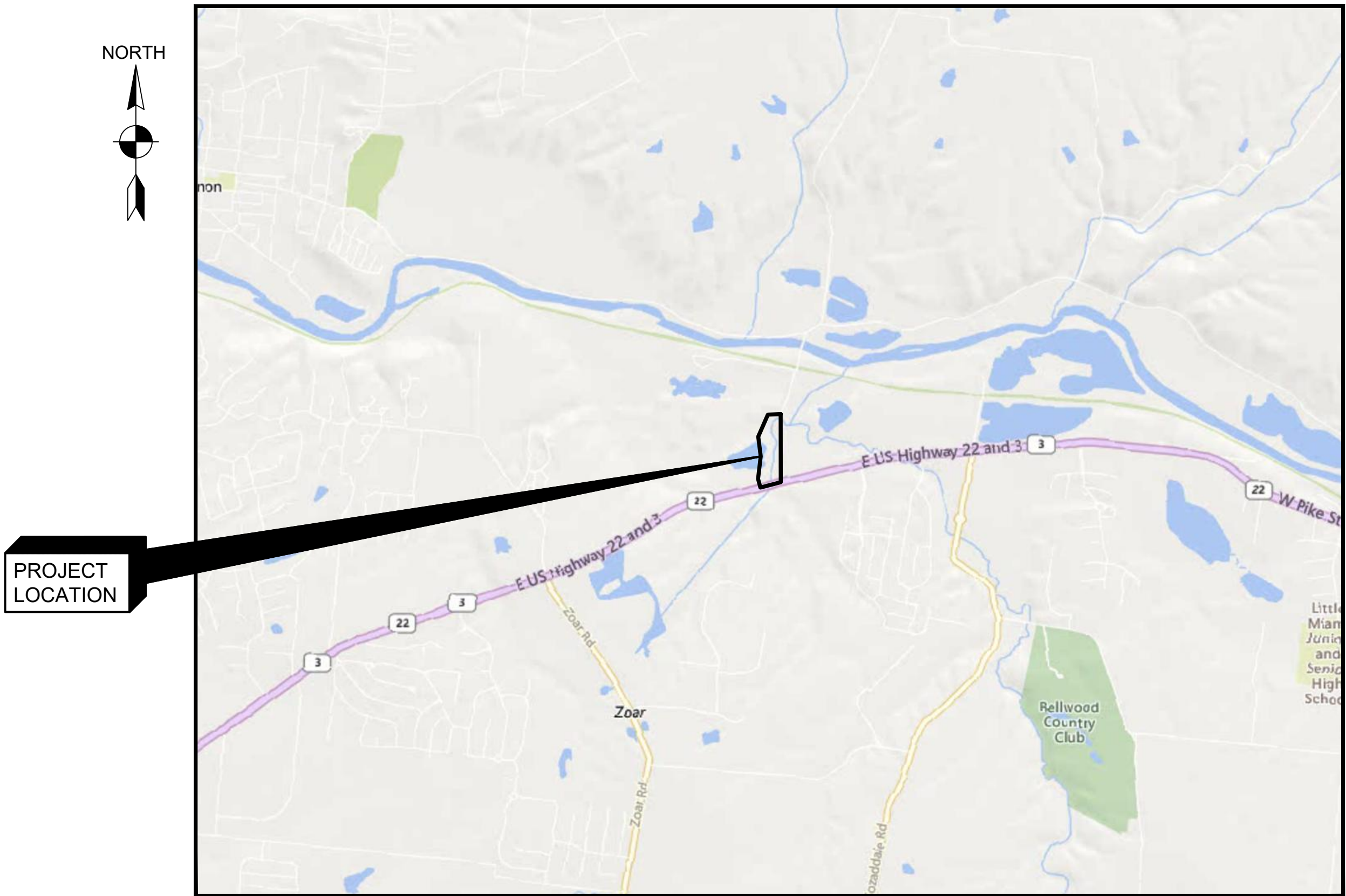


# HAMILTON TOWNSHIP

## MOUNTS PARK STREAM RESTORATION AND IMPROVEMENTS - PHASE 1 WITH PHASE 3 ALTERNATE

PROJECT NO. 173410744  
SEPTEMBER 8, 2025



VICINITY MAP  
NOT TO SCALE

UNDERGROUND UTILITIES  
2 WORKING DAYS  
BEFORE YOU DIG  
CALL 800.362.2764  
OHIO UTILITIES PROTECTION  
SERVICE  
NON-MEMBERS MUST BE  
CONTACTED DIRECTLY



JEFF WRIGHT  
TOWNSHIP ADMINISTRATOR  
HAMILTON TOWNSHIP  
  
*Bryce Rizzo*  
BRYCE RIZZO, PE  
PROJECT ENGINEER  
STANTEC CONSULTING SERVICES, INC

State of Ohio  
State Board of Registration for  
Professional Engineers and Surveyors  
**2024 – 2025**  
Professional Engineer  
**Bryce Rizzo**  
PE.91671 Expiration Date: 12/31/2025

*Megan O'Callaghan*  
BOARD CHAIRMAN

*John Greenhalgh*  
EXECUTIVE DIRECTOR







U:\17341074\17341074\TECHNICAL\_PRODUCTION\DRAWING\PRE-CONSTRUCTION\SUBMITTAL SHEET\_FILES\G-0-002-2023-NOTES.DWG - G-0-003-GENERAL NOTES - STANTEC\_SCREEN.CTB - PLOTTED 9/8/2025 10:41 AM BY RACE, CASEY

ADDITIONAL COMPENSATION

THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, SERVICES, AND RELATED ACCESSORIES FOR A COMPLETE PROJECT AS SHOWN AND DESCRIBED IN THE PLANS AND SPECIFICATIONS. THE PRICE FOR ITEMS OF WORK OR MATERIALS SHOWN ON THE PLANS OR PROVIDED FOR IN THE SPECIFICATIONS FOR WHICH NO SEPARATE UNIT PRICE IS GIVEN SHALL BE DISTRIBUTED AMONG THE VARIOUS BID ITEMS. SUBMISSION OF A BID SHALL BE CONSIDERED EVIDENCE THAT THE BIDDER IS SATISFIED WITH THE PLANS AND CONDITIONS AS SHOWN. NO ADDITIONAL COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR COMPLIANCE WITH THE PLANS, SPECIFICATIONS.

CONTRACTOR REQUIREMENTS

THE CONTRACTOR SHALL SUBMIT THE FOLLOWING SUBMITTALS 30 DAYS PRIOR TO STARTING WORK AT THE SITE:

CONTROL OF WATER PLAN

THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY ACCESS TO THE WORK AREAS, DEWATERING OR ISOLATING THE WORK AREA FROM INFLOW AS NECESSARY, AND PROVIDING AND MAINTAINING EROSION CONTROL MEASURES IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.

ALL DISCHARGE FROM DEWATERING ACTIVITIES SHALL PASS THROUGH A SEDIMENT CONTROL MEASURE SUCH AS A DEWATERING FILTER BAG OR APPROVED EQUAL PRIOR TO BEING DISCHARGED TO THE OPEN CHANNEL. BYPASS FLOW IS NOT REQUIRED TO BE UNTREATED. RELEASE OF WATER FROM DEWATERING ACTIVITIES IS NOT PERMITTED.

THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES NECESSARY TO PROTECT EXISTING FEATURES, INFRASTRUCTURE, AND UTILITIES WHICH ARE TO REMAIN IN PLACE FROM DAMAGE. ALL EXISTING FEATURES, INFRASTRUCTURE, AND UTILITIES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED AT THE CONTRACTOR'S EXPENSE WITHOUT ADDITIONAL COMPENSATION.

THE CONTRACTOR SHALL DISPOSE OF ALL NON-ORGANIC WASTES SUCH AS OLD GUNITE, PIPING, ROCK RUBBLE ETC. AT AN APPROVED LANDFILL OR, OTHER SUITABLE DISPOSAL SITES AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL OBSERVE AND CONFORM TO THE SPECIFIC REQUIREMENTS OF ALL RIGHTS-OF-WAY INCLUDING EASEMENTS, COURT ENTRIES, AND RIGHTS OF ENTRY OR ACTION FILED IN COURT IN ACCORDANCE WITH THE CODE OF THE APPLICABLE GOVERNING AGENCY.

GRADES AND ELEVATIONS SHOWN ON THE PLANS SHALL NOT BE REVISED UNDER ANY CIRCUMSTANCES WITHOUT FIRST OBTAINING APPROVAL FROM ENGINEER. INVERT ELEVATIONS OF IN-STREAM STRUCTURES SHALL NOT DEVIATE FROM THE PLAN ELEVATIONS BY MORE THAN 0.1 FOOT.

NON-RUBBER TIRED VEHICLES: NON-RUBBER TIRED VEHICLES SHALL NOT BE OPERATED ON PUBLIC STREETS OR ROADS. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ADJACENT ROADWAYS IN GOOD DRIVING CONDITION THROUGHOUT THE DURATION OF THE PROJECT. HAMILTON TOWNSHIP MAY GRANT OTHER EXCEPTIONS WHERE SHORT DISTANCES AND SPECIAL CIRCUMSTANCES ARE INVOLVED. GRANTING OF EXCEPTIONS MUST BE IN WRITING AND ANY RESULTING DAMAGE MUST BE REPAIRED TO THE SATISFACTION OF THE APPROPRIATE JURISDICTION.

SAFETY: THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REQUIREMENTS. TOGETHER WITH EXERCISING PRECAUTIONS AT ALL TIMES FOR THE PROTECTION OF PERSONS (INCLUDING EMPLOYEES) AND PROPERTY, IT IS ALSO THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO INITIATE, MAINTAIN, AND SUPERVISE ALL SAFETY REQUIREMENTS, PRECAUTIONS, AND PROGRAMS IN CONNECTION WITH THE WORK.

CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT ANY INCIDENTAL DISCHARGES ASSOCIATED WITH THE EXCAVATION AND HAULING OF MATERIAL. THIS PERTAINS TO ANY EXCAVATION OPERATIONS ONSITE.

TEMPORARY CONSTRUCTION FILL: ANY TEMPORARY CONSTRUCTION ACCESS FILL WITHIN "WATERS OF THE US" (EG., STREAMS, WETLANDS) SUBJECT TO US ARMY CORPS OF ENGINEERS (USACE) REGULATORY JURISDICTION WILL REQUIRE AUTHORIZATION BY THE USACE PRIOR TO THE PLACEMENT OF TEMPORARY FILL VIA THE WATERWAY PERMITTING PROCESS (404/401). ALL TEMPORARY CONSTRUCTION ACCESS FILLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE APPLICABLE WATERWAY PERMITS (404/401) AND SHALL NOT EXCEED THE QUANTITIES AND/OR SURFACE AREA OF TEMPORARY FILL THAT HAS BEEN PERMITTED. ADDITIONALLY, SOME TEMPORARY CONSTRUCTION ACCESS FILLS MAY ONLY BE ALLOWED IN SPECIFIC LOCATIONS, PER THE WATERWAY PERMITS (404/401) AND/OR OTHER ENVIRONMENTAL COMMITMENTS AND SHOULD BE CONSTRUCTED IN ACCORDANCE WITH ANY SUCH LOCATIONAL RESTRICTIONS TO AVOID ENVIRONMENTALLY SENSITIVE AREAS. THE WATERWAY PERMITS ARE INCLUDED AS PART OF CONTRACT DOCUMENTS.

MATERIAL SHALL BE DISPOSED OF OFF-SITE AT A LOCATION ARRANGED BY THE CONTRACTOR IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS REGARDING THE DISPOSAL OF SUCH MATERIAL.

CONSTRUCTION LIMITS

PROJECT LIMITS ARE SHOWN ON THE DRAWINGS.

NATIONWIDE PERMIT REQUIREMENTS

THE CONTRACTOR SHALL COMPLY WITH THE TERMS AND CONDITIONS FOR 401 AND 404 PERMITS AS ATTACHED IN THE CONTRACT DOCUMENTS.

NO TREES SHALL BE REMOVED OUTSIDE OF THE DISTURBANCE LIMITS AS SHOWN ON THE PLANS WITHOUT EXPLICIT WRITTEN PERMISSION PROVIDED TO THE CONTRACTOR BY HAMILTON TOWNSHIP.

A MIST-NET SURVEY WAS NOT PERFORMED FOR THIS PROJECT. THEREFORE, SEASONAL CLEARING RESTRICTIONS WILL APPLY. TREES GREATER THAN 3" DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED BETWEEN APRIL 1ST AND SEPTEMBER 30TH.

IF AT ANY TIME THERE ARE CHANGES TO THE SCOPE OF THE PROJECT THAT ARE NOT IN COMPLIANCE WITH THE PERMIT INVOLVING IMPACTS TO STREAMS OR WETLANDS, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER BEFORE BEGINNING MODIFIED WORK.

NO WORK SHALL BE PERFORMED THAT WOULD REQUIRE OHIO EPA, ODNR, OR ADDITIONAL USACE PERMITTING WITHOUT PRIOR CONSENT FROM HAMILTON TOWNSHIP AND THE APPLICABLE REGULATORY AGENCIES.

ACCESS TO PROJECT

CONTRACTOR SHALL BE SUBJECT TO THE REQUIREMENTS OF THE TOWNSHIP REGARDING ACCEPTABLE HAUL ROUTES. ALL HAULING ROUTES SHALL BE COORDINATED WITH HAMILTON TOWNSHIP BY THE CONTRACTOR.

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY LOCAL PERMITS AND PROVIDING ALL NECESSARY MAINTENANCE OF TRAFFIC MEASURES THAT MAY BE REQUIRED BY HAMILTON TOWNSHIP INCLUDING ANY MEASURES ABOVE AND BEYOND THOSE SHOWN ON THE PLANS AT THE CONTRACTORS EXPENSE.

SURVEY NOTES

- HORIZONTAL DATUM IS OHIO STATE PLANE, SOUTH ZONE NAD83(2011) GRID NORTH
- VERTICAL DATUM IS NAVD 1988.
- BASED ON GPS OBSERVATIONS PERFORMED IN MAY, 2024.
- PERTINENT RECORDS USED ARE AS SHOWN HEREON.
- THIS MAP AND THE SURVEY ON WHICH IT IS BASED HAVE BEEN PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT AND ARE NOT INTENDED TO REFLECT ALL EASEMENTS, ENCUMBRANCES, OR OTHER CIRCUMSTANCES AFFECTING THE TITLE TO THE PROPERTY SHOWN HEREON.
- THE UTILITIES, SEWERS AND THEIR LOCATIONS SHOWN HEREON ARE DERIVED FROM A COMBINATION OF FIELD SURVEYING OF VISIBLE UTILITY STRUCTURES, AVAILABLE PLANS AND A LEVEL C SUBSURFACE UTILITY INVESTIGATION. ACTUAL LOCATION OF UTILITIES MAY VARY FROM THE DEPICTED LOCATIONS. OTHER UNKNOWN UTILITIES MAY EXIST AND NECESSARY PRECAUTIONS SHOULD BE FOLLOWED WHEN EXCAVATING. ADDITIONAL INVESTIGATION SUCH AS VIDEOTAPING PIPE RUNS, NON-DESTRUCTIVE EXPOSURE OF UTILITIES MAY DETERMINE THE UNKNOWN UTILITY INFORMATION. CONTACT OHIO UTILITIES PROTECTION SERVICE (OUPS) AT 1-800-362-2764 PRIOR TO EXCAVATION.

UTILITIES

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES TO PREVENT DAMAGE DUE TO CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL OBSERVE THE LOCATION OF ALL OVERHEAD TELEPHONE AND ELECTRIC LINES IN THE WORK AREA AND TAKE ALL NECESSARY STEPS TO PREVENT DAMAGE TO THESE LINES, LOSS OF SERVICE, AND INJURY TO WORKERS.

PRIOR TO ANY EXCAVATION IN THE VICINITY OF ANY EXISTING UNDERGROUND FACILITIES, INCLUDING ALL WATER, SEWER, STORM DRAIN, GAS, PETROLEUM PRODUCTS, OR OTHER PIPELINES; ALL BURIED ELECTRIC POWER, COMMUNICATIONS, OR TELEVISION CABLES; ALL TRAFFIC SIGNAL AND STREET LIGHTING FACILITIES; AND ALL ROADWAY, STATE HIGHWAY, AND RAILROAD RIGHTS-OF-WAY, THE CONTRACTOR SHALL NOTIFY THE RESPECTIVE AUTHORITIES REPRESENTING THE OWNERS OR AGENCIES RESPONSIBLE FOR SUCH FACILITIES NOT LESS THAN 2 DAYS NOR MORE THAN 7 DAYS PRIOR TO EXCAVATION SO THAT A REPRESENTATIVE OF SAID OWNERS OR AGENCIES CAN BE PRESENT DURING SUCH WORK IF THEY SO DESIRE. EXPECT AS NOTED BELOW FOR WORK ADJACENT TO UNDERGROUND GAS LINES.

THE CONTRACTOR SHALL MAKE THEIR OWN INVESTIGATION INTO THE LOCATION OF UTILITIES WITHIN THE PROJECT SITE AND ANY WORK ASSOCIATED WITH THESE UTILITIES MUST BE APPROVED BY THEIR RESPECTIVE OWNERS AND HAMILTON TOWNSHIP. CONTRACTOR SHALL CALL OUPS 2 DAYS BEFORE INITIATING WORK.

TREE PROTECTION

CONTRACTOR SHALL NOT DAMAGE TREES AND OTHER DESIRABLE VEGETATION OUTSIDE THE PROJECT WORK AREA DURING CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL INSTALL TREE PROTECTION PER PLAN. ANY TREE OR AREA NOT DELINEATED FOR TREE CLEARING SHALL BE PROTECTED.

CONSTRUCTION PHASES

PHASE 1 OF THE MOUNTS PARK STREAM RESTORATION AND IMPROVEMENTS SHALL BE THE CONSTRUCTION OF TRIBUTARY 1. A CASCADE STEP-POOL CHANNEL CONVEYING FLOW FROM THE SOUTH OF THE SITE TO MOUNTS PARK LAKE. A BERM SHALL BE BUILT TO DISCOURAGE FLOWS FROM RETURNING TO THE ABANDONED CHANNEL.

PHASE 2 SHALL NOT BE INCLUDED AS PART OF THIS CONTRACT AND CONSTITUTES THE CONSTRUCTION OF A FLOODPLAIN SWALE TO CAPTURE FLOOD FLOWS OVERFLOWING STUBBS MILLS RD FROM BIGFOOT RUN. THE LENGTH OF THE ABANDONED CHANNEL BETWEEN THE SWALE AND THE RELICT CONFLUENCE OF FLOOD FLOWS AT MOUNTS PARK LAKE SHALL BE FILLED TO DISCOURAGE FLOW FROM CONTINUING TO FOLLOW THE EXISTING PATH

PHASE 3 SHALL INCLUDED THE FILLING OF THE ABANDONED CHANNEL FROM THE BERM AT TRIBUTARY 1 TO THE EXTENTS OF FILL DELINEATES FOR PHASE 3 IN THE GRADING PLANS.



0	9/8/2025	BR	ISSUED FOR CONSTRUCTION	
REV NO	DATE	ISSUED BY	REMARKS	

DESIGNED BY: \_\_\_\_\_ BR  
DRAWN BY: \_\_\_\_\_ CW  
SHEET CHK'D BY: \_\_\_\_\_ JS  
CROSS CHK'D BY: \_\_\_\_\_ BR  
APPROVED BY: \_\_\_\_\_ BR  
ISSUED DATE: \_\_\_\_\_ 9/8/2025

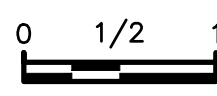


MOUNTS PARK STREAM RESTORATION  
AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

GENERAL  
GENERAL NOTES

WARNING



IF THIS BAR DOES  
NOT MEASURE 1"  
THEN DRAWING IS  
NOT TO SCALE

PROJECT SET: 03 of 15

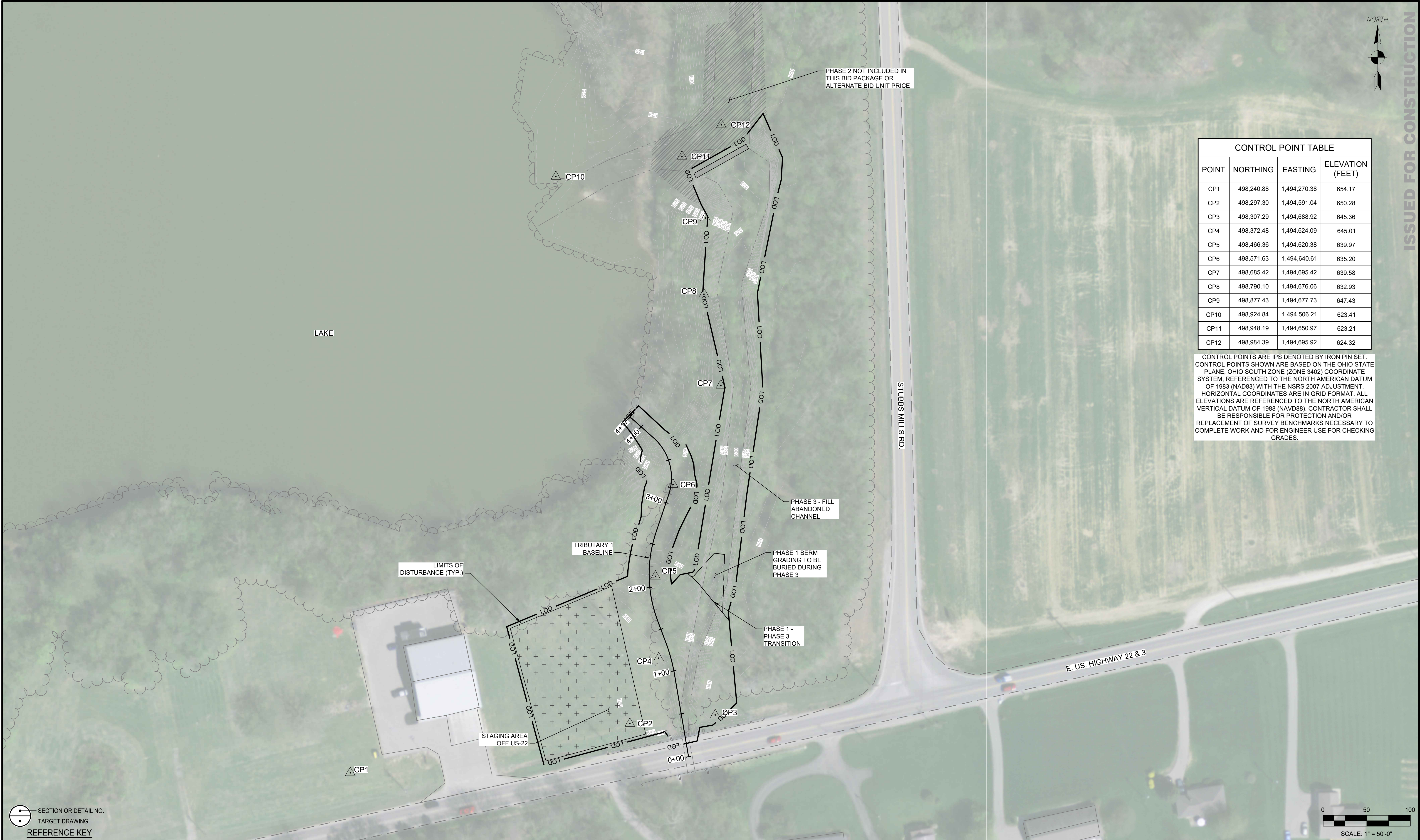
G SHEET: 03 OF 03

SHEET NO.:  
G-0-003

ISSUED FOR CONSTRUCTION



\\VA-173410744\TECHNICAL\_PRODUCTION\_DRAWING\PRE-CONSTRUCTION\SUBMITTAL\_SHEET\_FILES\C-1-001-EXISTING CONDITIONS - STANTEC\_SCREEN.CTB - PLOTTED 9/8/2025 10:42 AM BY PAGE, CASEY



CONTROL POINT TABLE			
POINT	NORTHING	EASTING	ELEVATION (FEET)
CP1	498,240.88	1,494,270.38	654.17
CP2	498,297.30	1,494,591.04	650.28
CP3	498,307.29	1,494,688.92	645.36
CP4	498,372.48	1,494,624.09	645.01
CP5	498,466.36	1,494,620.38	639.97
CP6	498,571.63	1,494,640.61	635.20
CP7	498,685.42	1,494,695.42	639.58
CP8	498,790.10	1,494,676.06	632.93
CP9	498,877.43	1,494,677.73	647.43
CP10	498,924.84	1,494,506.21	623.41
CP11	498,948.19	1,494,650.97	623.21
CP12	498,984.39	1,494,695.92	624.32

CONTROL POINTS ARE IPS DENOTED BY IRON PIN SET. CONTROL POINTS SHOWN ARE BASED ON THE OHIO STATE PLANE, OHIO SOUTH ZONE (ZONE 3402) COORDINATE SYSTEM, REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) WITH THE NSRS 2007 ADJUSTMENT. HORIZONTAL COORDINATES ARE IN GRID FORMAT. ALL ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND/OR REPLACEMENT OF SURVEY BENCHMARKS NECESSARY TO COMPLETE WORK AND FOR ENGINEER USE FOR CHECKING GRADES.



DESIGNED BY: BR  
DRAWN BY: CW  
SHEET CHK'D BY: JS  
CROSS CHK'D BY: BR  
APPROVED BY: BR  
ISSUED DATE: 9/8/2025

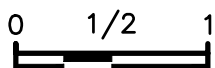
State of Ohio  
State Board of Registration for  
Professional Engineers and Surveyors  
2024-2025  
Bryce Rizzo  
PE #9181 Expiration Date: 12/31/2025  
Bryce Rizzo  
EXECUTIVE DIRECTOR

MOUNTS PARK STREAM RESTORATION  
AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

CIVIL  
EXISTING CONDITIONS

WARNING



IF THIS BAR DOES  
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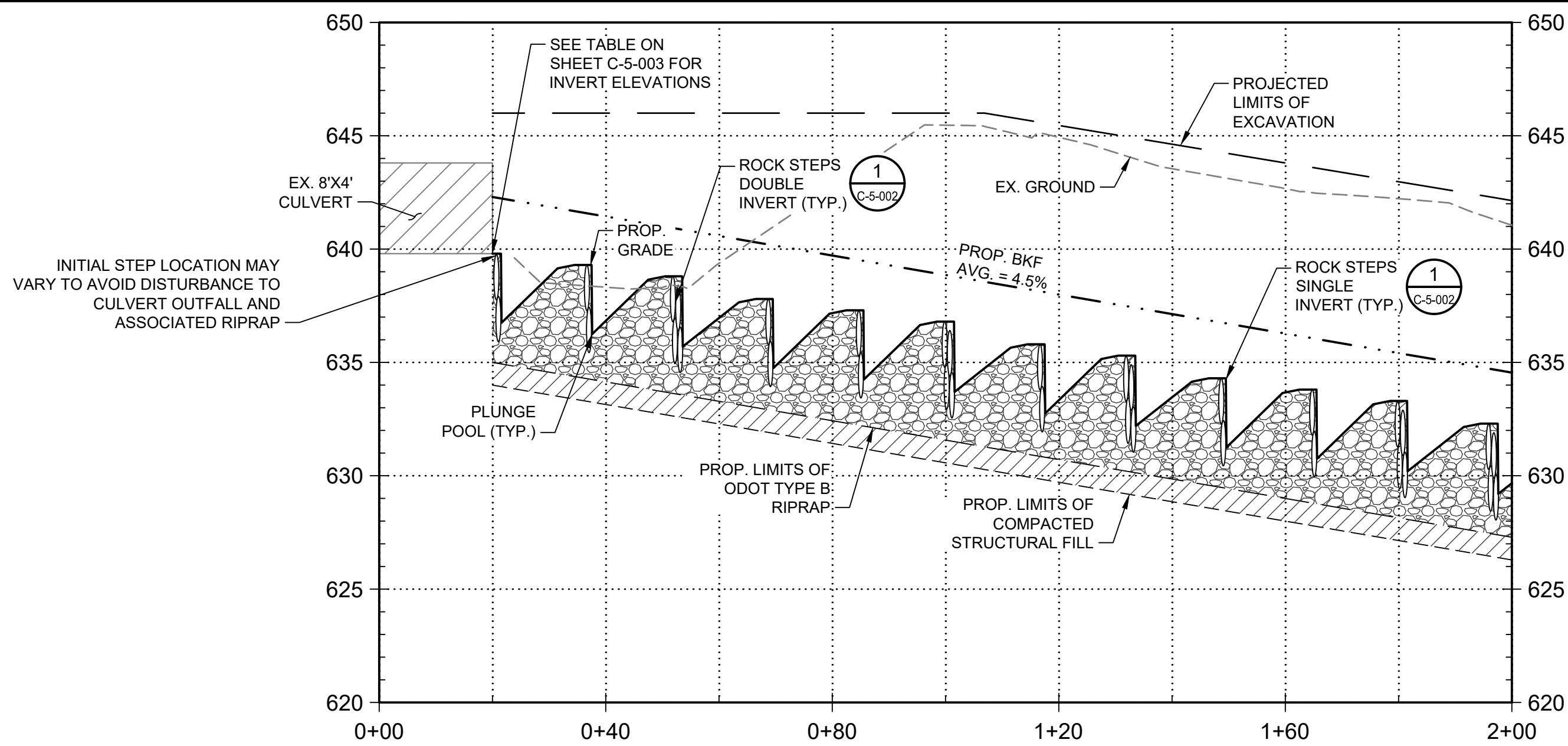
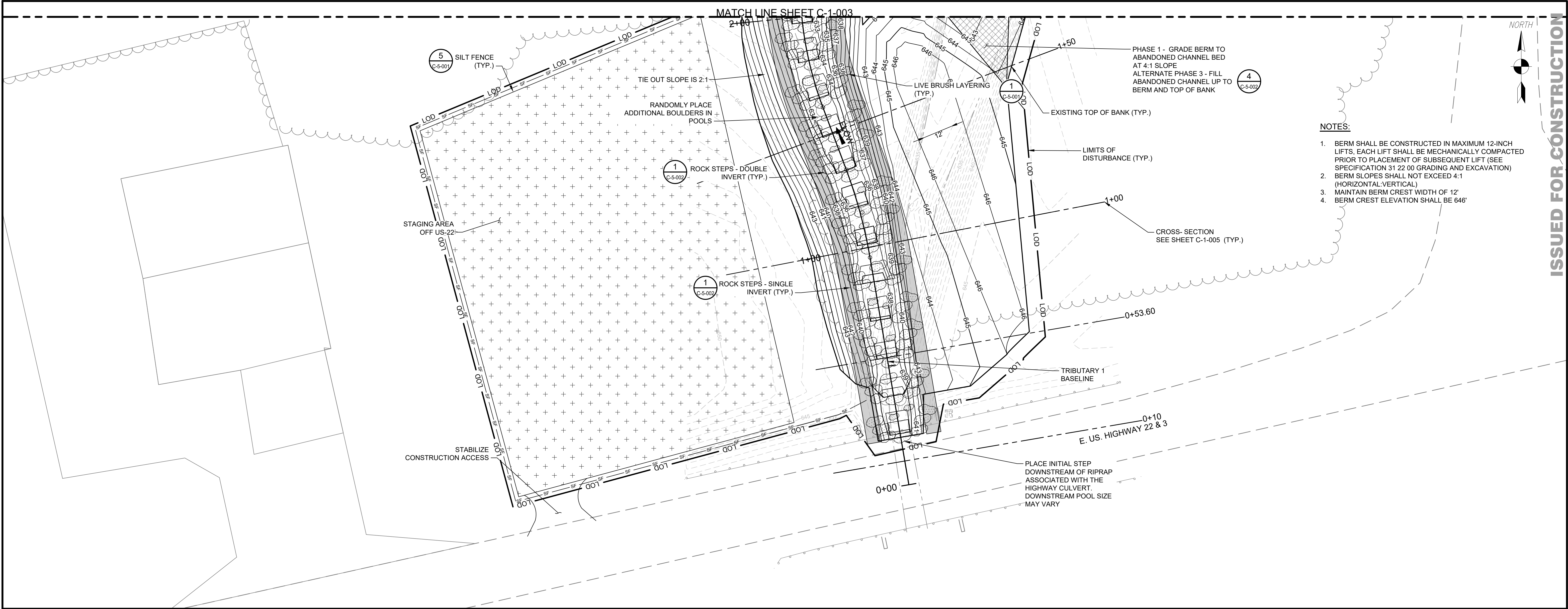
PROJECT SET: 04 of 15

C SHEET: 01 OF 12

SHEET NO.:  
C-1-001



\\173410744\TECHNICAL\_PRODUCTION\_DRAWING\PRE-CONSTRUCTION\_SUBMITTAL\_SHEET\_FILES\C-1-002-STEREOLANDING - C-1-002-PLAN & PROFILE 1 - STANTEC\_SCREEN.CTB - PLOTTED 9/8/2025 10:42 AM BY RACE, CASEY



SECTION OR DETAIL NO.  
TARGET DRAWING

REFERENCE KEY

0 20 40  
0 5 10  
SCALE: 1" = 20'-0" HORIZ.  
1" = 5'-0" VERT.



0	9/8/2025	BR	ISSUED FOR CONSTRUCTION	
REV NO	DATE	ISSUED BY	REMARKS	

DESIGNED BY: BR  
DRAWN BY: CW  
SHEET CHK'D BY: JS  
CROSS CHK'D BY: BR  
APPROVED BY: BR  
ISSUED DATE: 9/8/2025

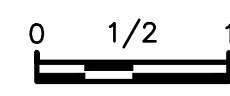
State of Ohio  
State Board of Registration for  
Professional Engineers and Surveyors  
2024 - 2025  
Bryce Rizzo  
PE #19176, E.S. #12312025  
Bryce Rizzo  
EXECUTIVE DIRECTOR

MOUNTS PARK STREAM RESTORATION  
AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

CIVIL  
PLAN & PROFILE I

WARNING



IF THIS BAR DOES  
NOT MEASURE 1"  
THEN DRAWING IS  
NOT TO SCALE

PROJECT SET: 05 of 15

C SHEET: 02 OF 12

SHEET NO.:  
C-1-002

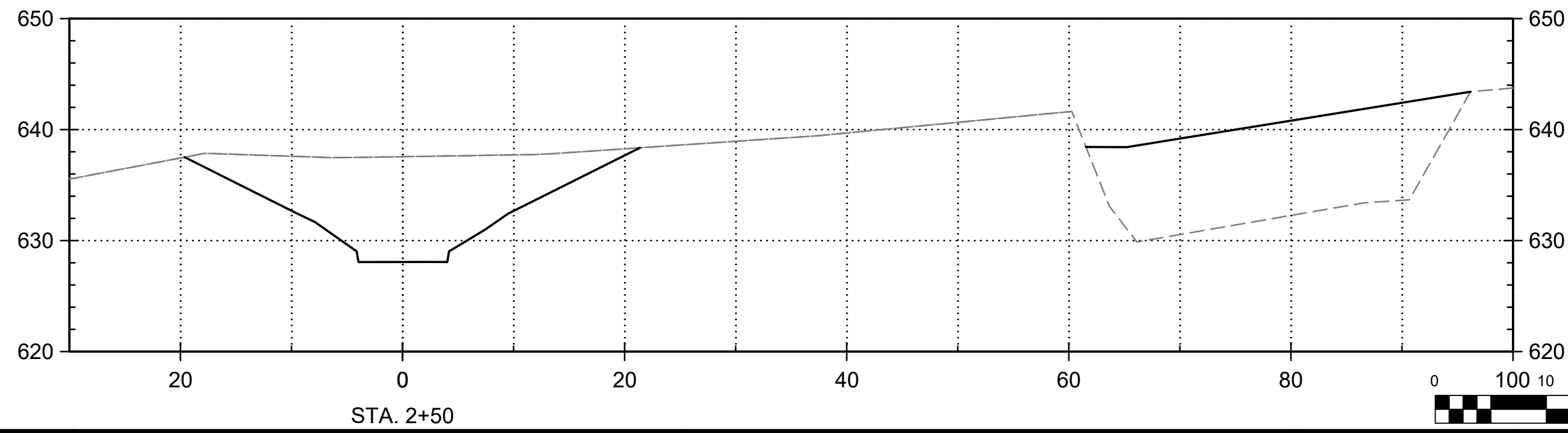
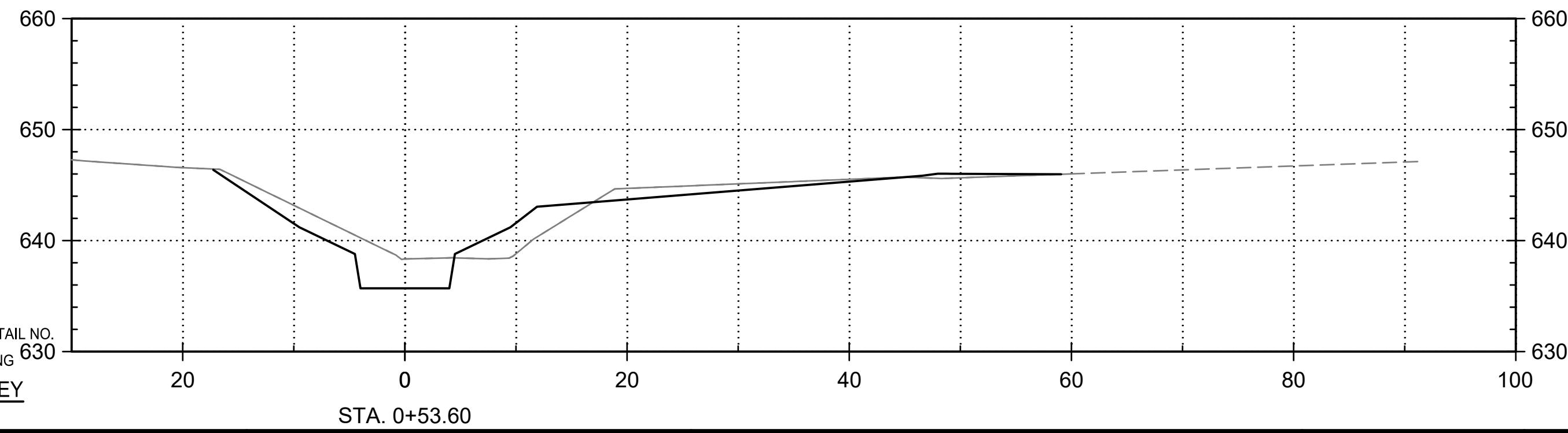
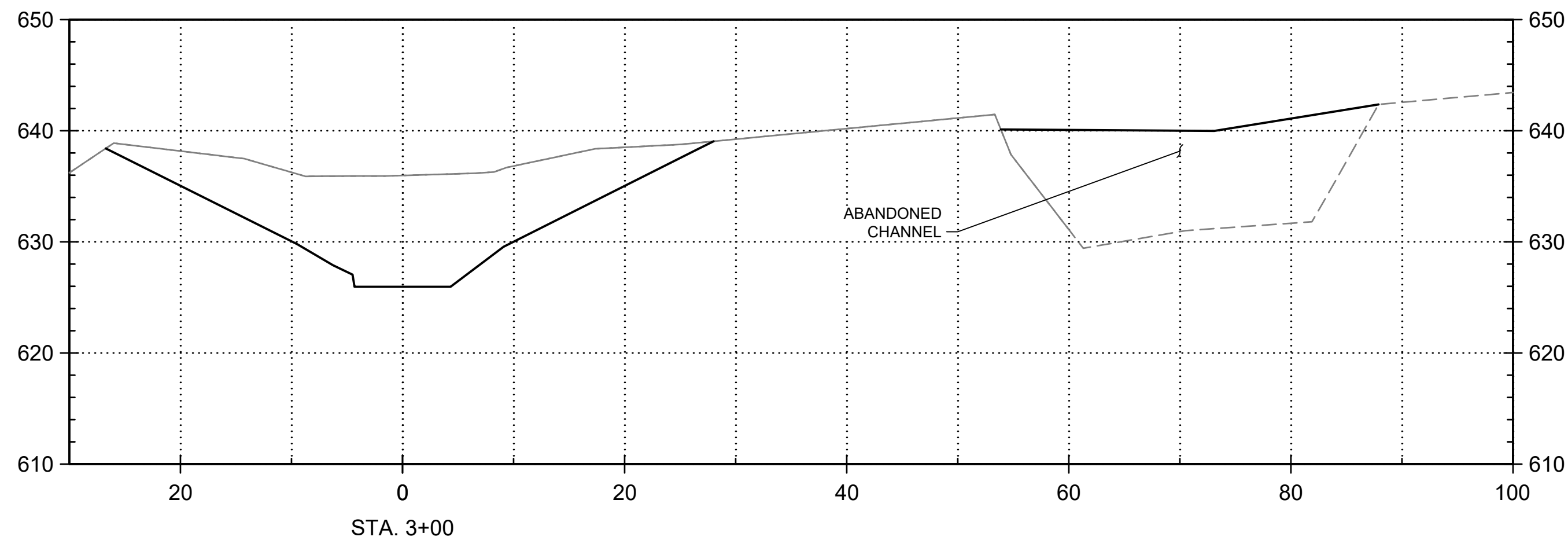
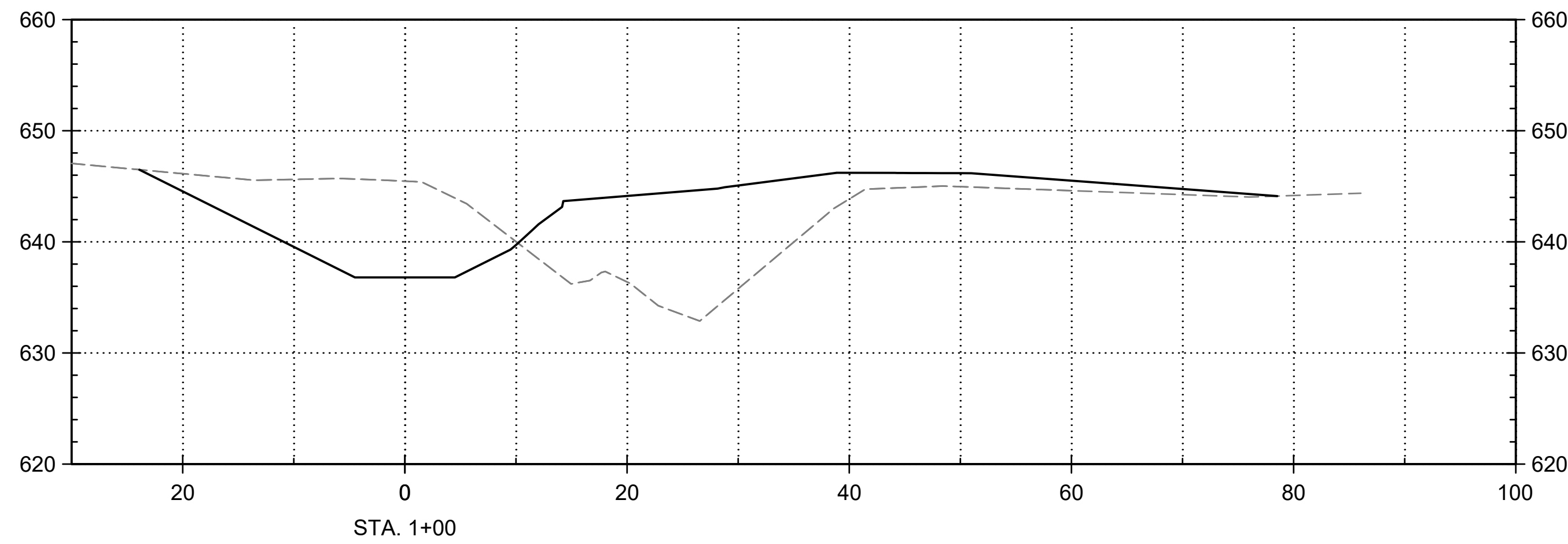
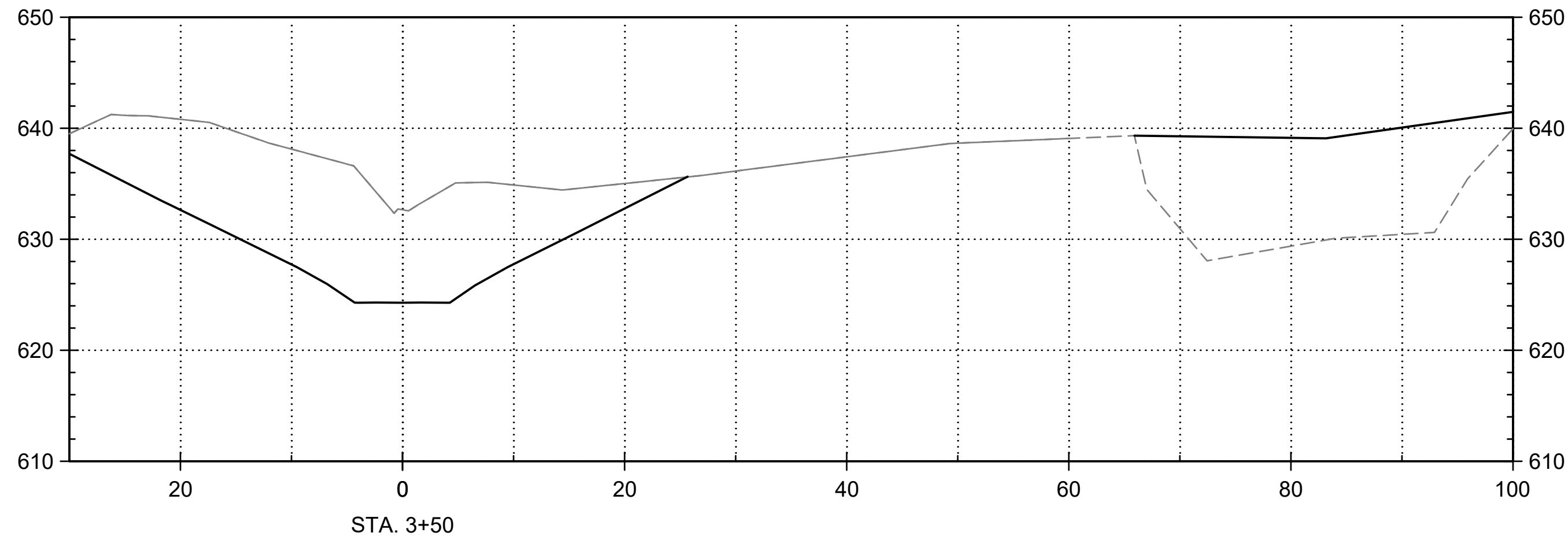
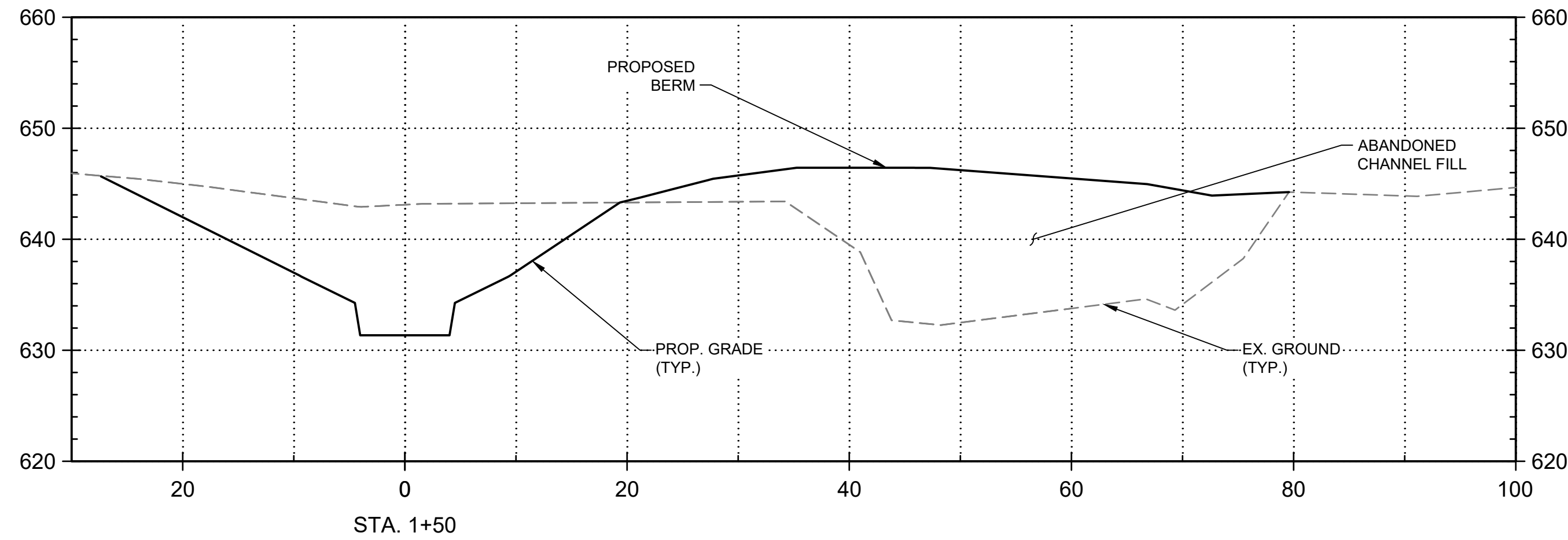
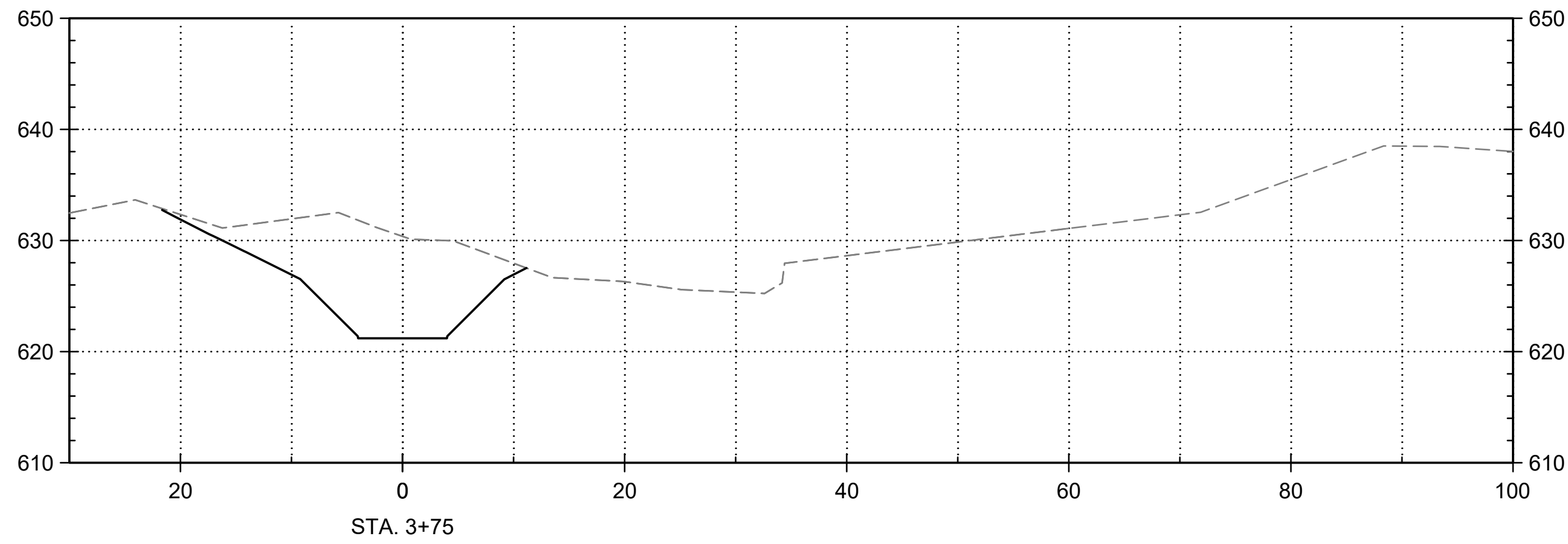
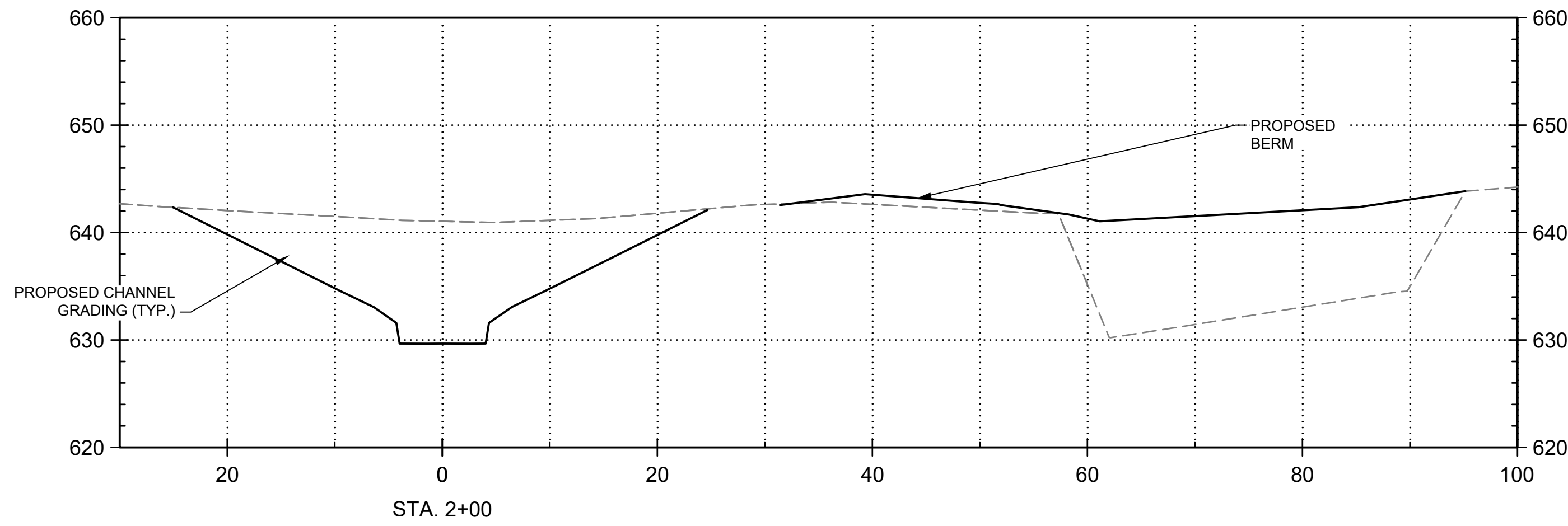








U:\17341074\TECHNICAL\_PRODUCTION\_DRAWING\PRE-CONSTRUCTION\_SUBMITTAL\_SHEET\_FILES\C-1-005-XSEC.DWG - C-1-005 CROSS SECTIONS - STATES\_SCREEN.CTB - PLOTTED 9/8/2025 10:42 AM BY RACE, CASEY



SECTION OR DETAIL NO. 630  
TARGET DRAWING  
REFERENCE KEY



0	9/8/2025	BR	ISSUED FOR CONSTRUCTION	
REV NO	DATE	ISSUED BY	REMARKS	

DESIGNED BY: BR  
DRAWN BY: CW  
SHEET CHK'D BY: JS  
CROSS CHK'D BY: BR  
APPROVED BY: BR  
ISSUED DATE: 9/8/2025

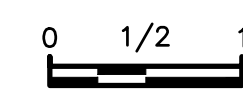


## MOUNTS PARK STREAM RESTORATION AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

CIVIL  
CROSS SECTIONS

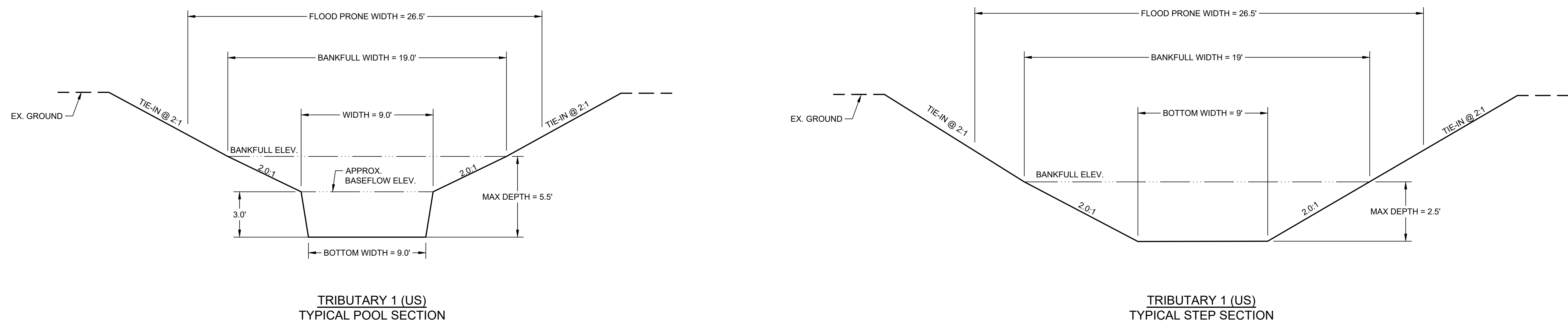
WARNING  
IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE



SCALE: 1" = 10'-0"  
PROJECT SET: ## of 15  
C SHEET: ## of 12  
SHEET NO.: #####

ISSUED FOR CONSTRUCTION





0	9/8/2025	BR	ISSUED FOR CONSTRUCTION
REV NO	DATE	ISSUED BY	REMARKS

DESIGNED BY: \_\_\_\_\_ BR  
DRAWN BY: \_\_\_\_\_ CW  
SHEET CHK'D BY: \_\_\_\_\_ JS  
CROSS CHK'D BY: \_\_\_\_\_ BR  
APPROVED BY: \_\_\_\_\_ BR  
ISSUED DATE: \_\_\_\_\_ 9/8/2025



PROJECT NO. 173410744

## CIVIL TYPICAL SECTIONS

WARNING

0 1/2 1

IF THIS BAR DOES NOT MEASURE 1" THEN DRAWING IS NOT TO SCALE

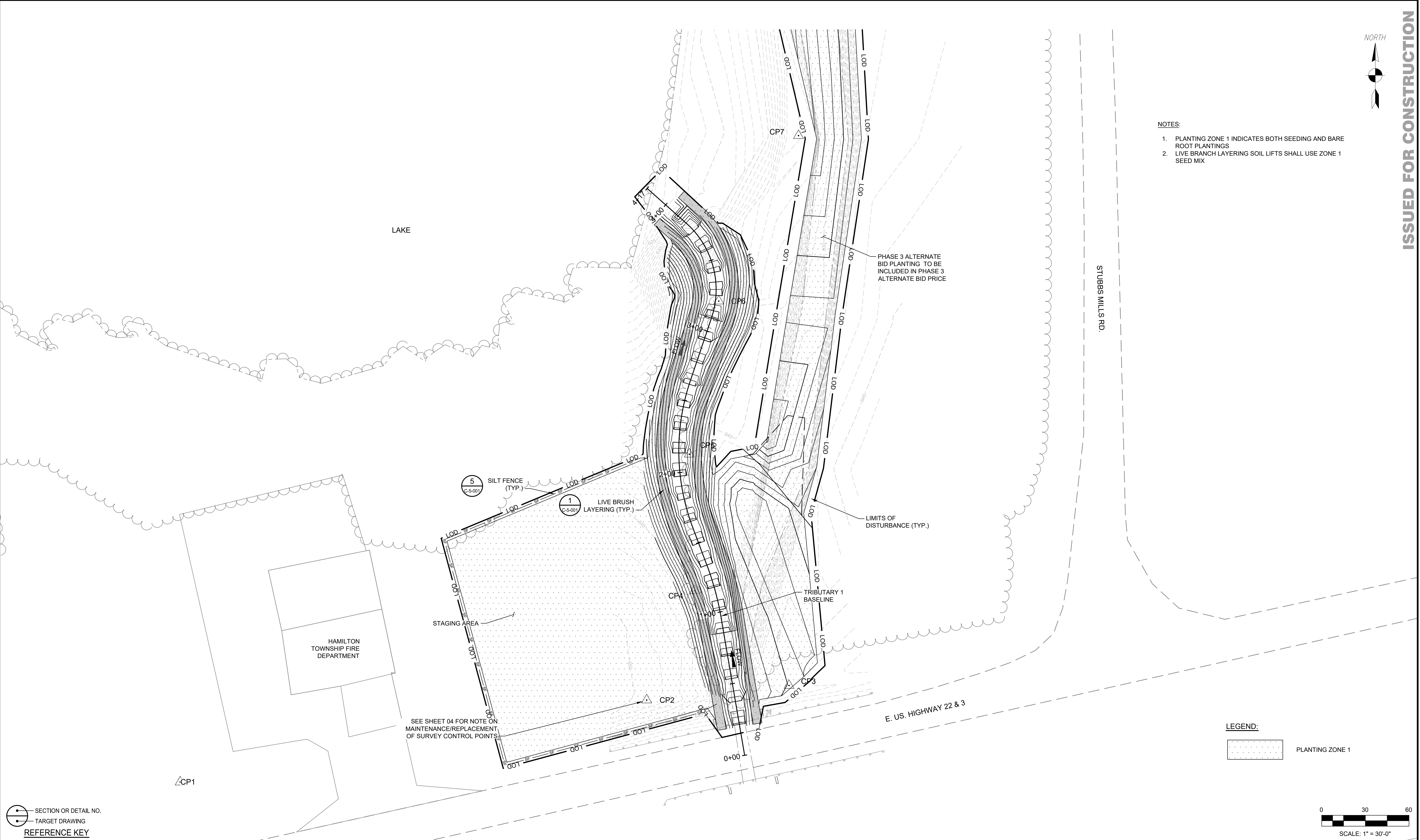
PROJECT SET: 09 of 15

C SHEET: 06 OF 12

SHEET NO.:  
C-3-001



\\173410744\TECHNICAL\_PRODUCTION\DRAWING\PRE-CONSTRUCTION\SUBMITTAL\TARGET\_DRAWING\173410744-PLANTING\DWG - C-4-001 PLANTING PLAN I - STANTEC\_SCREENLCTB - PLOTTED 9/8/2025 10:42 AM BY RACE, CASEY



SECTION OR DETAIL NO.

TARGET DRAWING

REFERENCE KEY

REV NO	DATE	ISSUED BY	REMARKS
0	9/8/2025	BR	ISSUED FOR CONSTRUCTION

DESIGNED BY: BR

DRAWN BY: CW

SHEET CHK'D BY: JS

CROSS CHK'D BY: BR

APPROVED BY: BR

ISSUED DATE: 9/8/2025

State of Ohio  
State Board of Registration for  
Professional Engineers and Surveyors  
2024 - 2025  
Professional Engineer  
Bryce Rizzo  
PE #19121 Sub. Exp. Date: 12/31/2025  
Bryce Rizzo  
BOARD CHAIRMAN  
EXECUTIVE DIRECTOR

MOUNTS PARK STREAM RESTORATION  
AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

CIVIL  
PLANTING PLAN I

WARNING

0 1/2 1

IF THIS BAR DOES  
NOT MEASURE 1"  
THEN DRAWING IS  
NOT TO SCALE

PROJECT SET: 10 of 15


C SHEET: 07 of 12

SHEET NO.:  
C-4-001

ISSUED FOR CONSTRUCTION



0 30 60



SCALE: 1" = 30'-0"

SCALE: 1" = 30'-0"

LEGEND:

PLANTING ZONE 1

**WARNING**

A horizontal number line with tick marks at 0,  $\frac{1}{2}$ , and 1. The segment between 0 and  $\frac{1}{2}$  is shaded black.

IF THIS BAR DOES  
NOT MEASURE 1"  
THEN DRAWING IS  
NOT TO SCALE

PROJECT SET: 11 of 15

C SHEET: 08 OF 12

SHEET NO.:  
C-4-002

# MOUNTS PARK STREAM RESTORATION AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

DESIGNED BY: \_\_\_\_\_ BR  
DRAWN BY: \_\_\_\_\_ CW  
SHEET CHK'D BY: \_\_\_\_\_ JS  
CROSS CHK'D BY: \_\_\_\_\_ BR  
APPROVED BY: \_\_\_\_\_ BR  
ISSUED DATE: \_\_\_\_\_ 9/8/2025

State of Ohio  
State Board of Registration for  
Professional Engineers and Surveyors

**2024 – 2025**  
Professional Engineer  
**Bryce Rizzo**  
PE#1631 Expiration Date: 12/31/2025

*Bryce Rizzo*  
EXECUTIVE DIRECTOR

0	9/8/2025	BR	ISSUED FOR CONSTRUCTION	
REV NO	DATE	ISSUED BY	REMARKS	

SECTION OR DETAIL NO.

TARGET DRAWING

## REFERENCE KEY





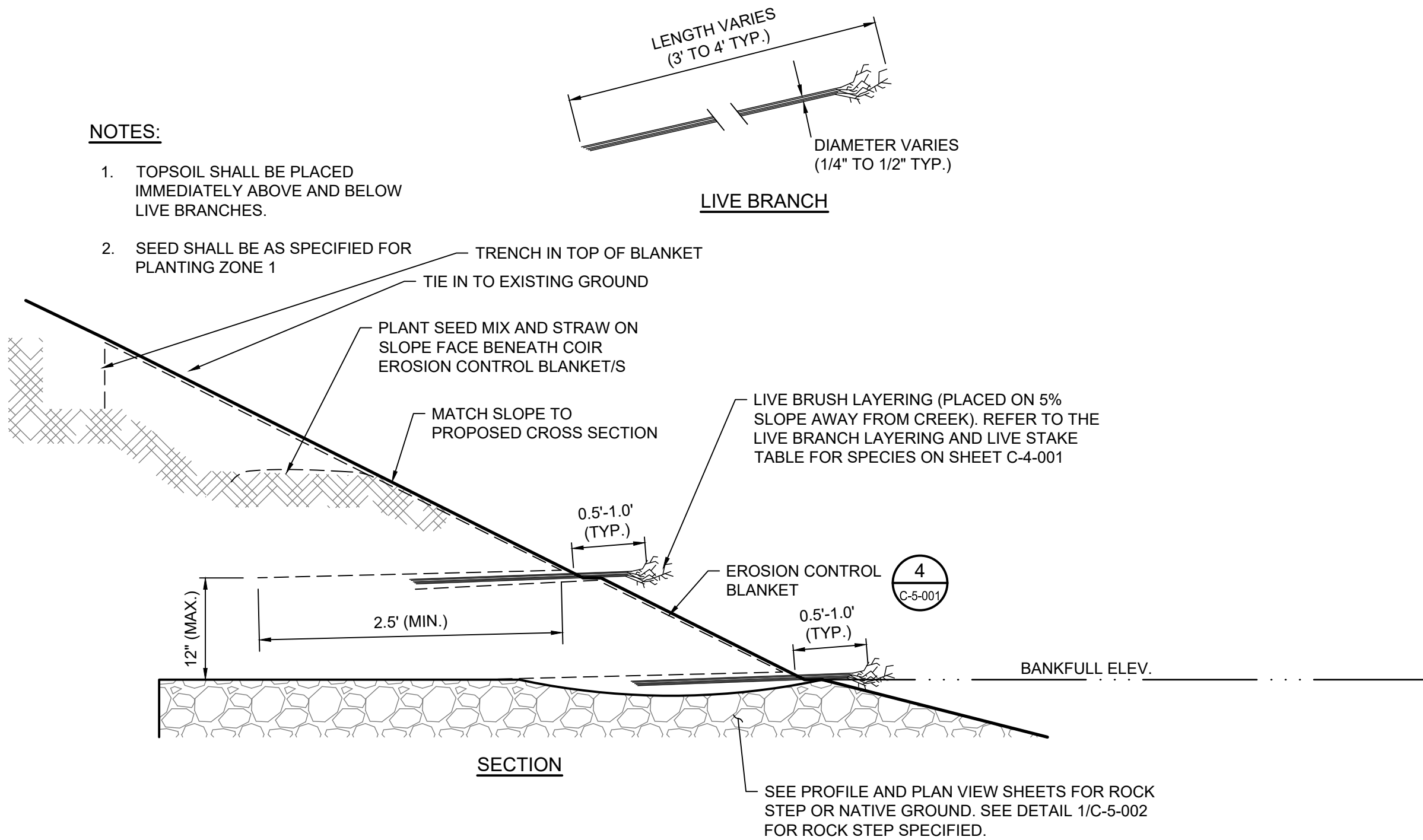


PLAN - SYMBOL

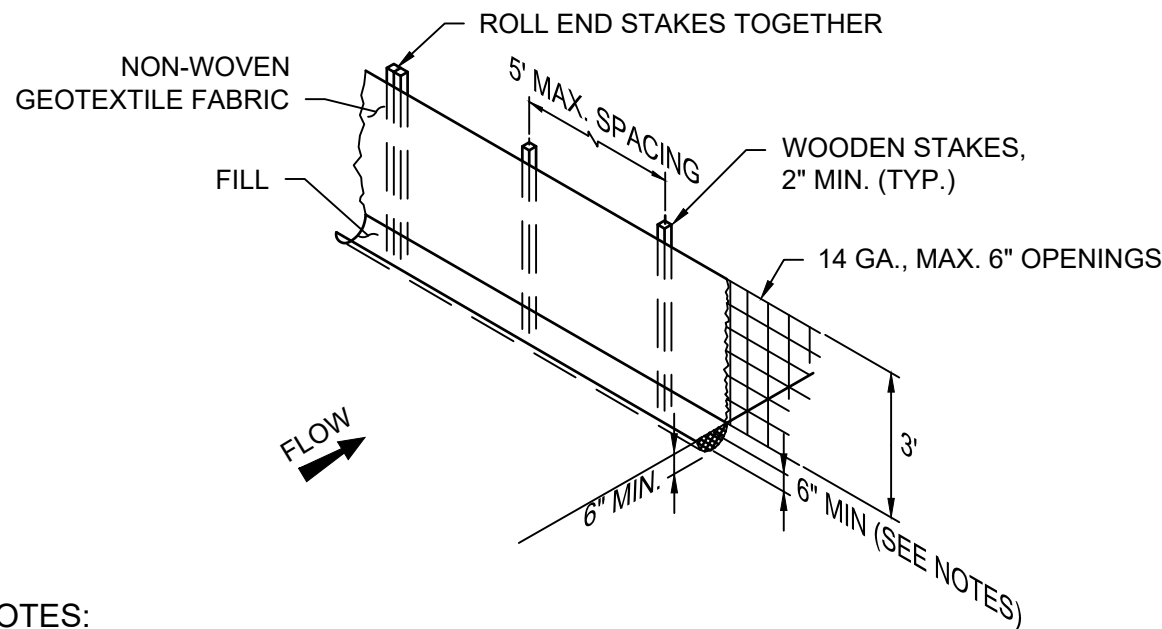
NOTES:

1. TOPSOIL SHALL BE PLACED IMMEDIATELY ABOVE AND BELOW LIVE BRANCHES.

2. SEED SHALL BE AS SPECIFIED FOR PLANTING ZONE 1



1 DETAIL - LIVE BRUSH LAYERING  
SCALE: NOT TO SCALE



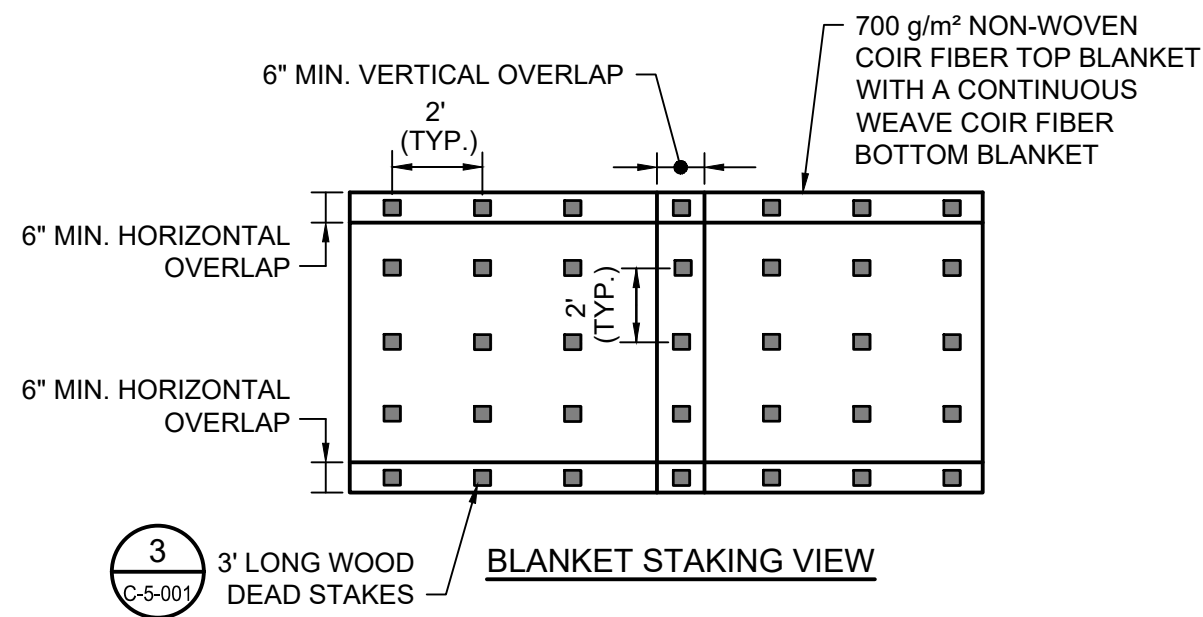
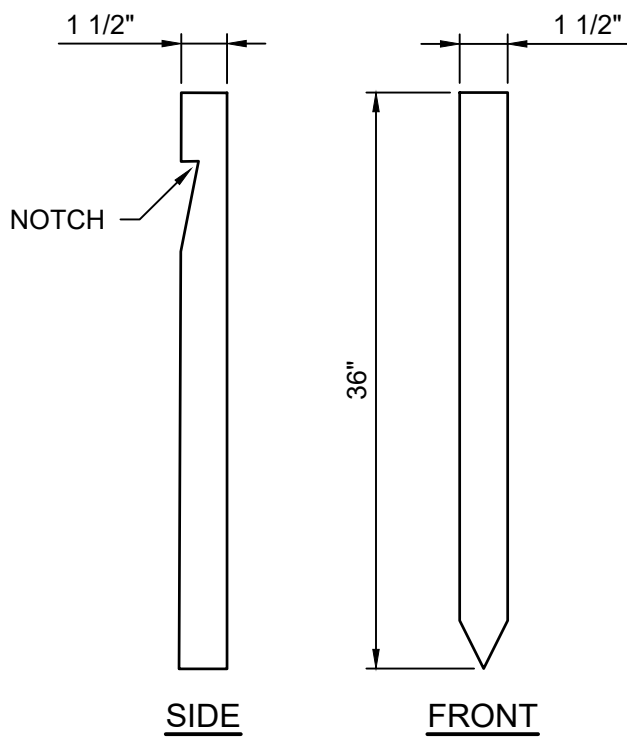
NOTES:

1. ALL EARTHWORK ACTIVITY SHALL BE LOCATED UPHILL OF SILT FENCE.
2. SILT FENCE SHALL BE INSTALLED ACROSS SLOPES.
3. ATTACH FILTER FABRIC TO WOODEN STAKES WITH STAPLES, HOGRINGS OR OTHER MATERIALS APPROVED BY THE ENGINEER.
4. WOODEN STAKES SHALL BE INSTALLED ON THE DOWNHILL SIDE OF FILTER FABRIC.
5. BURY THE BOTTOM 12 INCHES OF FILTER FABRIC IN A 6\"X6\" TRENCH (TO PREVENT SEDIMENT FROM ESCAPING UNDER THE FENCE) AND BACK FILL WITH SOIL.
6. JOIN SILT FENCE SECTIONS BY ROLLING END STAKES TOGETHER TO CREATE AN UNBROKEN SEDIMENT BARRIER.

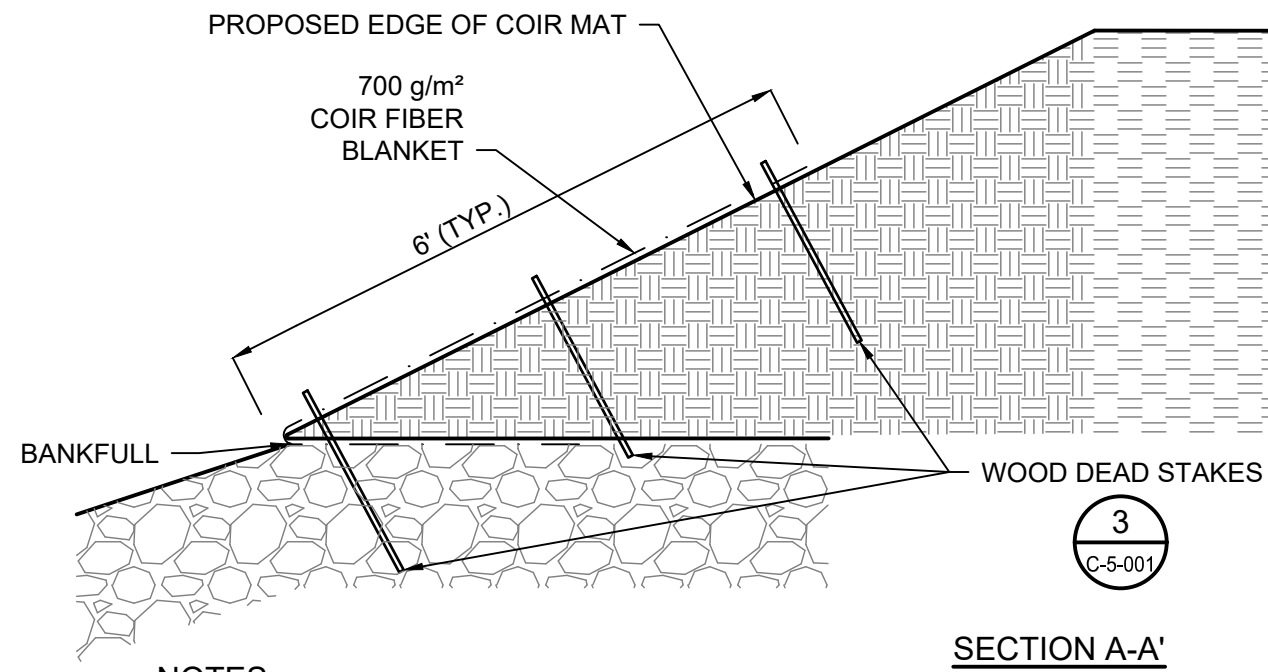
NOTES:

1. DEAD STAKES SHALL BE OF MINIMUM DIMENSIONS SHOWN AND SHALL BE GENERALLY FREE OF KNOTS.
2. ALL DEAD STAKES SHALL BE RELATIVELY STRAIGHT AND WITHOUT ANY ROT OR WATER DAMAGE.
3. DEAD STAKES SHALL BE NOTCHED 1\" TO 2\" BELOW THE TOP OF THE STAKE TO ENGAGE EROSION CONTROL BLANKET WHEN INSTALLED.
4. STAKES SPLIT DURING NOTCHING OR INSTALLATION SHALL BE DISCARDED FOR UNDAMAGED STAKES.
5. ALL VARIATIONS FROM THE STAKING DETAIL MUST BE APPROVED BY THE ENGINEER.

3 DETAIL - DEAD STAKE  
SCALE: NOT TO SCALE



4 DETAIL - EROSION CONTROL BLANKET  
SCALE: NOT TO SCALE



NOTES:

1. EROSION CONTROL BLANKET SHALL BE INSTALLED IN THE LOCATIONS DETAILED IN THE LANDSCAPING PLAN.
2. BANK SLOPES SHALL RECEIVE EROSION CONTROL BLANKET FROM BANKFULL TO 6 FEET UP THE SLOPE FROM BANKFULL INCLUDING THE PROPOSED LIFTS.
3. RAKE SOIL SMOOTH, ADD SEED, AND MULCH BEFORE INSTALLING COIR FIBER BLANKET.
4. BLANKET SHALL BE LAID PARALLEL TO FLOW. OVERLAP BETWEEN ADJACENT RUNS OF BLANKET SHALL BE A MINIMUM OF SIX (6) INCHES. BLANKET SHALL OVERLAP IN THE DOWNSTREAM DIRECTION PARALLEL TO FLOW AND DOWN-SLOPE PERPENDICULAR TO FLOW.
5. ALL MATERIALS ARE TO BE APPROVED BY ENGINEER OR OWNER'S ONSITE CONSTRUCTION MANAGER.
6. ADDITIONAL STAKING SHALL BE APPLIED IF THE EROSION CONTROL BLANKET SEPARATES FROM THE SOIL MORE THAN 6 INCHES UNDER A REASONABLE PULL.
7. ALL EXPOSED EDGES OF BLANKET SHALL BE BURIED AND STAKED IN A TRENCH 6 INCHES DEEP.
8. BLANKET SHALL BE PLACED WITH SUFFICIENT TIGHTNESS AS TO AVOID MOVEMENT DURING A FLOOD FLOW EVENT.
9. FOLLOW LIVE BRUSH LAYERING DETAIL FOR EXACT DENOTATION OF SOIL LIFTS PLACED ON ALL STREAM SLOPES

NOTES:

1. EROSION CONTROL BLANKET DELINEATED ON SHEET C-1-0003 SHALL HAVE LIVE BRUSH LAYERING UNDER NEATH BEFORE PLACEMENT IN ACCORDANCE WITH THIS DETAIL.
2. BACKFILL ON TOP OF BANK TREATMENT WITH 3 INCHES OF TOPSOIL TO CREATE A PLANTING SURFACE SLOPED APPROXIMATELY 5% AWAY FROM CREEK. WIDTH OF PLANTING SURFACE SHOULD BE A MINIMUM OF 2.5 FEET. PLACE TOPSOIL ON PLANTING SURFACE AND PLACE LIVE BRUSH SUCH THAT 2/3 OF THE BRUSH WILL BE COVERED WITH SOIL AND 1/3 OF THE BRUSH IS EXPOSED, EXTENDING BEYOND THE FACE OF THE BANK. PLACE A MINIMUM OF 5 STEMS PER RUNNING FOOT OF BANK IN A SLIGHT CRISS-CROSS PATTERN. BACKFILL ABOVE LIVE BRUSH WITH A 3 INCH LAYER OF TOPSOIL.
3. USING A 6.5-FOOT WIDE STRIP OF EROSION CONTROL BLANKET (700 g/m²). LAY THE BLANKET OVER THE LIVE BRUSH LAYERING SUCH THAT A MINIMUM OF TWO AND A HALF FEET OF BLANKET IS OVER THE NEWLY PLACED LIVE BRUSH AND TOPSOIL. LAY THE BLANKET DOWN-SLOPE AND PLACE A ONE-FOOT-THICK LAYER OF SOIL OVER THE BLANKET. GENTLY COMPACT THIS SOIL BY USING THE EXCAVATOR BUCKET SO THAT THE UNDERLYING BRUSH AND BANK TREATMENT ARE NOT DISPLACED OR DAMAGED. WHEN STARTING TO PLACE THE FILL, OFFSET THE FILL APPROXIMATELY 3 TO 4 INCHES BACK FROM THE FACE OF THE SLOPE TO CREATE A SLIGHT TERRACE. ON THE OUTER FACE OF THE SLOPE, WHICH WILL BE EXPOSED TO FLOW, PLACE 2 INCHES OF TOPSOIL, SEED AND COVER WITH STRAW MULCH TO REDUCE LOSS OF SOIL THROUGH OPENINGS IN THE BLANKET. WRAP THE EROSION CONTROL BLANKET OVER THE FACE OF THE SLOPE AND CREATE A NEW PLANTING SURFACE FOR THE NEXT LAYER OF LIVE BRUSH ON A 5% SLOPE AWAY FROM THE CREEK. SOIL WRAP CAN BE COMPLETED WITH SOD MAT HARVEST ON SITE. SOD MATS SHALL BE STAKED IN A SIMILAR MANNER AND MATS SHOULD BE A MINIMUM OF 1 SQUARE YARD IN SIZE.
4. REPEAT STEP 2 ABOVE TO BUILD THE NEXT SOIL WRAP AND LIVE BRUSH LAYER.
5. RECONSTRUCT THE SLOPES SUCH THAT THE OVERALL SLOPE MATCHES THE PROPOSED CROSS SECTION SHAPE.
6. ABOVE THE LAST LIVE BRUSH LAYER, PLACE THE EROSION CONTROL BLANKET ON TOP OF THE LAST LIFT IN THE LIVE BRUSH TRENCH, SIMILAR TO STEP 2, AND ADDITIONAL EROSION CONTROL BLANKET ON THE FACE OF THE SLOPE AND EXTEND THE BLANKET 6 FEET UP THE SLOPE FROM THE BANKFULL ELEVATION UP ONTO THE BANKFULL BENCH AREA. BURY THE TOP EDGE OF THE BLANKET IN A TRENCH 6 INCHES DEEP. SECURE THE FABRIC WITH STAKES PER THE PLANS. IF NECESSARY, INSTALL A SECOND ROLL OF EROSION CONTROL BLANKET ON THE BANKFULL BENCH.
7. IF LIVE BRANCHES ARE NOT INSTALLED (CONSTRUCTION OUTSIDE OF DORMANCY) OR DO NOT SURVIVE, LIVE STAKES SHALL BE INSTALLED ALONG THE STRUCTURE BETWEEN THE INNER BERM AND BANKFULL AT A DENSITY OF 2 STAKES PER SQUARE YARD. SUPPLEMENTAL LIVE STAKES SHALL BE INSTALLED DURING THE FIRST DORMANT PERIOD AFTER CONSTRUCTION, TYPICALLY OCTOBER 31 - MARCH 31.
8. STRUCTURE MAY BE MODIFIED IN FIELD BY ENGINEER.



0	9/8/2025	BR	ISSUED FOR CONSTRUCTION	
REV NO	DATE	ISSUED BY	REMARKS	

DESIGNED BY: BR  
DRAWN BY: CWV  
SHEET CHK'D BY: JS  
CROSS CHK'D BY: BR  
APPROVED BY: BR  
ISSUED DATE: 9/8/2025

State of Ohio  
State Board of Registration for  
Professional Engineers and Surveyors  
2024 - 2025  
Bryce Rizzo  
Professional Engineer  
PE #91872 Expiration Date: 12/31/2025  
Ryan Pennington  
Executive Director

MOUNTS PARK STREAM RESTORATION  
AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

CIVIL  
DETAILS I

WARNING

0 1/2 1

IF THIS BAR DOES  
NOT MEASURE 1"  
THEN DRAWING IS  
NOT TO SCALE

PROJECT SET: 12 of 15

C SHEET: 10 OF 12

SHEET NO.:  
C-5-001







\\V:\17341074\TECHNICAL\_PRODUCTION\DRAWING\PRE-CONSTRUCTION\SUBMITTAL\Sheet\_Files\C-5-001-2024-DETAILS-TABLES.DWG - C-5-003 MATERIAL QUANTITIES - STANTEC\_SCREEN.CTB - PLOTTED 9/8/2025 10:43 AM BY RACE CASEY

ROCK STEP TABLE					
TRIBUTARY 1 ALIGNMENT					
		ELEVATIONS (FT)			
STATION	STRUCTURE	CP1 (1ST STEP INVERT)	CP2 (2ND STEP INVERT)	CP3 (PLUNGE POOL)	CP4 (BANKFULL)
0+20	Single Invert	639.8	-	636.3	642.3
0+35	Single Invert	639.3	-	635.8	641.8
0+50	Double Invert	638.8	638.3	635.3	641.3
0+66	Single Invert	637.8	-	634.3	640.3
0+82	Single Invert	637.3	-	633.8	639.8
0+98	Double Invert	636.8	636.3	633.3	639.3
1+14	Single Invert	635.8	-	632.3	638.3
1+30	Double Invert	635.3	634.8	631.8	637.8
1+46	Single Invert	634.3	-	630.8	636.8
1+62	Single Invert	633.8	-	630.3	636.3
1+78	Double Invert	633.3	632.8	629.8	635.8
1+95	Double Invert	632.3	631.8	628.8	634.8
2+10	Single Invert	631.3	-	627.8	633.8
2+26	Single Invert	630.8	-	627.3	633.3
2+42	Double Invert	630.3	629.8	626.8	632.8
2+58	Single Invert	629.3	628.8	625.8	631.8
2+74	Double Invert	628.8	628.3	625.3	631.3
2+90	Double Invert	627.8	627.3	624.3	630.3
3+06	Single Invert	626.8	-	623.3	629.3
3+22	Double Invert	626.3	625.8	622.8	628.8
3+38	Single Invert	625.3	-	621.8	627.8
3+55	Single Invert	624.8	-	621.3	627.3
3+71	Double Invert	624.3	623.8	620.8	626.8
3+95	Single Invert	623.3	-	619.8	625.8



0	9/8/2025	BR	ISSUED FOR CONSTRUCTION	
REV NO	DATE	ISSUED BY	REMARKS	

DESIGNED BY: BR  
DRAWN BY: CW  
SHEET CHK'D BY: JS  
CROSS CHK'D BY: BR  
APPROVED BY: BR  
ISSUED DATE: 9/8/2025



MOUNTS PARK STREAM RESTORATION  
AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

CIVIL  
STRUCTURE TABLE

WARNING  
0 1/2 1  
IF THIS BAR DOES  
NOT MEASURE 1"  
THEN DRAWING IS  
NOT TO SCALE

PROJECT SET: 10 of 12  
C SHEET: 11 OF 12  
SHEET NO.:  
C-5-003

ISSUED FOR CONSTRUCTION



\\VA-17341074\4\TECHNICAL\_PRODUCTION\DRAWING\PRE-CONSTRUCTION\SUBMITTAL\Sheet Files\C-5-001-2024-DETAILS-TABLES.DWG - C-5-004-PLANTING QUANTITIES - STANTEC-SCREEN.CTB - PLOTTED: 9/8/2025 10:43 AM BY: RACE\_CASEY

WET TO MESIC SEED MIX			
BOTANICAL NAME	COMMON NAME	RATE OZ/ACRE	QUANTITY
PERMANENT GRASSES/SEDGES			
ANDROPOGON GERARDII	BIG BLUESTEM	16.00	10.34
CALAMAGROSTIS CANADENSIS	BLUEJOINT GRASS	1.00	0.65
CAREX LURIDA	BOTTLEBRUSH SEDGE	3.00	1.94
CAREX STRICTA	COMMON TUSsock SEDGE	0.75	0.48
CAREX VULPINOIDEA	BROWN FOX SEDGE	2.00	1.29
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	24.00	15.50
JUNCUS DUDLEYI	DUDLEY'S RUSH	0.25	0.16
PANICUM VIRGATUM	SWITCH GRASS	2.00	1.29
SCIRPUS ATROVIRENS	DARK GREEN RUSH	1.00	0.65
SORGHASTRUM NUTANS	INDIAN GRASS	8.00	5.17
SPARTINA PECTINATA	PRAIRIE CORD GRASS	2.00	1.29
	TOTAL	60.00	38.76
TEMPORARY COVER			
AVENA SATIVA	COMMON OAT	512.00	330.75
	TOTAL	512.00	330.75
FORBS			
ASCLEPIAS INCARNATA	SWAMP MILKWEED	2.00	1.29
ASCLEPIAS SYRIACA	COMMON MILKWEED	2.00	1.29
BAPTISIA LACTEA	WHITE WILD INDIGO	1.00	0.65
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	8.00	5.17
COREOPSIS LANCEOLATA	SAND COREOPSIS	4.00	2.58
COREOPOSIS TRIPTERIS	TALL COREOPSIS	1.00	0.65
DESMODIUM ILLINOENSE	ILLINOIS TICK TREFOIL	0.50	0.32
DOELLINGERIA UMBELLATA	FALT-TOP ASTER	0.50	0.32
ECHINACEA PURPUREA	BROAD-LEAVED PURPLE CONEFLOWER	4.00	2.58
ERYNGIUM YUCCIFOLIUM	RATTLESNAKE MASTER	2.00	1.29
HELENIUM AUTUMNALE	SNEEZEWEED	1.00	0.65
HELIANTHUS GROSSESERRATUS	SAWTOOTH SUNFLOWER	0.50	0.32
LESPEDEZA CAPITATA	ROUND-HEADED BUSH CLOVER	1.50	0.97
LIATRIS SPICATA	MARSH BLAZING STAR	1.00	0.65
MONARDA FISTULOSA	WILD BERGAMOT	1.00	0.65
OLIGONEURON RIGIDUM	STIFF GOLDENROD	1.00	0.65
PARTHENIUM INTEGRIFOLIUM	WILD QUININE	1.00	0.65
PENSTEMON DIGITALIS	FOXGLOVE BEARD TONGUE	1.00	0.65
PHYSOSTEGIA VIRGINIANA	OBEDIENT PLANT	0.25	0.16
PYCNANTHEMUM VIRGINIANUM	COMMON MOUNTAIN MINT	0.50	0.32
RATIBIDA PINNATA	YELLOW CONEFLOWER	4.00	2.58
RUDBECKIA HIRTA	BLACK-EYED SUSAN	4.00	2.58
RUDBECKIA LACINIATA	WILD GOLDEN GLOW	1.00	0.65
RUDBECKIA SUBTOMENTOSA	SWEET BLACK-EYED SUSAN	0.50	0.32
SENNA HEBECARPA	WILD SENNA	2.25	1.45
SILPHIUM INTEGRIFOLIUM	ROsin WEED	1.00	0.65
SILPHIUM LACINIATUM	COMPASS PLANT	3.00	1.94
SILPHIUM PERFOLIATUM	CUP PLANT	2.00	1.29
SILPHIUM TEREbinthinACEUM	PRAIRIE DOCK	1.00	0.65
SOLIDAGO JUNCEA	EARLY GOLDENROD	0.25	0.16
SOLIDAGO RUGOSA	ROUGH GOLDENROD	0.25	0.16
SYMPHYOTRICHUM LANCEOLATUM	PANcLED ASTER	0.50	0.32
SYMPHYOTRICHUM NOVAE-ANGLIAE	NEW ENGLAND ASTER	0.50	0.32
TRADESCANTIA OHIENSIS	COMMON SPIDERWORT	1.25	0.81
VERNONIA FASCICULATA	COMMON IRONWEED	3.00	1.94
VERONICASTRUM VIRGINICUM	CULVER'S ROOT	0.25	0.16
ZIZIA AUREA	GOLDEN ALEXANDERS	1.00	0.65
	TOTAL	59.50	38.44

LIVE BRUSH LAYERING OR LIVE STAKES		
SCIENTIFIC NAME	COMMON NAME	STEMS
LIVE BRUSH AND LIVE STAKE SPECIES		
CORNUS AMOMUM	SILKY DOGWOOD	2,513
SALIX SPP	WILLOW	2,513
SAMBUCUS CANADENSIS	AMERICAN ELDERBERRY	2,513
BARE ROOT SEEDLINGS		
SCIENTIFIC NAME	COMMON NAME	QUANTITY
BARE ROOT		
ACER RUBUM	RED MAPLE	35
CERCIS CANDENSIS	RED BUD	35
LINDERA BENZOIN	SPICE BUSH	35
PRUNUS AMERICANA	AMERICAN PLUM	35
QUERES BICOLOR	SWAMP WHITE OAK	35
CARYA OVATA	SHAGBARK HICKORY	35
CELTIS OCCIDENTALIS	HACKBERRY	35
LIRIODENDRON TULIPFERA	TULIP TREE	35

NOTE: BARE ROOT SEEDLINGS APPLIED AT APPROXIMATELY ONE STEM PER 250 FT² AND LIVE STAKES ARE 5 STEMS PER FOOT PER LIFT.

- PHASE III ALTERNATE BID PLANTING QUANTITIES
- AN ADDITIONAL 96 BARE ROOT SEEDLINGS WILL BE REQUIRED TO PLANT THE ADDITIONAL AREA DISTURBED BY PHASE III
  - AN ADDITIONAL 113 OUNCES OF ZONE 1 WET TO MESIC SEED MIX WILL LIKEWISE BE REQUIRED

NOTE: SPECIES MIX AND PLANTING DENSITY FOR PHASE III ALTERNATE BID SHALL BE EQUIVALENT TO PHASE I



0	9/8/2025	BR	ISSUED FOR CONSTRUCTION	
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DESIGNED BY: \_\_\_\_\_ BR  
DRAWN BY: \_\_\_\_\_ CW  
SHEET CHK'D BY: \_\_\_\_\_ JS  
CROSS CHK'D BY: \_\_\_\_\_ BR  
APPROVED BY: \_\_\_\_\_ BR  
ISSUED DATE: \_\_\_\_\_ 9/8/2025



MOUNTS PARK STREAM RESTORATION  
AND IMPROVEMENTS - PHASE 1

PROJECT NO. 173410744

CIVIL  
PLANTING QUANTITIES

WARNING

0 1/2 1

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PROJECT SET: 15 of 15

C SHEET: 12 OF 12

SHEET NO.: C-5-004

ISSUED FOR CONSTRUCTION