTH OF PROJECT = 40.410.06 FEET = 7.653 MILES

SUDBURY NOTICE OF INTENT SUBMISSION NOT APPROVED FOR CONSTRUCTION

ORIGINALLY SUBMITTED MARCH 5, 2020 REVISED JULY 30, 2020 REVISED OCTOBER 21, 2020 REVISED JANUARY 7, 2021



COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE

MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

DESIGNER JCR

SHEET NO.

TITLE SHEET & INDEX

CONT. P19-3295-D1A

ACC. XXXXXXX

SCALE: AS NOTED

DATE: JAN 2021

1 OF 1

GENERAL S	VMROLS			
-		DECODIDATION	— ABBREV	IATIONS
EXISTING	PROPOSED	DESCRIPTION	GENERAL	
☐ JB Ⅲ Æ Æ CD	JB	JERSEY BARRIER	AADT	ANNUAL AVERAGE DAILY TRAFFIC
⊞ ⊕ ⊕ CB	(■) CB	CATCH BASIN CATCH BASIN CURB INLET	ABAN	ABANDON
⊕ FP	● FP	FLAG POLE	ADDROX	ADDROVIMATE
G GP	G GP	GAS PUMP	APPROX. A.C.	APPROXIMATE ASPHALT CONCRETE
□ MB	□ MB	MAIL BOX	ACCM PIPE	ASPHALT CONTROL CORRUGATED METAL PIPE
		POST SQUARE	BIT.	BITUMINOUS
	0	POST CIRCULAR	ВС	BOTTOM OF CURB
⊕ WELL □ EHH	⊕ WELL □ EHH	WELL ELECTRIC HANDHOLE	BD.	BOUND
	0	FENCE GATE POST	BL	BASELINE
o GG	o GG	GAS GATE	BLDG BM	BUILDING BENCHMARK
● BHL #	◆ BHL #	BORING HOLE	BO	BY OTHERS
	→ MW # → ¬¬¬¬ "	MONITORING WELL	BOS	BOTTOM OF SLOPE
■ TP #	■ TP#	TEST PIT HYDRANT	BR.	BRIDGE
*	*	LIGHT POLE	CBCL	CATCH BASIN CATCH BASIN WITH CURB INLET
■CB ■CB/DH	7 N	CONCRETE BOUND/DRILL HOLE	CBCI CC	CEMENT CONCRETE
		GPS POINT	CCM	CEMENT CONCRETE MASONRY
©	©	CABLE MANHOLE	CEM	CEMENT
D	0	DRAINAGE MANHOLE	CI	CURB INLET
E	©	ELECTRIC MANHOLE	CIP	CAST IRON PIPE
(G) (M)	© ₩	GAS MANHOLE MISC MANHOLE	CLF CL	CHAIN LINK FENCE CENTERLINE
(S)	<u> </u>	SEWER MANHOLE	CMP	CORRUGATED METAL PIPE
T	①	TELEPHONE MANHOLE	CSP	CORRUGATED STEEL PIPE
W	w	WATER MANHOLE	CO.	COUNTY
■ MHB	■ MHB	MASSACHUSETTS HIGHWAY BOUND	CONC	CONCRETE
□ MON		MONUMENT STONE BOLIND	CONT	CONTINUOUS
□ SB ■ TB		STONE BOUND TOWN OR CITY BOUND	CONST CR GR	CONSTRUCTION CROWN GRADE
		TRAVERSE OR TRIANGULATION STATION	DHV	DESIGN HOURLY VOLUME
⊸ TPL or GUY	→ TPL or GUY	TROLLEY POLE OR GUY POLE	DI	DROP INLET
o HTP		TRANSMISSION POLE	DIA	DIAMETER
-&- UFB	ے۔ UFB	UTILITY POLE W/ FIREBOX	DIP	DUCTILE IRON PIPE
	-∲ UPDL	UTILITY POLE WITH DOUBLE LIGHT	DW	STEADY DON'T WALK - PORTLAND ORANGE
-&- ULT -⊶ UPL	_& ULT -← UPL	UTILITY POLE W / 1 LIGHT UTILITY POLE	DWY ELEV (or EL.)	DRIVEWAY ELEVATION
	-V- UPL	BUSH	EMB	EMBANKMENT
•SIZE & TYPE		TREE	EOP	EDGE OF PAVEMENT
0		STUMP	,	EXISTING
		SWAMP / MARSH	EXC	EXCAVATION
△ WF−X−XXX	· WC	WETLAND FLAG	F&C F&G	FRAME AND COVER FRAME AND GRATE
WGPM	WGPM	PARKING METER	FDN.	FOUNDATION
		OVERHEAD CABLE/WIRE	FLDSTN	FIELDSTONE
		- CURBING	GAR	GARAGE
_100		- CONTOURS (ON-THE-GROUND SURVEY DATA)	GD	GROUND
<u></u>		- CONTOURS (PHOTOGRAMMETRIC DATA)	GG Gl	GAS GATE GUTTER INLET
12" RCP _D		- UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER) - UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)	GIP	GALVANIZED IRON PIPE
4" HP G		- UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)	GRAN	GRANITE
8" VCP S		- UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)	GRAV	GRAVEL
		- UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)	GRD	GUARD
8" C.I. W		- UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)	HDW HMA	HEADWALL HOT MIX ASPHALT
0000000000		BALANCED STONE WALL - GUARD RAIL - STEEL POSTS	HOR	HORIZONTAL
		- GUARD RAIL - STEEL POSTS - WOOD GUARD RAIL	HYD	HYDRANT
x	x	CHAIN LINK OR METAL FENCE	INV	INVERT
	o	- WOOD FENCE	JCT	JUNCTION
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		L LB	LENGTH OF CURVE LEACH BASIN
		- SAWCUT LINE	LP	LIGHT POLE
		- TOP OR BOTTOM OF SLOPE - LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY	LST	LANDSCAPE TIMBER
		BANK OF RIVER OR STREAM	LT	LEFT
_ · _ · _ · _		BORDER OF WETLAND	MAX	MAXIMUM
100°BZ		100 FT WETLAND BUFFER	MB MH	MAILBOX MANHOLE
200'RA		200 FT RIVERFRONT AREA BUFFER	MHB	MASSACHUSETTS HIGHWAY BOUND
APX 200'RA		APPROX 200 FT RIVERFRONT BUFFER	MIN	MINIMUM
100'RA		100 FT RIVERFRONT AREA BUFFER APPROX 100 FT RIVERFRONT AREA BUFFER	NIC	NOT IN CONTRACT
APA TOURA		AURA BUFFER	NO.	NUMBER
100BZ <del>_AURA</del>		100 FT AURA BUFFER	PC	POINT OF COMPOUND OUR VATURE
100VPBZ		100 FT VERNAL POOL AREA BUFFER	PCC P.G.L.	POINT OF COMPOUND CURVATURE PROFILE GRADE LINE
		- STATE HIGHWAY LAYOUT/STATE OWNED LAND	P.G.L. Pl	POINT OF INTERSECTION
		- TOWN OR CITY LAYOUT - COUNTY LAYOUT	POC	POINT ON CURVE
		- COUNTY LAYOUT - RAILROAD SIDELINE	POT	POINT ON TANGENT
		TOWN OR CITY BOUNDARY LINE	PRC	POINT OF REVERSE CURVATURE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE	PROJ	PROJECT

PROPERTY LINE OR APPROXIMATE PROPERTY LINE

TRAVERSE OR TRIANGULATION STATION

SE BENCH W/ CONCRETE PAD

— — — — — EASEMENT

· EROSION CONTROL BARRIER

CHECK DAM

#### 

PROPOSED

PAVEMENT

**PROP** 

PT

PVI

PVT

**PVMT** 

POINT OF VERTICAL CURVATURE

POINT OF VERTICAL TANGENCY

POINT OF VERTICAL INTERSECTION

PLANTABLE SOIL BORROW

POINT OF TANGENCY

GENERAL	<u>-</u>
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
Т	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TMA	TELEPHONE MAST ARM
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

#### PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
	SL	STOP LINE
	cw	CROSSWALK
	SWL	SOLID WHITE LINE
	SYL	SOLID YELLOW LINE
	BWL	BROKEN WHITE LINE
	BYL	BROKEN YELLOW LINE
	<u>DWL</u>	DOTTED WHITE LINE
	<u>DYL</u>	DOTTED YELLOW LINE
	DWLEx	DOTTED WHITE LINE EXTENSION
	DYLEx	DOTTED YELLOW LINE EXTENSION
	DBWL	DOUBLE WHITE LINE
	DBYL	DOUBLE YELLOW LINE

#### **GENERAL NOTES:**

- 1. THE PROPERTY LINES SHOWN ON THIS PLAN OF THE PARCELS AT 44 FOREST AVENUE IN HUDSON, 163 BOSTON POST ROAD IN SUDBURY AND THE FORMER RAILROAD RIGHT-OF-WAY ARE BASED UPON AN ACTUAL FIELD SURVEY CONDUCTED BY VHB, INC. IN 2015 AND FROM DEEDS AND PLANS OF RECORD.
- 2. THE EXISTING CONDITIONS SHOWN ON THIS PLAN WERE DEVELOPED FROM A COMBINED EFFORT OF AERIAL PHOTOGRAMMETRIC MAPPING BY EASTERN TOPOGRAPHICS, INC., BASED ON AERIAL PHOTOGRAPHS TAKEN ON FEBRUARY 22, 2013, AND AUGMENTED BY AN ON-THE-GROUND SURVEY PERFORMED BY VHB DURING 2015 AND 2017.
- 3. THE HORIZONTAL CONTROL IS BASED ON THE MASSACHUSETTS MAINLAND STATE PLANE COORDINATE SYSTEM AND THE NATIONAL GEODETIC SURVEY (NAD83). ALL ELEVATION IS US FEET, REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 (NAVD88).
- 4. THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND GRADES IN THE FIELD BEFORE COMMENCING WORK AND PROMPTLY NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
- 3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. AND SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
- 4. THE DELINEATED WETLANDS SHOWN ON THIS PLAN WERE FLAGGED BY THE VHB ENVIRONMENTAL DEPARTMENT AND FIELD SURVEYED BY THE VHB SURVEY DEPARTMENT IN SEPTEMBER AND OCTOBER 2017 AND WERE UPDATED IN MAY 2018 (SUDBURY ONLY). IN HUDSON, ADDITIONAL WETLANDS WERE DELINEATED AND SURVEYED BY VHB IN JANUARY 2019.
- 5. THE APPROXIMATE WETLANDS AND STREAMS, AND THEIR ASSOCIATED BUFFERS AND RIVERFRONT AREAS, WHERE APPLICABLE, WERE TAKEN FROM AVAILABLE MASSGIS DATA. THESE WERE NOT FIELD DELINEATED OR FIELD VERIFIED.
- 6. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
- 7. THE CONTRACTOR SHALL ALTER THE MASONRY OF THE TOP SECTION OF ALL EXISTING DRAINAGE AND SEWER STRUCTURES AS NECESSARY FOR CHANGES IN GRADE, AND RESET ALL WATER AND DRAINAGE FRAMES, GRATES AND BOXES TO THE PROPOSED FINISH SURFACE GRADE. REQUIRED NEW MASONRY SHALL BE CLAY BRICK.
- 8. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES.
- 9. EXISTING UTILITY POLES WILL BE RELOCATED BY OTHERS IF REQUIRED.
- 10. TREES AND SHRUBS WITHIN THE LIMITS OF GRADING SHALL BE REMOVED ONLY UPON APPROVAL OF THE ENGINEER.
- 11. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE OWNER.
- 12. THE TERM "PROPOSED" (PROP) MEANS WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS "REMOVE AND RESET" (R&R).
- 13. JOINTS BETWEEN NEW ASPHALT CONCRETE ROADWAY PAVEMENT AND SAWCUT EXISTING PAVEMENT SHALL BE SEALED WITH BITUMEN AND BACKSANDED.
- 14. EXISTING SIGNS WITHIN THE PROJECT LIMITS SHALL BE RETAINED UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
- 15. IF SUITABLE, ALL EXISTING GRANITE CURB & EDGING SHALL BE RE-USED IN THE PROPOSED WORK, EXCEPT CURVED STONES OF A DIFFERENT RADIUS THAN PROPOSED
- 16. ALL PROPOSED HOT MIX ASPHALT CURB SHALL BE MASSDOT TYPE 3 UNLESS STATED OTHERWISE ON THE PLANS.
- 17. ALL EXISTING STATE, COUNTY, CITY, AND TOWN LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND THEIR EXACT LOCATIONS ARE NOT GUARANTEED.
- 18. DISPOSAL OF ALL SURPLUS MATERIAL SHALL BE AS APPROVED BY THE ENGINEER AND
- 19. ALL EXISTING EROSION CONTROL BARRIER, CONSTRUCTION FENCING AND SILT SACKS SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION ACTIVITIES AND REMOVED AFTER CONSTRUCTION ACTIVITIES ARE COMPLETE.



101 Walnut St., P.O. Box 9151

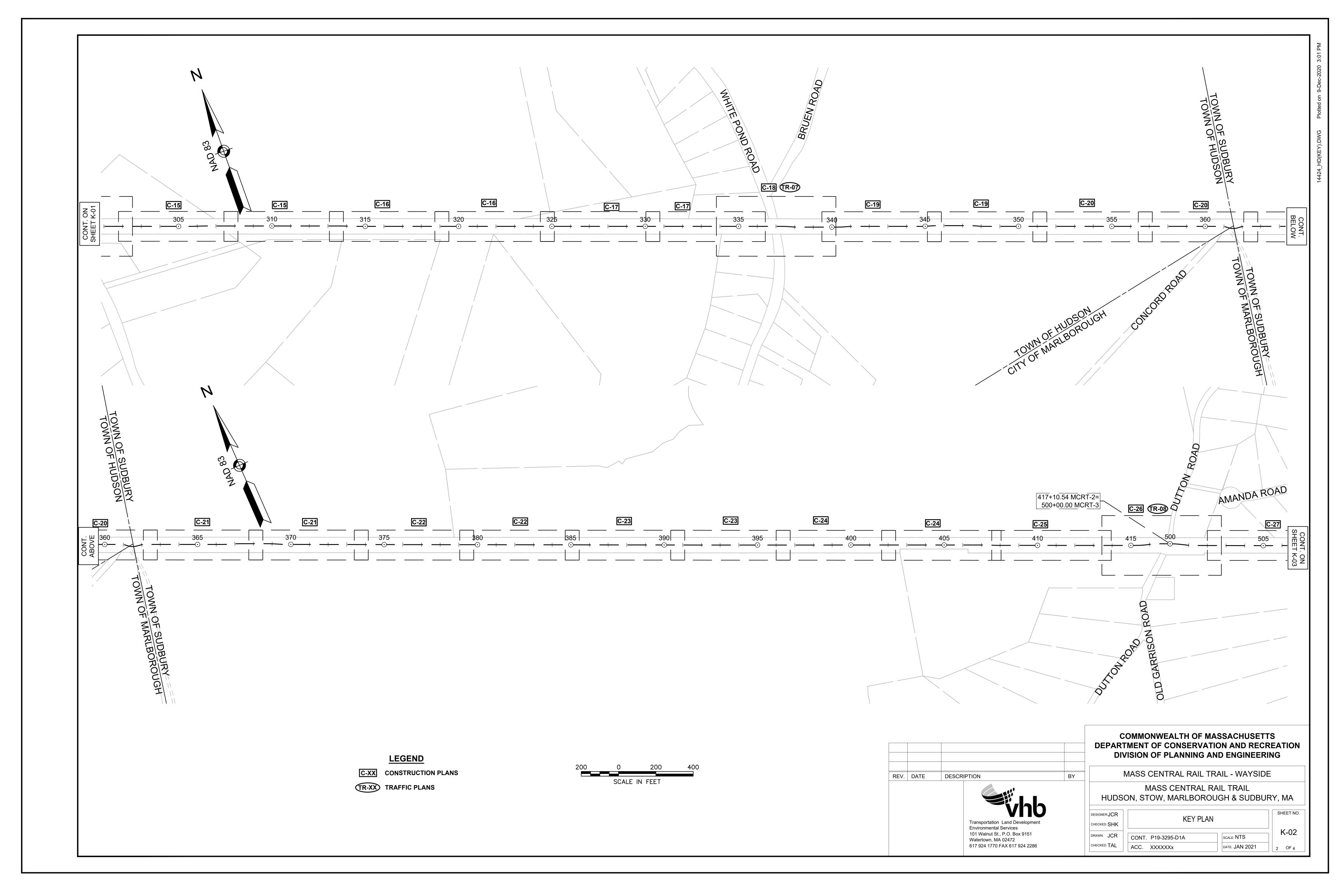
617 924 1770 FAX 617 924 2286

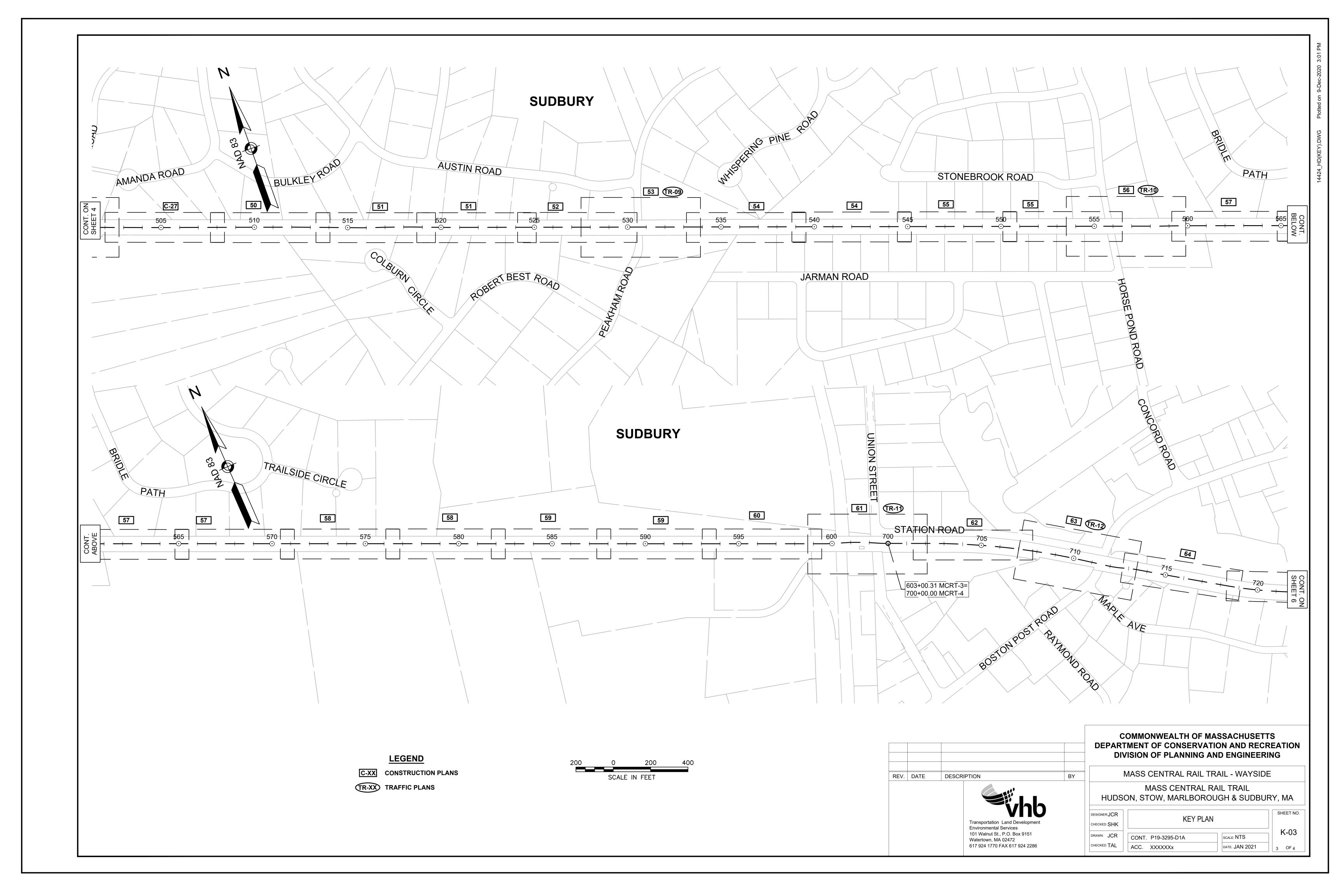
Watertown, MA 02472

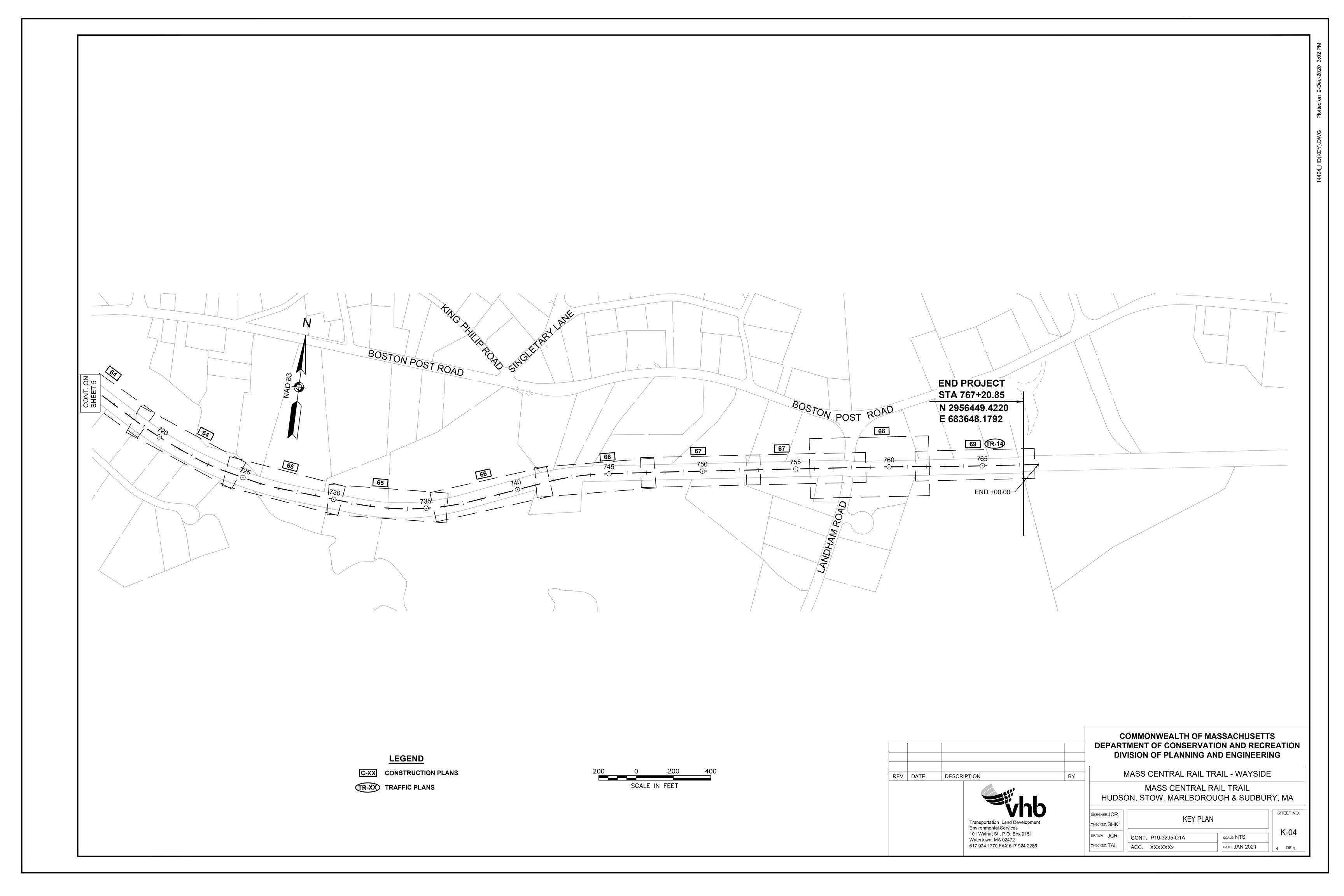
#### COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING

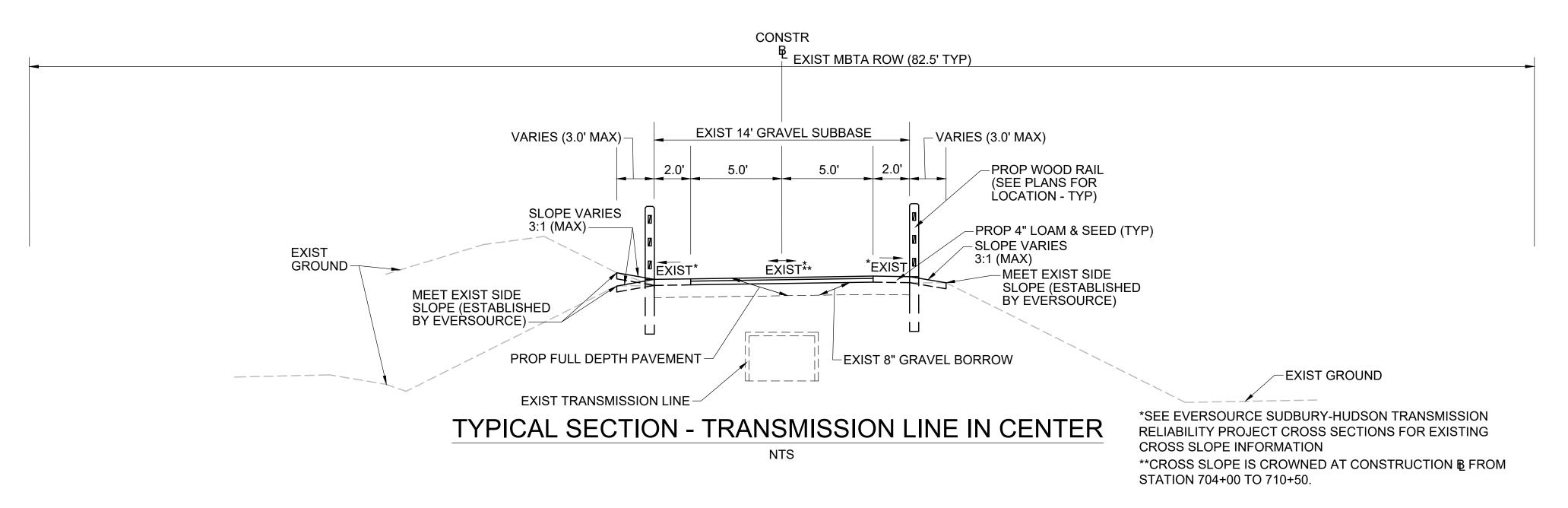
MASS CENTRAL RAIL TRAIL - WAYSIDE MASS CENTRAL RAIL TRAIL HUDSON STOW MARI BOROLIGH & SUDBURY MA

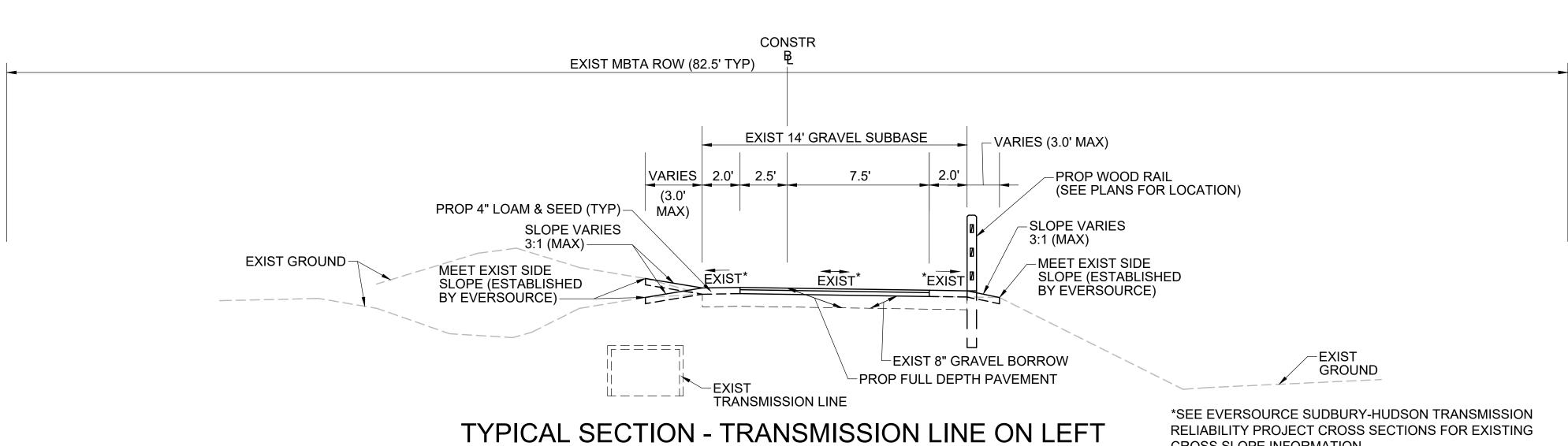
порз	ON, STOW, WARLBOR	COGH & SUDBUR	T, IVIA
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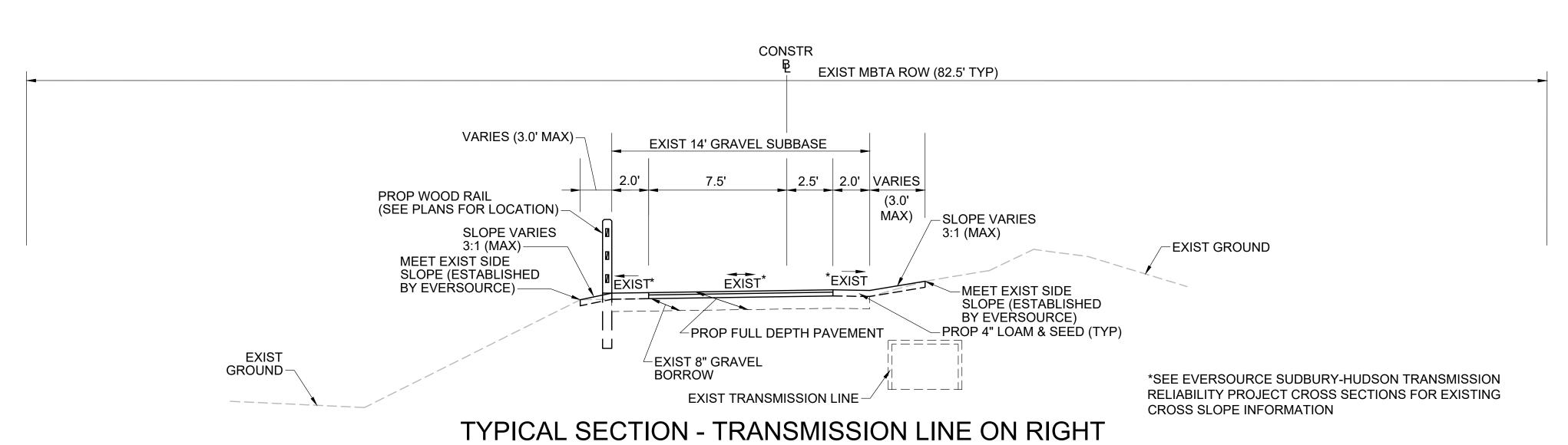












#### **PAVEMENT NOTES**

PROPOSED PATH PAVEMENT

SURFACE: 1.5" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5)

**INTERMEDIATE:** 2.5" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0)

SUBBASE: 8" GRAVEL BORROW, TYPE b

FROM STA 100+00± TO STA 767+20± EXIST GRAVEL FROM EVERSOURCE ACCESS ROAD SHALL BE USED FOR SUBBASE MATERIAL.

PROPOSED CATTLE CROSSING PAVEMENT

SURFACE: 1.5" SUPERPAVE SURFACE COURSE - 9.5 (SSC - 9.5) 2.5" SUPERPAVE INTERMEDIATE COURSE - 19.0 (SIC - 19.0) INTERMEDIATE:*

2.5" SUPERPAVE INTERMEDIATE COURSE TO BE INSTALLED AS PART OF EVERSOURCE SUDBURY-HUDSON

PROPOSED CEMENT CONCRETE WHEELCHAIR RAMP

SURFACE: 6" CEMENT CONCRETE AIR ENTRAINED 4000 PSI, 3/4", 610

TRANSMISSION LINE RELIABILITY PROJECT.

SUBBASE: 8" GRAVEL BORROW, TYPE b

EXIST GRAVEL FROM EVERSOURCE ACCESS ROAD SHALL BE USED FOR SUBBASE MATERIAL.

SURFACE: 4" CEMENT CONCRETE

AIR ENTRAINED 4000 PSI, 3/4", 610

PROPOSED CEMENT CONCRETE PULL OFF/TURN AROUND

SUBBASE:

EXIST GRAVEL FROM EVERSOURCE ACCESS ROAD SHALL

8" GRAVEL BORROW, TYPE b

BE USED FOR SUBBASE MATERIAL.

PROPOSED HOT MIX ASPHALT WALK

1" SUPERPAVE SURFACE COURSE - 9.5 (SSC-9.5) SURFACE:

1.5" SUPERPAVE INTERMEDIATE COURSE 12.5 (SIC-12.5)

8" GRAVEL BORROW, TYPE b SUBBASE:

#### NOTES:

**CROSS SLOPE INFORMATION** 

- 1. ALL HOT MIX ASPHALT SHALL BE PRODUCED WITH A WARM-MIX ASPHALT ADDITIVE.
- ALL HOT MIX ASPHALT PAVEMENTS SHALL BE CONSTRUCTED AND PRODUCED IN ACCORDANCE WITH SECTION 450 HOT MIX ASPHALT PAVEMENT.
- 3. ASPHALT EMULSION FOR TACK COAT (RS-1H) SHALL BE SPRAY APPLIED FOR DOUBLE OVERLAP COVERAGE AT 0.05 GALLONS PER SQUARE YARD OVER SMOOTH SURFACES.
- 4. HMA JOINT SEALANT (ASPHALT RUBBER) SHALL BE APPLIED IN SURFACE COURSE AT ALL VERTICAL COLD JOINTS PRIOR
- 5. ALL HOT MIX ASPHALT WALKS SHALL BE MEASURED AND PAID FOR UNDER ITEM 702 OF STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES.



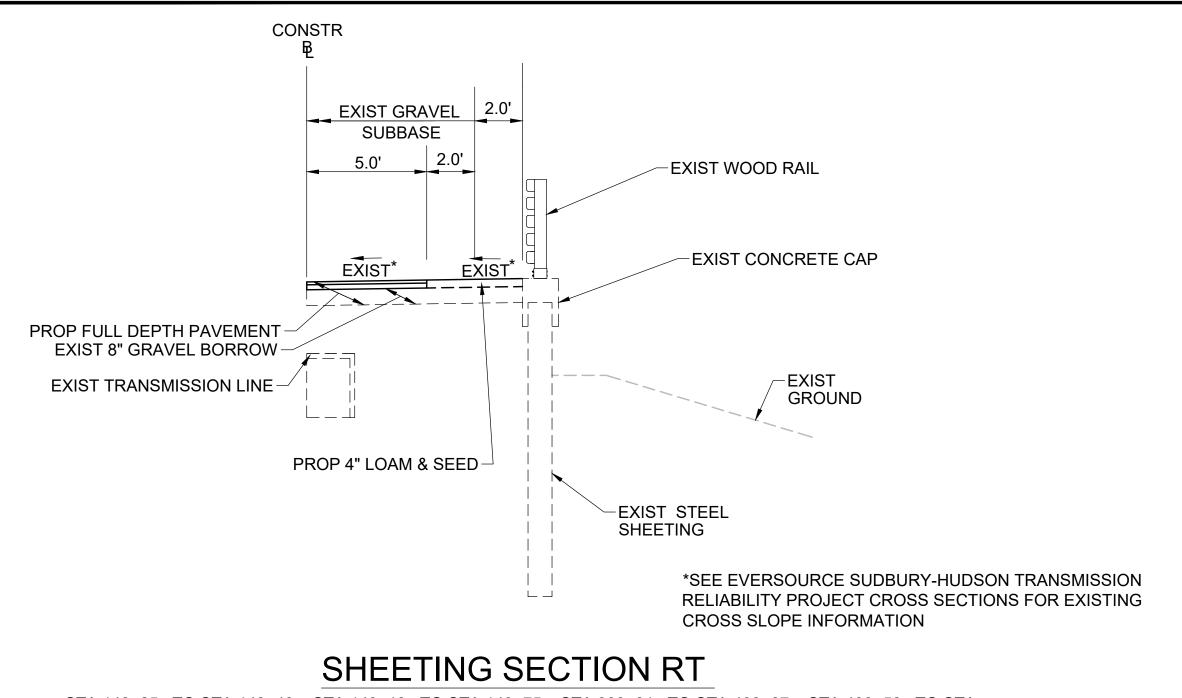
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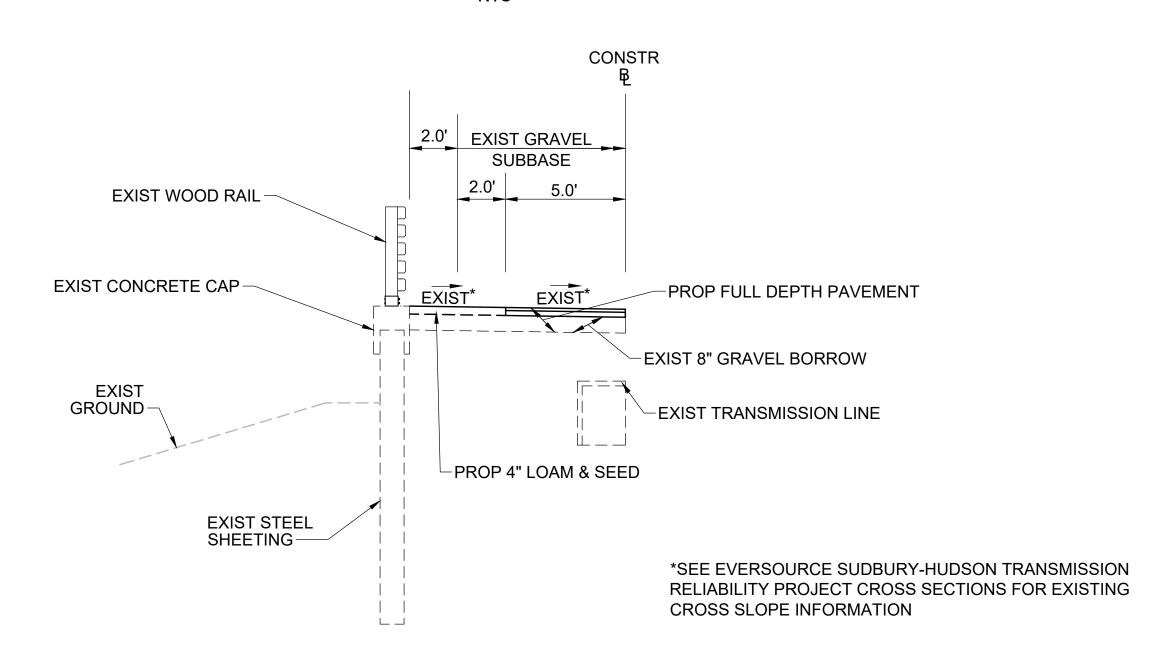
**COMMONWEALTH OF MASSACHUSETTS** DEPARTMENT OF CONSERVATION AND RECREATION **DIVISION OF PLANNING AND ENGINEERING** 

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA
DESIGNER: JCR TYPICAL SECTIONS & PVMT NOTES SHEET NO.

HUDSON, STOW, MARLBOROUGH & SUDBURY, MA			
DESIGNER:JCR	TYPICAL SECTIONS & F	DV/MT NIOTES	SHEET NO.
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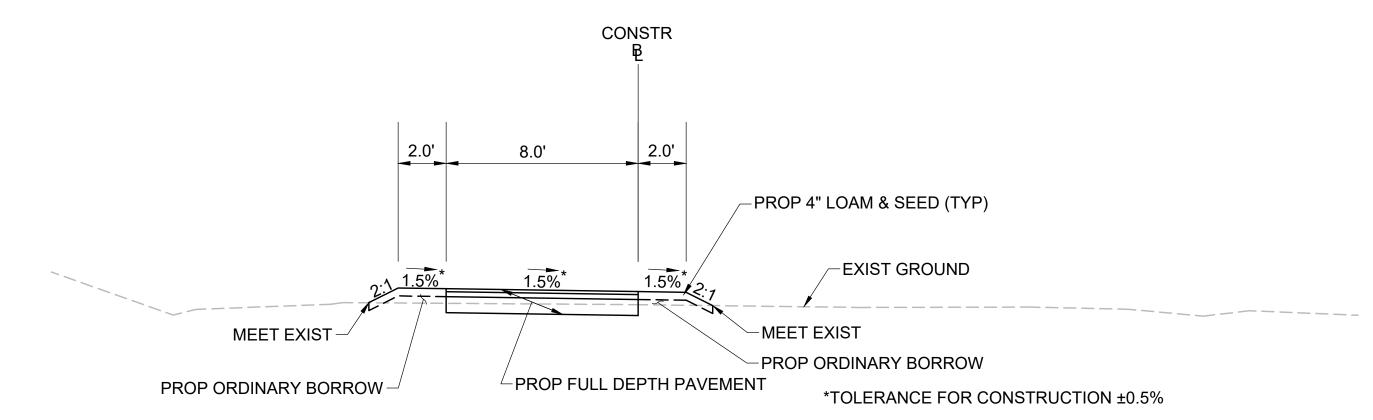


STA 148+25± TO STA 148+49±, STA 149+13± TO STA 149+75±, STA 399+91± TO STA 400+07±, STA 400+58± TO STA 401+25±, STA 724+73± TO STA 725+03±, STA 725+59± TO STA 725+96±, STA 731+00± TO STA 734+25±



#### SHEETING SECTION LT

STA 119+00± TO STA 119+38±, STA 119+52± TO STA 125+00±, STA 148+25± TO STA 148+49±, STA 149+13± TO STA 149+75±, STA 300+50± TO STA 400+07±, STA 400+58± TO STA 401+25±, STA 724+73± TO STA 725+03±, STA 725+59± TO STA 725+96±



STA 10+15± TO STA 12+40±

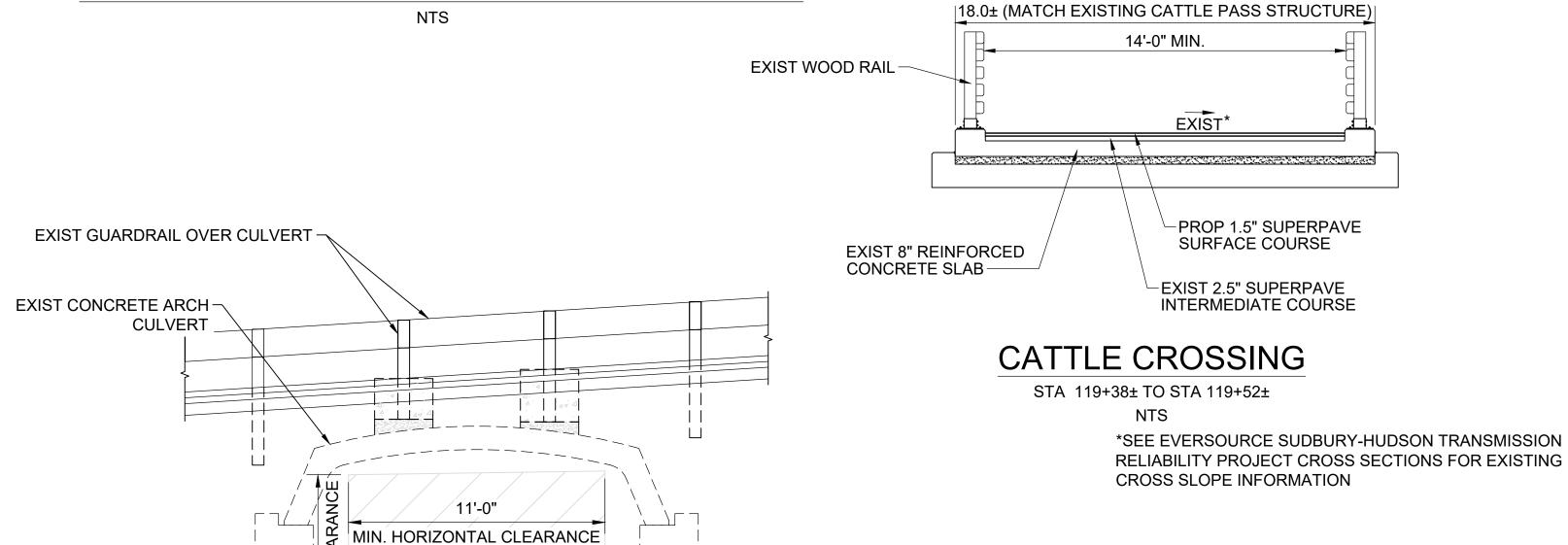
___ 1.0' LEVEL **CEM CONC** PULL OFF/TURN AROUND EXIST 8" GRAVEL BORROW-EXIST GROUND -PROP 4" LOAM & SEED (TYP) EXIST MANHOLE OR HANDHOLE 

### **PAVEMENT NOTES**

*SEE SHEET TS-01

*TOLERANCE FOR CONSTRUCTION ±0.5%

#### TYPICAL SECTION - PULL OFF/TURN AROUND



<u>____</u> -PROP FULL DEPTH PAVEMENT

EXIST 8" GRAVEL BORROW

CHESTNUT STREET CULVERT

STA 132+44± TO STA 132+84±

**EXIST 14' GRAVEL** 

ACCESS ROAD

CONSTR

EXIST*

EXIST CONCRETE -

EXIST TRANSMISSION LINE

PEDESTAL WALL & FOOTING (TYP)

> *SEE EVERSOURCE SUDBURY-HUDSON TRANSMISSION RELIABILITY PROJECT CROSS SECTIONS FOR EXISTING CROSS SLOPE INFORMATION

> > CHECKED: TAL

ACC. XXXXXXX

REV. DATE DESCRIPTION

Transportation Land Development

617 924 1770 FAX 617 924 2286

Environmental Services 101 Walnut St., P.O. Box 9151

Watertown, MA 02472

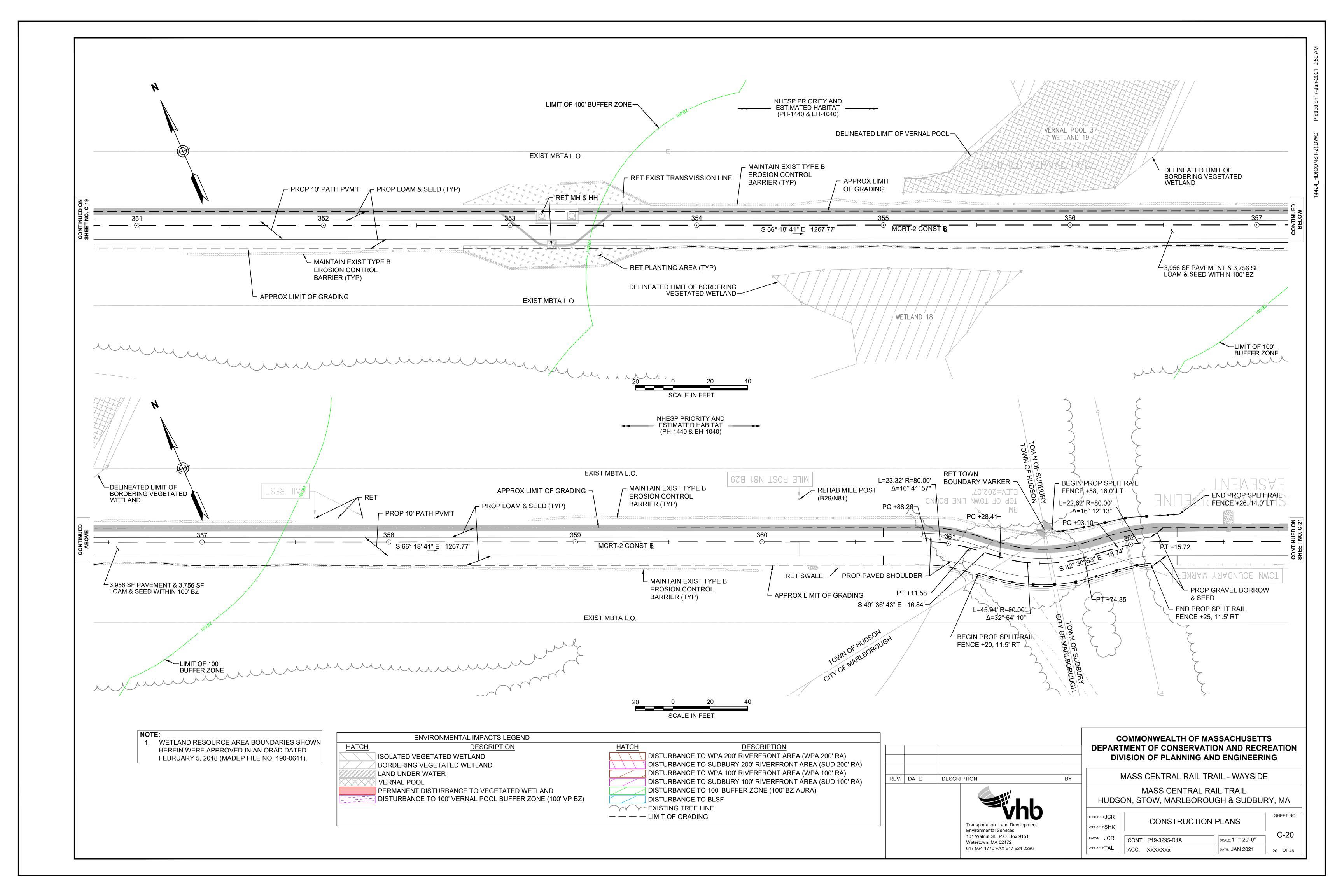
#### **COMMONWEALTH OF MASSACHUSETTS** DEPARTMENT OF CONSERVATION AND RECREATION **DIVISION OF PLANNING AND ENGINEERING**

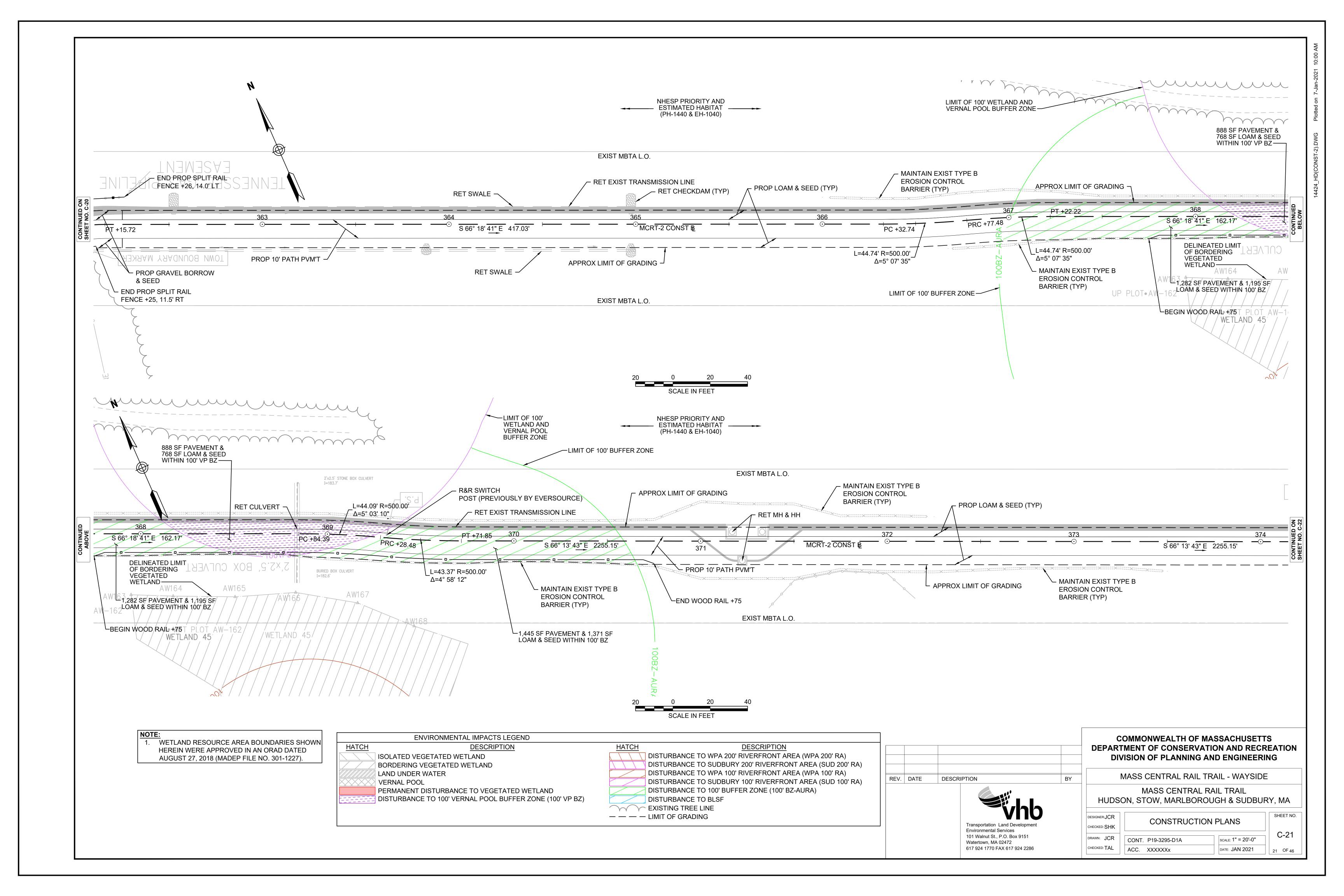
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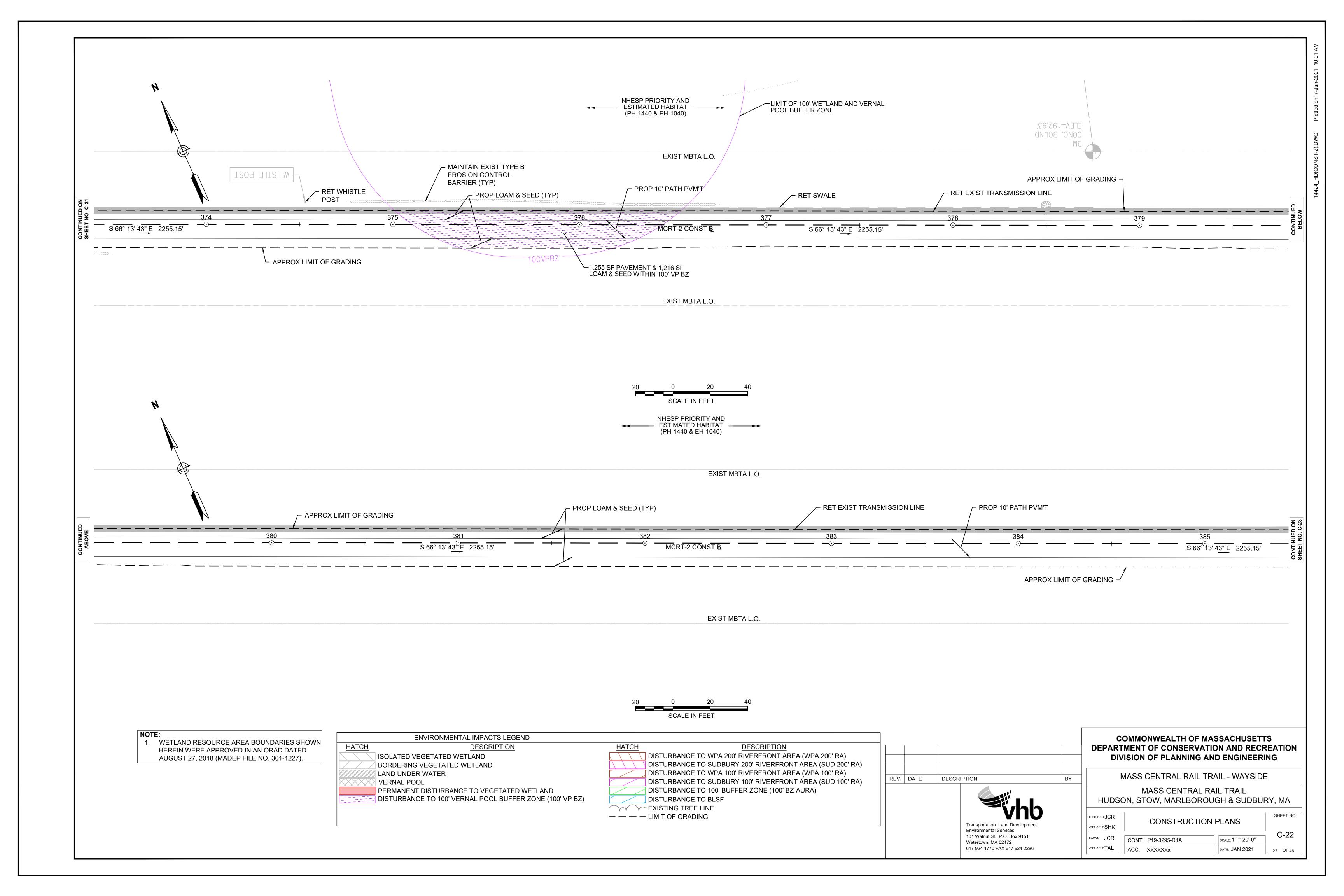
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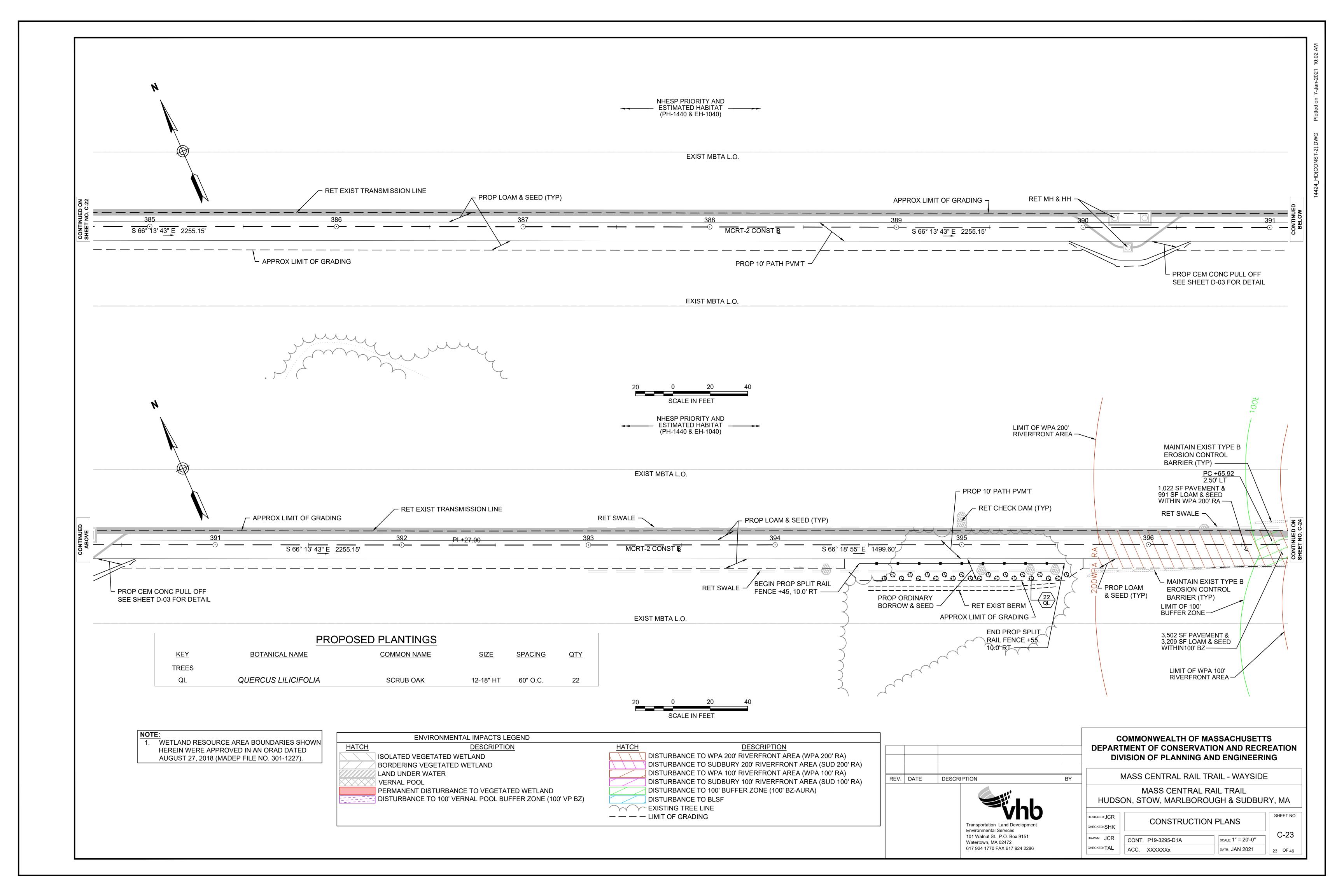
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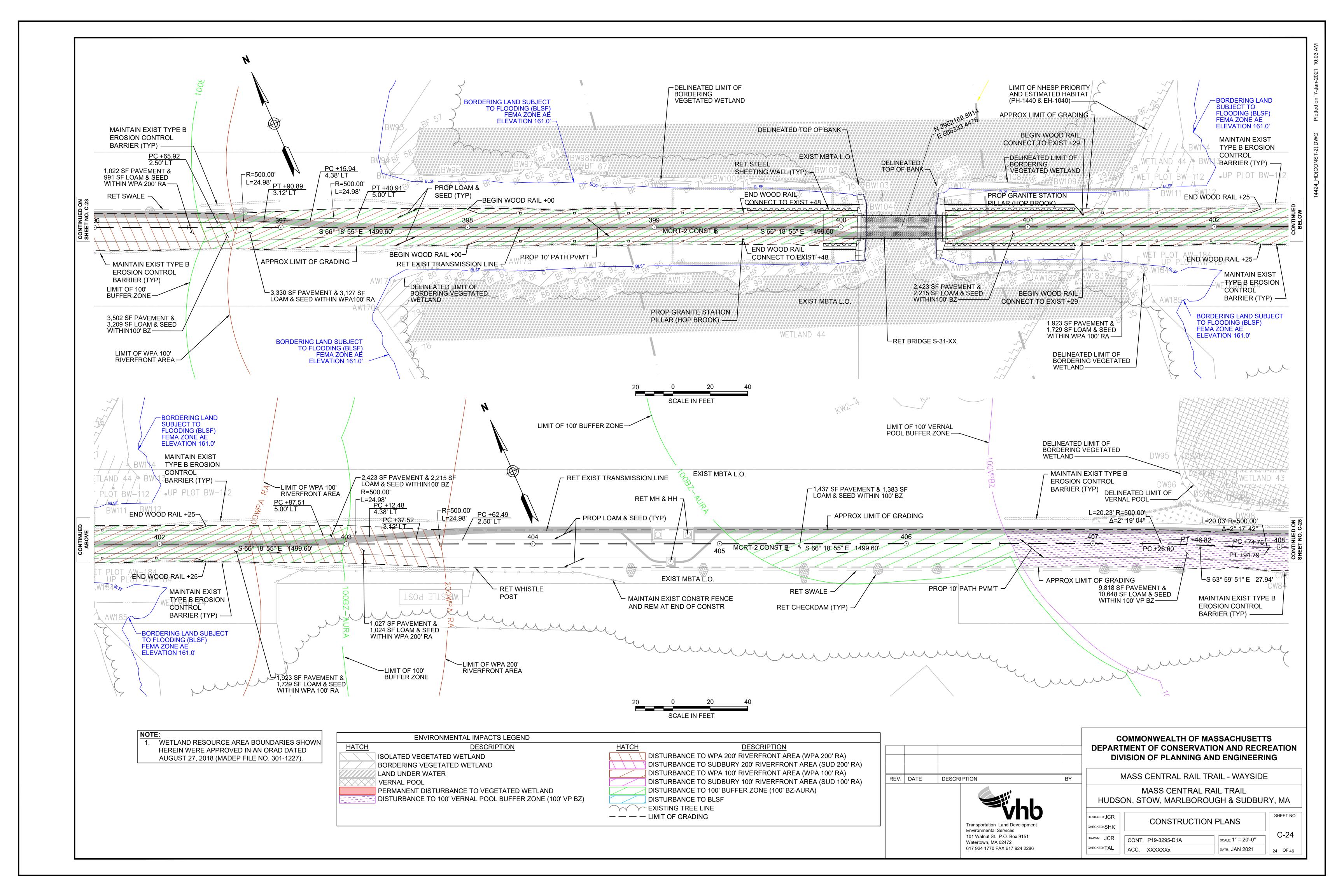
TYPICAL SECTION - MCRT CONNECTION

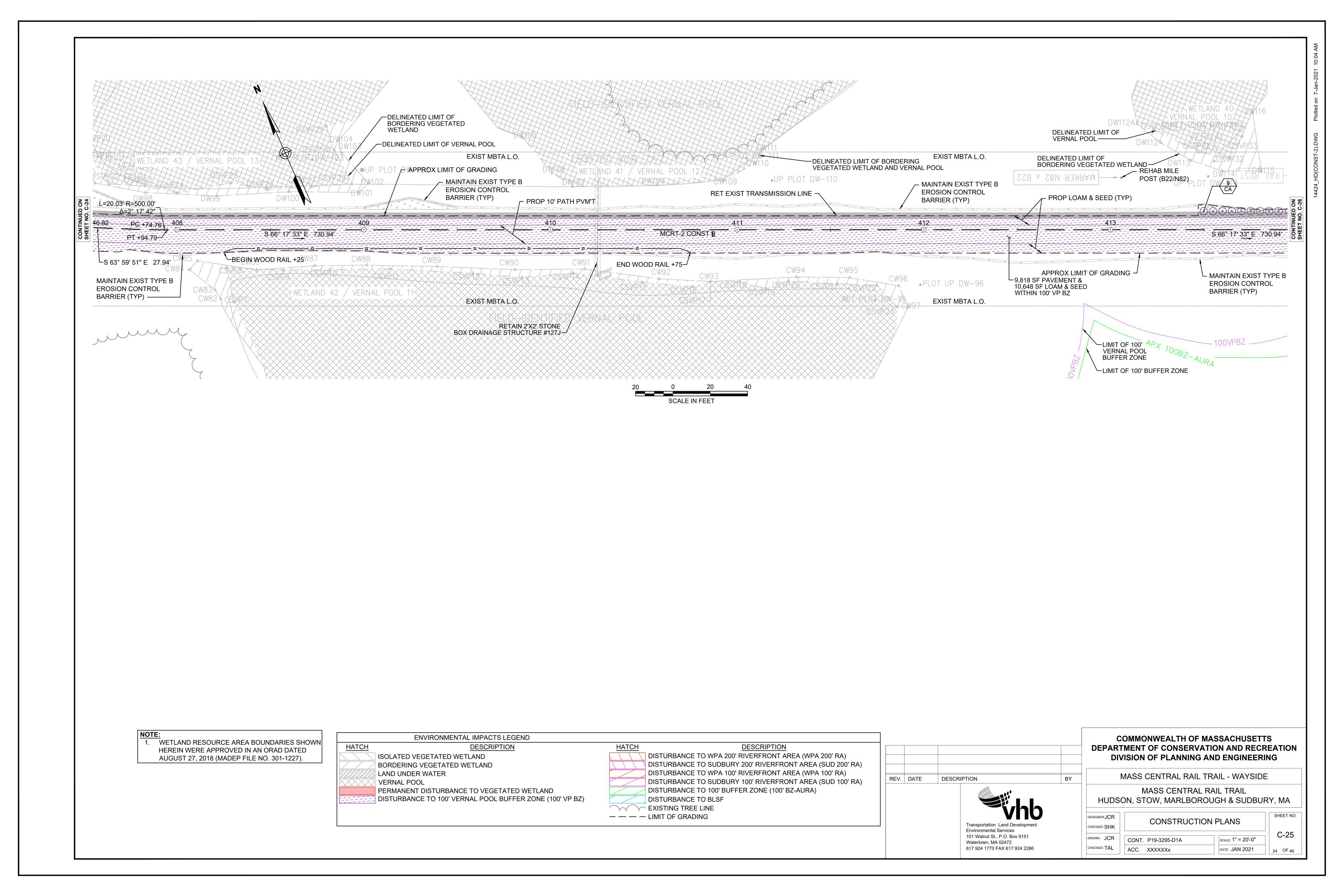


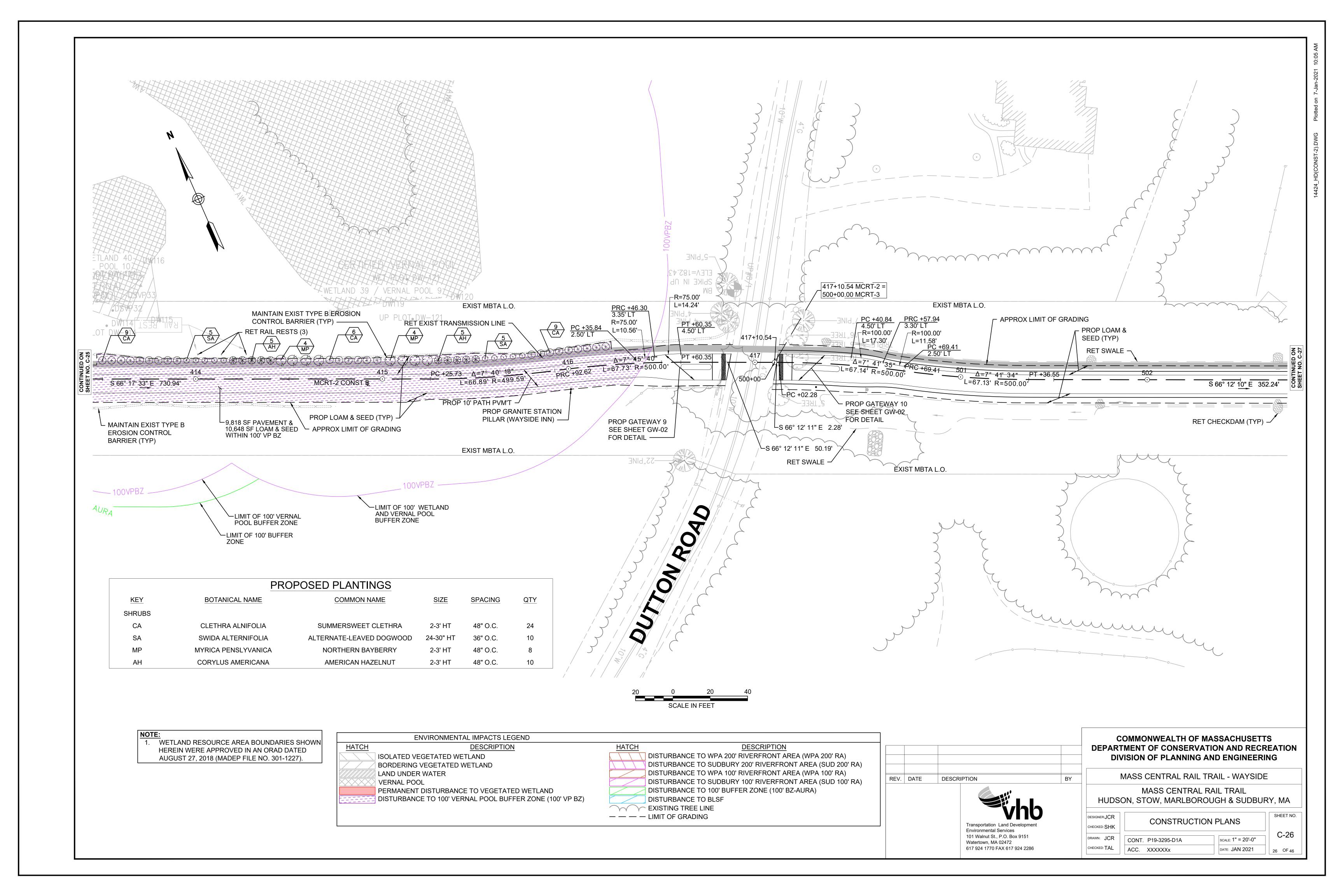


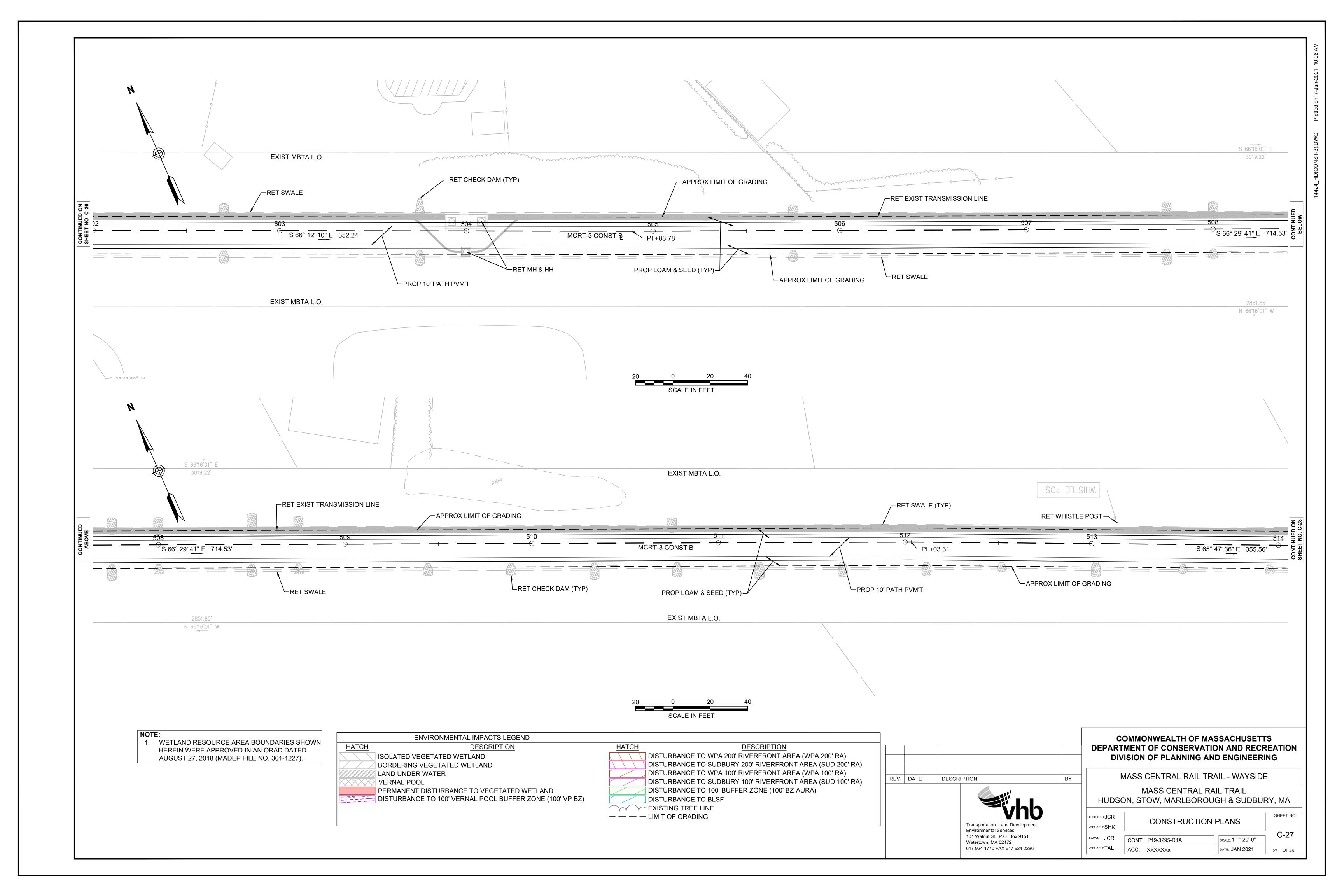


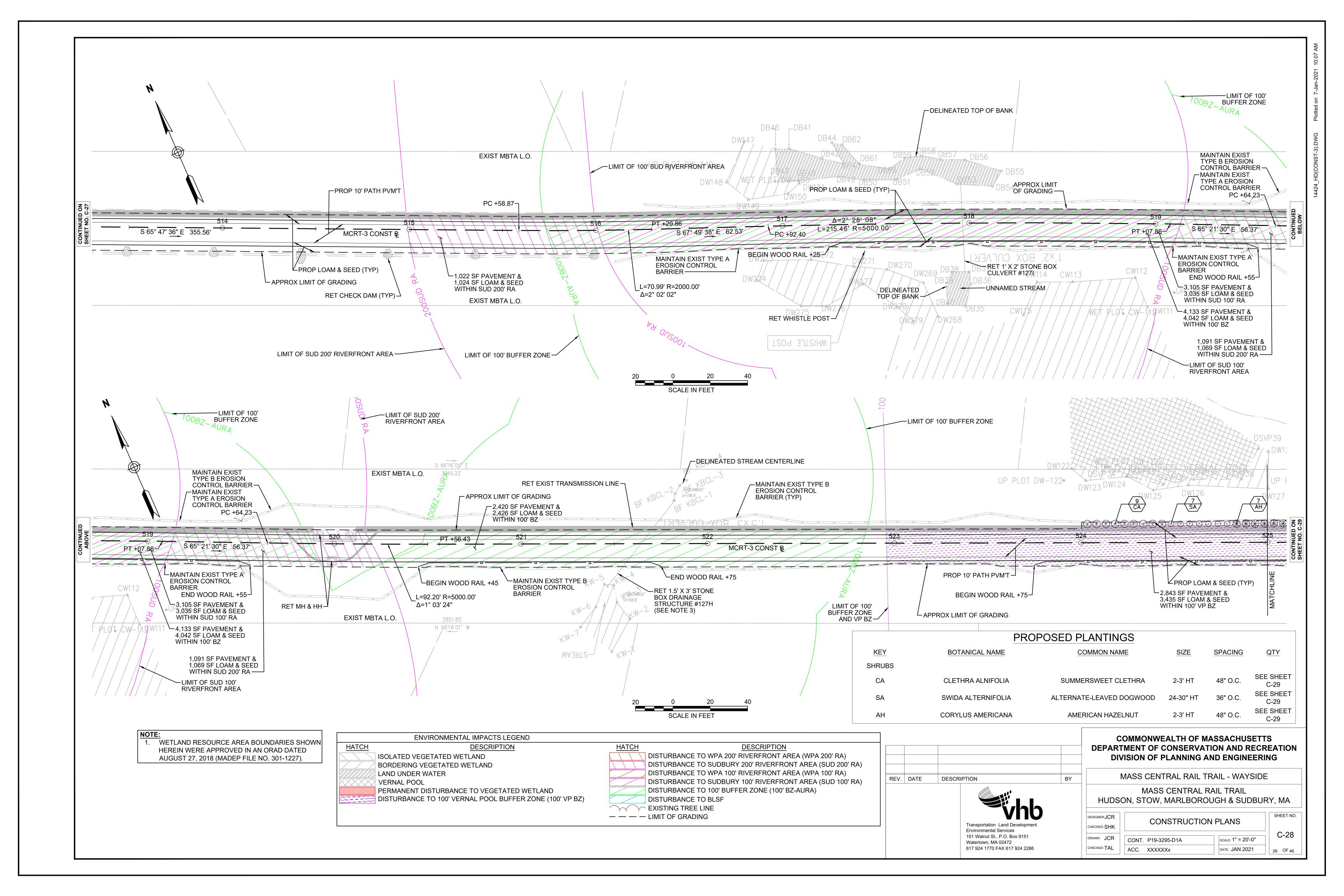


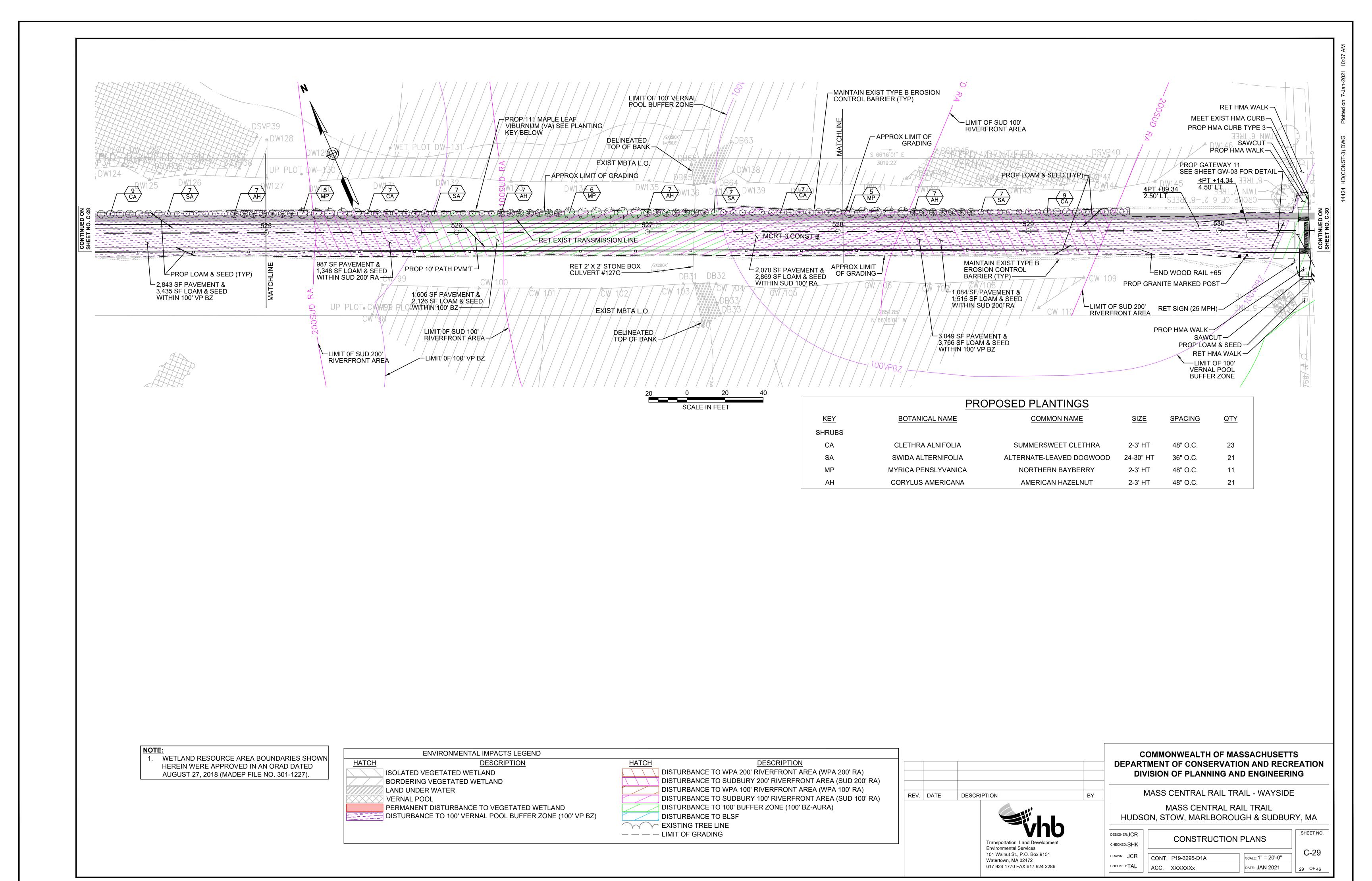


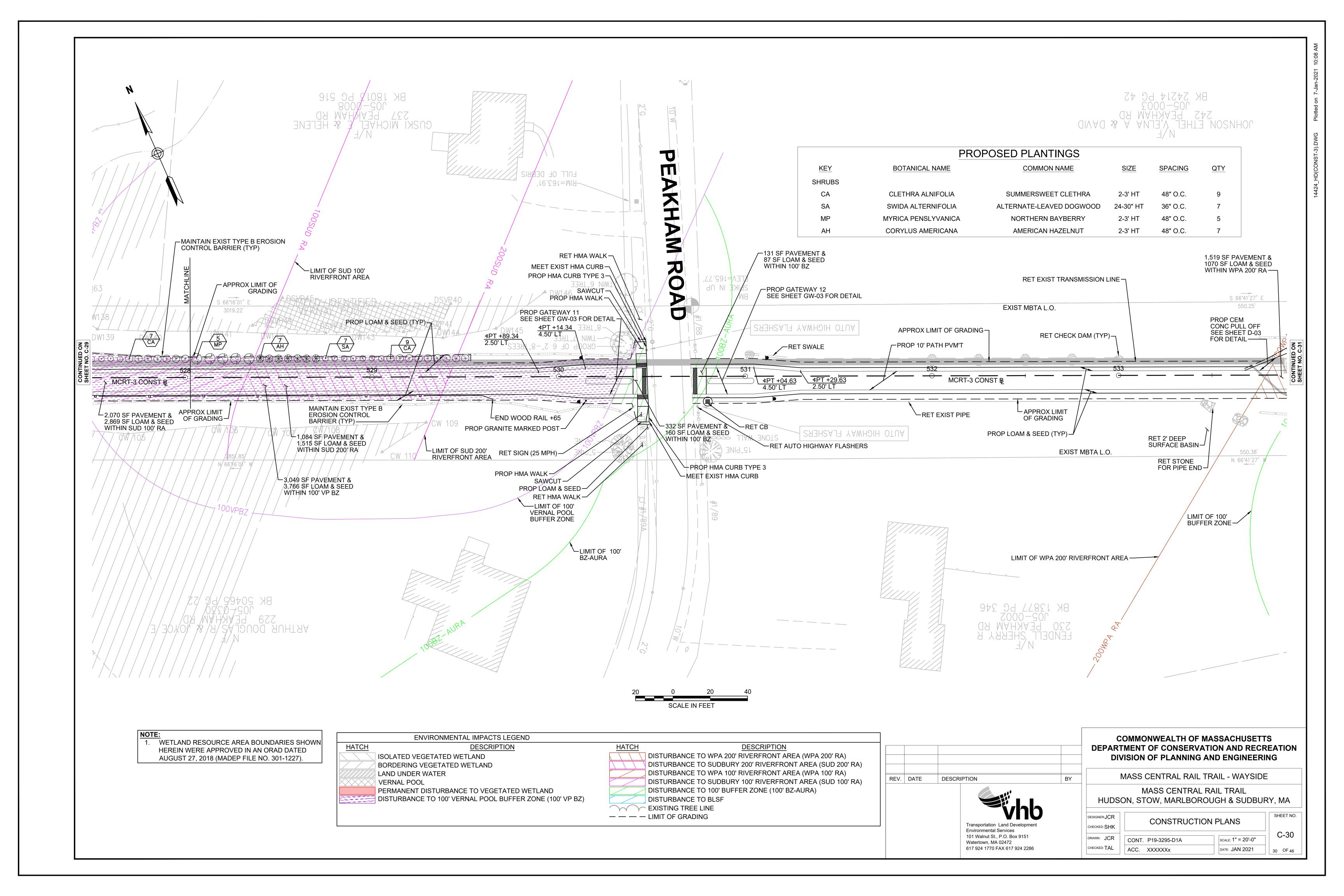


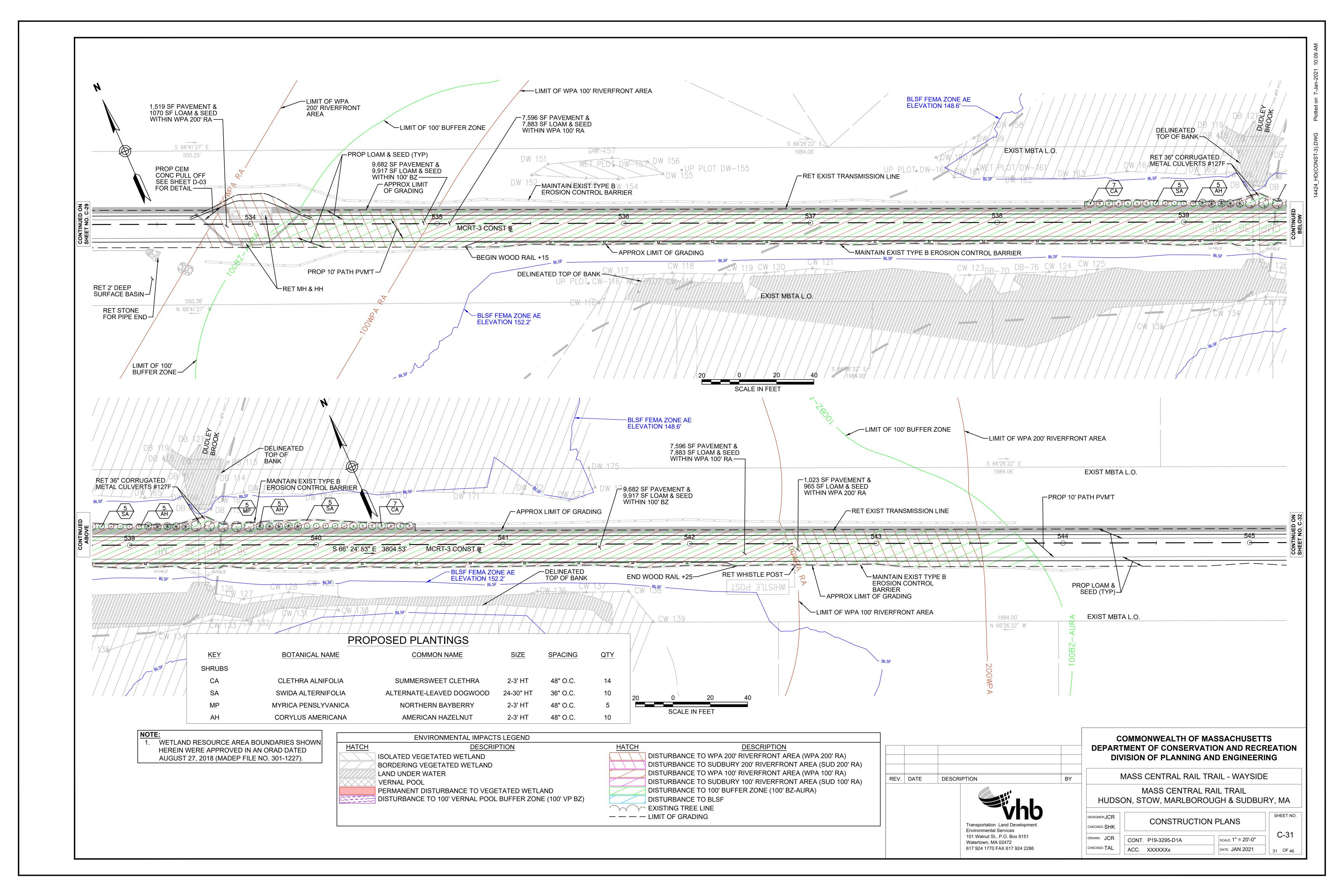


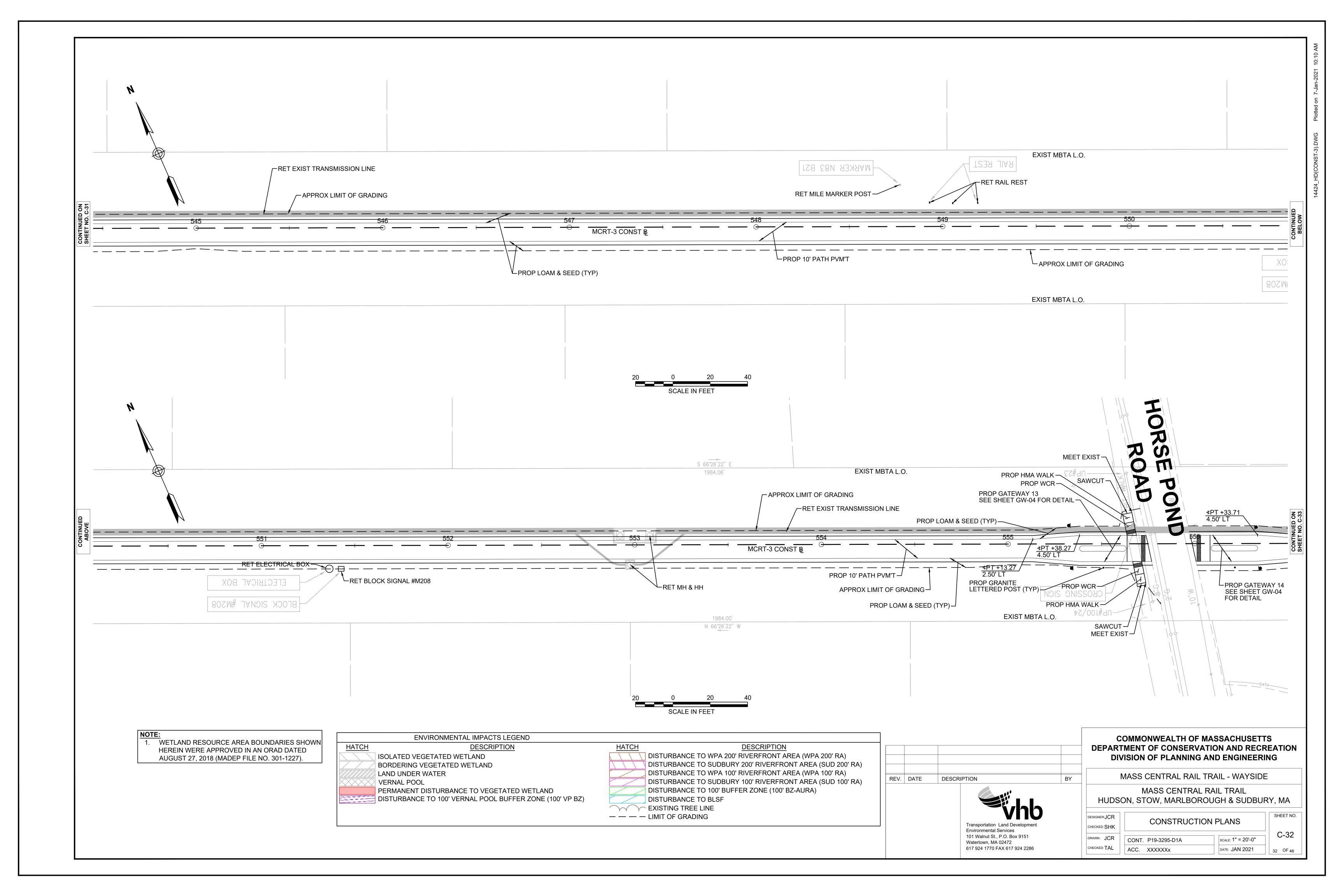


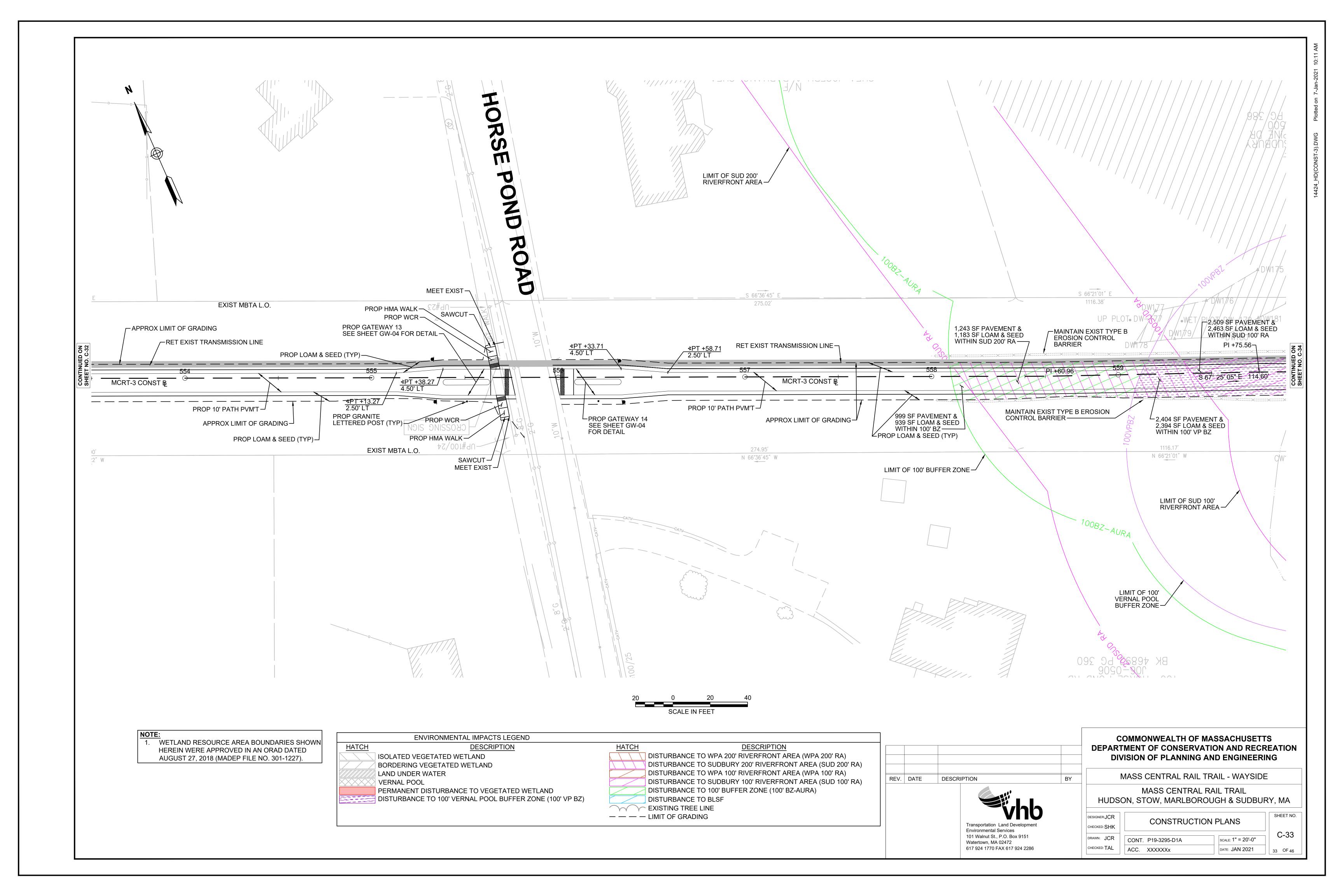


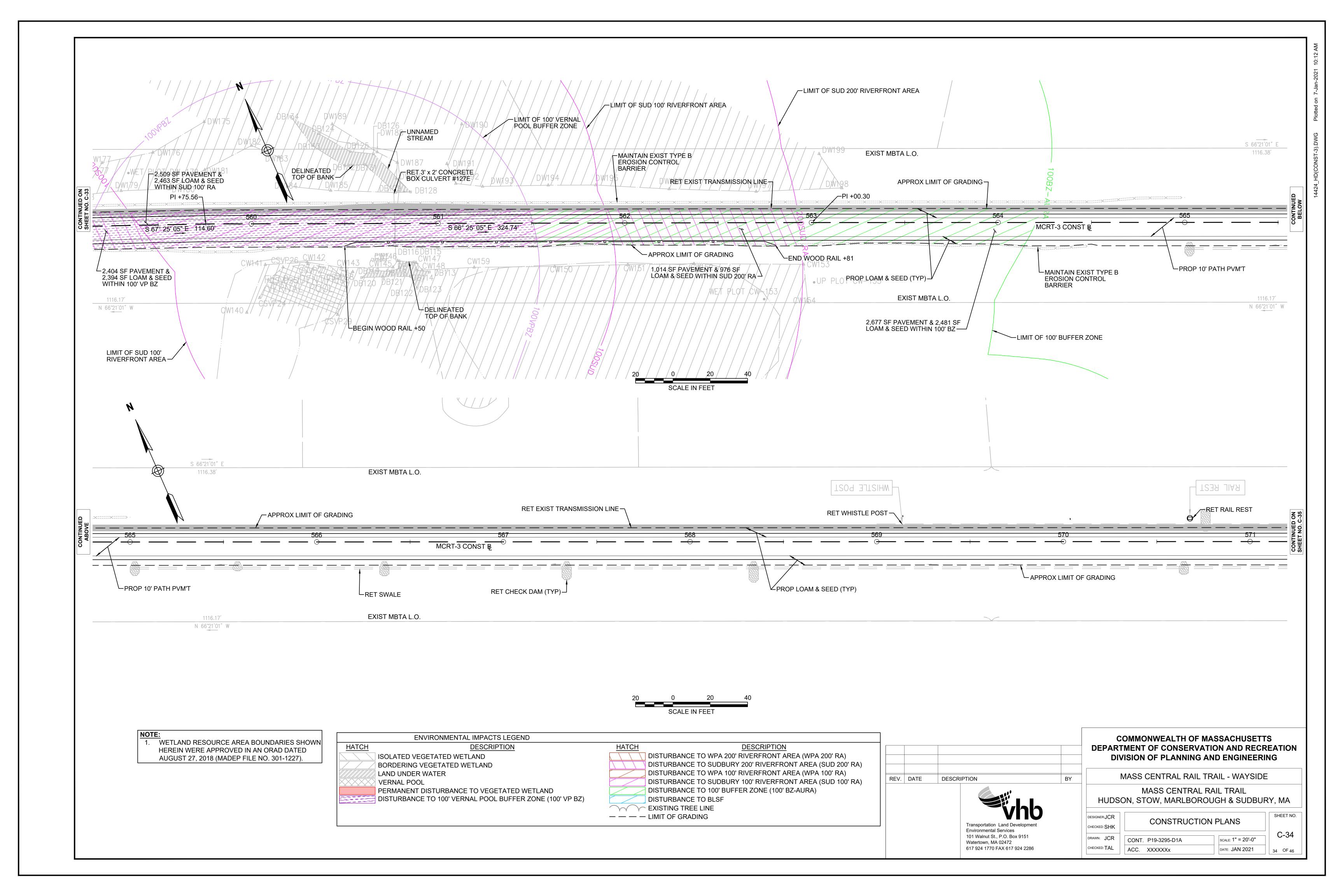


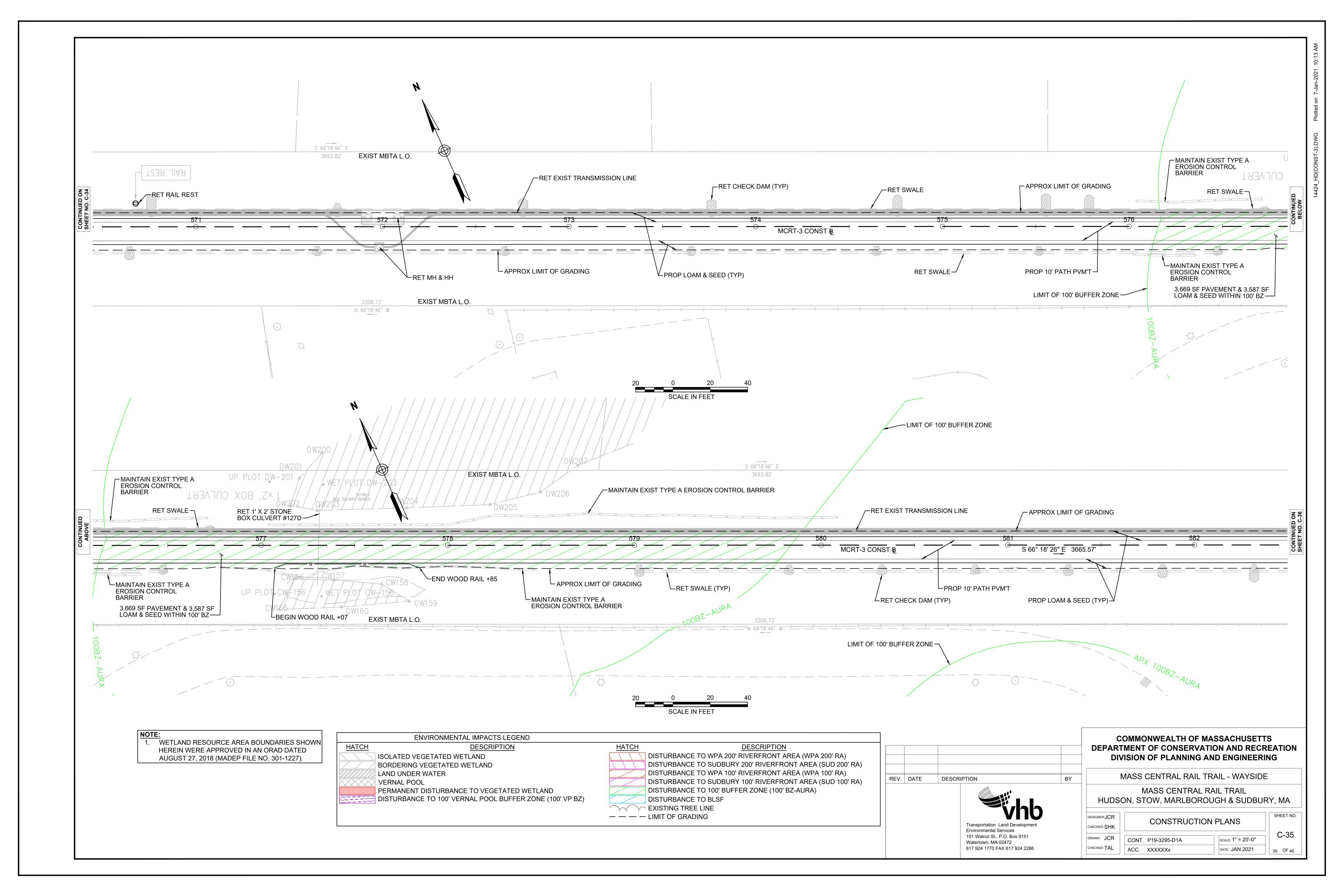


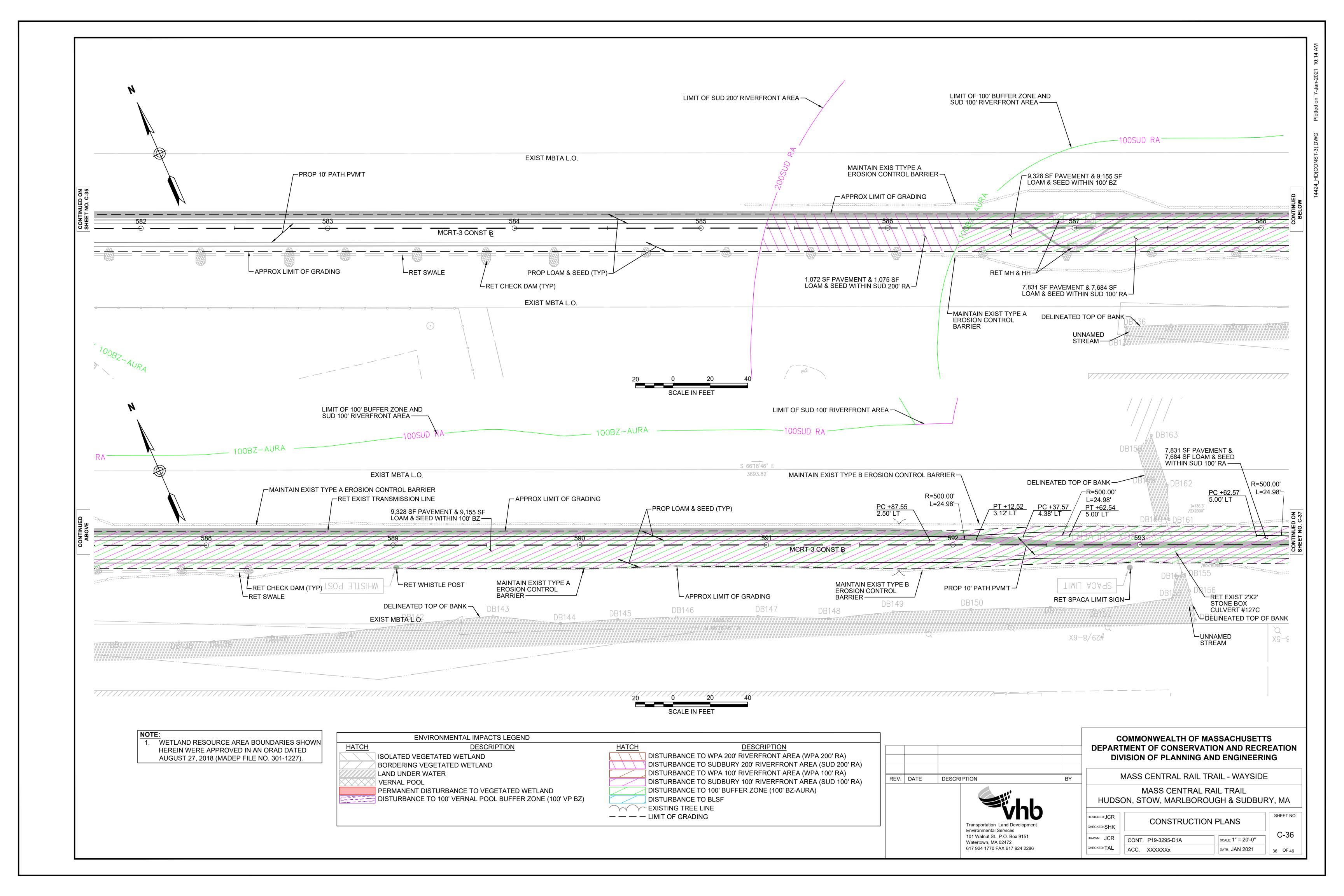


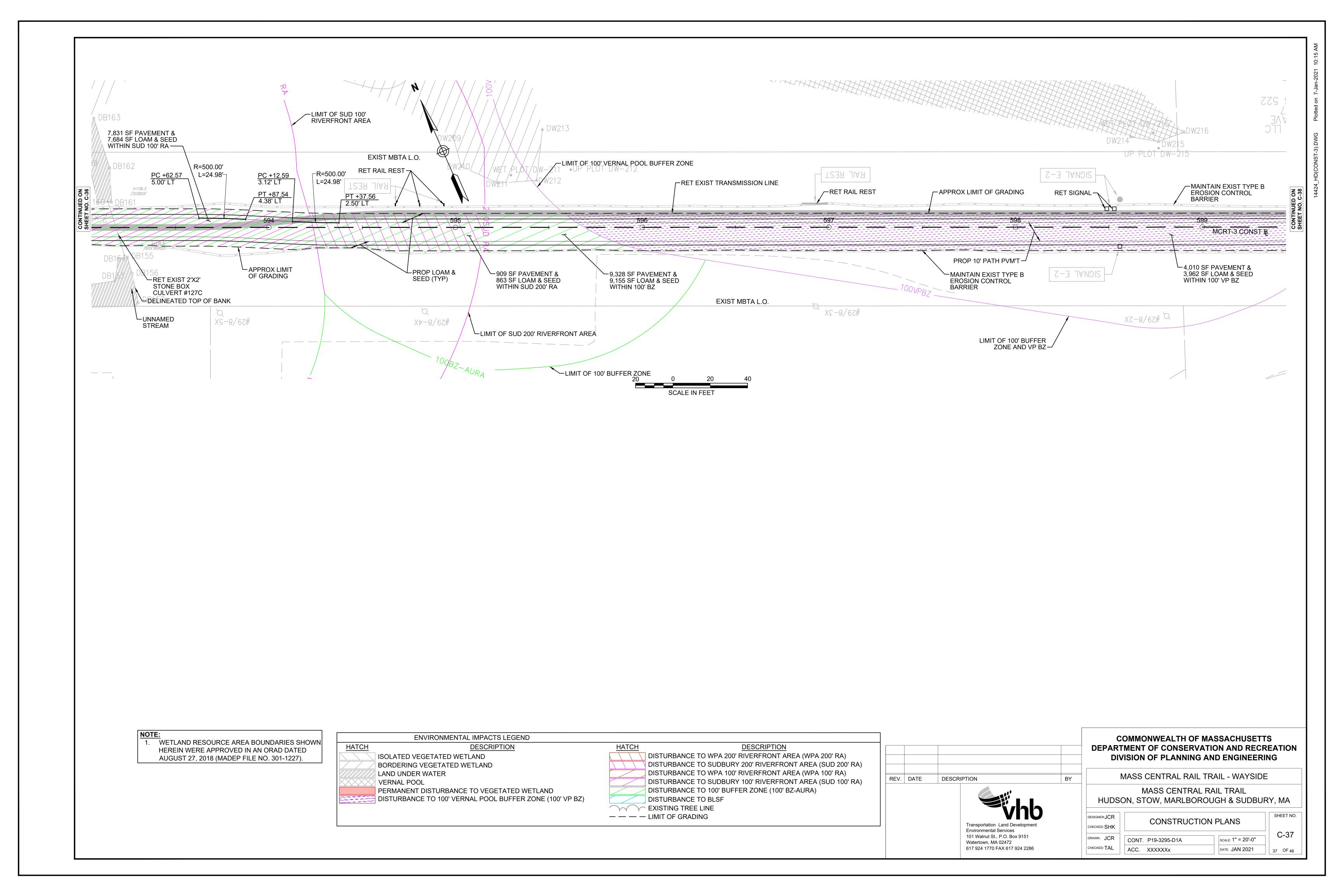


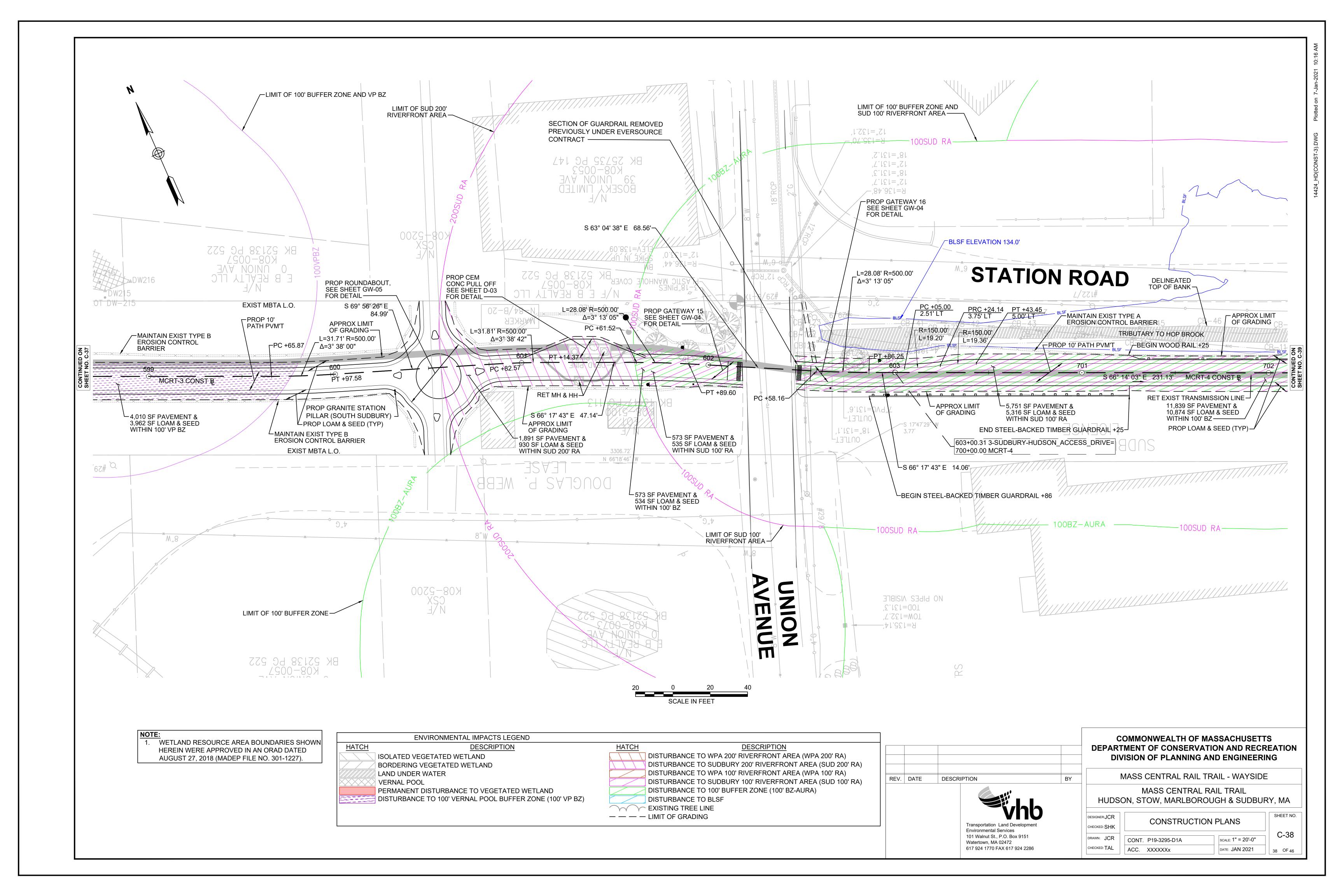


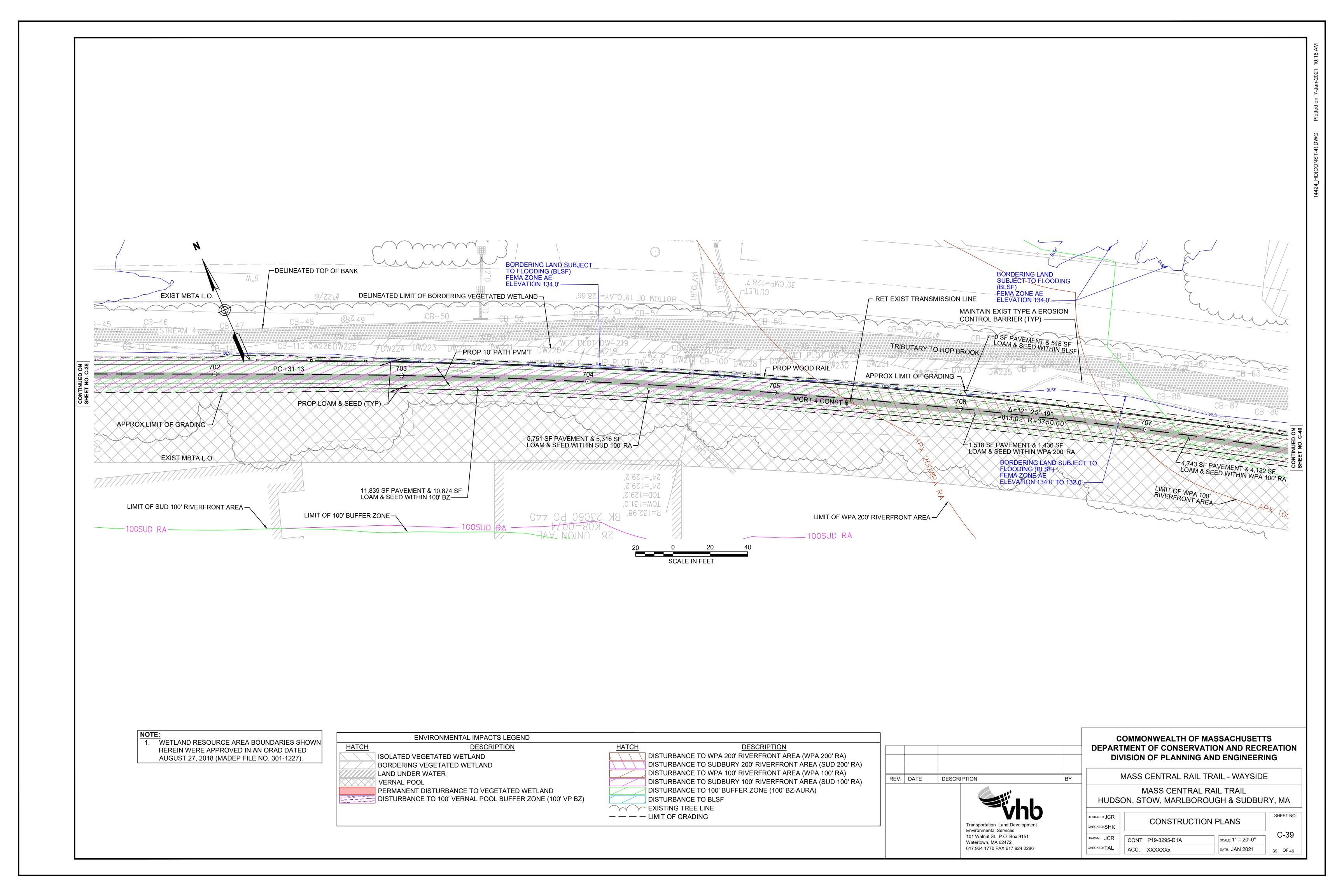


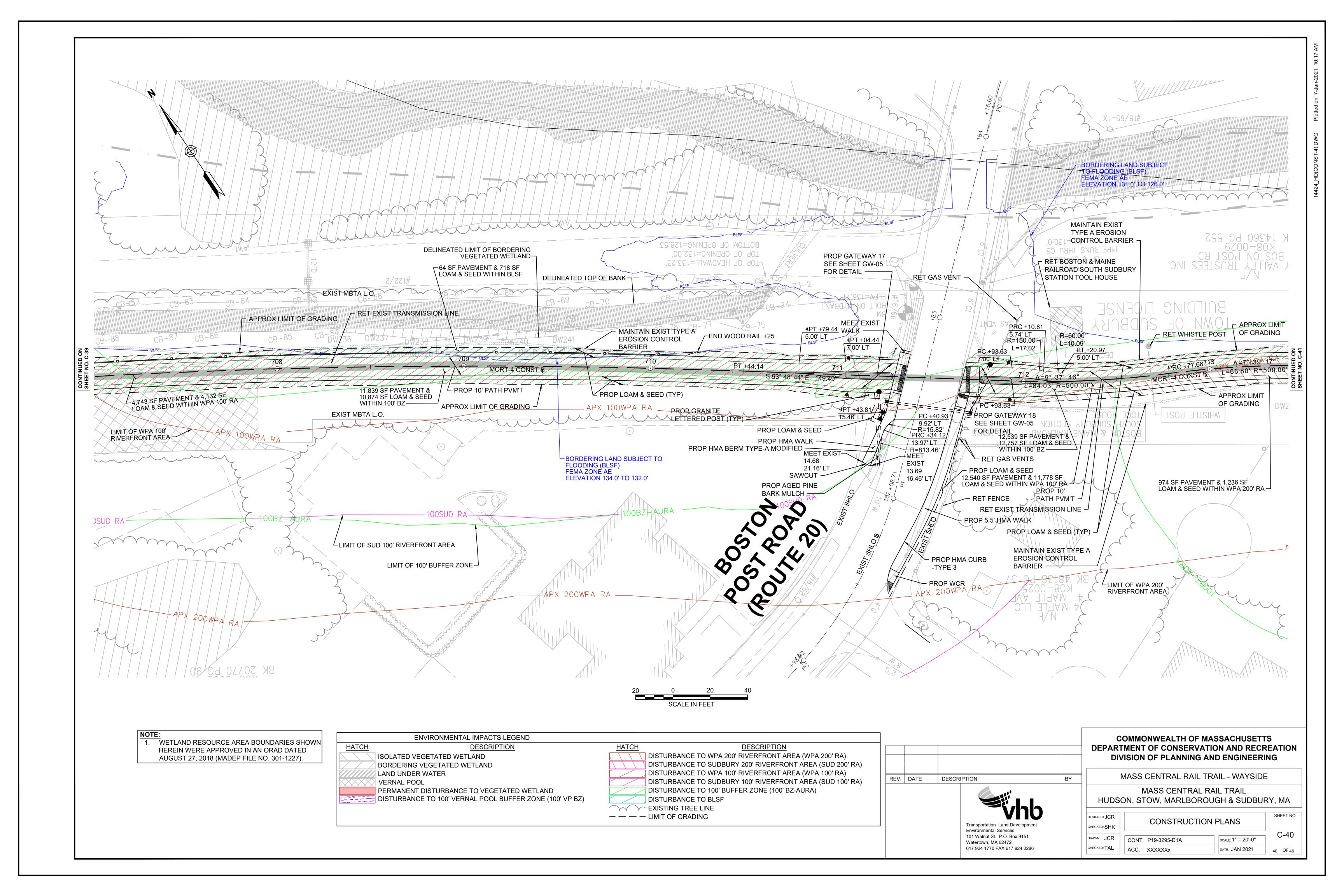


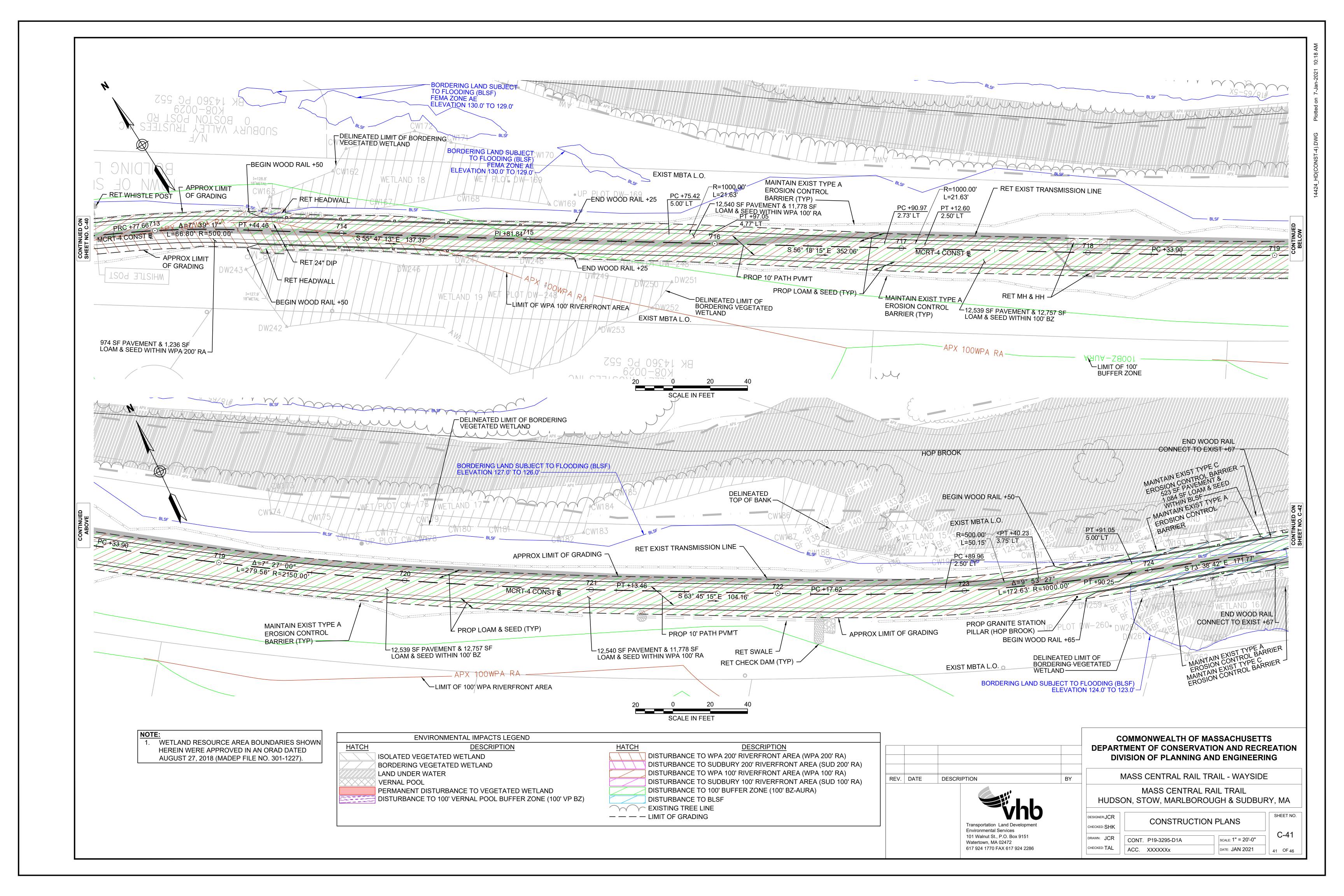


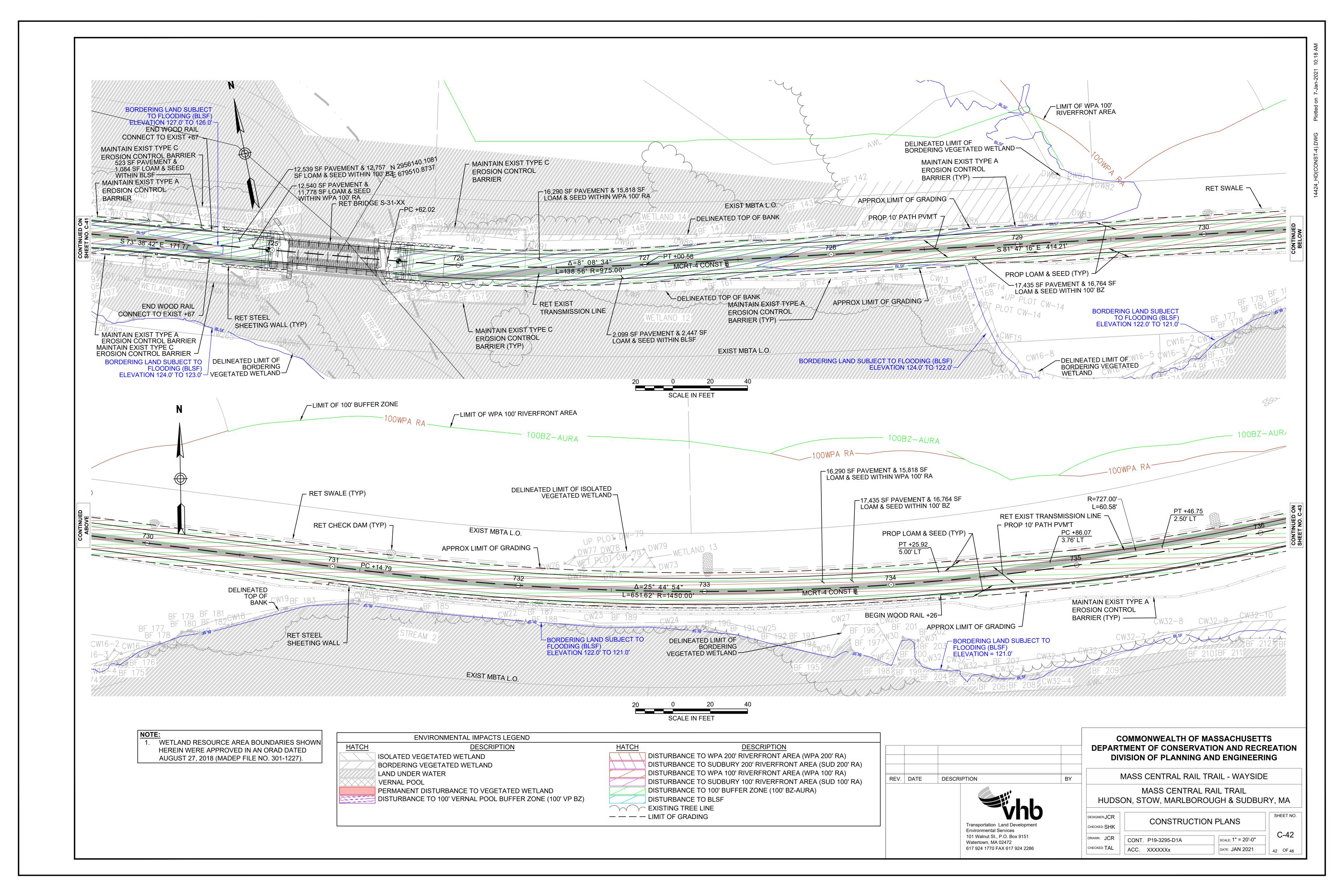


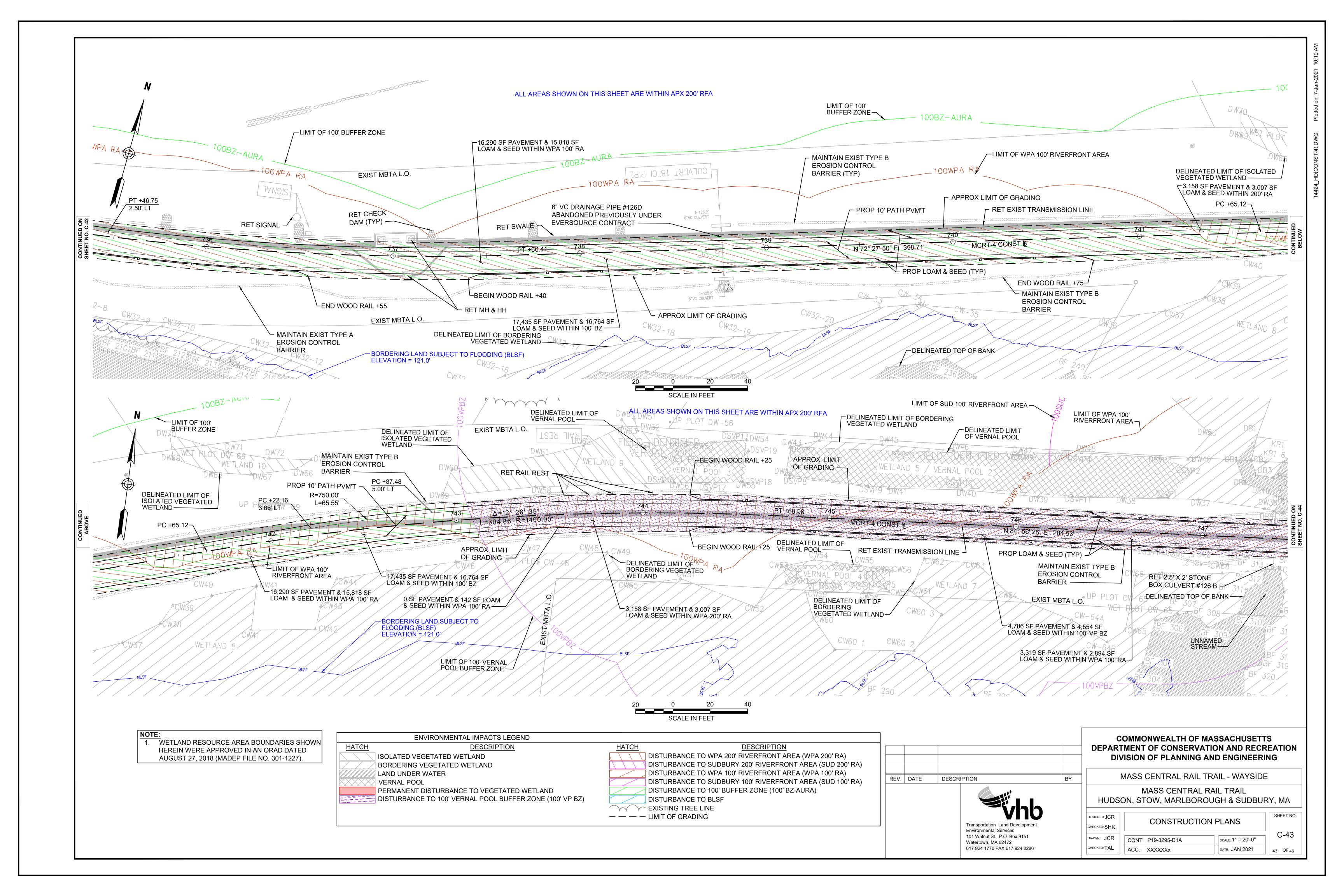


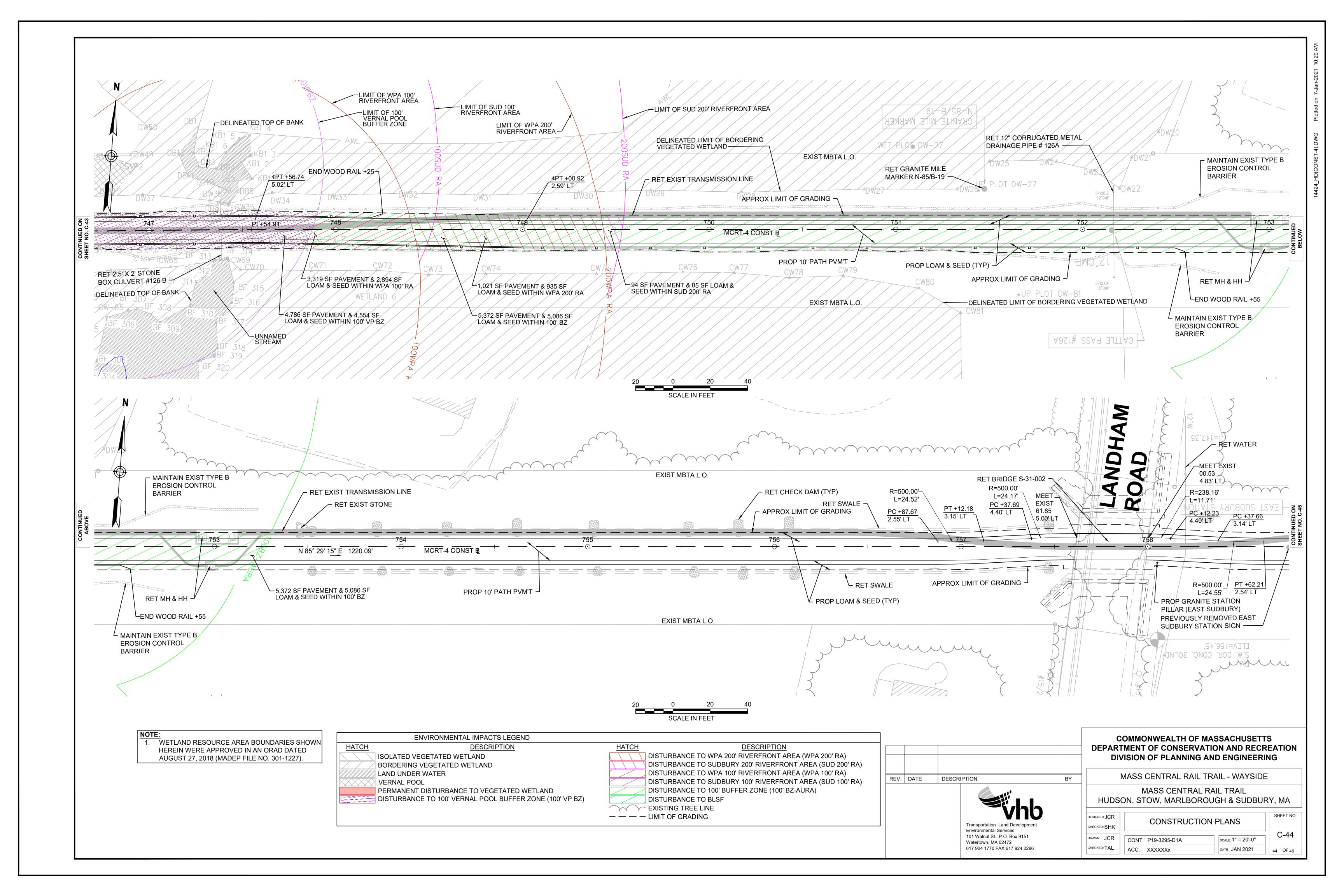


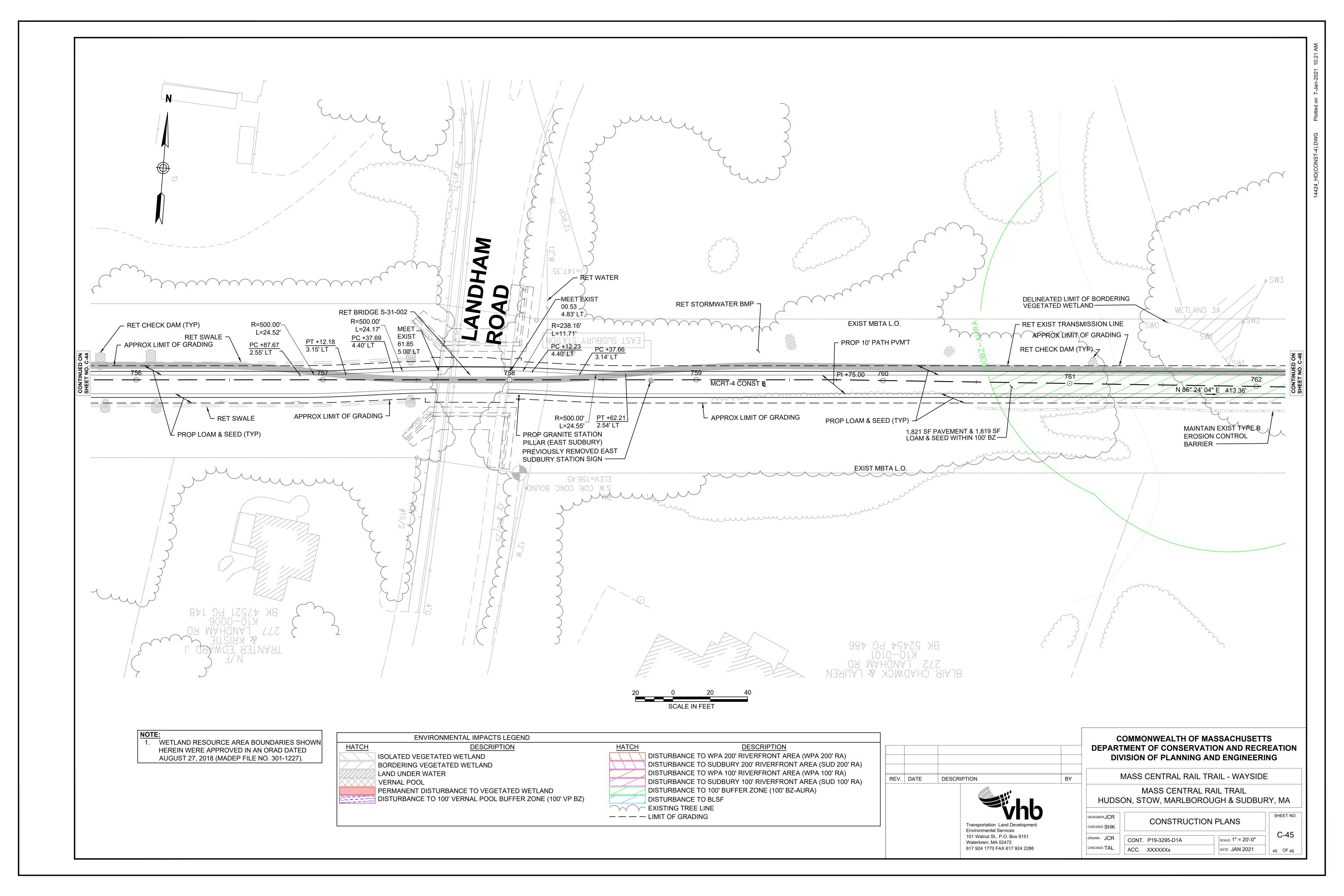


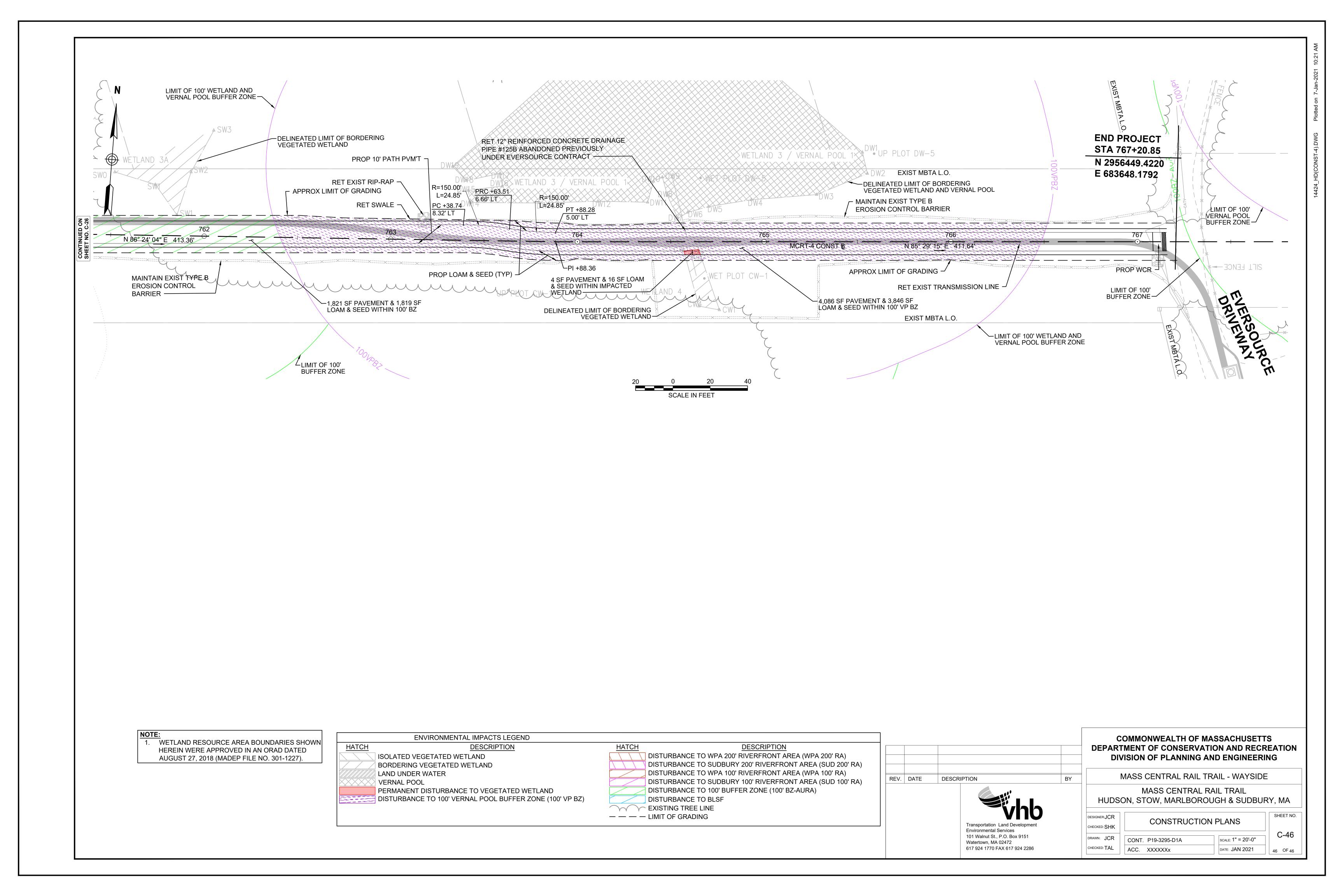


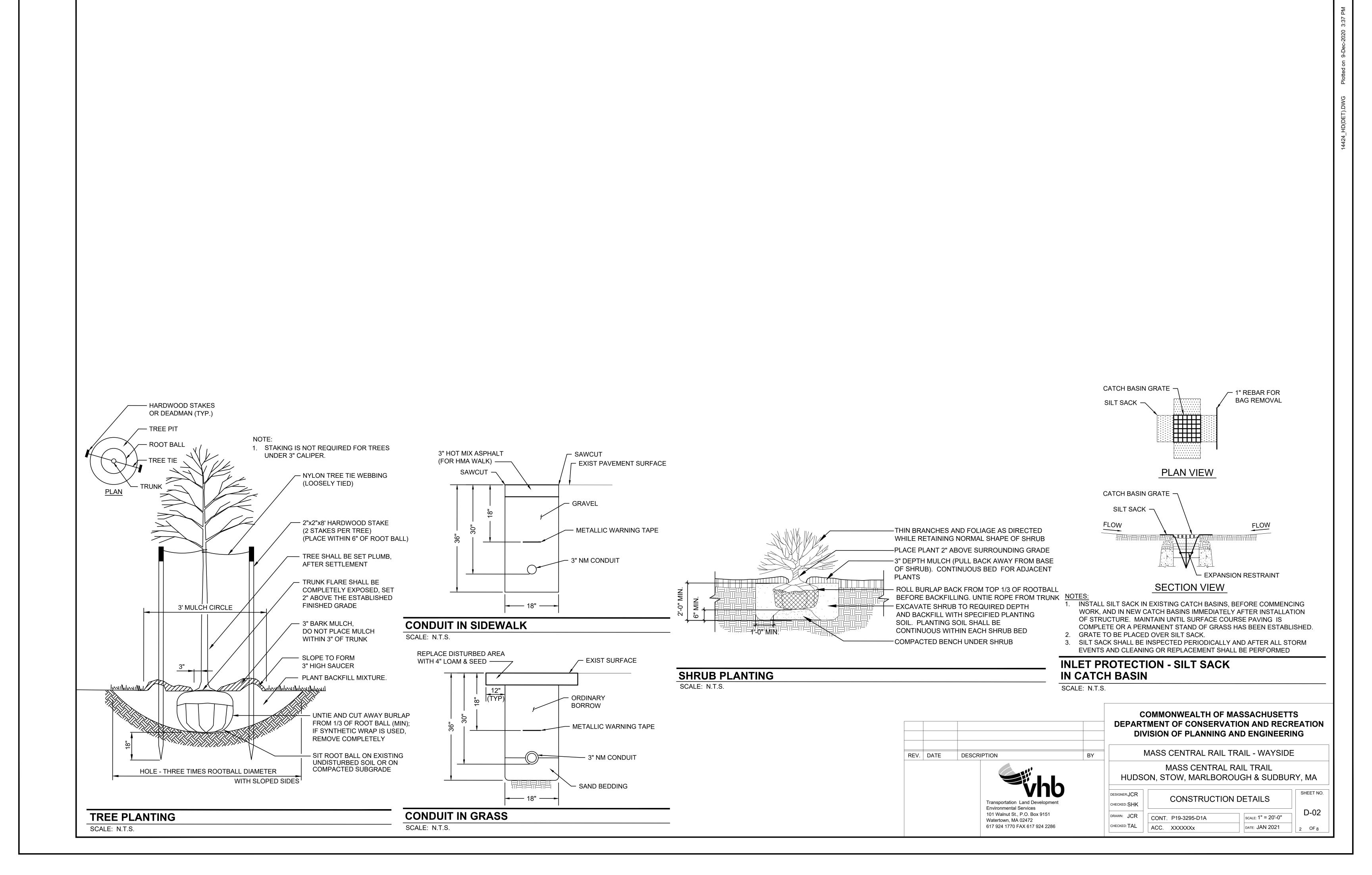


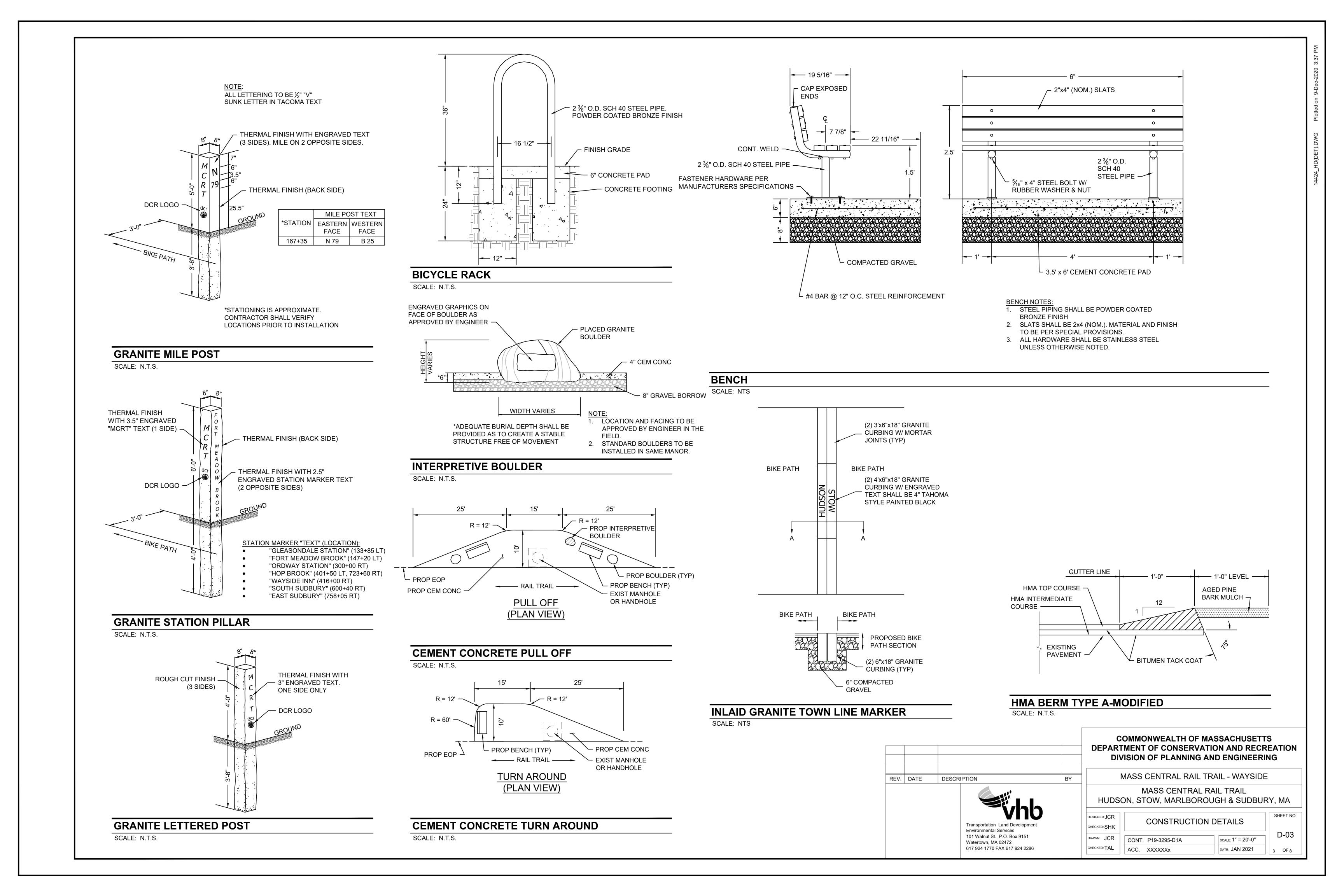


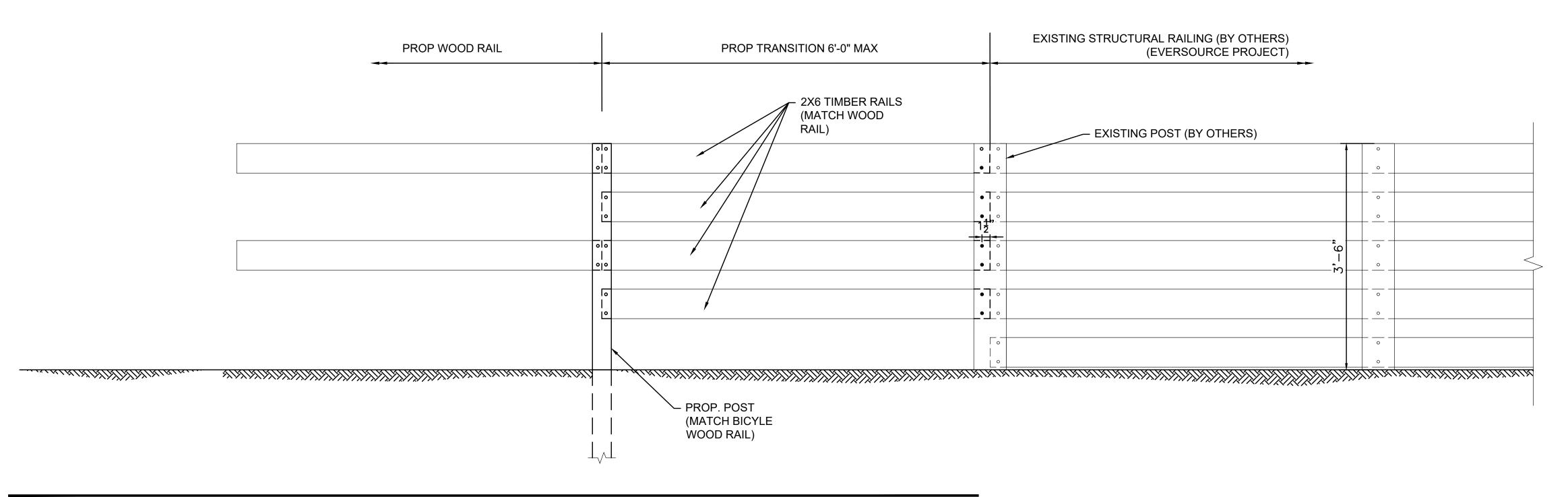






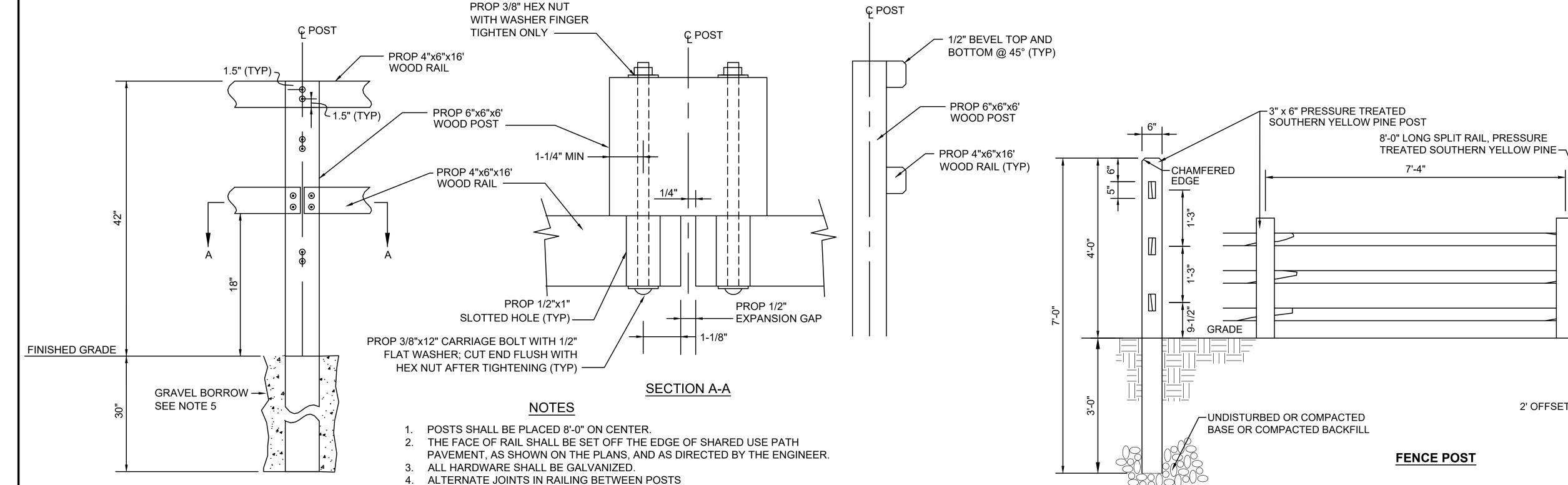






#### WOOD RAIL TRANSITION DETAIL AT EXISTING STRUCTURAL RAILING

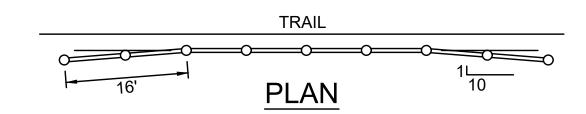
SCALE: NTS



- CONTRACTOR SHALL SET POST IN 4,000 PSI, 1-1/2IN, 565 CEMENT CONCRETE
- FOR ALL POSTS UNABLE TO BE SET AT REQUIRED DEPTH. 6. BOLTS SHALL BE SIZED AND INSTALLED SO THAT THEY EXTEND NO MORE
- THAN ONE ADDITIONAL NUT LENGTH BEYOND THE SECURED SURFACE.

#### **WOOD RAIL - ELEVATION AND SECTION VIEWS**

SCALE: NTS



#### **WOOD RAIL TERMINAL END - PLAN VIEW**

SCALE: NTS



**SPLIT RAIL WOOD FENCE** 

SCALE: NTS

#### COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION **DIVISION OF PLANNING AND ENGINEERING**

FIRST AND LAST SECTION OF A LINE OF SPLIT RAIL FENCE SHALL BEGIN/END WITH

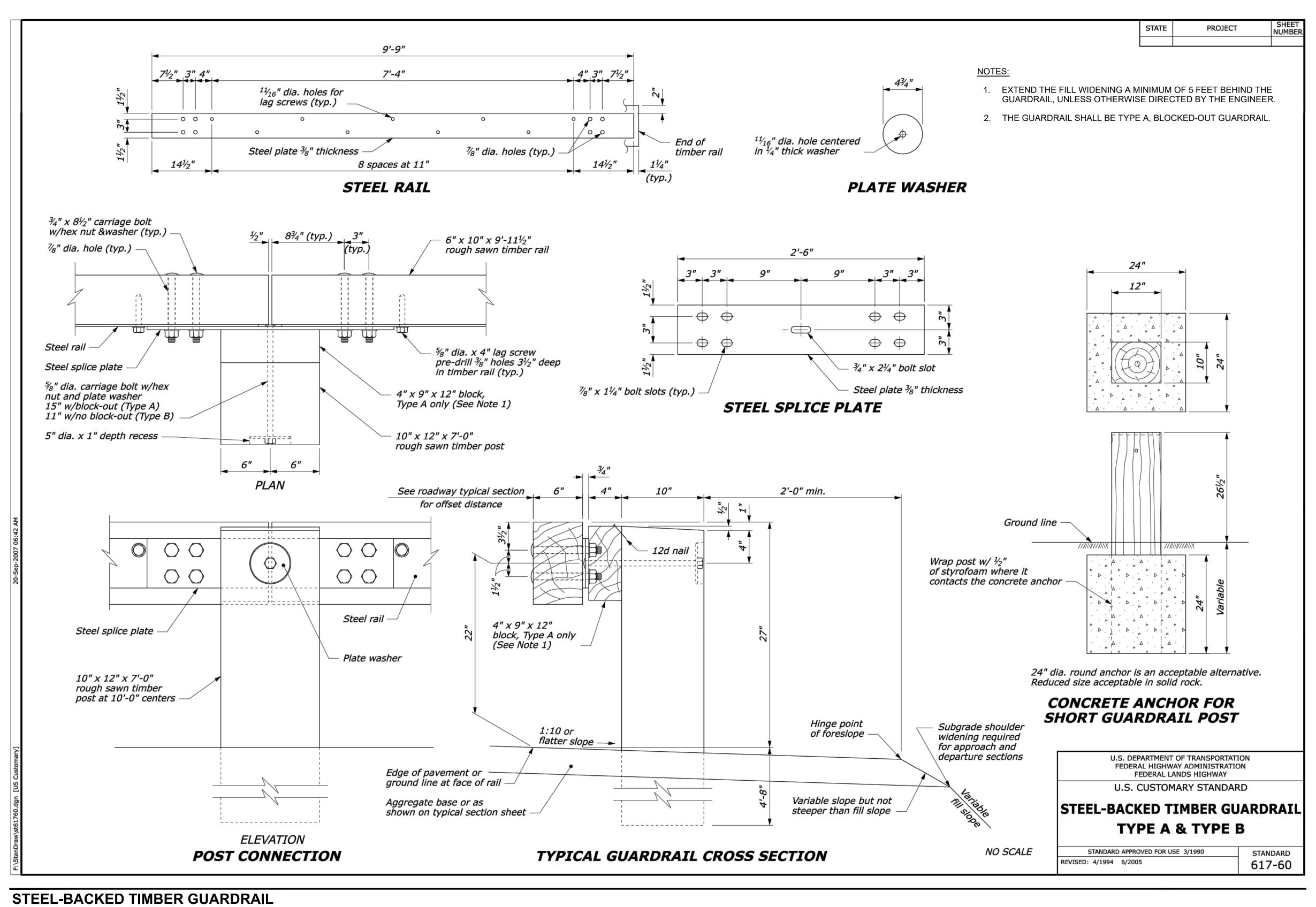
A 2' OFFSET TAPER, EXCEPT WHERE FENCE CONNECTS TO OTHER FENCING.

PATH ——

**PLAN** 

MASS CENTRAL RAIL TRAIL - WAYSIDE
MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA
SUFFEENO

DESIGNER:JCR	CONSTRUCTION	ON DETAILS	SHEET
CHECKED: SHK	CONOTROOTR	JN DETAILO	
DRAWN: JCR	CONT. P19-3295-D1A	scale: 1" = 20'-0"	D-0
CHECKED: TAL	ACC. XXXXXXX	DATE: <b>JAN 2021</b>	4 OF



SCALE: NTS

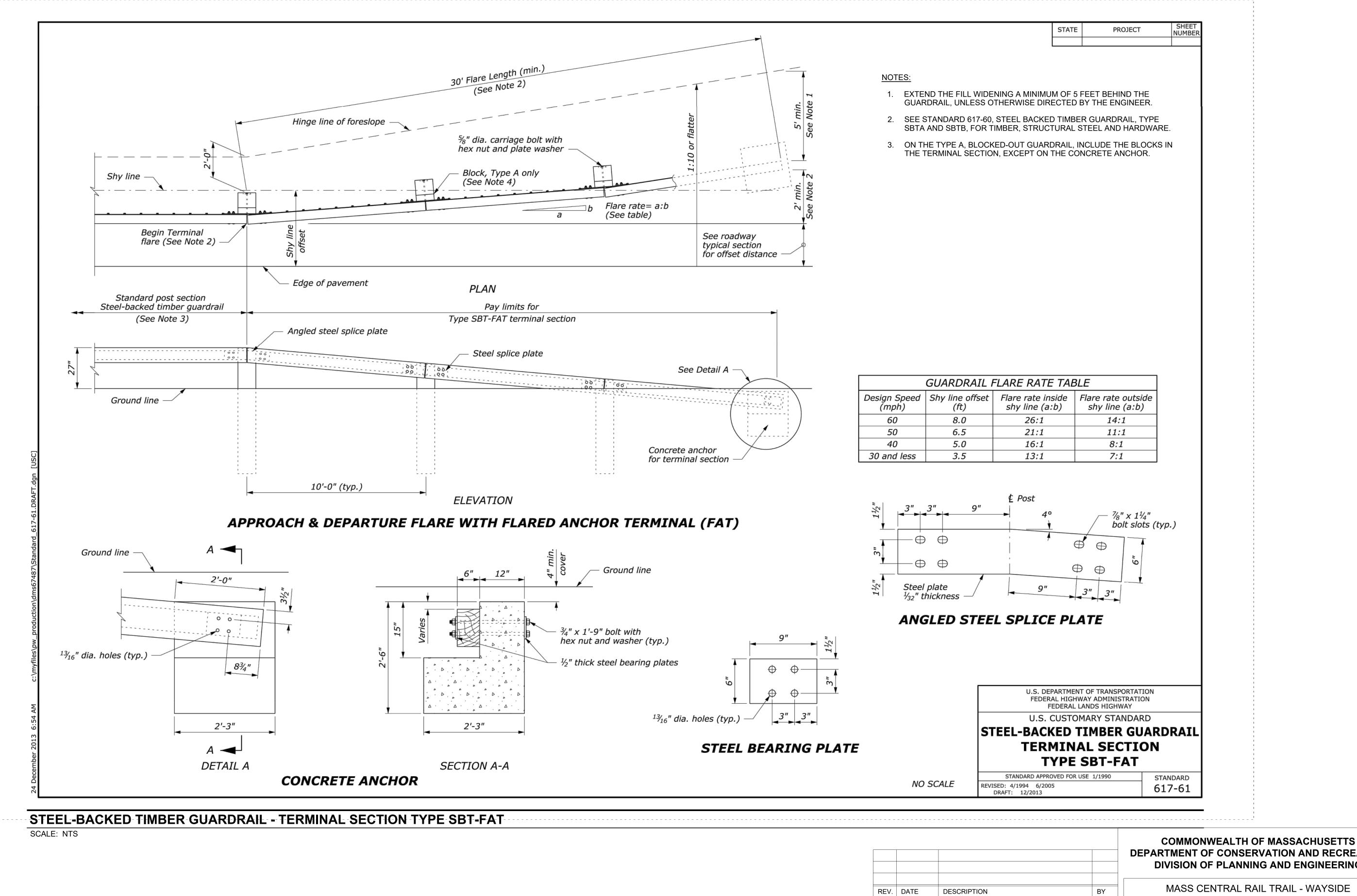


COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

MASS CENTRAL RAIL TRAIL - WAYSIDE

MASS CENTRAL RAIL TRAIL
HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

DESIGNER:JCR	CONSTRUCTIO	ON DETAILS	SHEET NO.
CHECKED: SHK			D 05
DRAWN: JCR	CONT. P19-3295-D1A	scale: 1" = 20'-0"	D-05
CHECKED: TAL	ACC. XXXXXXX	DATE: <b>JAN 2021</b>	5 OF 8



Transportation Land Development

617 924 1770 FAX 617 924 2286

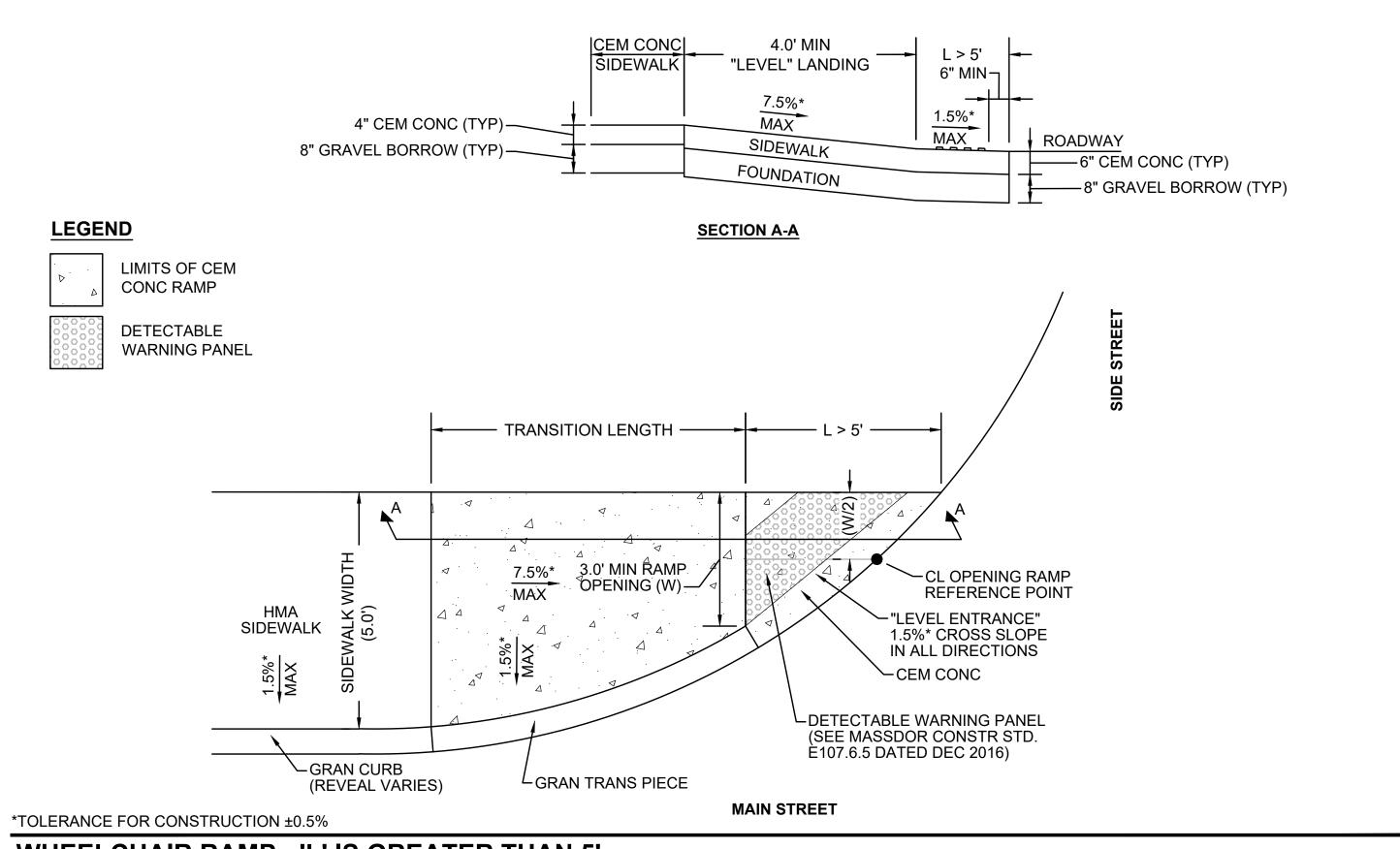
Environmental Services 101 Walnut St., P.O. Box 9151

Watertown, MA 02472

DEPARTMENT OF CONSERVATION AND RECREATION **DIVISION OF PLANNING AND ENGINEERING** 

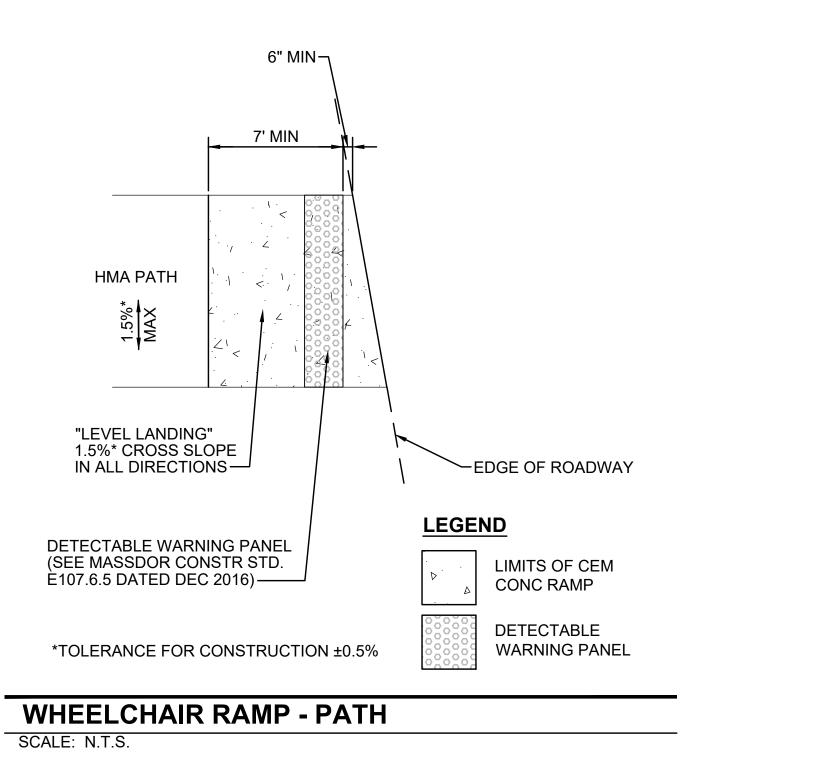
MASS CENTRAL RAIL TRAIL - WAYSIDE MASS CENTRAL RAIL TRAIL HUDSON, STOW, MARLBOROUGH & SUDBURY, MA

SHEET NO. DESIGNER:JCR CONSTRUCTION DETAILS CHECKED: SHK DRAWN: JCR SCALE: 1" = 20'-0" CONT. P19-3295-D1A ACC. XXXXXXX DATE: **JAN 2021** 6 OF 8



WHEELCHAIR RAMP - 'L' IS GREATER THAN 5'

SCALE: NTS



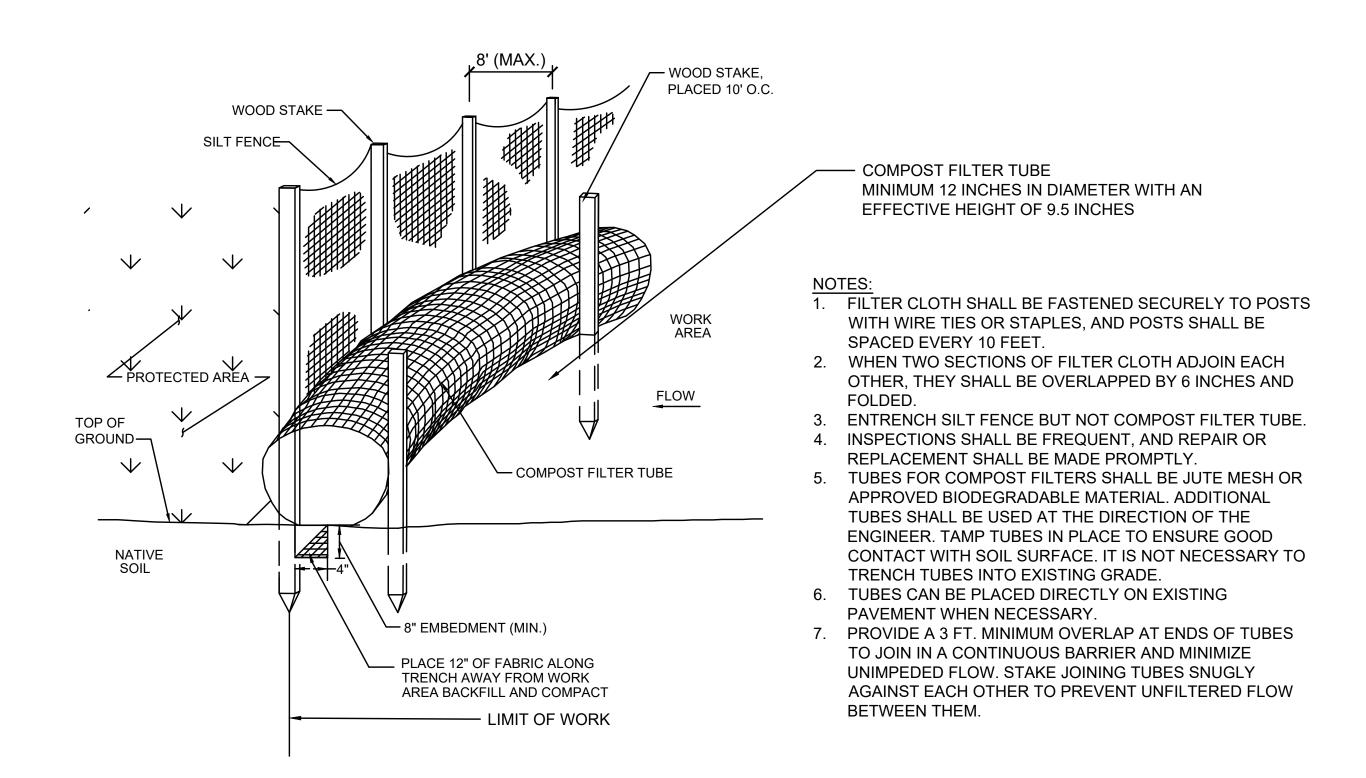
# REV. DATE DESCRIPTION BY Transportation Land Development Environmental Services 101 Walnut St., P.O. Box 9151 Watertown, MA 02472

617 924 1770 FAX 617 924 2286

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF CONSERVATION AND RECREATION
DIVISION OF PLANNING AND ENGINEERING

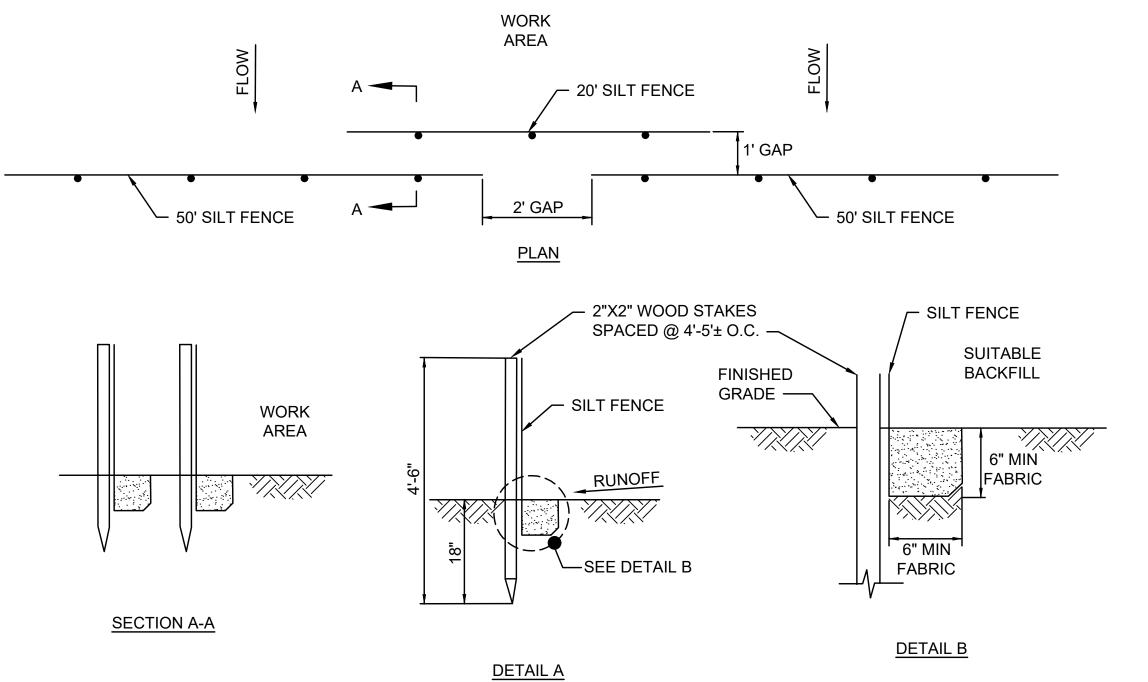
N	IASS CENTRAL RAIL TRAIL - WAYSIDE	
HUDSC	MASS CENTRAL RAIL TRAIL ON, STOW, MARLBOROUGH & SUDBUR	Y, MA
DESIGNER:JCR	CONSTRUCTION DETAILS	SHEET NO.

DESIGNER:JCR CHECKED:SHK	CONSTRUCTION DETAILS		SHEET NO.
DRAWN: JCR	CONT. P19-3295-D1A   SCALE: 1" = 20'-0"		D-07
CHECKED: TAL	ACC. XXXXXXX	DATE: <b>JAN 2021</b>	7 OF 8



#### COMPOST FILTER TUBE AND SILT FENCE DETAIL - TYPE A EROSION CONTROL BARRIER

SCALE: NTS



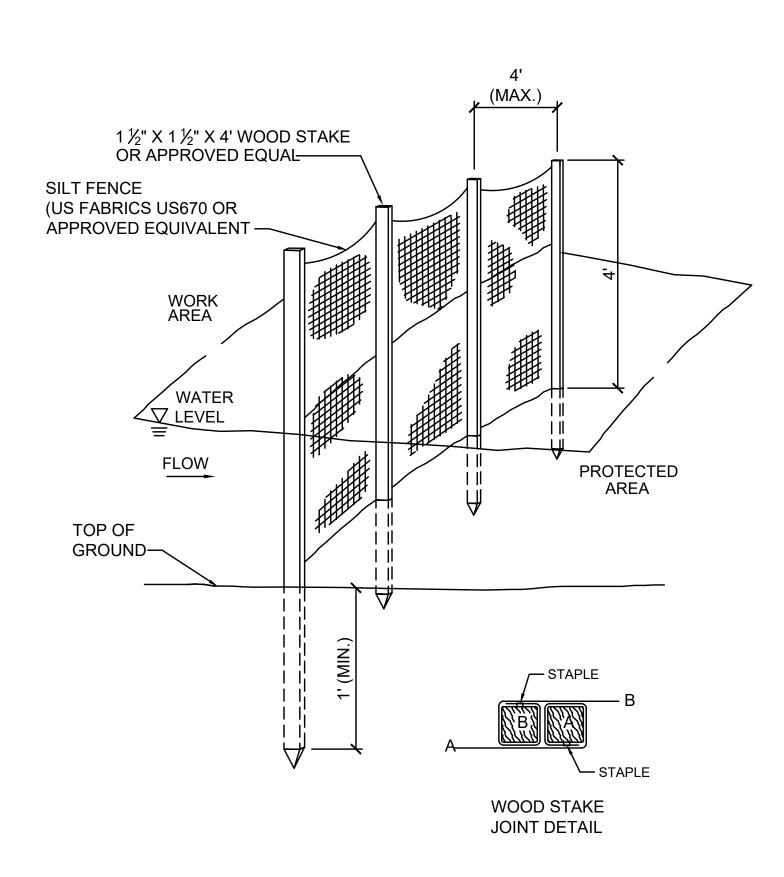
#### NOTES:

1. SYNCOPATED SILT FENCE SHALL BE USED WITHIN ALL PRIORITY HABITAT AREAS AND WITHIN 450' OF VERNAL POOLS.

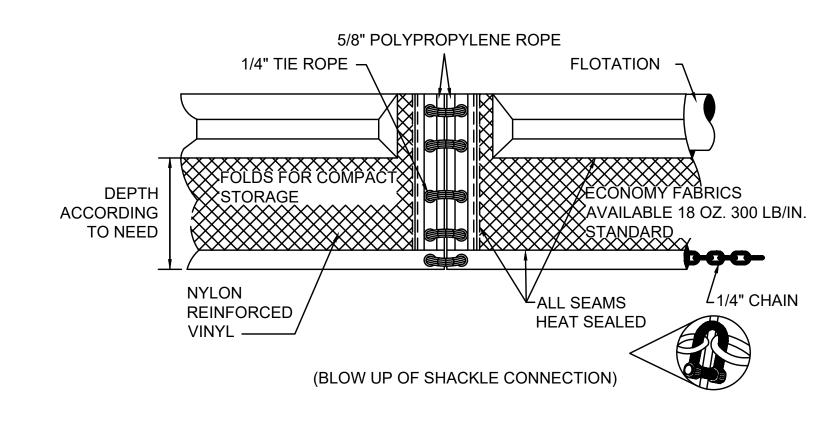
2. INSTALL GAP AFTER EVERY 50' OF EROSION CONTROL BARRIER.

#### SYNCOPATED SILT FENCE DETAIL - TYPE B EROSION CONTROL BARRIER

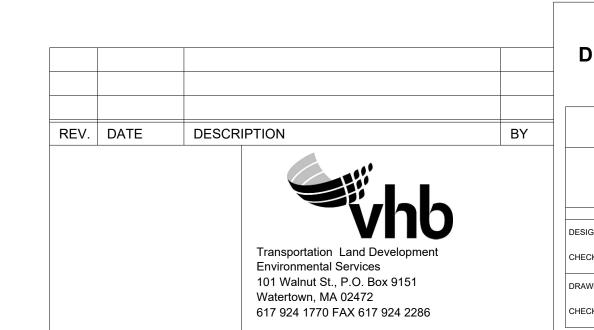
SCALE: N.T.S.



### 4' HIGH SILT FENCE BARRIER DETAIL - EROSION CONTROL BARRIER TYPE C (OPTION 1) SCALE: N.T.S.



## TURBIDITY CURTAIN DETAIL - EROSION CONTROL BARRIER TYPE C (OPTION 2) SCALE: N.T.S.



## COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF CONSERVATION AND RECREATION DIVISION OF PLANNING AND ENGINEERING

	MACC CENTRAL DAIL TRAIL MAYCIDE					
BY	MASS CENTRAL RAIL TRAIL - WAYSIDE					
	MASS CENTRAL RAIL TRAIL HUDSON, STOW, MARLBOROUGH & SUDBURY, MA					
	DESIGNER:JCR CHECKED:SHK	CONSTRUCTION DETAILS		SHEET NO.		
	DRAWN: JCR CHECKED: TAL	CONT. P19-3295-D1A  ACC. XXXXXXX	SCALE: 1" = 20'-0"  DATE: JAN 2021	D-08		