

# TOWN OF SWAMPSCOTT MASSACHUSETTS



SWAMPSCOTT RAIL TRAIL

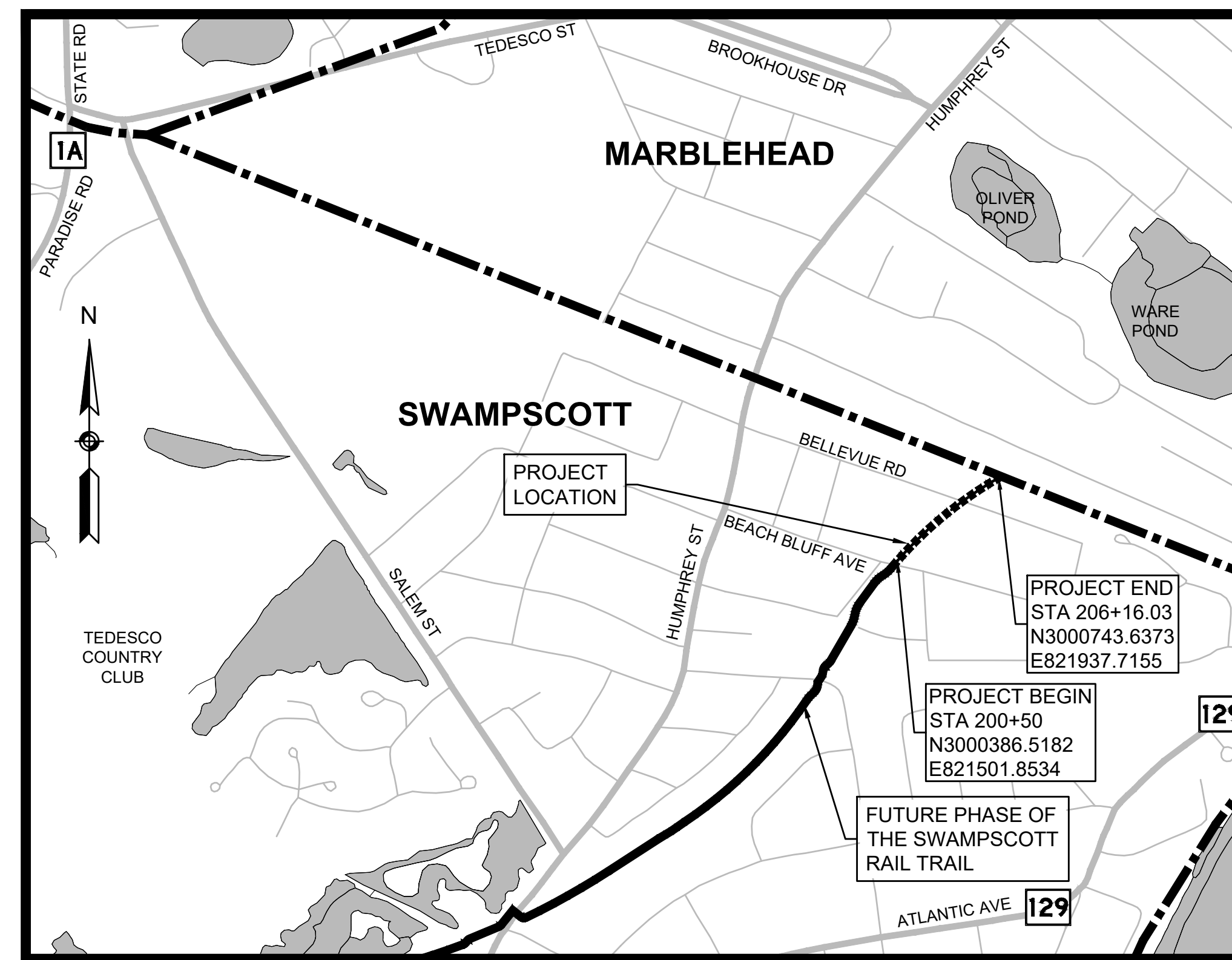
## DRAFT BID PLANS

**SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL**

STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	1	18

STANTEC PROJECT NO. 179410549  
TITLE SHEET & INDEX

INDEX	
SHEET NO.	DESCRIPTION
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0 500 1,000 1,500 2,000  
SCALE: 1" = 500'

LENGTH OF PROJECT = 566.03 FEET = 0.107 MILES

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.

GENERAL SYMBOLS

Table with columns: EXISTING, PROPOSED, DESCRIPTION. Lists various symbols for infrastructure like manholes, catch basins, and utility poles.

TRAFFIC SIGNALS

Table with columns: EXISTING, PROPOSED, DESCRIPTION. Lists symbols for traffic signals, detectors, and pedestrian crossings.

PAVEMENT MARKINGS SYMBOLS

Table with columns: EXISTING, PROPOSED, DESCRIPTION. Lists symbols for various pavement markings like stop lines and lane boundaries.

ABBREVIATIONS

Table with columns: GENERAL, DESCRIPTION. Lists abbreviations for traffic engineering terms like AADT, ABAN, and ADJ.

SWAMPSCOTT RAIL TRAIL

Small table with columns: STATE, SUBMISSION, SHEET NO., TOTAL SHEETS. Provides project identification numbers.

LEGEND & ABBREVIATIONS

ABBREVIATIONS (cont.)

Table with columns: GENERAL, DESCRIPTION. Continuation of abbreviations for terms like RADIUS OF CURVATURE and REMOVE AND DISPOSE.

TRAFFIC SIGNAL ABBREVIATIONS

Table with columns: CABINETS, DESCRIPTION. Lists abbreviations for traffic signal equipment like CAB, CCVE, and DW.

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STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
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STANTEC PROJECT NO. 179410549

GENERAL NOTES

GENERAL NOTES:

- EXISTING GROUND SURFACES SHOWN ON PLANS, PROFILES AND CROSS SECTIONS ARE BASED UPON DATA OBTAINED BY FIELD SURVEYS.
- THE LOCATIONS OF EXISTING SUBSURFACE STRUCTURES, SUCH AS SEWERS, WATER MAINS, DRAINS AND OTHER UTILITIES ARE APPROXIMATE ONLY AND THE ENGINEER DOES NOT GUARANTEE THEIR NUMBER OR LOCATIONS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES BEFORE EXCAVATING.
- ALL GAS GATES, ELECTRIC MANHOLES, AND TELEPHONE MANHOLES WITHIN THE LIMITS OF WORK SHALL BE ADJUSTED BY THE OWNING AGENCY. ALL GAS, ELECTRIC, TELEPHONE AND CATV WORK SHALL BE DONE BY THE OWNING AGENCY. THE CONTRACTOR SHALL NOTIFY THE OWNING AGENCIES TO ADJUST AND/OR RELOCATE THESE STRUCTURES TO AVOID IMPACTING THE CONTRACTOR'S SCHEDULE OF OPERATIONS.
- ANY CLEANING OF CATCH BASINS OR DRAIN PIPES NECESSARY FOR THE PROPOSED WORK SHALL BE COMPLETED BY THE RESPECTIVE MUNICIPALITY INVOLVED.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE UTILITY COMPANIES DOING WORK IN THE SAME AREA THE CONTRACTOR SHALL ALLOW THE UTILITY COMPANIES AND THEIR REPRESENTATIVES TO ADJUST AND/OR INSTALL THEIR SYSTEMS WITHIN TOWN / STATE OWNED STREETS AND EASEMENTS.
- CONSTRUCT DRIVEWAYS AND WALKS AS SHOWN ON THE PLANS AND/OR AS REQUIRED BY THE ENGINEER.
- SAW CUT EXISTING BITUMINOUS CONCRETE ROADWAYS, CEMENT CONCRETE SIDEWALKS AND BITUMINOUS CONCRETE DRIVEWAYS AS SHOWN ON THE PLANS AND AT THE PROPOSED MATCH LINE.
- 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.
- AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
- ALL ACCESSIBLE ROUTES, WALKWAYS, CURB CUTS, RAMPS, SIDEWALKS, DRIVEWAY OPENINGS, CLEARANCES AND SLOPE TOLERANCES SHALL CONFORM WITH THE ARCHITECTURAL ACCESS BOARD (AAB), 521 CMR AND MASSHIGHWAY CONSTRUCTION AND TRAFFIC STANDARD DRAWINGS.
- ITEMS LABELED "REM" SHALL BE REMOVED AND DISCARDED BY CONTRACTOR.
- THE CONTRACTOR SHALL PROTECT EXISTING SURVEY MONUMENTS AND SHALL RESET ANY MONUMENTATION DISTURBED BY HIS OPERATIONS.
- THE CONTRACTOR SHALL INSTALL OTHER NECESSARY TEMPORARY REGULATORY AND WARNING SIGNS DURING CONSTRUCTION AS REQUIRED BY THE ENGINEER FOR OTHER INCIDENTAL CONSTRUCTION ACTIVITIES. ALL SIGNAGE AND TRAFFIC CONTROL DEVICES USED MUST CONFORM TO THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD)
- THE CONTRACTOR SHALL PERFORM HIS WORK IN A MANNER ACCEPTABLE TO THE ENGINEER SO THAT INTERFERENCE WITH AND INCONVENIENCE TO BUSINESS CONCERNS AND ABUTTERS, ON ACCOUNT OF THE CONSTRUCTION WORK, IS KEPT TO A MINIMUM.
- THE CONTRACTOR SHALL NOT BE ALLOWED TO PARK EQUIPMENT OR STOCKPILE EQUIPMENT OR MATERIAL ON THE TRAVELED WAYS OVERNIGHT OR WHEN NOT IN USE.
- THE CONTRACTOR SHALL MAINTAIN SAFE AND RESPONSIBLE ACCESS TO AND FROM ABUTTING PROPERTY, PRIVATE WAYS, DRIVEWAYS AND ALL ALLEYS AT ALL TIMES DURING THE CONSTRUCTION PERIOD.
- ALL DETECTABLE WARNING PANELS SHALL BE MOUNTED IN CEMENT CONCRETE AND INSTALLED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD DETAIL E107.6.5.

SURVEY NOTES:

- COORDINATES, IN U.S. SURVEY FEET, ARE IN THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM (MCS), MAINLAND ZONE, REFERENCED TO THE NORTH AMERICAN DATUM OF 1983, (NAD 83/2011, EPOCH 2010.00), BASED ON THE KeyNetGPS VIRTUAL REFERENCE SYSTEM (VRS) USING TRIMBLE R10 GNSS GPS RECEIVERS.
- PROPERTY LINES COMPILED FROM RECORD PLAN INFORMATION. ABUTTER LINES OBTAINED BY ASSESSORS GIS DATA AND ARE APPROXIMATE.
- THIS PLAN HAS BEEN PREPARED BY PHOTOGRAMMETRIC METHODS USING AERIAL IMAGERY ACQUIRED ON DECEMBER 4, 2017 SUPPLEMENTED WITH LIMITED FIELD SURVEY.
- THE AUGUST 2018 REVISION INCLUDES SELECTED TREES LOCATED ALONG THE CORRIDOR BETWEEN HUMPHREY STREET AND SEAVIEW AVENUE.

SURVEY REFERENCES:

- RIGHT OF WAY AND TRACK MAP BOSTON AND MAINE R.R. SCALE 1"=100' DATED JUNE 30, 1914 SHEETS V.7.10 1-3
- PLANS PROVIDED BY THE TOWN OF SWAMPSCOTT ASSESSORS, PLATES C7, D7, E7, F7, G7, H6, H7, I5 & I6
- LAND IN SWAMPSCOTT, MASS., BOSTON AND MAINE RAILROAD TO LYNN ELECTRIC COMPANY, SCALE 1"=200' DATED DECEMBER, 1962 PLAN BOOK 103, PAGE 85
- PLAN OF A PORTION OF HUMPHREY STREET FROM SALEM STREET TO OCEAN AVENUE IN THE TOWN OF SWAMPSCOTT AS RELOCATED, SCALE 1"=40' DATED SEPTEMBER 1953 LAYOUT NO. 2826
- LAND IN SWAMPSCOTT, MASS., BOSTON AND MAINE RAILROAD TO RAYLEN REALTY COMPANY, SCALE 1"=50' DATED DECEMBER 1959 PLAN 583 OF 1963

UTILITY NOTES:

- RECORD UTILITY INFORMATION FROM THE VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES, ARE APPROXIMATE ONLY AND ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD.
- ALL UTILITY COMPANIES, PUBLIC AND PRIVATE MUST 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.
- 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" (1-811-344-7233) 72 HOURS (EXCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS) PRIOR TO ANY EXCAVATION TO OBTAIN ACCURATE UTILITY LOCATIONS.
- 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.
- 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.
- NATIONAL GRID EMERGENCY TELEPHONE NUMBERS:

GAS:  
EMERGENCY: 1-800-233-5325  
NEW SERVICE: 1-877-696-4743  
CUSTOMER SUPPORT: 1-800-732-3400

ELECTRIC:  
OUTAGE/EMERGENCY: 1-800-465-1212  
NEW SERVICE: 1-800-375-4730  
CUSTOMER SERVICE: 1-800-322-3223

**SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL**

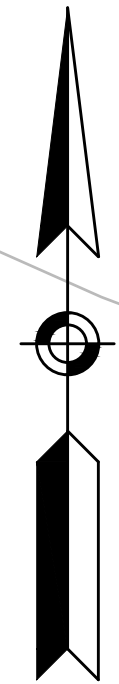
STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	4	18
STANTEC PROJECT NO. 179410549			

KEY PLAN

**LEGEND**

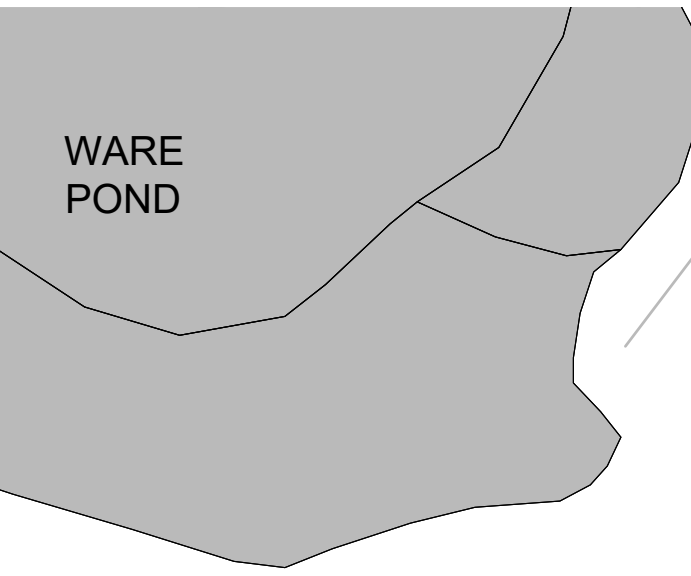
XX — CONSTRUCTION PLAN SHEET NUMBER

N



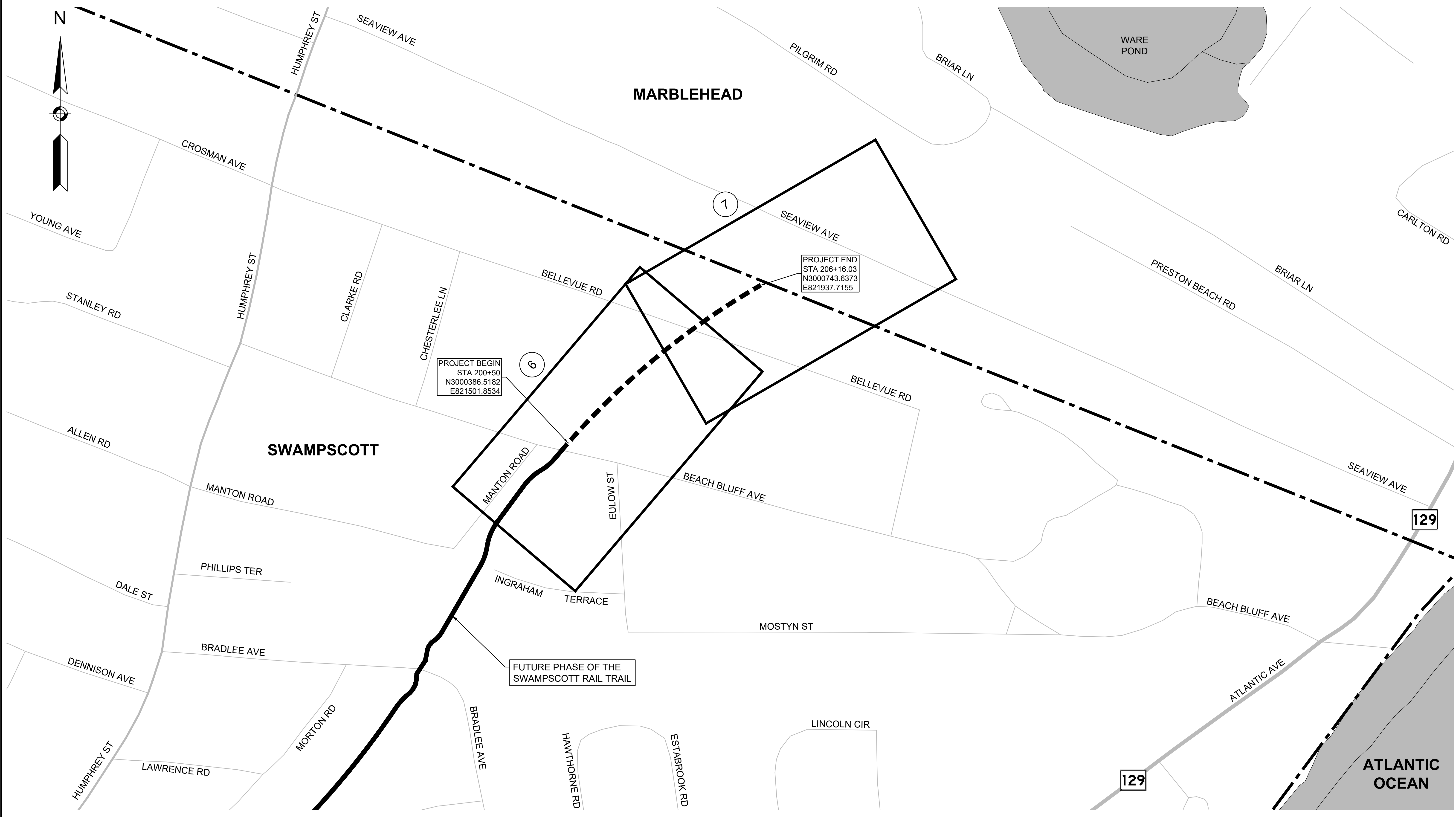
**MARBLEHEAD**

**SWAMPSCOTT**



WARE POND

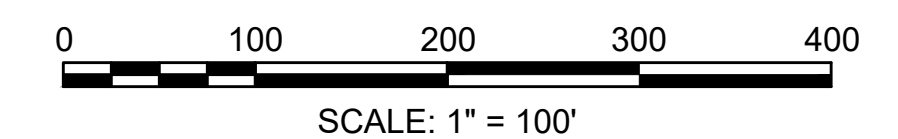
**ATLANTIC OCEAN**



PROJECT BEGIN  
STA 200+50  
N3000386.5182  
E821501.8534

PROJECT END  
STA 206+16.03  
N3000743.6373  
E821937.7155

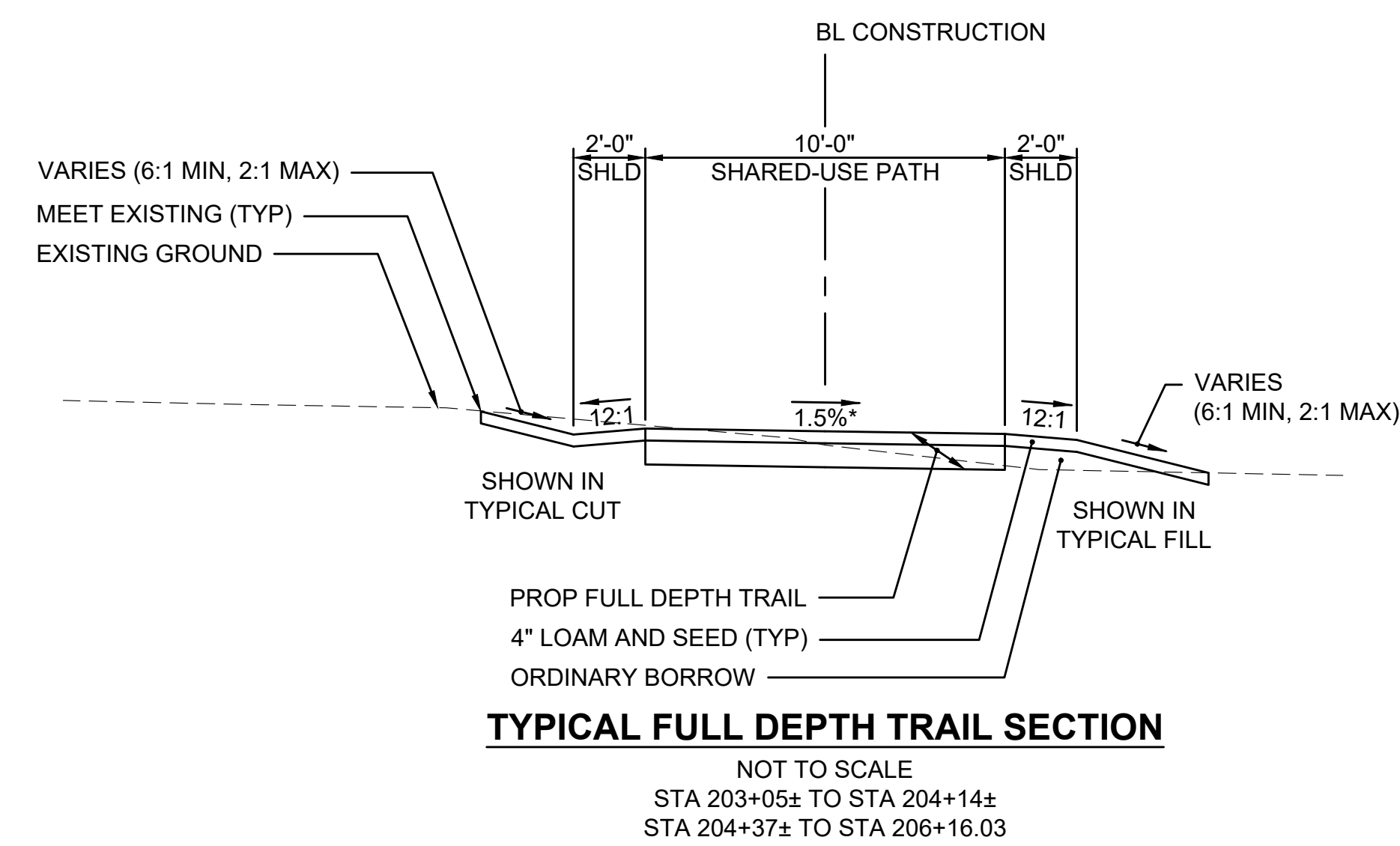
FUTURE PHASE OF THE  
SWAMPSCOTT RAIL TRAIL



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TYPICAL SECTIONS



**MATERIAL NOTES**

PROPOSED FULL DEPTH TRAIL SECTIONS

- SURFACE: 4" STABILIZED STONEDUST
- BASE: 8" (MIN) GRAVEL BORROW, TYPE b

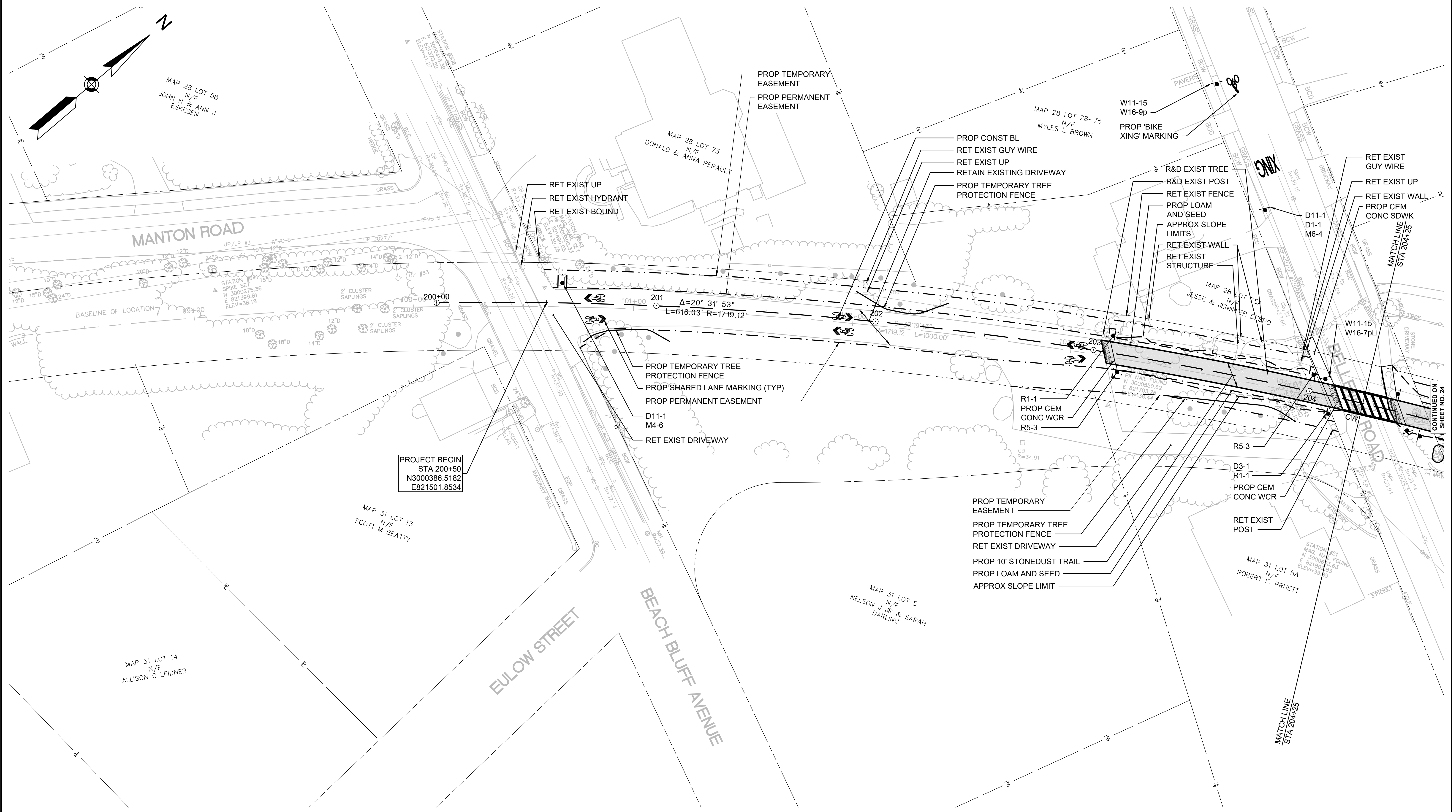
PROPOSED CEMENT CONCRETE SIDEWALK AND WHEELCHAIR RAMP SECTIONS

- SURFACE: 6" CEMENT CONCRETE  
(4000psi, ¾", 610 lbs. AIR ENTRAINED)
- BASE: 8" (MIN) GRAVEL BORROW, TYPE b

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MA	FOR BID: 2020-04-06	6	18

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CONSTRUCTION PLANS  
PART 1 OF 2



PROJECT BEGIN  
STA 200+50  
N3000386.5182  
E821501.8534

FOR PROFILE SEE SHEET NO. 8

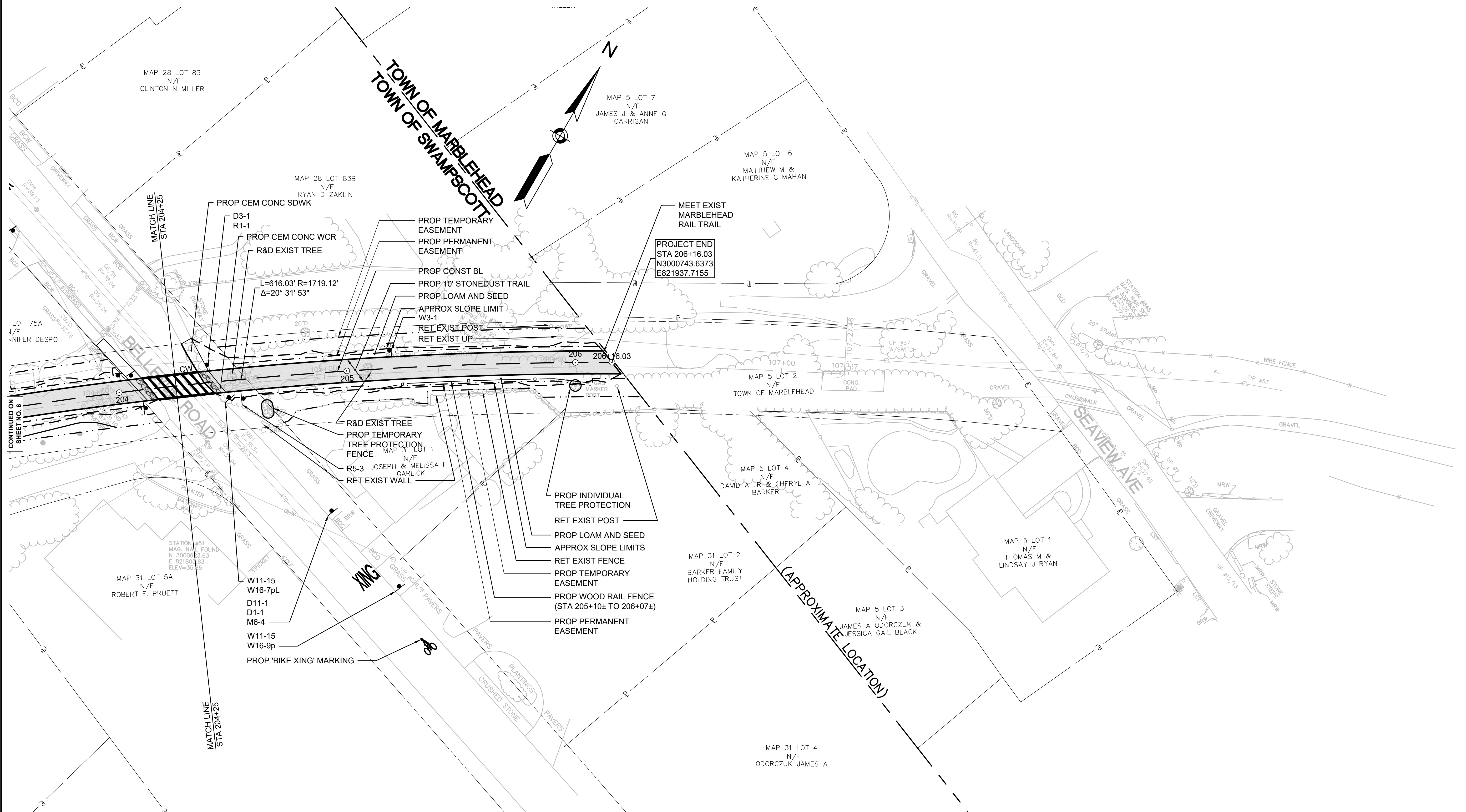
0 20 50 100  
SCALE: 1" = 20'

SWAMP\_RT\_BB\_TO\_JMB\_CONST\_PLANS.DWG Plotted on: 6-Apr-2020 9:33 AM

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MA	FOR BID: 2020-04-06	7	18

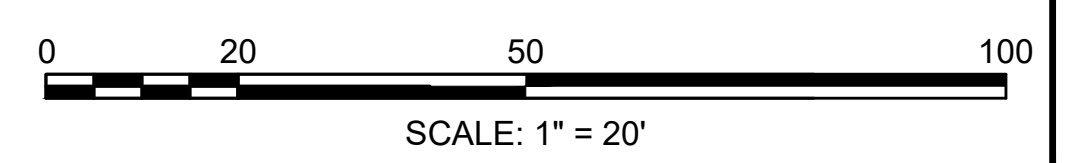
STANTEC PROJECT NO. 179410549  
CONSTRUCTION PLANS  
PART 2 OF 2



PROJECT END  
STA 206+16.03  
N3000743.6373  
E821937.7155

L=616.03' R=1719.12'  
Δ=20° 31' 53"

(APPROXIMATE LOCATION)



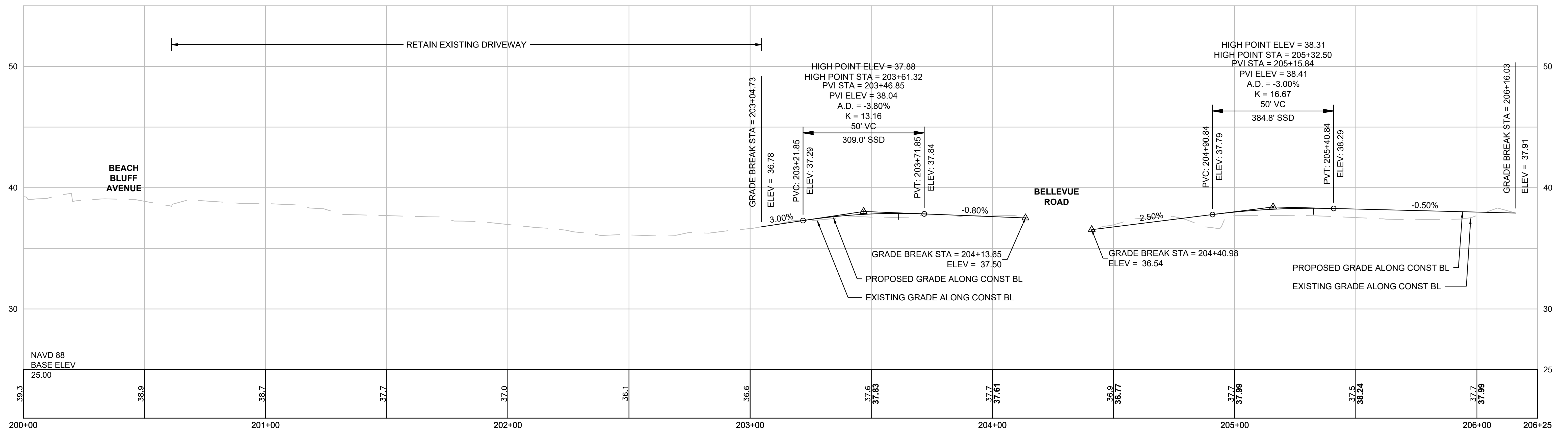
FOR PROFILE SEE SHEET NO. 8

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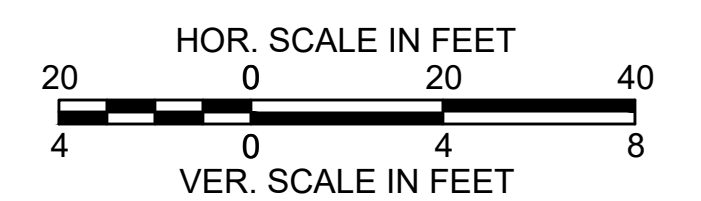
STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	8	18

STANTEC PROJECT NO. 179410549

**PROFILES**



FOR CONSTRUCTION PLANS SEE SHEET NO. 6 - 7





NOTE:  
ALL STOP AND YIELD SIGNS, PROPOSED IN THIS CONTRACT, ARE SUBJECT TO APPROVAL BY THE TOWN OF SWAMPSCOTT BEFORE INSTALLATION.



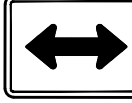






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STANTEC PROJECT NO. 179410549

**TRAFFIC SIGN SUMMARY**

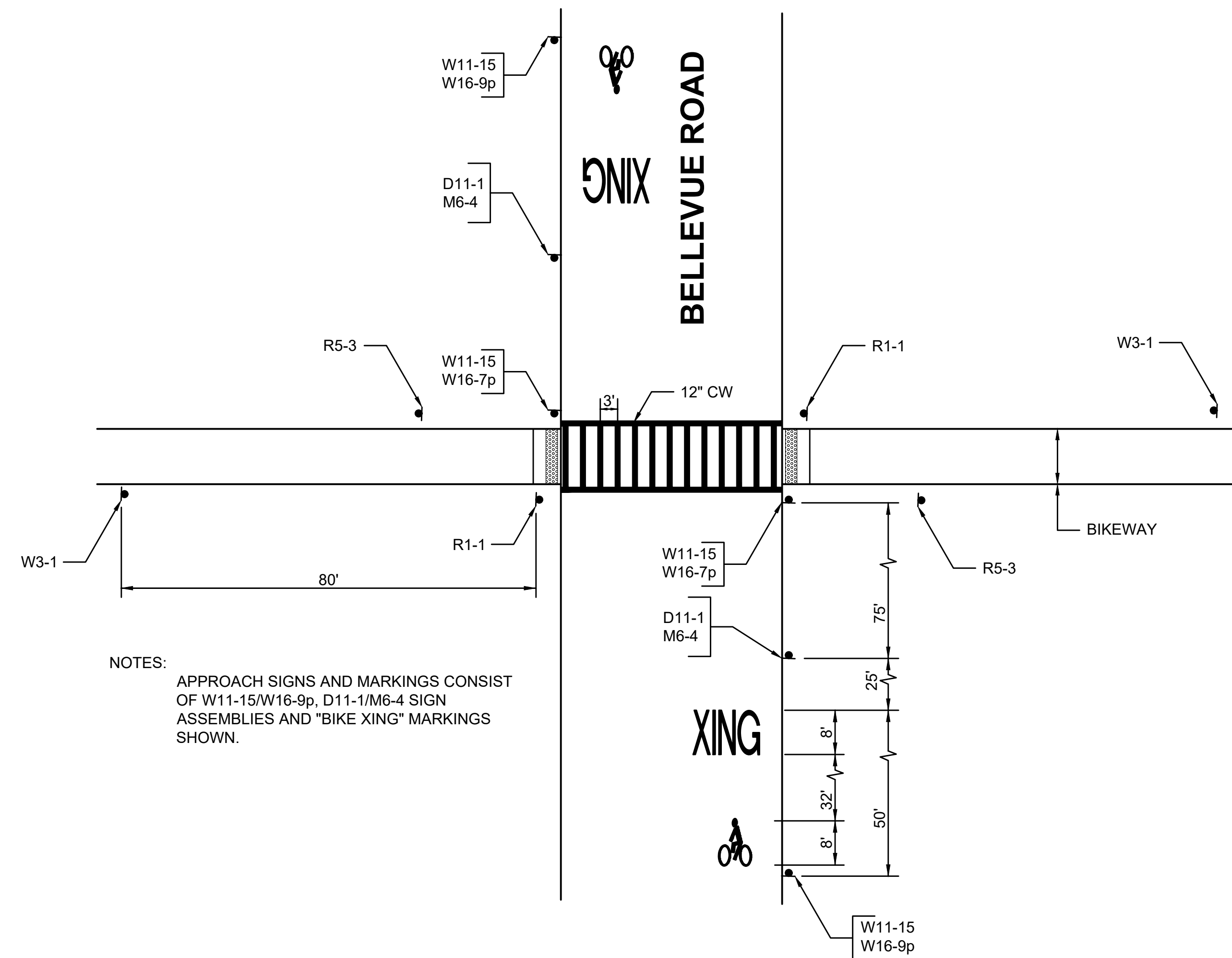
**TRAFFIC SIGN SUMMARY**

IDENTIFICATION NUMBER	SIZE OF SIGN		UNIT AREA (SF)	TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	AREA (SF)
	WIDTH	HEIGHT			LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK-GROUND	LEGEND	BORDER		
D11-1	24"	18"	3.00		2009 MUTCD	2009 MUTCD	2009 MUTCD	3	GREEN	WHITE	WHITE	1-P5 3	9.00
M4-6	12"	6"	0.50		2009 MUTCD	2009 MUTCD	2009 MUTCD	1	GREEN	WHITE	WHITE	MOUNT 1 WITH D11-1	0.50
M6-4	12"	9"	0.75		2009 MUTCD	2009 MUTCD	2009 MUTCD	2	GREEN	WHITE	WHITE	MOUNT 2 WITH D11-1	1.50
R1-1 (PATH)	18"	18"	2.25		2009 MUTCD	2009 MUTCD	2009 MUTCD	3	RED	WHITE	WHITE	1-P5 3	6.75
R5-3	24"	24"	4.00		2009 MUTCD	2009 MUTCD	2009 MUTCD	3	WHITE	BLACK	BLACK	1-P5 3	12.00
W3-1	18"	18"	2.25		2009 MUTCD	2009 MUTCD	2009 MUTCD	1	YELLOW	BLACK/ RED	BLACK	1-P5 1	2.25
W11-15	30"	30"	6.25		2009 MUTCD	2009 MUTCD	2009 MUTCD	4	YELLOW	BLACK	BLACK	1-P5 4	25.00
W16-9p	24"	12"	2.00		2009 MUTCD	2009 MUTCD	2009 MUTCD	2	YELLOW	BLACK	BLACK	MOUNT 2 WITH W11-15	4.00
W16-7pL	24"	12"	2.00		2009 MUTCD	2009 MUTCD	2009 MUTCD	2	YELLOW	BLACK	BLACK	MOUNT 2 WITH W11-15	4.00

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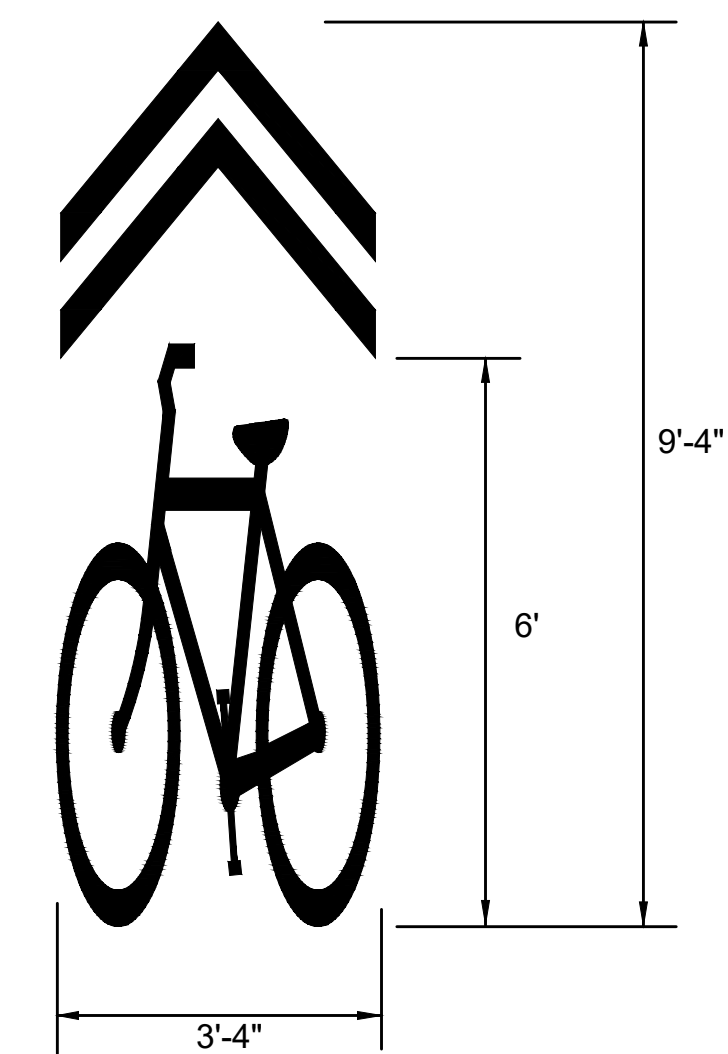
TRAFFIC DETAILS



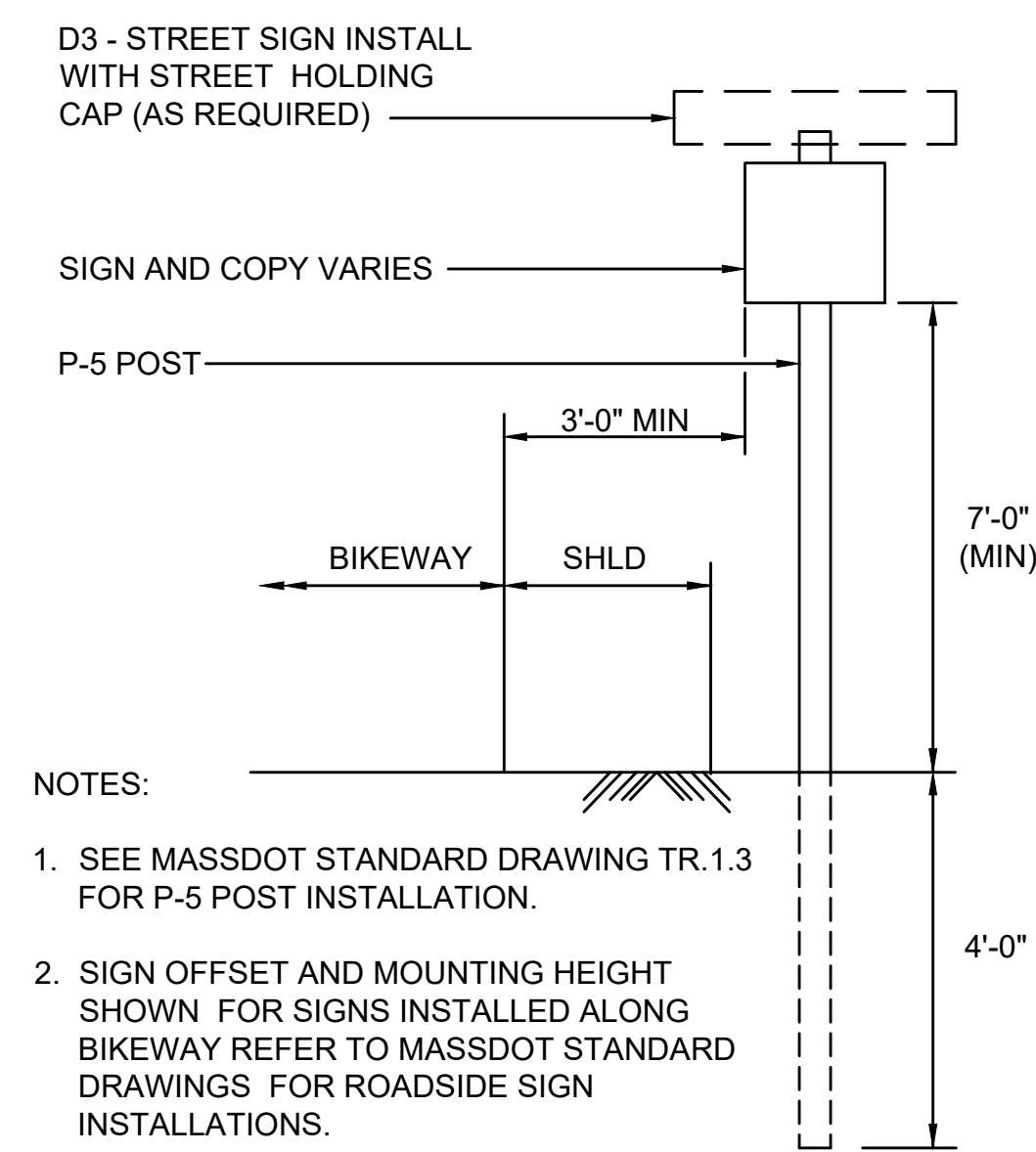
NOTES:  
APPROACH SIGNS AND MARKINGS CONSIST OF W11-15/W16-9p, D11-1/M6-4 SIGN ASSEMBLIES AND "BIKE XING" MARKINGS SHOWN.

TYPICAL INTERSECTION SIGNS AND MARKINGS  
NOT TO SCALE

NOTES:  
1. THE CENTER OF THE MARKING SHALL BE 4 FEET FROM THE EDGE OF PAVEMENT.



SHARED LANE MARKING  
NOT TO SCALE



NOTES:  
1. SEE MASSDOT STANDARD DRAWING TR.1.3 FOR P-5 POST INSTALLATION.  
2. SIGN OFFSET AND MOUNTING HEIGHT SHOWN FOR SIGNS INSTALLED ALONG BIKEWAY REFER TO MASSDOT STANDARD DRAWINGS FOR ROADSIDE SIGN INSTALLATIONS.

TYPICAL SIGN LOCATION  
NOT TO SCALE

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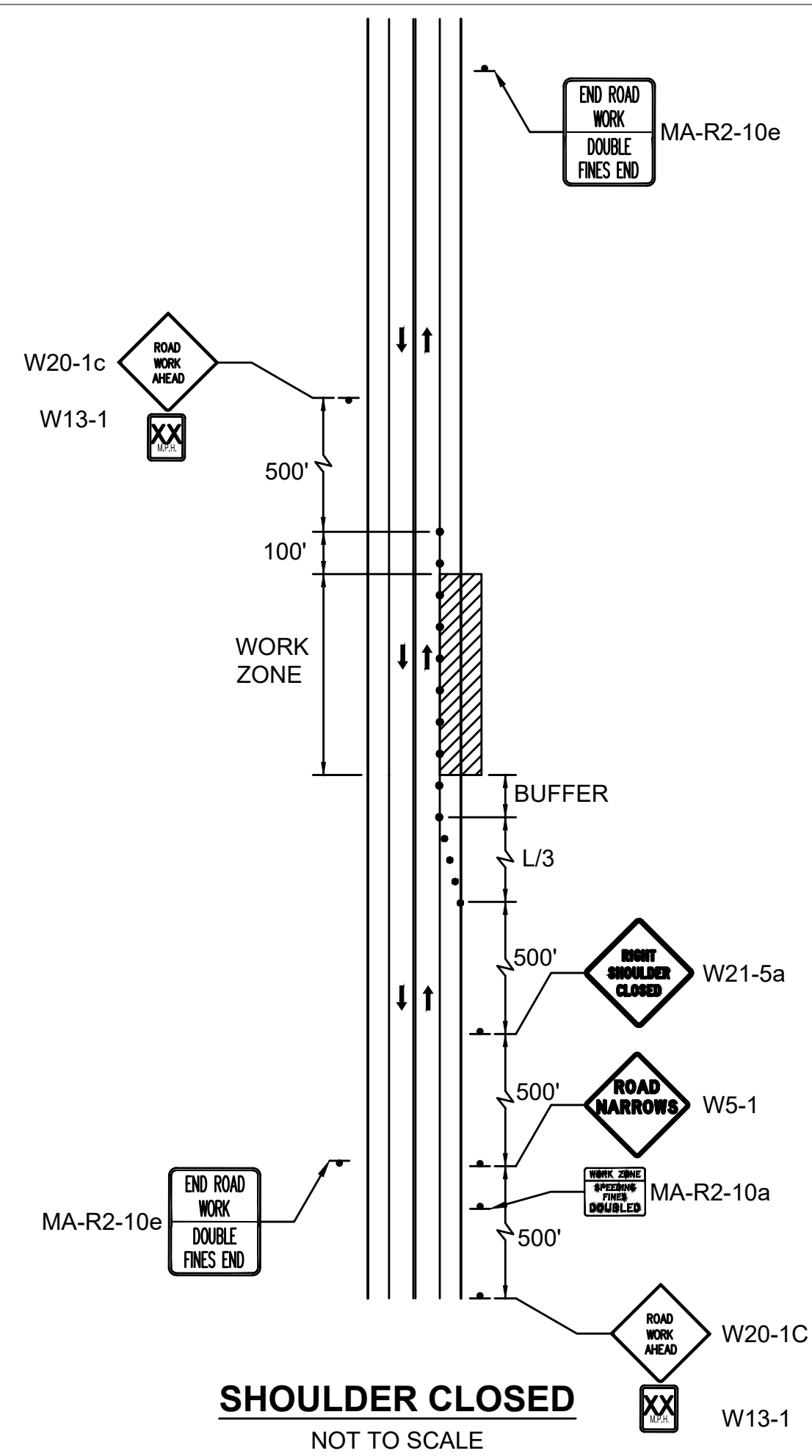
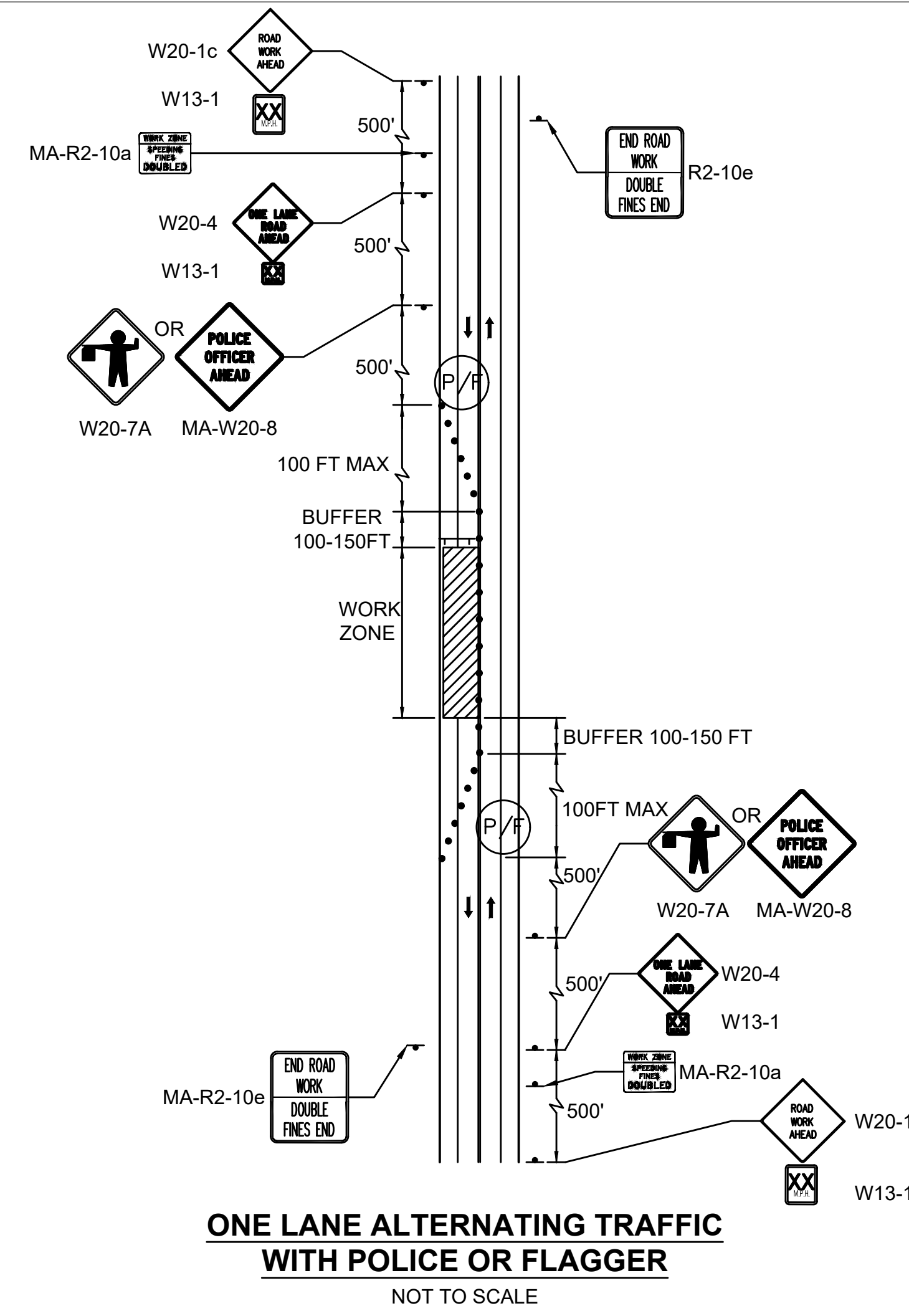
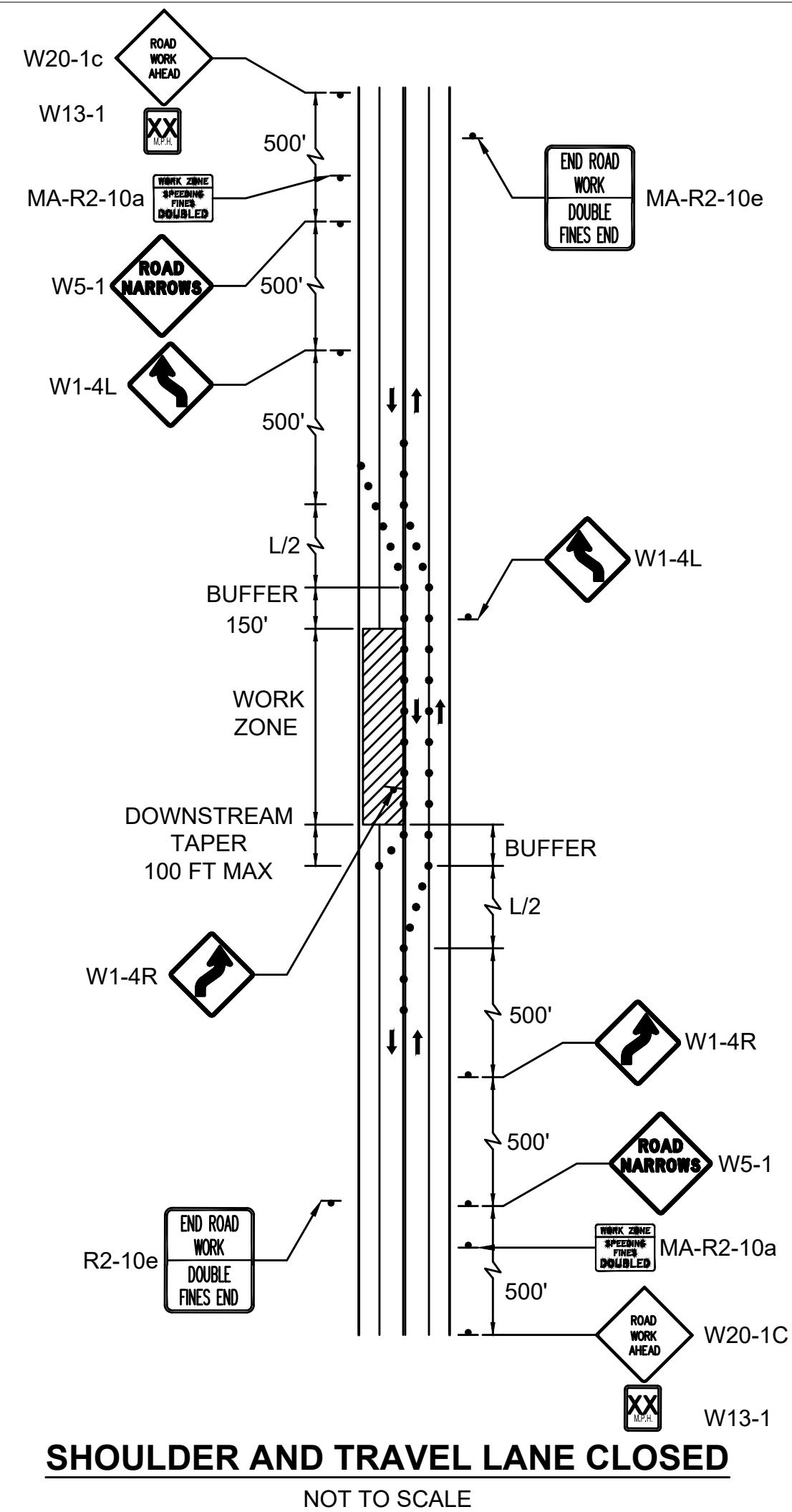
**TEMPORARY TRAFFIC CONTROL PLANS**

**CONSTRUCTION SIGN SUMMARY**

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACKGROUND	LEGEND	BORDER		
MA-R2-10a	48"	36"	WORK ZONE SPEEDING FINES DOUBLED	SEE MASSDOT STANDARDS			2	SEE MASSDOT STANDARDS				24.00
MA-R2-10e	36"	18"	END ROAD WORK DOUBLE FINES END	SEE MASSDOT STANDARDS			2	SEE MASSDOT STANDARDS				9.00
S-G20-1 (SEE DETAIL BELOW)	42"	24"	BIKEPATH CLOSED DURING CONSTRUCTION	4"	3"	N/A	2	WHITE	BLACK	BLACK		14.00
W1-4L	36"	36"	ROAD NARROWS	SEE 2009 MUTCD			2	SEE 2009 MUTCD				18.00
W1-4R	36"	36"	ROAD NARROWS	SEE 2009 MUTCD			2	SEE 2009 MUTCD				18.00
W13-1	18"	18"	XX MPH				4					9.00
W5-1	36"	36"	ROAD NARROWS				2					18.00
W20-1c	36"	36"	ROAD WORK AHEAD				4					36.00
W20-4c	36"	36"	ONE LANE ROAD AHEAD				2					18.00
W21-5aR	36"	36"	RIGHT SHOULDER CLOSED				1					9.00
W20-7A	36"	36"	ROAD WORK AHEAD				2					18.00
OR	OR	OR	OR				OR					OR
MA-W20-8	36"	36"	POLICE OFFICER AHEAD	SEE MASSDOT STANDARDS			2					18.00

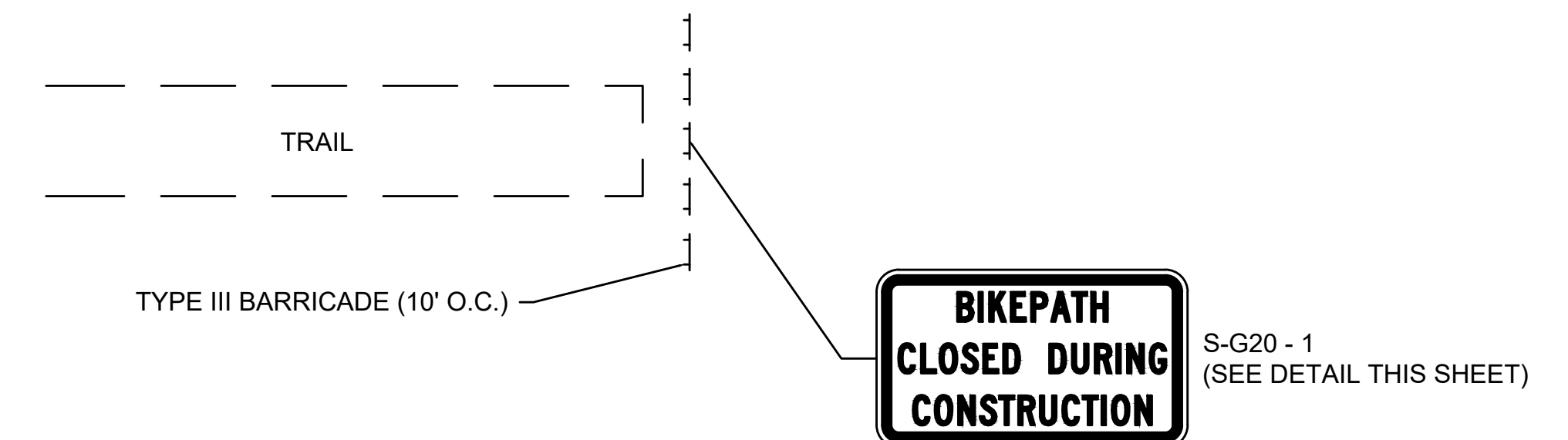
**LEGEND**

- REFLECTORIZED DRUM
- SIGN ON SUPPORT
- TYPE III BARRICADE WITH WARNING LIGHTS
- ▨ WORK ZONE
- P/F POLICE OFFICER/FLAGGER

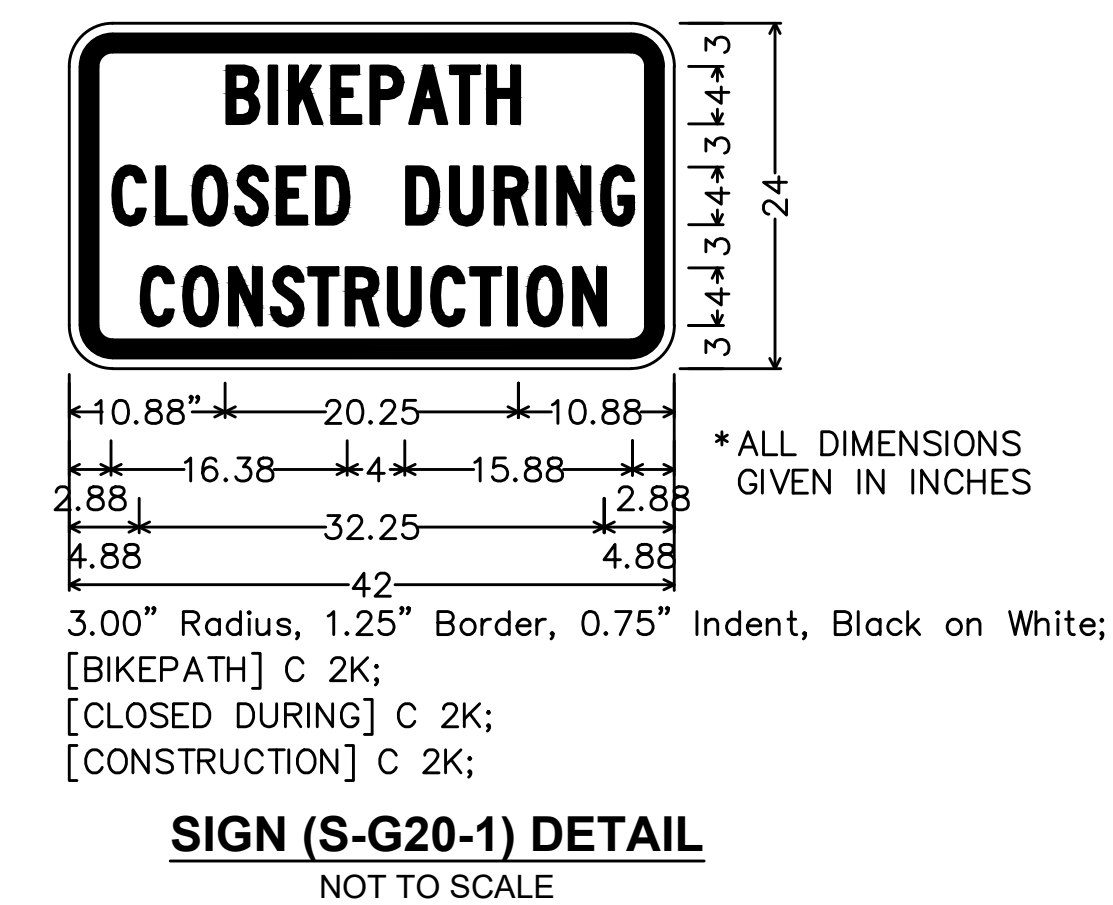


**NOTES:**

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE 2009 EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND MASSACHUSETTS AMENDMENTS.
- ALL SIGN LEGENDS, BORDERS AND MOUNTING SHALL BE IN ACCORDANCE WITH THE 2009 MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, AND REFLECTORIZED PLASTIC DRUMS WITH LIGHTING DEVICES MOUNTED ON THEM, SHALL PASS THE CRITERIA SET FORTH IN NCHRP REPORT 350, "RECOMMENDED PROCEDURES FOR THE SAFETY PERFORMANCE EVALUATION OF HIGHWAY FEATURES."
- CONTRACTOR SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT AND SIMILAR OPERATIONS.
- THE FIRST TEN PLASTIC REFLECTORIZED DRUMS OF A TAPER SHALL BE MOUNTED WITH SEQUENTIAL FLASHING LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH SHALL BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.
- ALL TEMPORARY WALKWAYS SHALL MEET ADA/AAB GUIDELINES.
- NO LANE CLOSURE WILL BE PERMITTED DURING PEAK HOUR TRAFFIC.



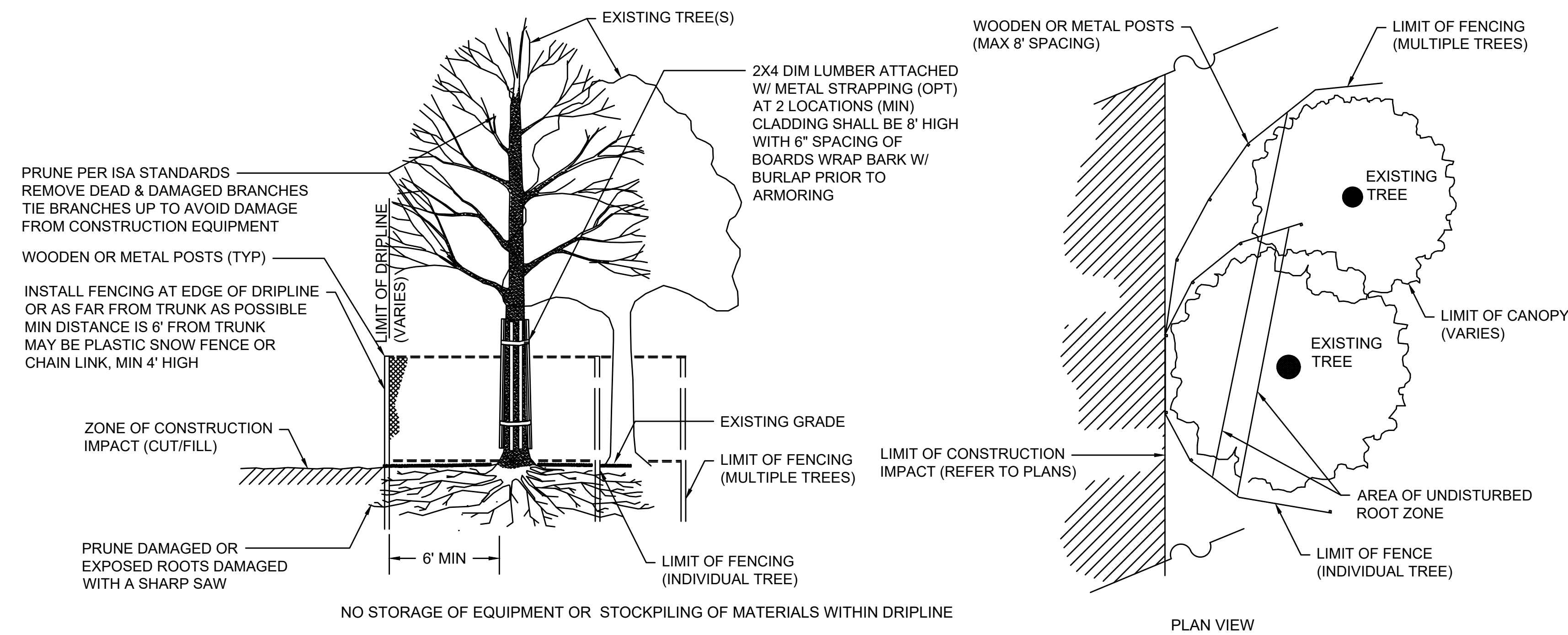
**TYPICAL PATH CLOSURE**  
NOT TO SCALE



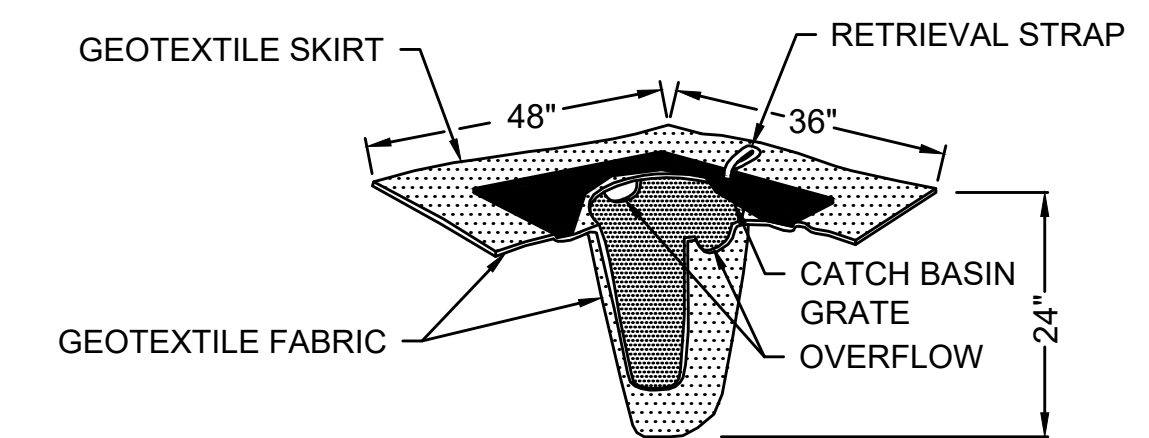
**SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL**

STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	12	18
STANTEC PROJECT NO. 179410549			

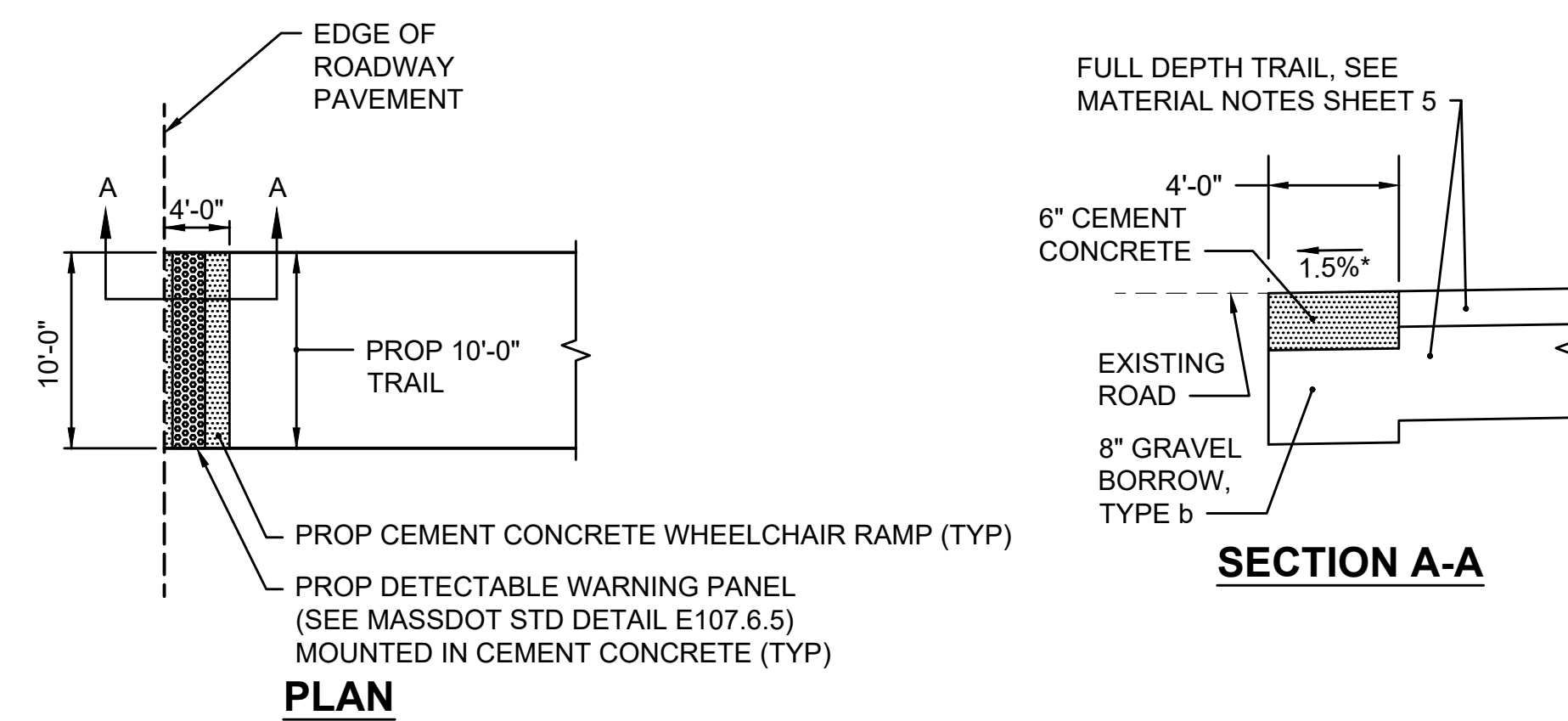
**CONSTRUCTION DETAILS  
PART 1 OF 2**



**TREE PROTECTION - EXISTING TREE(S)**  
NOT TO SCALE



**SILT SACK FOR SEDIMENT CONTROL**  
NOT TO SCALE



**DETECTABLE WARNING PANEL AT TRAIL INTERSECTION**  
NOT TO SCALE

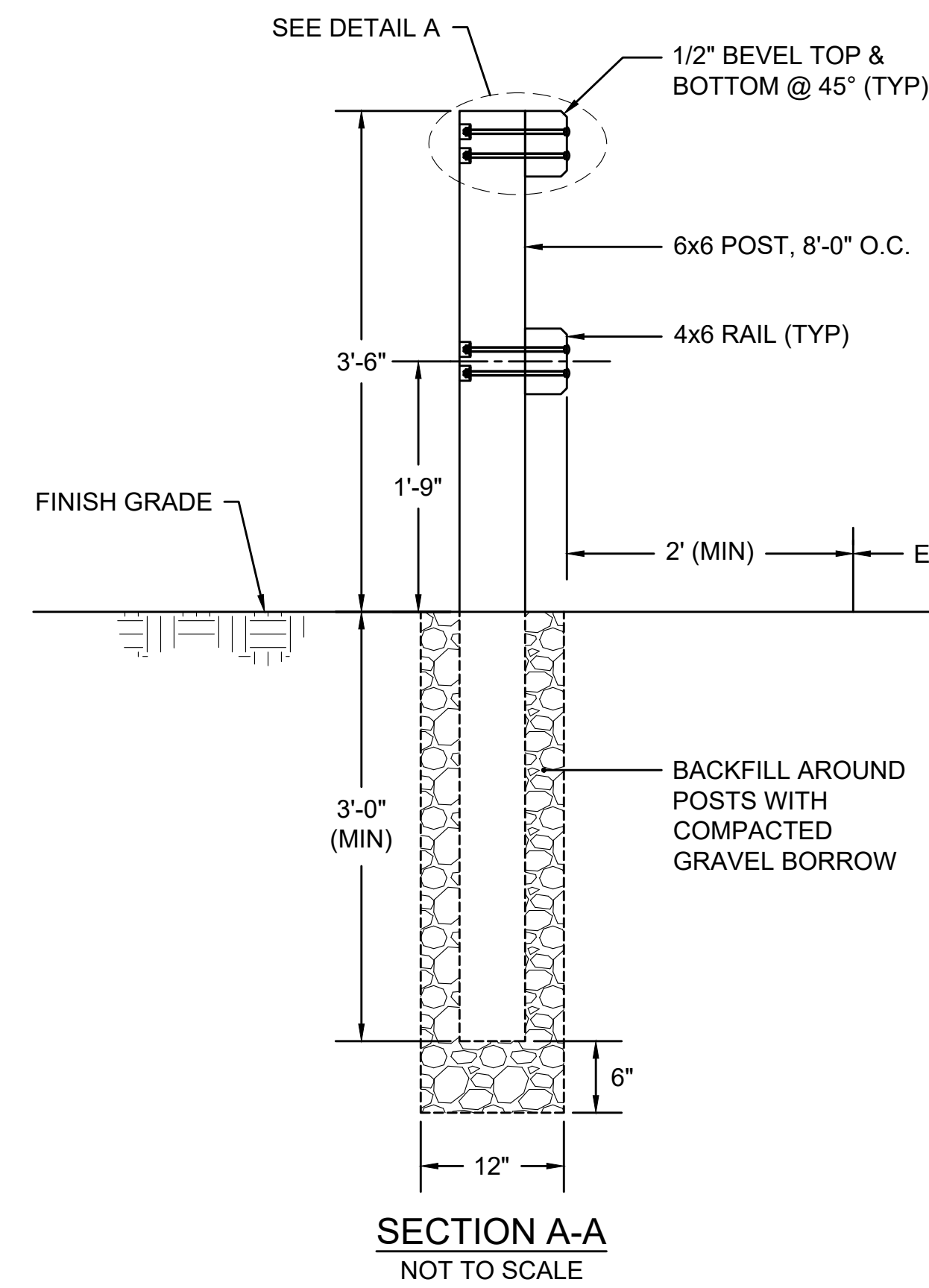
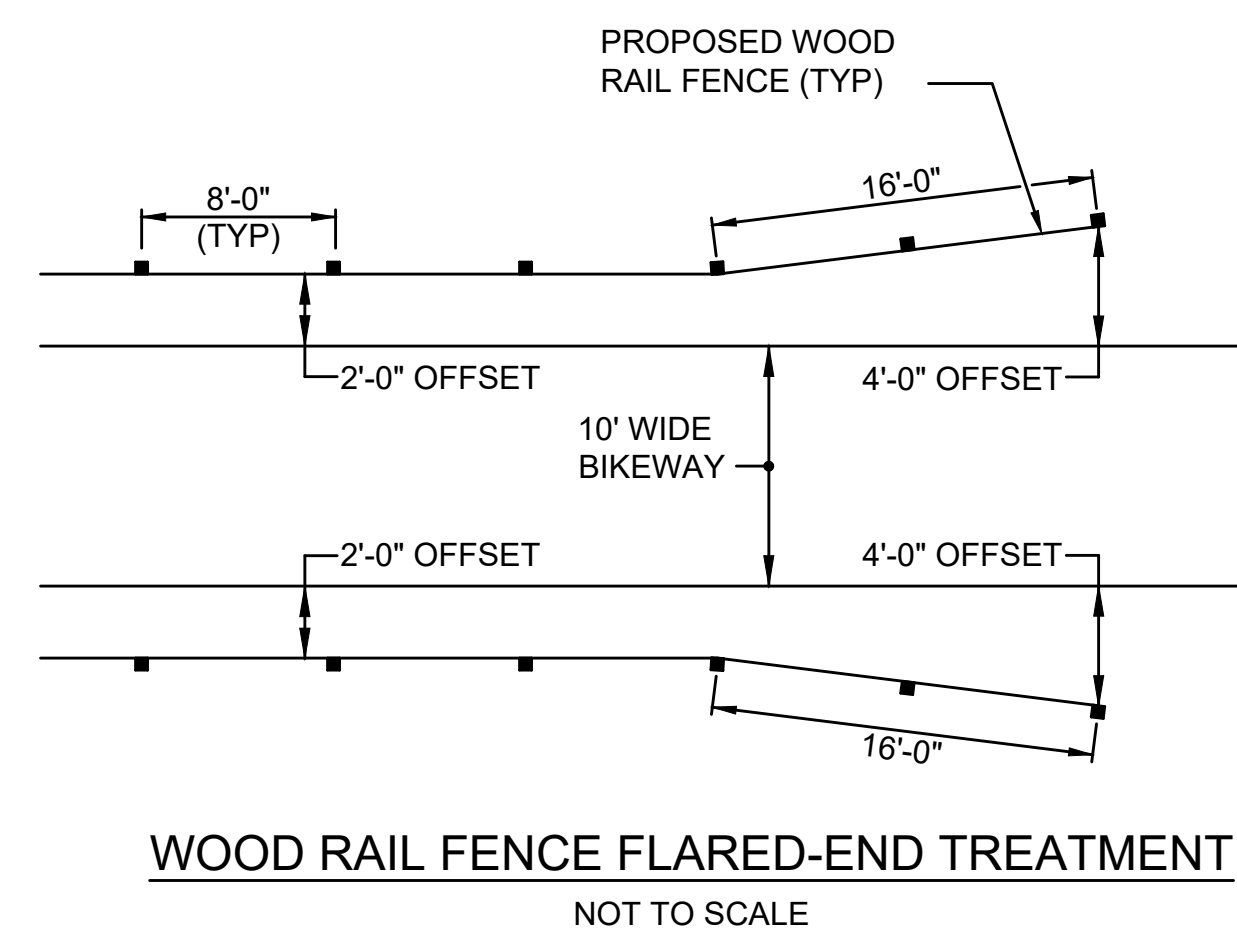
**NOTES:**

1. WHEELCHAIR RAMPS AND DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MASSDOT CONSTRUCTION STANDARD DRAWINGS NUMBERED 107.2.0, 107.2.1, 107.6.0, 107.6.4, 107.6.5, 107.7.0 AND 107.9.0 AND ADA/ MA AAB REQUIREMENTS.
  2. DETECTABLE WARNING PANELS ARE REQUIRED ON ALL PROPOSED WHEELCHAIR RAMPS AND ARE TO BE INSTALLED IN ACCORDANCE WITH CONSTRUCTION STANDARD 107.6.5. DETECTIBLE WARNING PANELS SHALL BE PLACED PERPENDICULAR TO THE PATH OF TRAVEL AND NOT THE CURB LINE.
  3. ALL DETECTABLE WARNING PANELS SHALL BE CAST IRON AND MOUNTED IN CEMENT CONCRETE.
- \* TOLERANCE FOR CONSTRUCTION ±0.5% (TYP.)

**SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL**

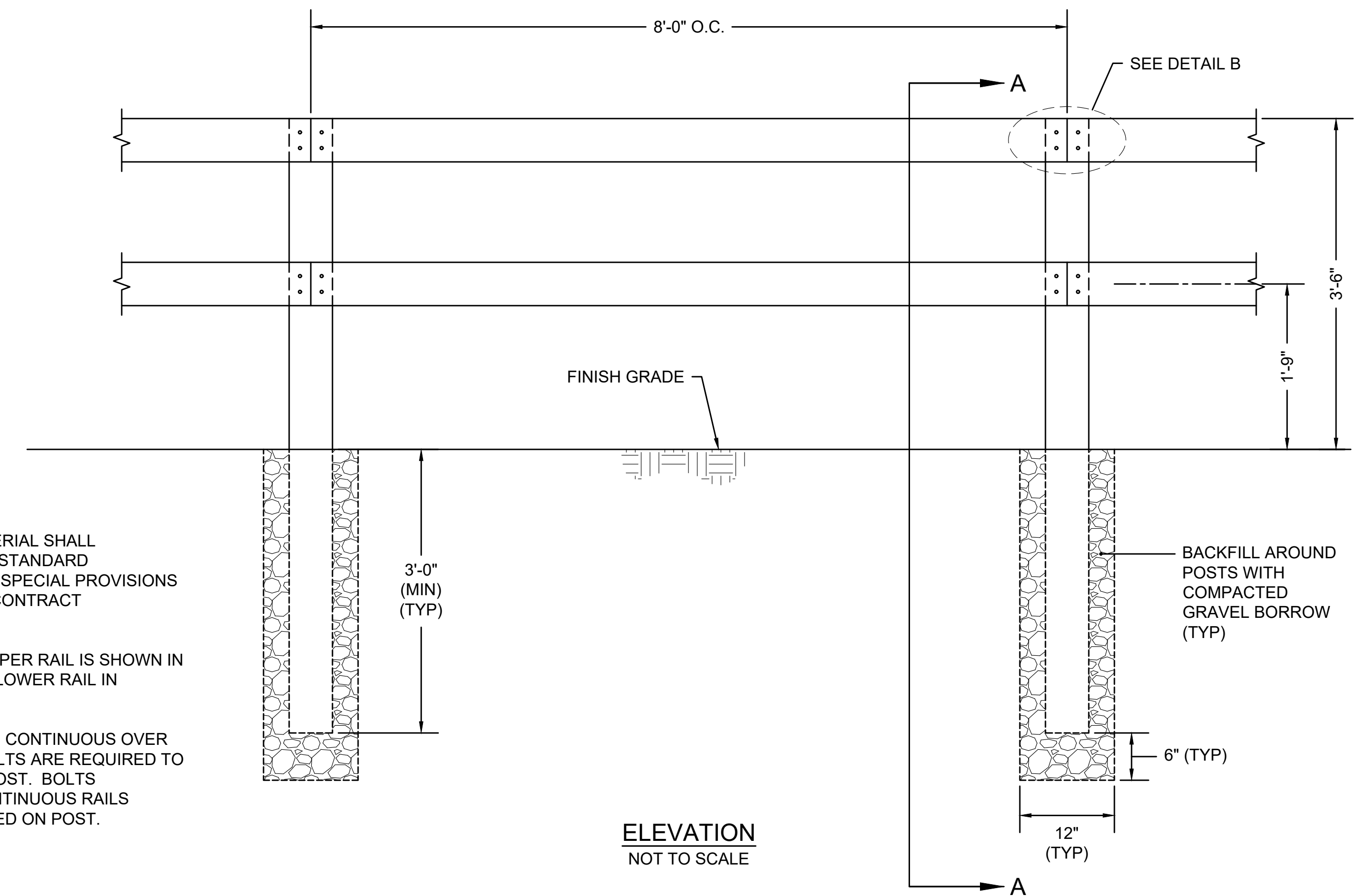
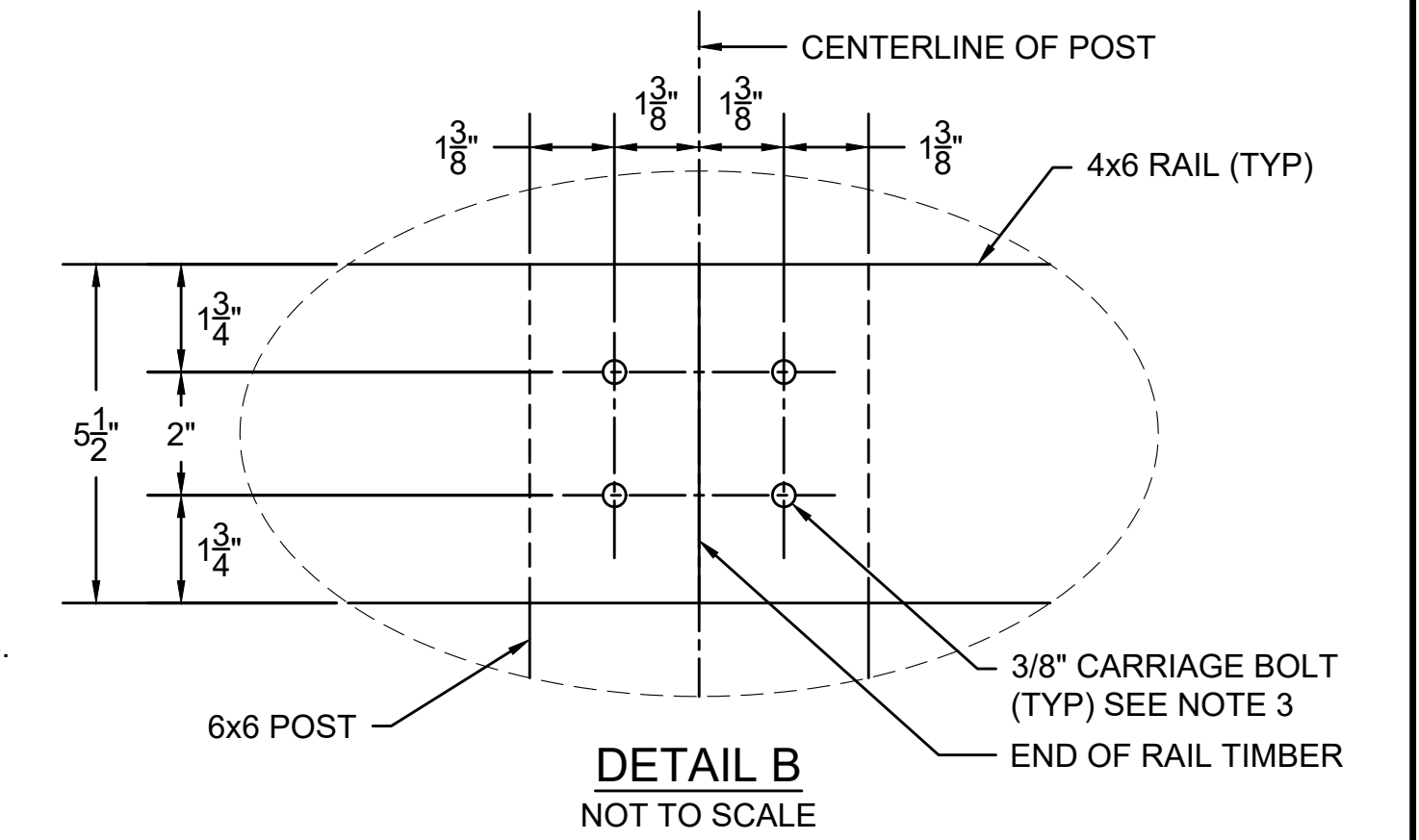
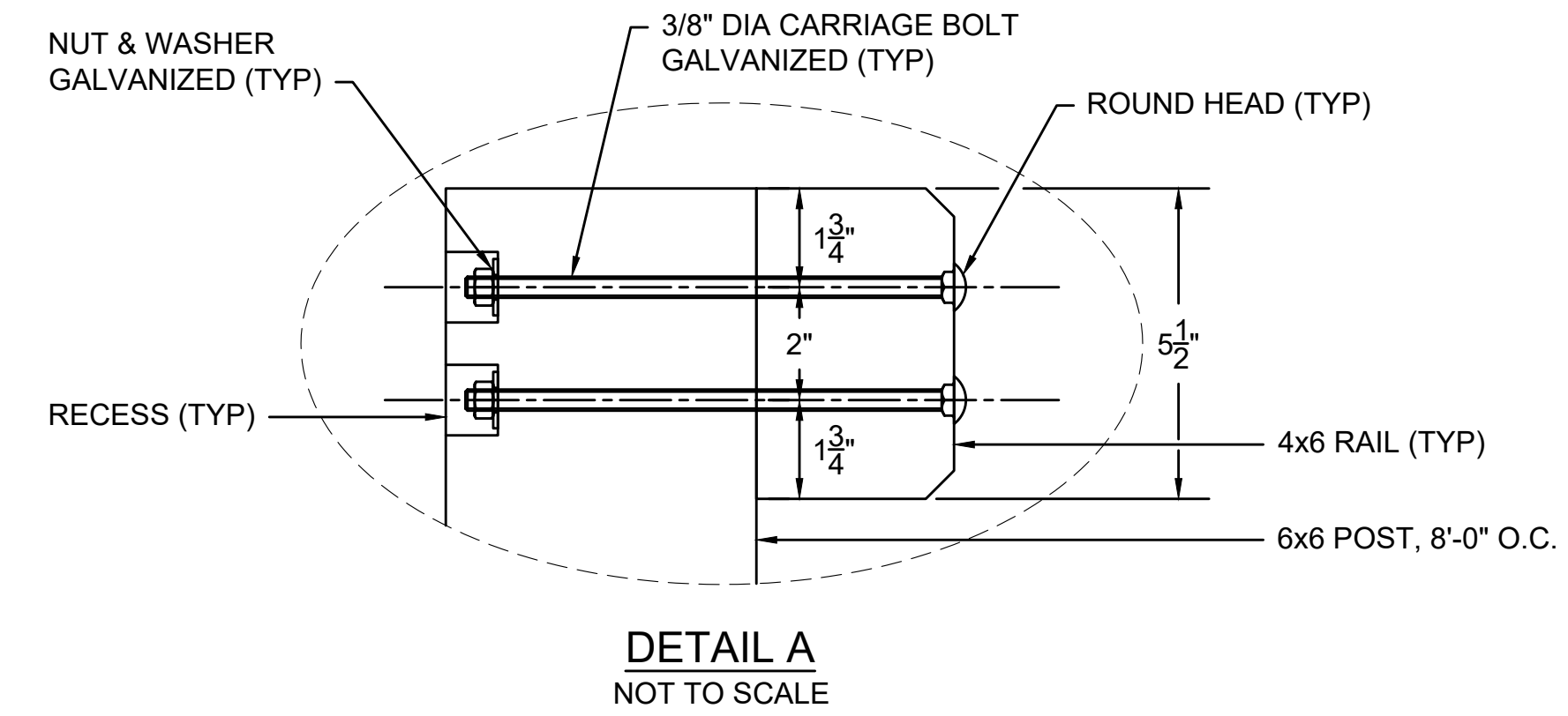
STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	13	18

STANTEC PROJECT NO. 179410549  
CONSTRUCTION DETAILS  
PART 2 OF 2



**NOTES:**

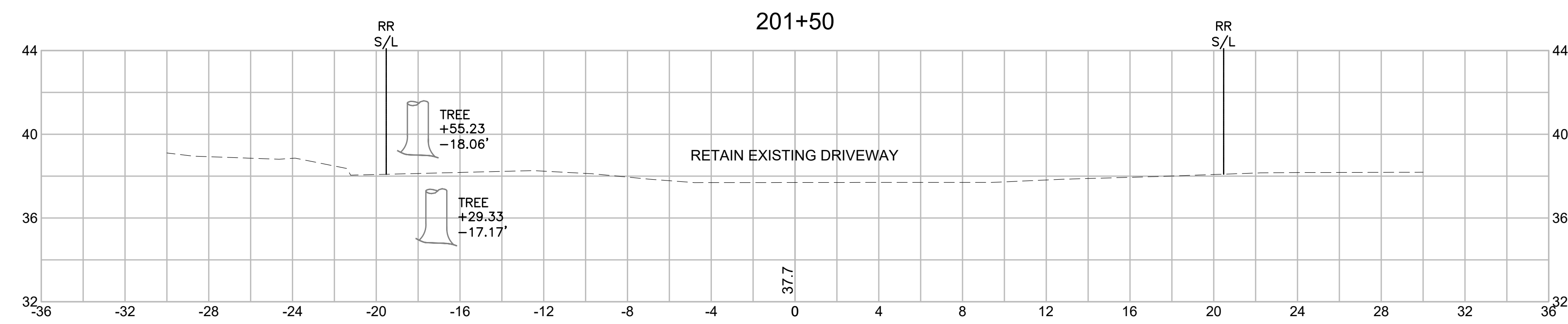
1. ALL FENCING MATERIAL SHALL CONFORM TO THE STANDARD SPECIFICATIONS & SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
2. MOUNTING FOR UPPER RAIL IS SHOWN IN DETAIL A. MOUNT LOWER RAIL IN SIMILAR FASHION.
3. IF A RAIL TIMBER IS CONTINUOUS OVER A POST ONLY 2 BOLTS ARE REQUIRED TO ATTACH RAIL TO POST. BOLTS INSTALLED ON CONTINUOUS RAILS SHALL BE CENTERED ON POST.



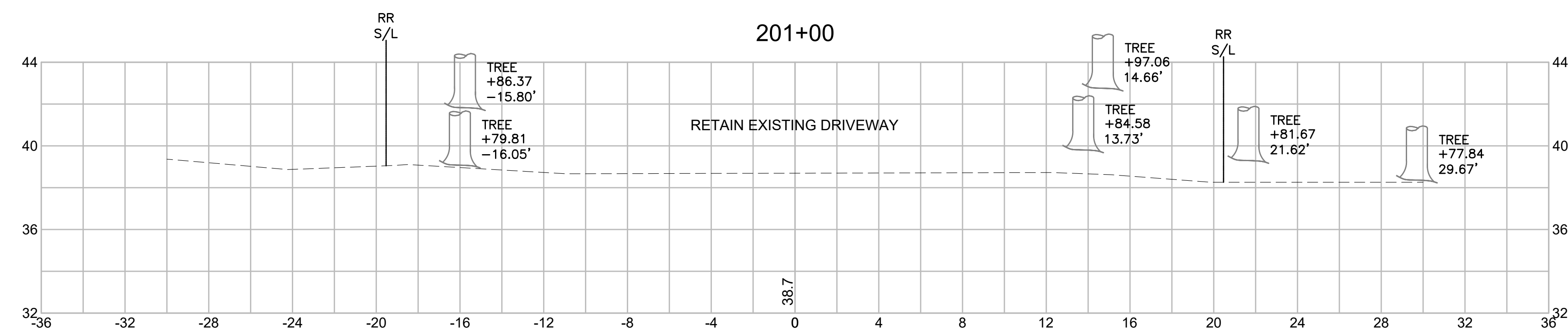
SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL

STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	14	18

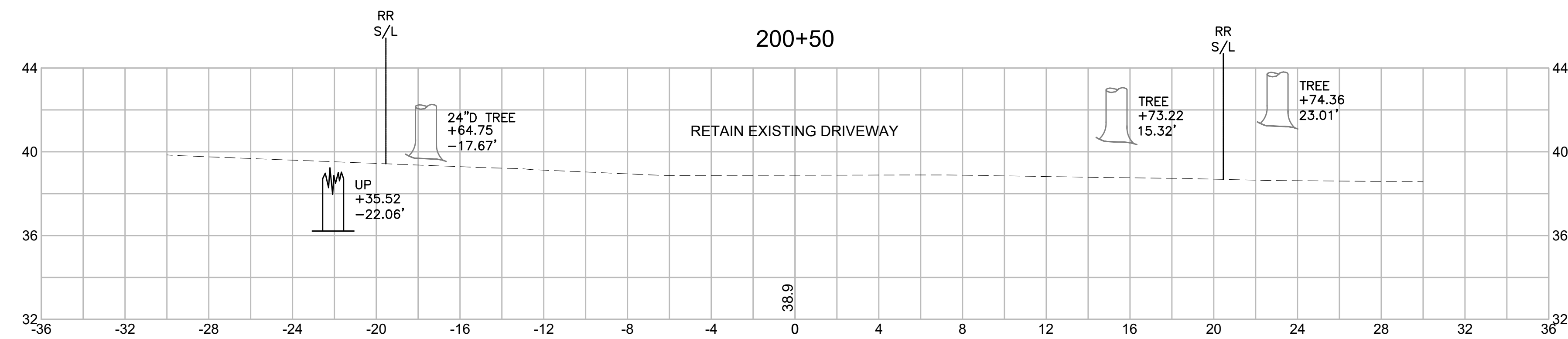
STANTEC PROJECT NO. 179410549  
CROSS SECTIONS  
PART 1 OF 5



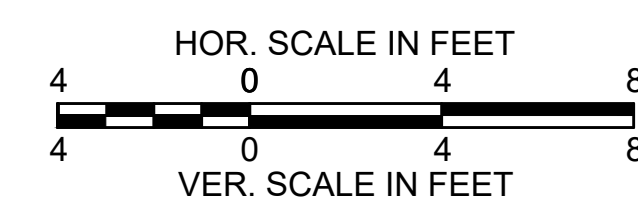
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FILL = 0.00SF



CUT = 0.00SF  
FILL = 0.00SF



CUT = 0.00SF  
FILL = 0.00SF



SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL

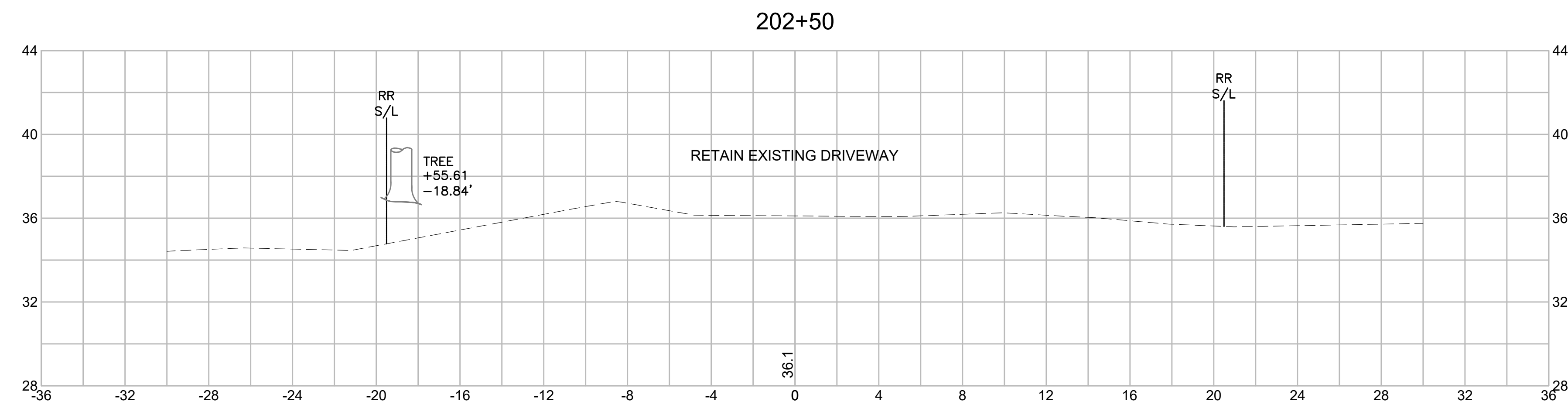
STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	15	18

STANTEC PROJECT NO. 179410549

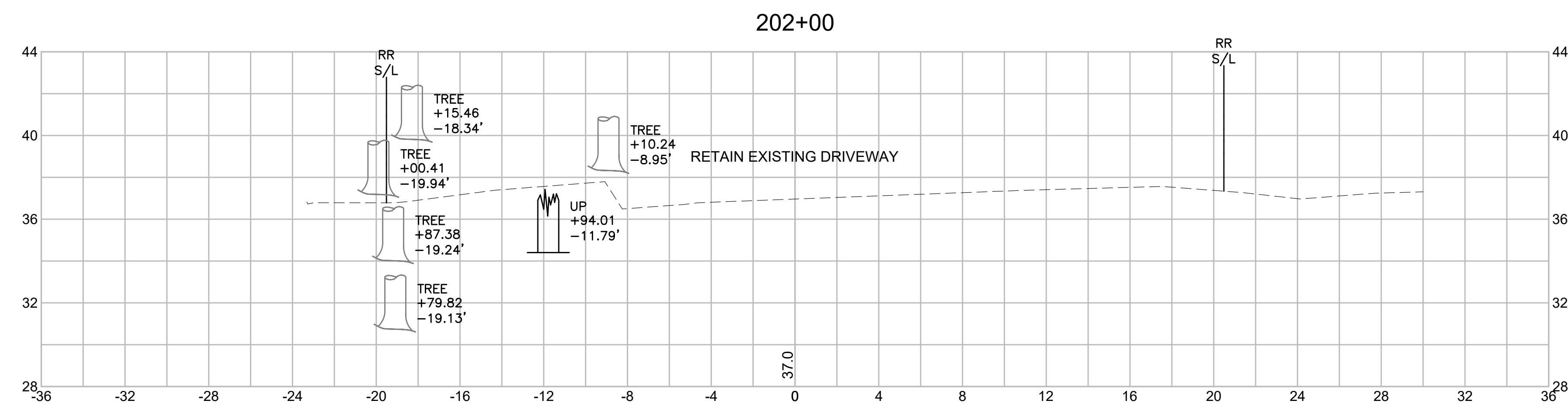
CROSS SECTIONS  
PART 2 OF 5



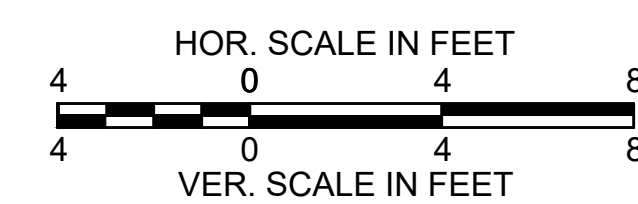
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CUT = 0.00SF  
FILL = 0.00SF



CUT = 0.00SF  
FILL = 0.00SF

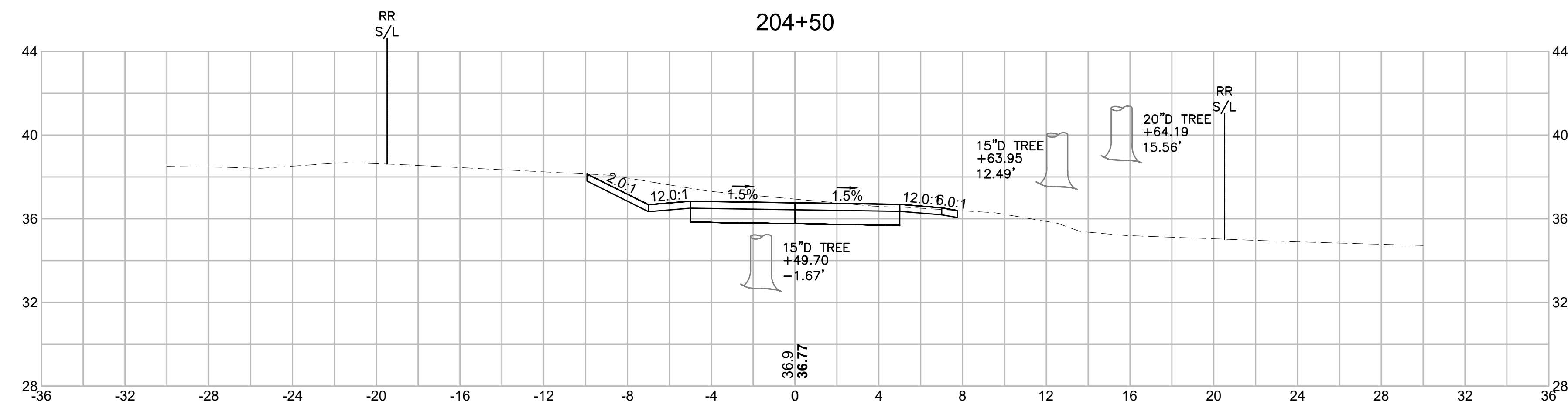


**SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL**

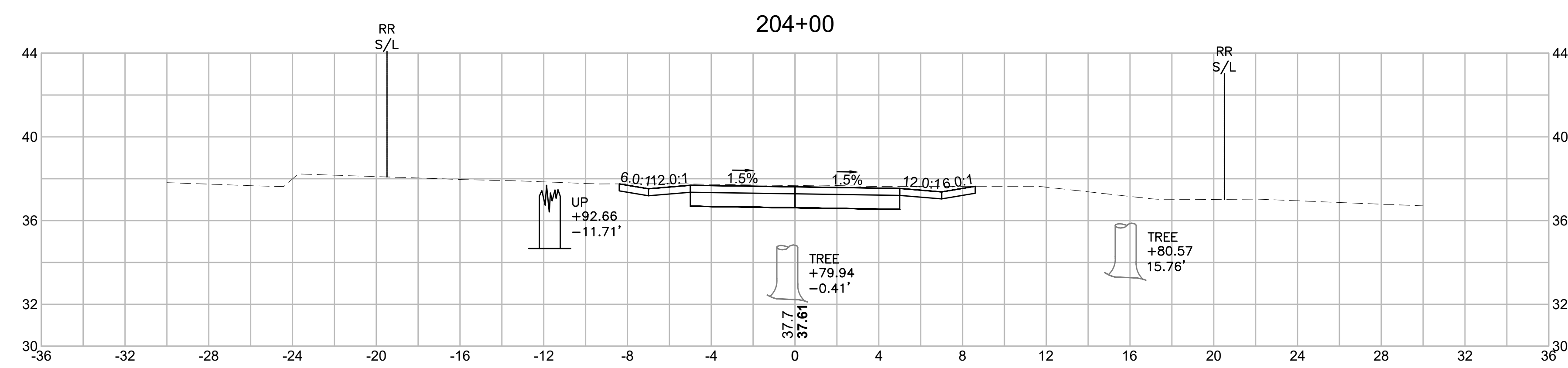
STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	16	18

STANTEC PROJECT NO. 179410549

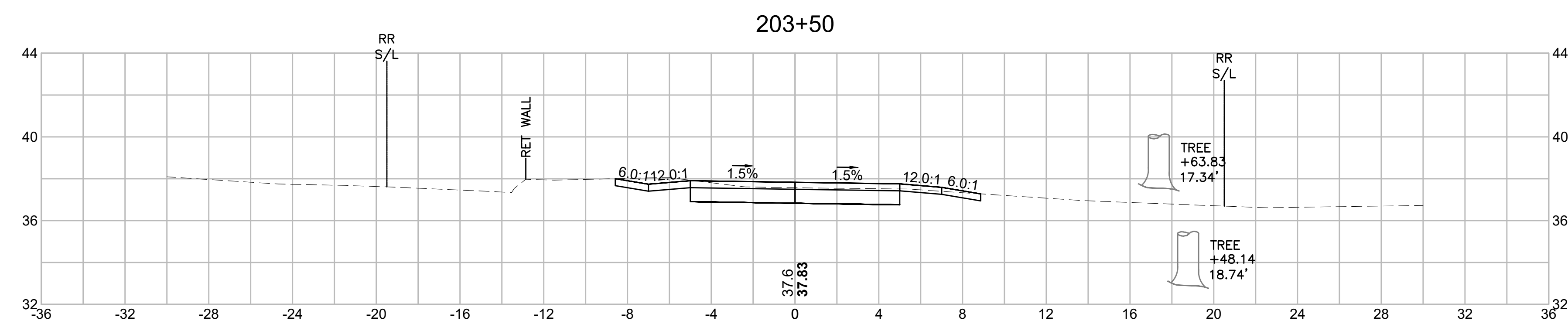
**CROSS SECTIONS  
PART 3 OF 5**



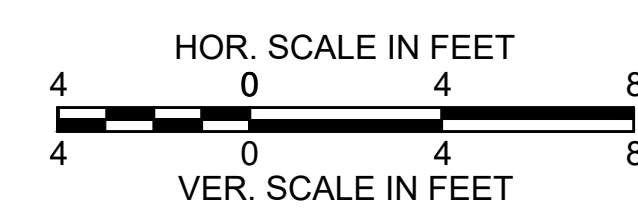
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CUT = 14.11SF  
FILL = 0.00SF



CUT = 10.36SF  
FILL = 0.00SF



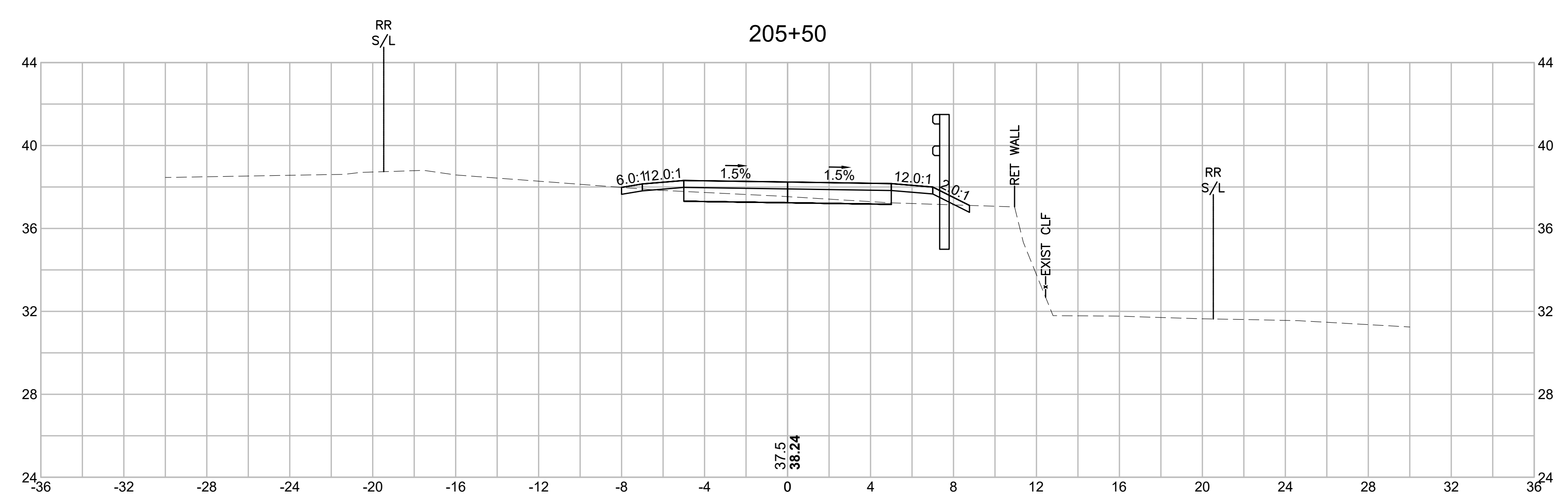


**SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL**

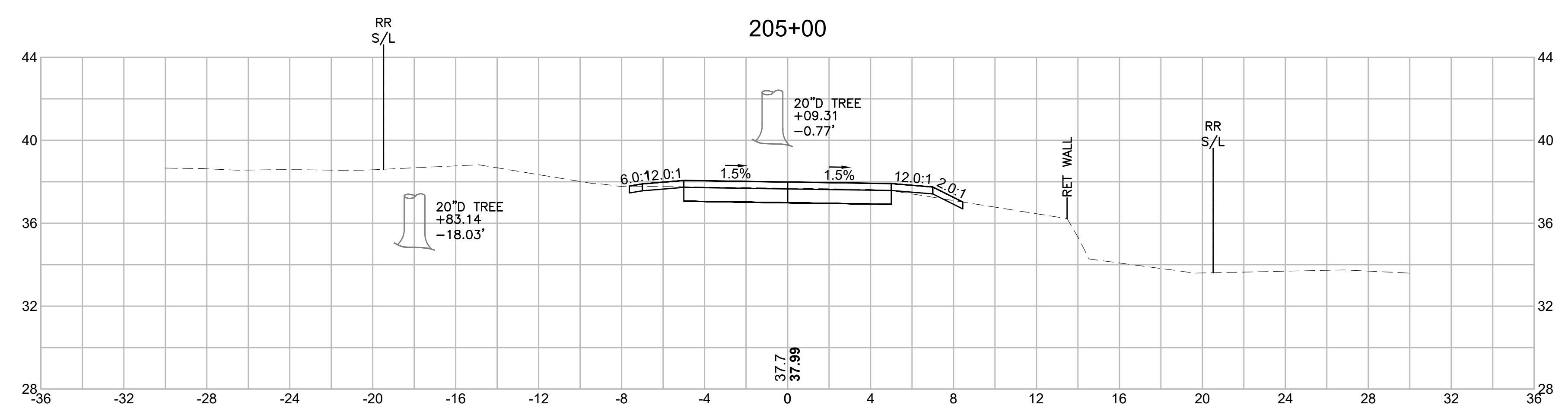
STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	17	18

STANTEC PROJECT NO. 179410549

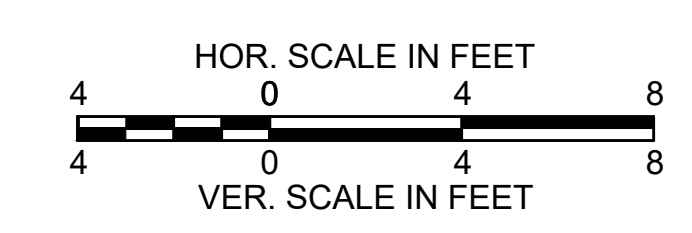
**CROSS SECTIONS  
PART 4 OF 5**



CUT = 3.20SF  
FILL = 1.49SF



CUT = 7.56SF  
FILL = 0.20SF

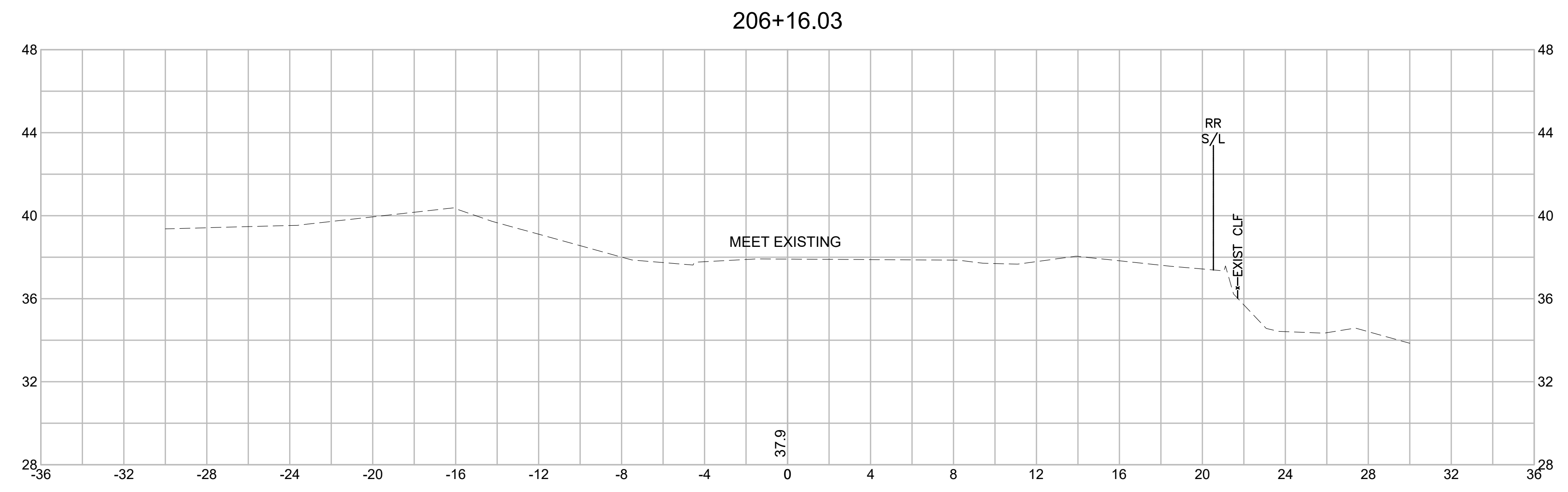


SWAMPSCOTT  
SWAMPSCOTT RAIL TRAIL

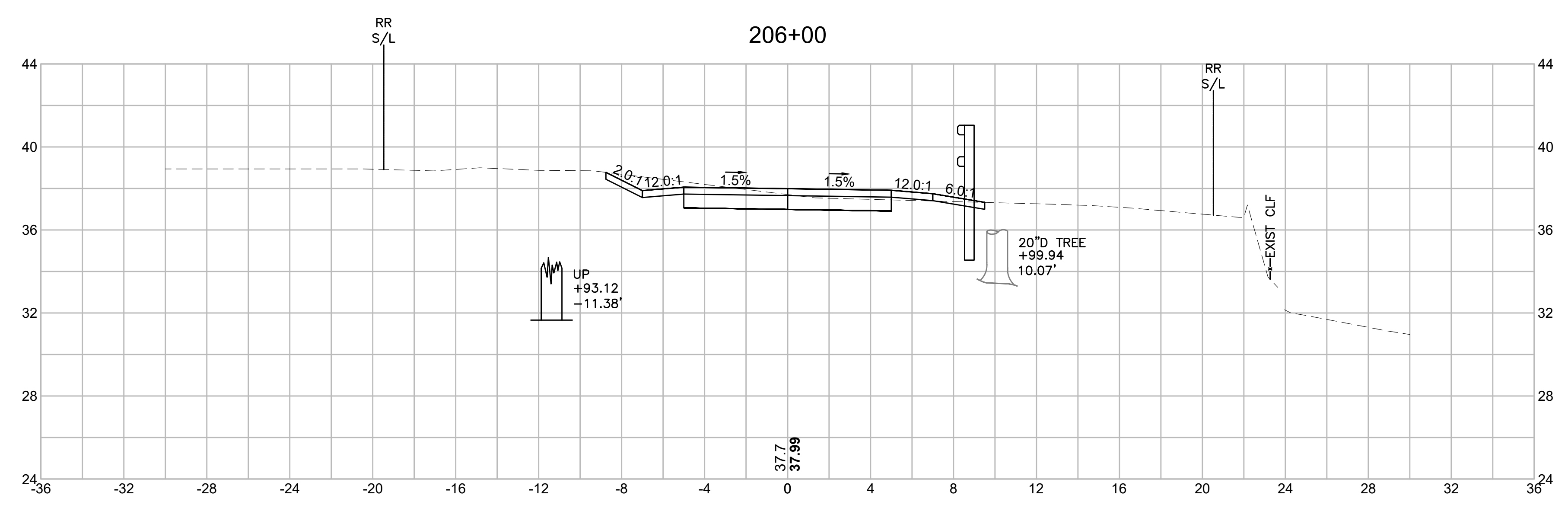
STATE	SUBMISSION	SHEET NO.	TOTAL SHEETS
MA	FOR BID: 2020-04-06	18	18

STANTEC PROJECT NO. 179410549

CROSS SECTIONS  
PART 5 OF 5



CUT = 0.00SF  
FILL = 0.00SF



CUT = 10.99SF  
FILL = 0.15SF

