

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



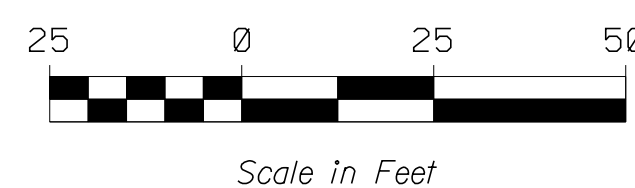
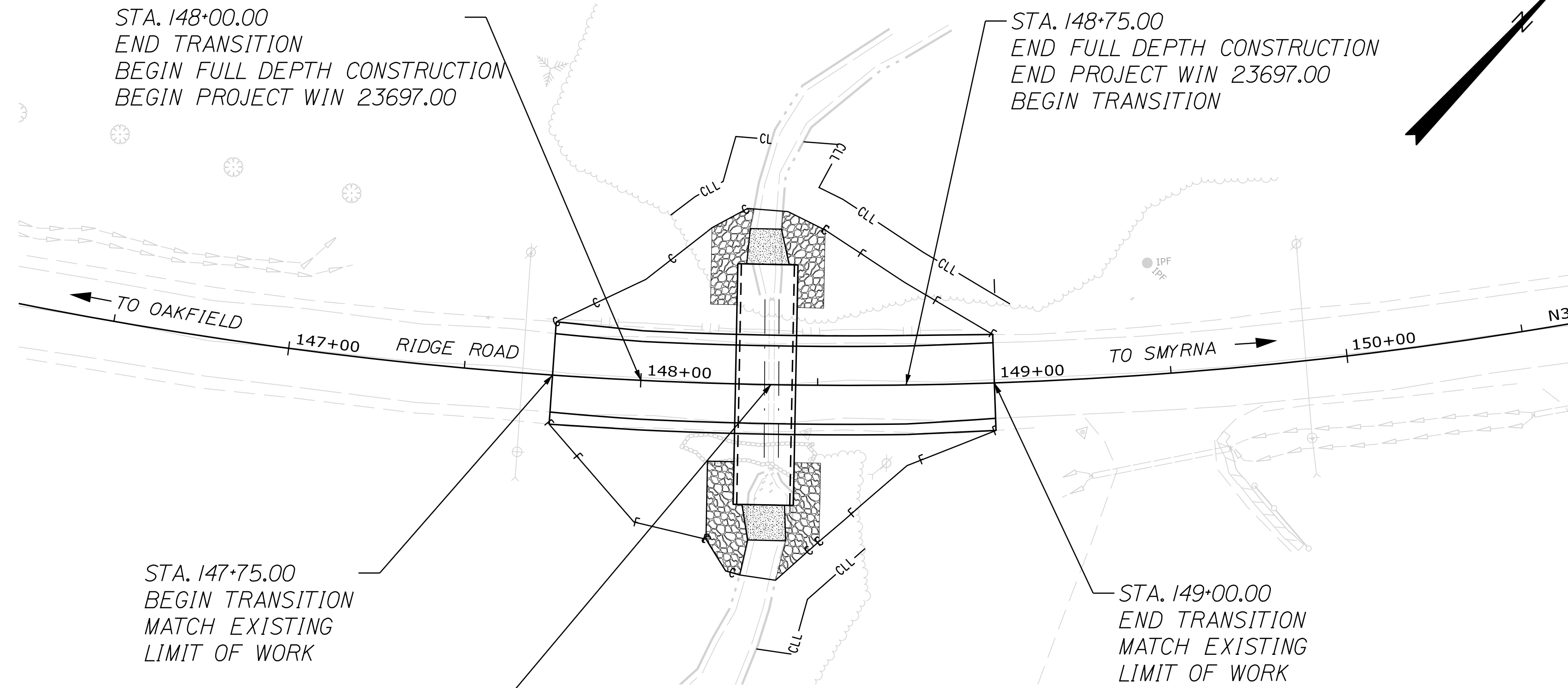
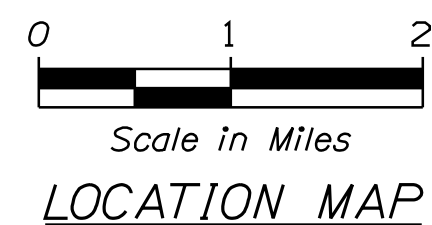
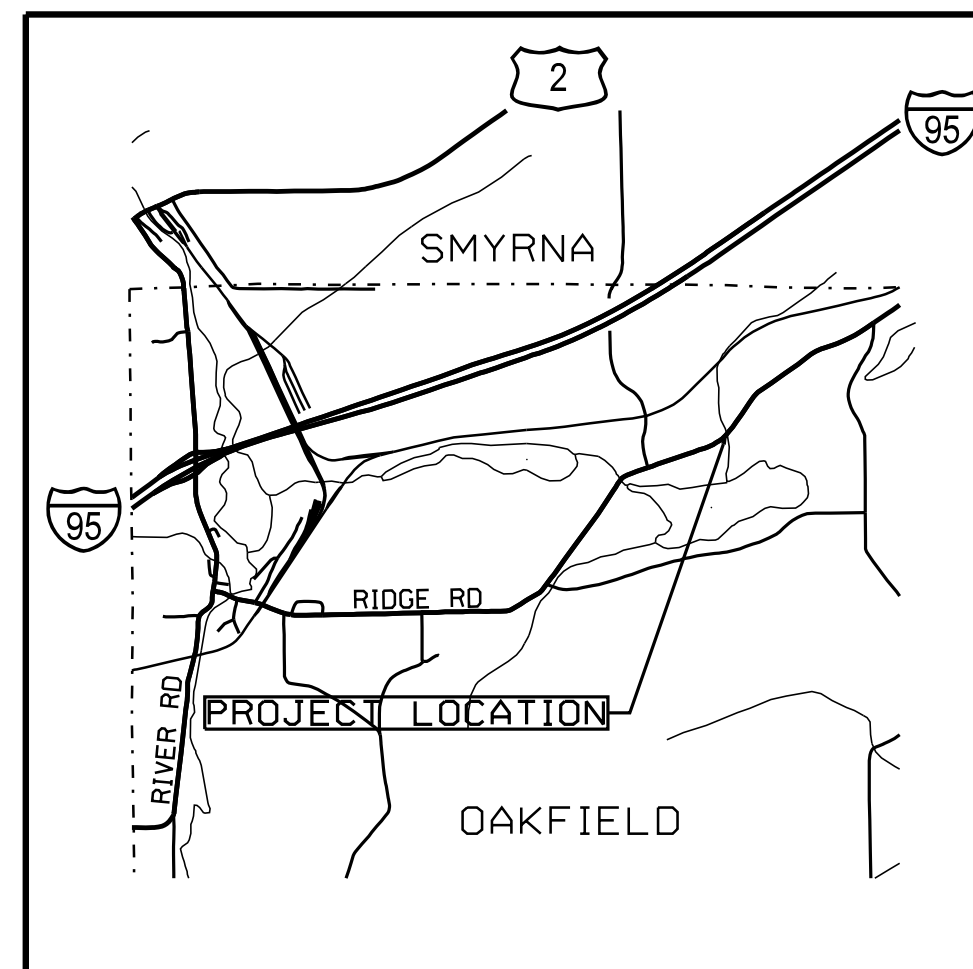
## OAKFIELD AROOSTOOK COUNTY

RIDGE ROAD  
SPAULDING LAKE BRIDGE  
BRIDGE NO. 6638  
**STATE PROJECT NO. 23697.00**  
PROJECT LENGTH : 0.01 MILES

PLAN LEGEND	
Town, County, State	-----
Property Lines	-----
R/W Lines-Existing	-----
R/W Lines-Proposed	-----
Culvert-Existing	-----
Culvert Proposed	-----
Curbing Existing	-----
Curbing Proposed	-----
Type 1	-----
Type 3	-----
Type 5	-----
Outline of Bodies of Water	-----
Exposed Bedrock	-----
Buildings	-----
Trees	-----
Tree Line	-----
Clearing Limit Line	-----
Railroad	-----
Catch Basins	Existing  Proposed
Manholes	Existing  Proposed
Proposed Underdrain	-----
Proposed Ditch	-----
Existing Ditch	-----
Utility Poles	Existing  Proposed
Fire Hydrants	Existing  Proposed
Existing Water Line	-----
Existing San. Sewer	-----
Existing San. Sewer Manhole	
Guardrail-Existing	-----
Guardrail-Proposed	-----
Guardrail-Cable, Other	-----
Centerline-Existing	-----
Centerline-Proposed	-----
Travelway-Existing	-----
Travelway-Proposed	-----
Boring	HB-XXX-###
Pavement Core	PC-#
Test Pit	TP-XXX-###
Probe	P-#. #X
	#. # = Depth
	X = W (Weathered Rock)
	R (Refusal)
	NR (No Refusal)

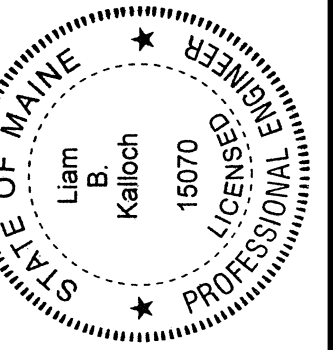
INDEX OF SHEETS	
Description	Sheet No.
Title Sheet	1
Typical Sections	2
Estimated Quantities and General Notes	3
Special Details	4
Streambed Details	5
Boring Location Plan & Interpretive Subsurface Profile	6
Boring Logs	7
Plan and Profile	8
Cross Sections	9-11
Road Closure Plan	12
Sign Summary	13
Right of Way Map	14

TRAFFIC DATA	
Current (2023) AADT	330
Future (2043) AADT	360
DHV - % of AADT	12%
Design Hour Volume	43
% Heavy Trucks (AADT)	9%
% Heavy Trucks (DHV)	5%
Directional Distribution (DHV)	63%
18 kip Equivalent P 2.0	12
18 kip Equivalent P 2.5	11
Design Speed (mph)	45
Functional Class:	Minor Collector
Highway Corridor Priority:	4



<b>PROJECT LOCATION:</b>	OAKFIELD, RIDGE ROAD, LOCATED 1.2 MILES EAST OF SPAULDING LAKE ROAD INTERSECTION
<b>PROGRAM AREA:</b>	REGIONAL PROGRAM
<b>SCOPE OF WORK:</b>	LARGE CULVERT REPLACEMENT

STATE OF MAINE	DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
		COMMISSIONER:	
		CHIEF ENGINEER:	



Signature: <i>Liam B. Kellogg</i>	SIGNATURE	15070	P.E. NUMBER	01-25-2024	DATE
	PROGRAM MANAGER	ROGER SOUCY	DESIGNER	L. KALLOCH	CONSULTANT
	PROJECT RESIDENT	CMA ENGINEERS, INC.	CONTRACTOR		PROJECT COMPLETION DATE

PROJECT INFORMATION	PROGRAM	DESIGNER	CONSULTANT	CONTRACTOR	PROJECT COMPLETION DATE
	HIGHWAY	ROGER SOUCY	CMA ENGINEERS, INC.		

OAKFIELD RIDGE ROAD	TITLE SHEET
------------------------	-------------

SHEET NUMBER	1
OF 14	

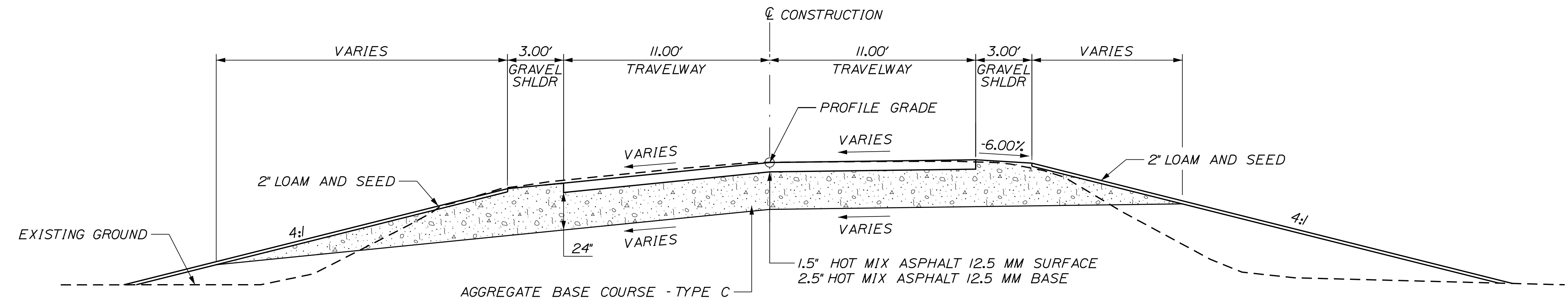
WIN 23697.00 STATE PROJECT NO. 23697.00

Date: 1/17/2024

Username: common

Division: HIGHWAY

Filename: ... \Consultant\001\_Title .dgn



AGGREGATE BASE COURSE - TYPE C		
SHOULDER 68.40 CY/100 LF	TRAVEL LANE 162.96 CY/100 LF	SHOULDER 46.95 CY/100 LF
STATION TO STATION 148+00 TO 148+75	STATION TO STATION 148+00 TO 148+75	STATION TO STATION 148+00 TO 148+75

**ROADWAY TYPICAL SECTION**  
SUPERELEVATED  
N.T.S.

SUPERELEVATION TABLE		
LT. TRAVEL LANE	STATION	RT. TRAVEL LANE
	BEGIN	
MATCH	147+75	MATCH
-9.0%	148+00	0.6%
-9.5%	148+25	1.0%
-10.0%	148+50	1.3%
-10.5%	148+75	1.7%
MATCH	149+00	MATCH

**NOTES:**

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. THE GRAVEL QUANTITY CALCULATION IS BASED ON A 2 INCH LOAM OR DIRTY BORROW DEPTH. THE ACTUAL DEPTH MAY VARY. SEE THE GENERAL NOTES.
3. STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
4. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.

NOT TO SCALE

STATE OF MAINE DEPARTMENT OF TRANSPORTATION <b>23697.00</b>	BRIDGE NO. 6638 <b>WIN</b> 23697.00 HIGHWAY PLANS
OAKFIELD RIDGE ROAD <b>TYPICAL SECTIONS</b>	SHEET NUMBER <b>2</b> OF 14
SIGNATURE _____ P.E. NUMBER _____ DATE _____	DATE _____ BY W. GORDON J. BEAUBIET ROGER SOUCY L. KALLOCH S. FORTIER DESIGN/REVIEWED DESIGN/REVIEWED DESIGN/REVIEWED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES

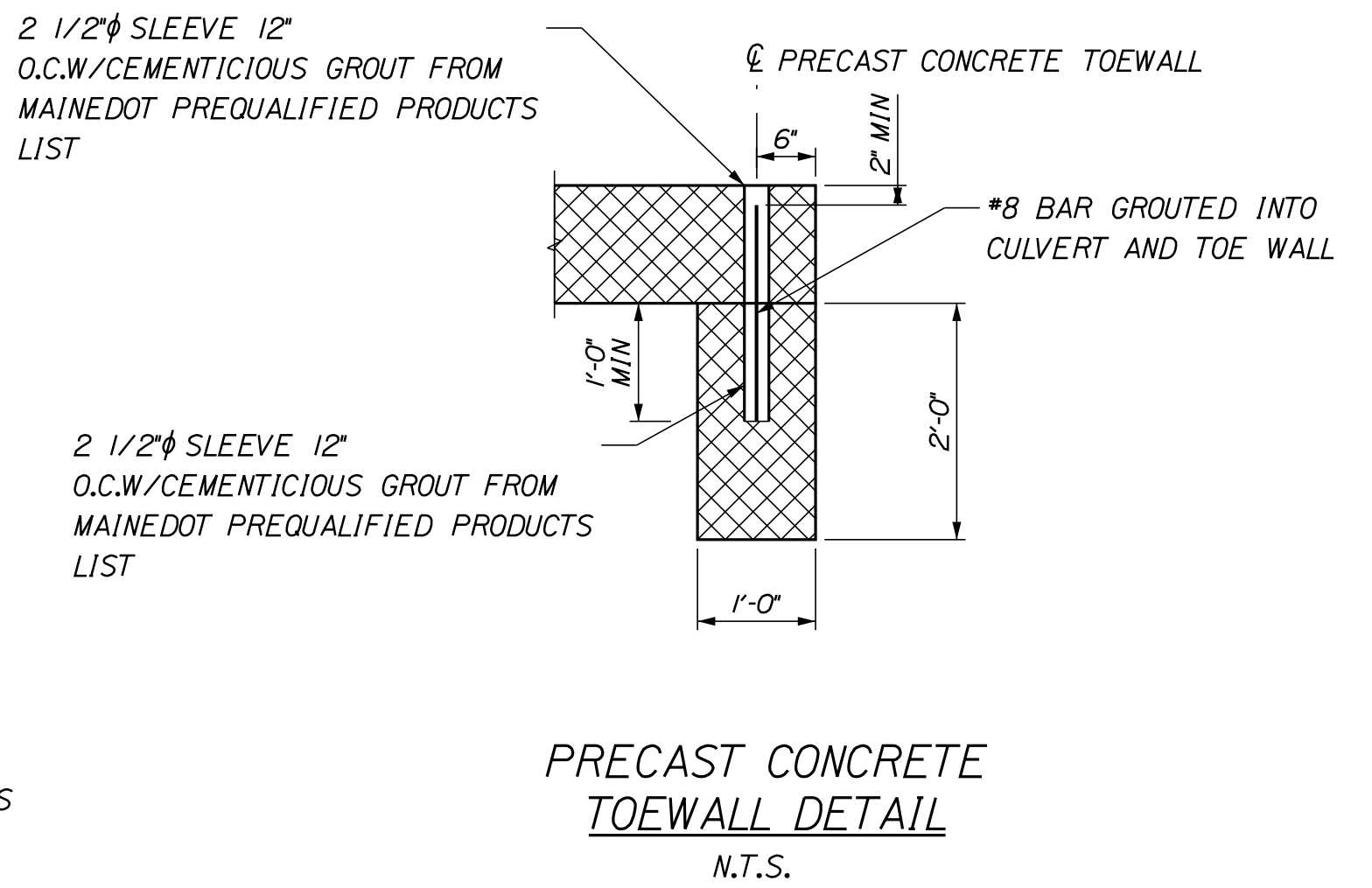
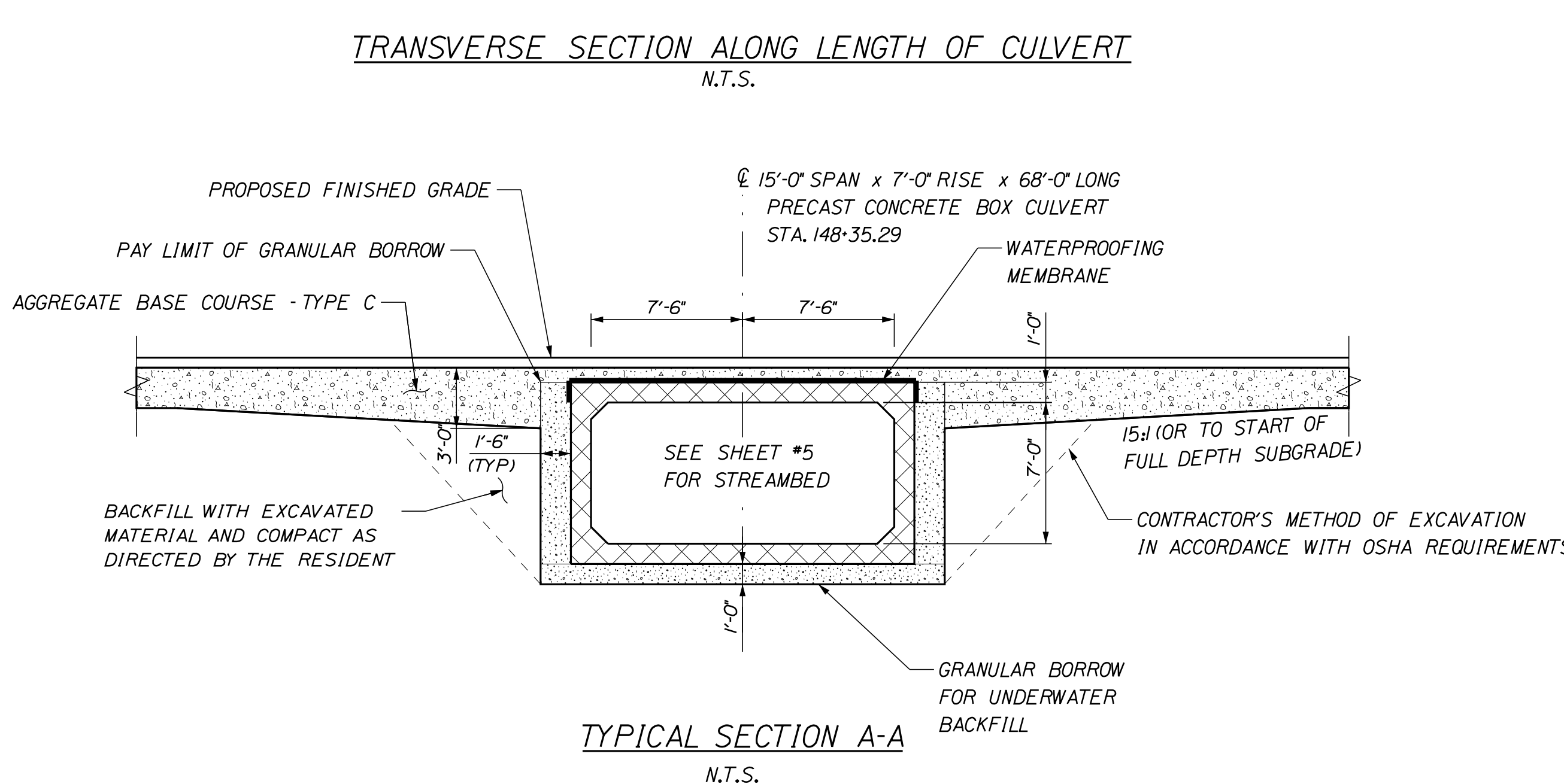
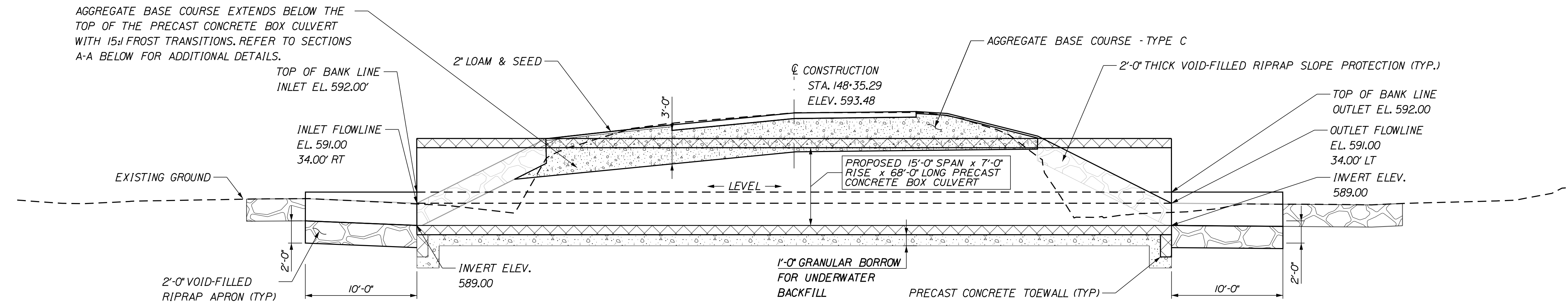
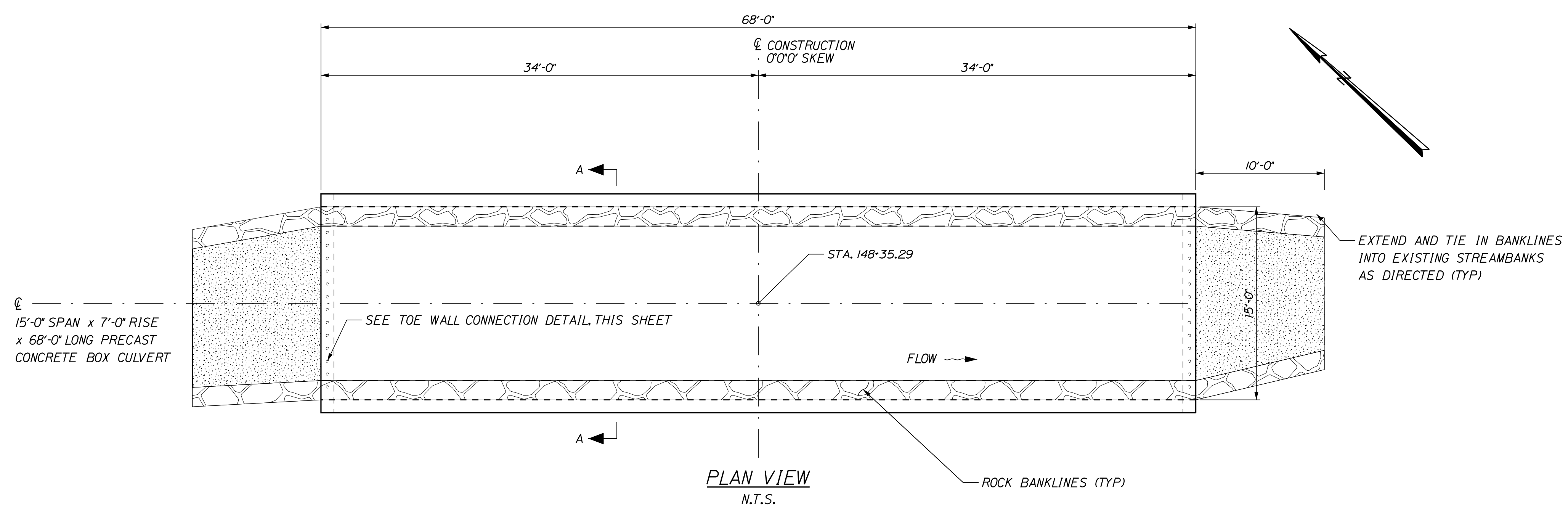


Date: 1/18/2024

Username: common

Division: HIGHWAY

Filename: ... \005\_SpecialDetail.dgn



**PRECAST CONCRETE BOX CULVERT NOTES:**

1. THE PRECAST UNITS SHALL BE DESIGNED TO CARRY CONSTRUCTION LOADINGS WITH A MINIMUM FILL COVER OF 18 INCHES OVER THE TOP OF THE UNITS.
2. INSTALL STANDARD MEMBRANE WATERPROOFING OVER THE TOP AND TO 12 INCHES DOWN THE EXTERIOR SIDES OF THE PRECAST UNITS.
3. THE PRECAST CONCRETE BOX CULVERT SHALL BE BEDDED ON A 1-FOOT LAYER OF COMPACTED GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL.
4. COFFERDAMS ARE TO BE PLACED AT BOTH THE DOWNSTREAM AND UPSTREAM END OF THE PRECAST CONCRETE BOX CULVERT TO ALLOW FOR THE CONSTRUCTION OF THE PRECAST CONCRETE BOX CULVERT IN THE DRY.
5. RIPRAP WILL BE USED TO INSLOPE AROUND THE CULVERT ENDS AT BOTH THE INLET AND OUTLET, SEE PLAN AND PROFILE FOR LOCATIONS.
6. THE PRECAST CONCRETE BOX CULVERT SHALL BE LINED WITH 2-FEET OF SPECIAL FILL IN ACCORDANCE WITH SPECIAL PROVISION 203.
7. A 'CLAMHELL' PRECAST CONCRETE BOX CULVERT SHALL BE USED.
8. CONSTRUCTION, HANDLING AND ASSEMBLY OF THE PRECAST UNIT SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS APPLICABLE.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		23697.00		WIN		23697.00		HIGHWAY PLANS	
BRIDGE NO. 6638		SIGNATURE		P.E. NUMBER		DATE					
PROJ. MANAGER	ROGER SOUCY	DESIGN-DETAILED	L. KALLOCH	CHECKED-REVIEWED	S. FORTIER	DESIGN-DETAILED		REVISIONS 1		REVISIONS 2	
DATE		BY	W. GORDON	DATE		BY	J. BEAUBIET	DATE		BY	
OAKFIELD RIDGE ROAD											
SPECIAL DETAILS											
SHEET NUMBER											
4											
OF 14											

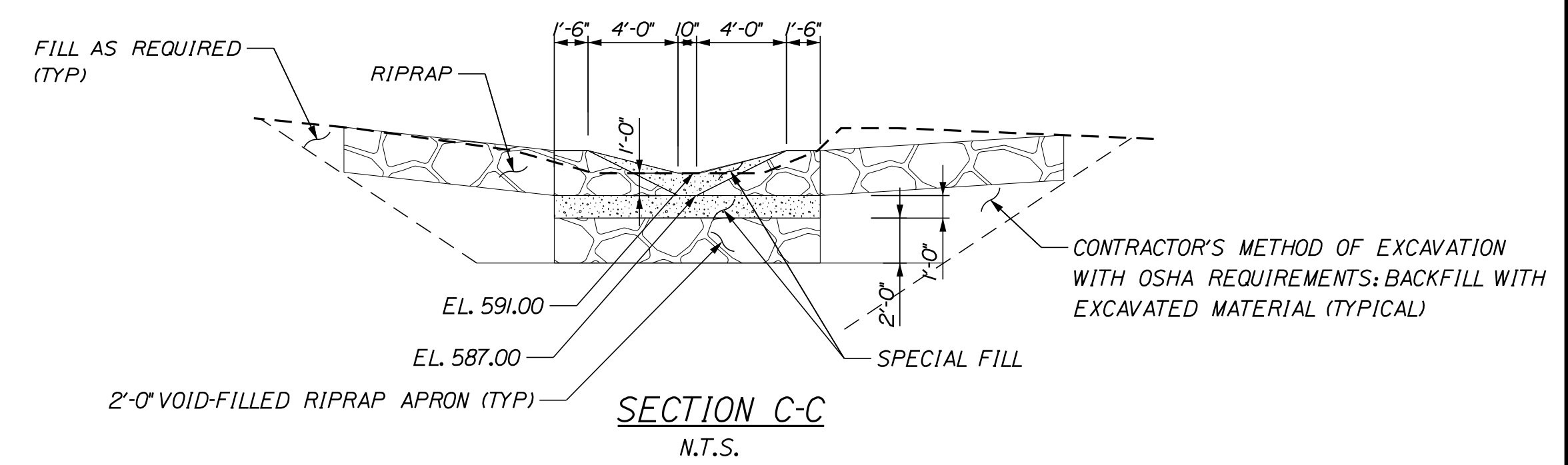
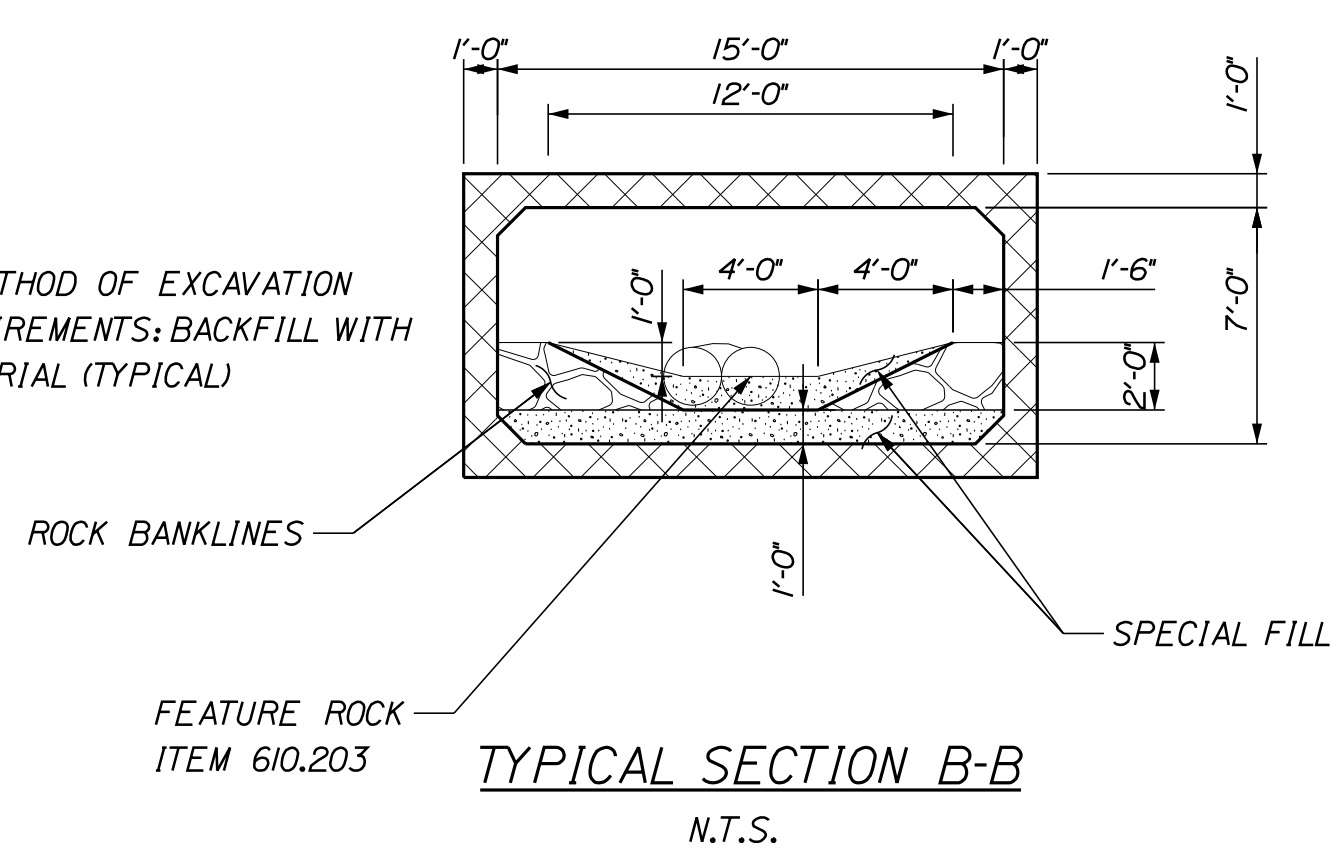
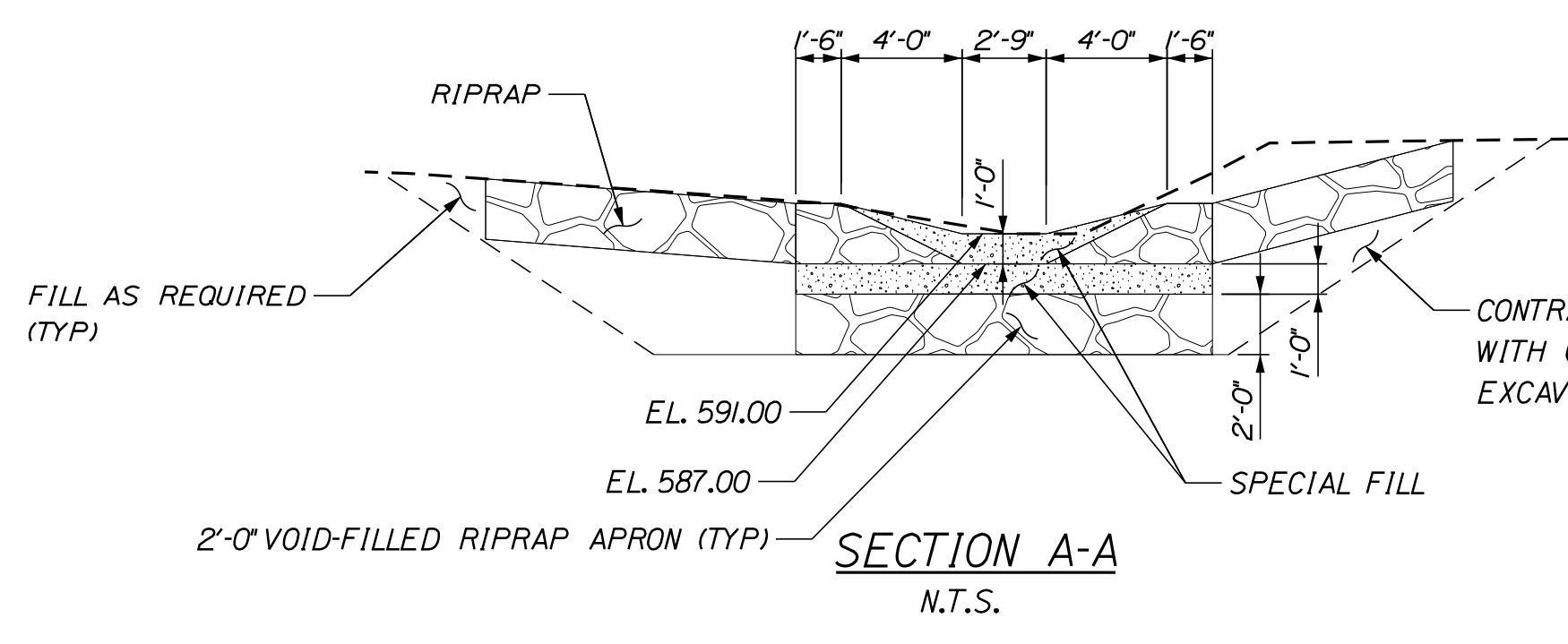
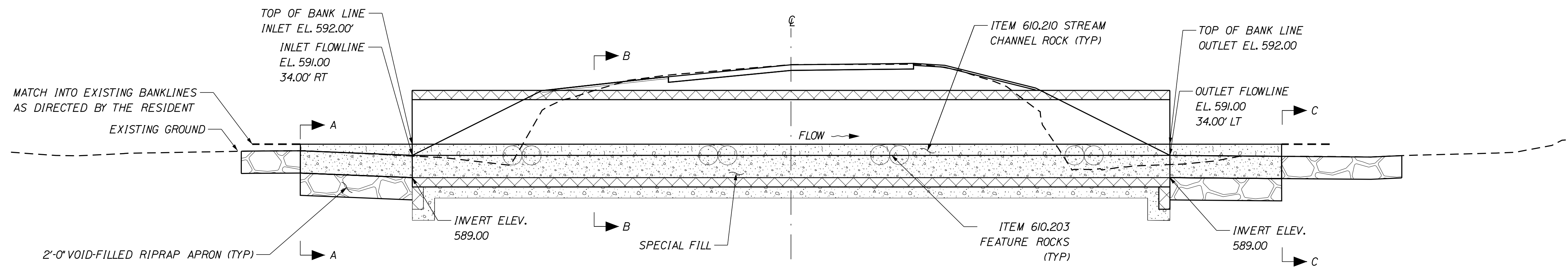
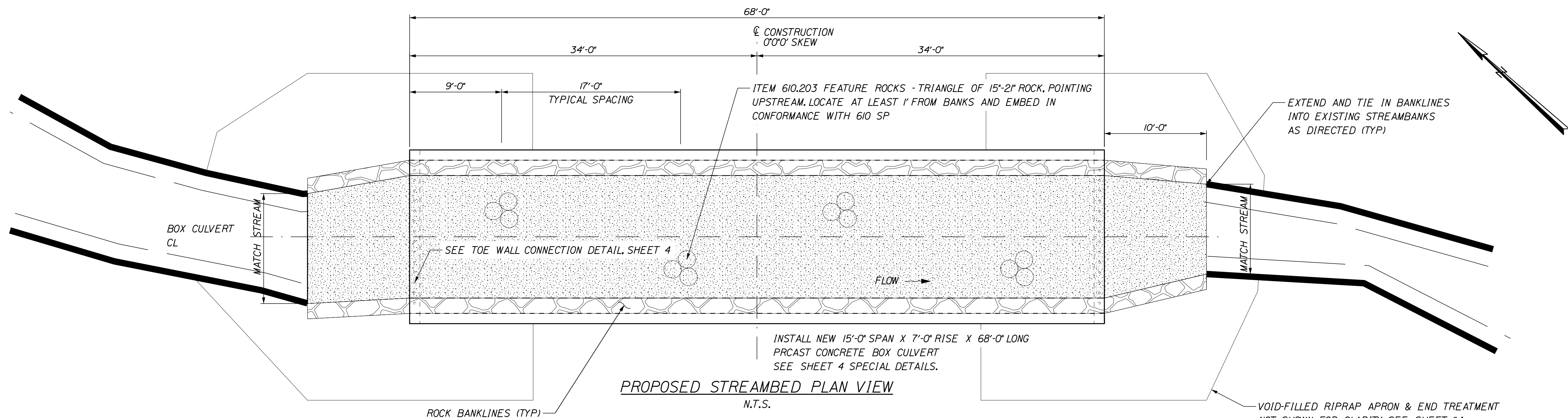
NOT TO SCALE

Date: 1/18/2024

Username: common

Division: HIGHWAY

Filename: ... \005\_SpecialDetail.dgn



STATE OF MAINE	DEPARTMENT OF TRANSPORTATION	23697.00	WIN	23697.00	HIGHWAY PLANS
		BRIDGE NO. 6638			

DATE	BY	ROGER SOUCY	DESIGN-DETAILED	L. KALLOCH	W. GORDON	J. BEAUBIET	SIGNATURE
	CHECKED-REVIEWED	S. FORTIER	DESIGN-DETAILED				P.E. NUMBER
	DESIGN-DETAILED		REVISIONS 1				DATE
			REVISIONS 2				
			REVISIONS 3				
			REVISIONS 4				
			FIELD CHANGES				

PROJ. MANAGER	ROGER SOUCY	DATE	
DESIGN-DETAILED	L. KALLOCH	BY	W. GORDON
CHECKED-REVIEWED	S. FORTIER	ROGER SOUCY	J. BEAUBIET
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

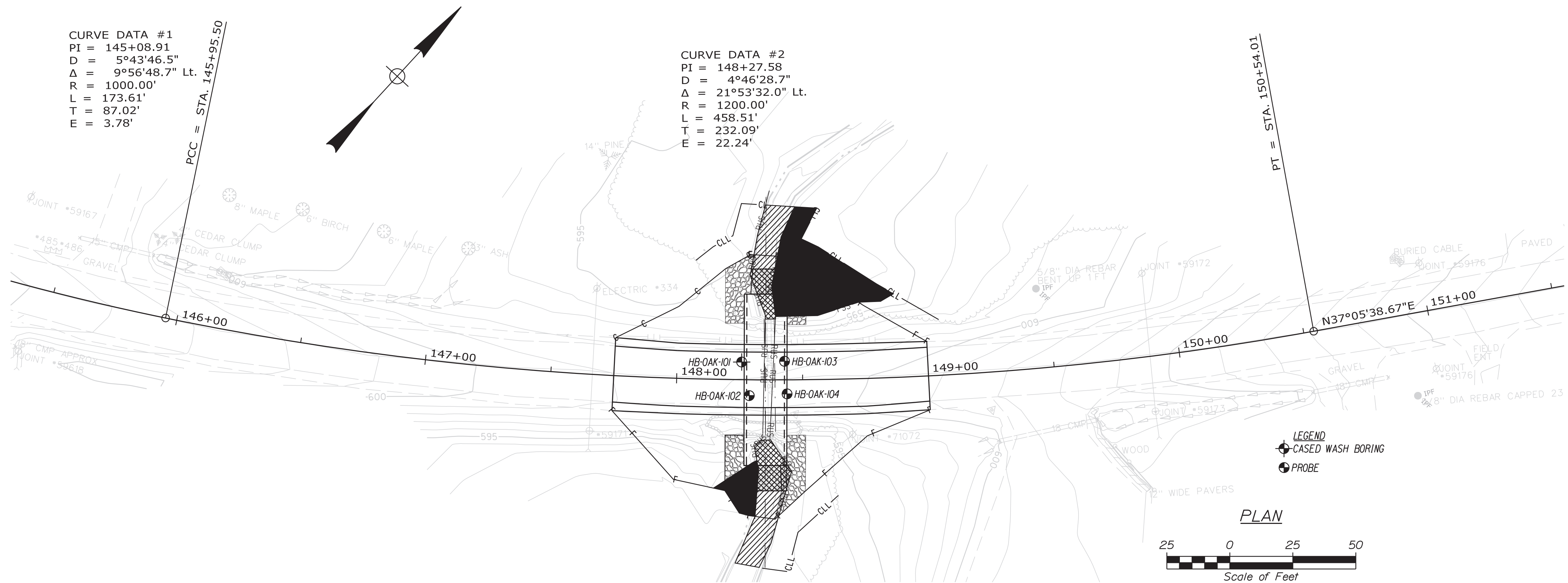
OAKFIELD  
 RIDGE ROAD  
**STREAMBED DETAILS**

SHEET NUMBER  
**5**  
 OF 14

NOT TO SCALE

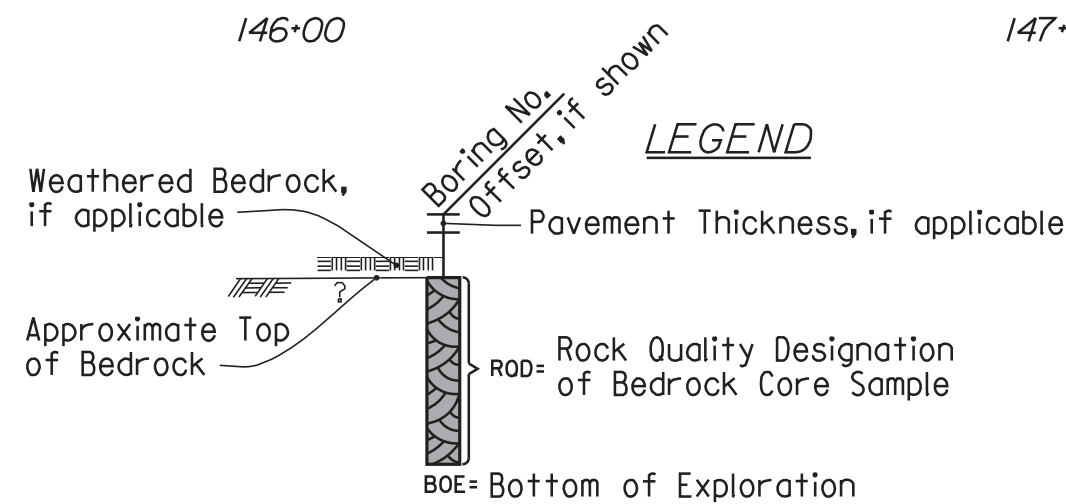
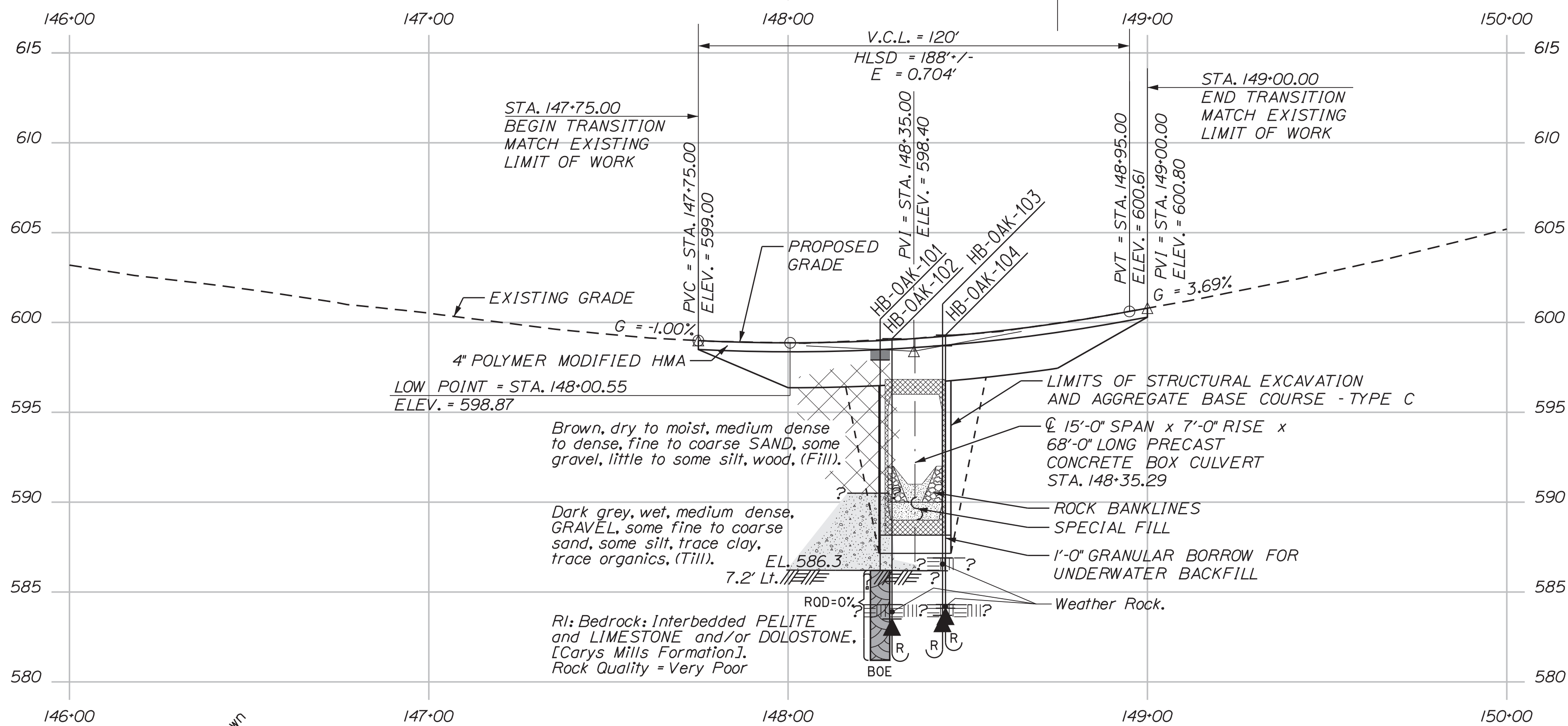
CURVE DATA #1  
 PI = 145+08.91  
 D = 5°43'46.5"  
 Δ = 9°56'48.7" Lt.  
 R = 1000.00'  
 L = 173.61'  
 T = 87.02'  
 E = 3.78'

CURVE DATA #2  
 PI = 148+27.58  
 D = 4°46'28.7"  
 Δ = 21°53'32.0" Lt.  
 R = 1200.00'  
 L = 458.51'  
 T = 232.09'  
 E = 22.24'



STA 148+00.00  
 END TRANSITION  
 BEGIN FULL DEPTH CONSTRUCTION  
 BEGIN PROJECT WIN 23697.00

STA 148+75.00  
 END FULL DEPTH CONSTRUCTION  
 END PROJECT WIN 23697.00  
 BEGIN TRANSITION



Note: This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and bedrock transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.



Cody A. Russell

SIGNATURE

15866

P.E. NUMBER

1/22/2024

DATE

PROJ. MANAGER	DATE	BY	REVISIONS	FIELD CHANGES
DESIGN-DETAILED				
CHECKED-REVIEWED				
DESIGN-DETAILED	JAN 2024	T. WHITE		
DESIGN-DETAILED		C. RUSSELL		
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

OAKFIELD RIDGE ROAD  
 BORING LOCATION PLAN &  
 INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER

6

OF 14



CURVE DATA #1  
 PI = 145+08.91  
 D = 5°43'46.5"  
 Δ = 9°56'48.7" Lt.  
 R = 1000.00'  
 L = 173.61'  
 T = 87.02'  
 E = 3.78'

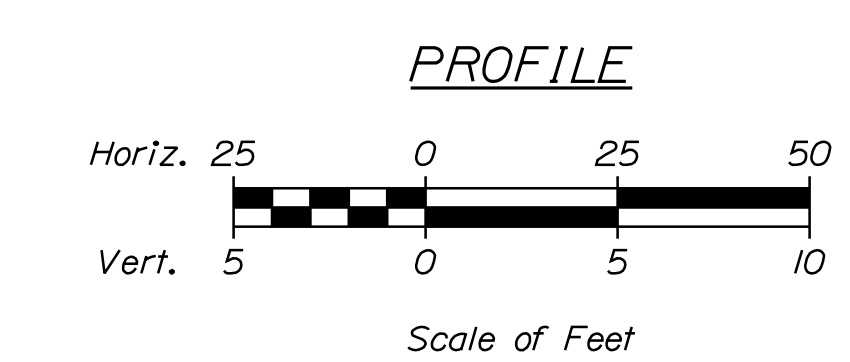
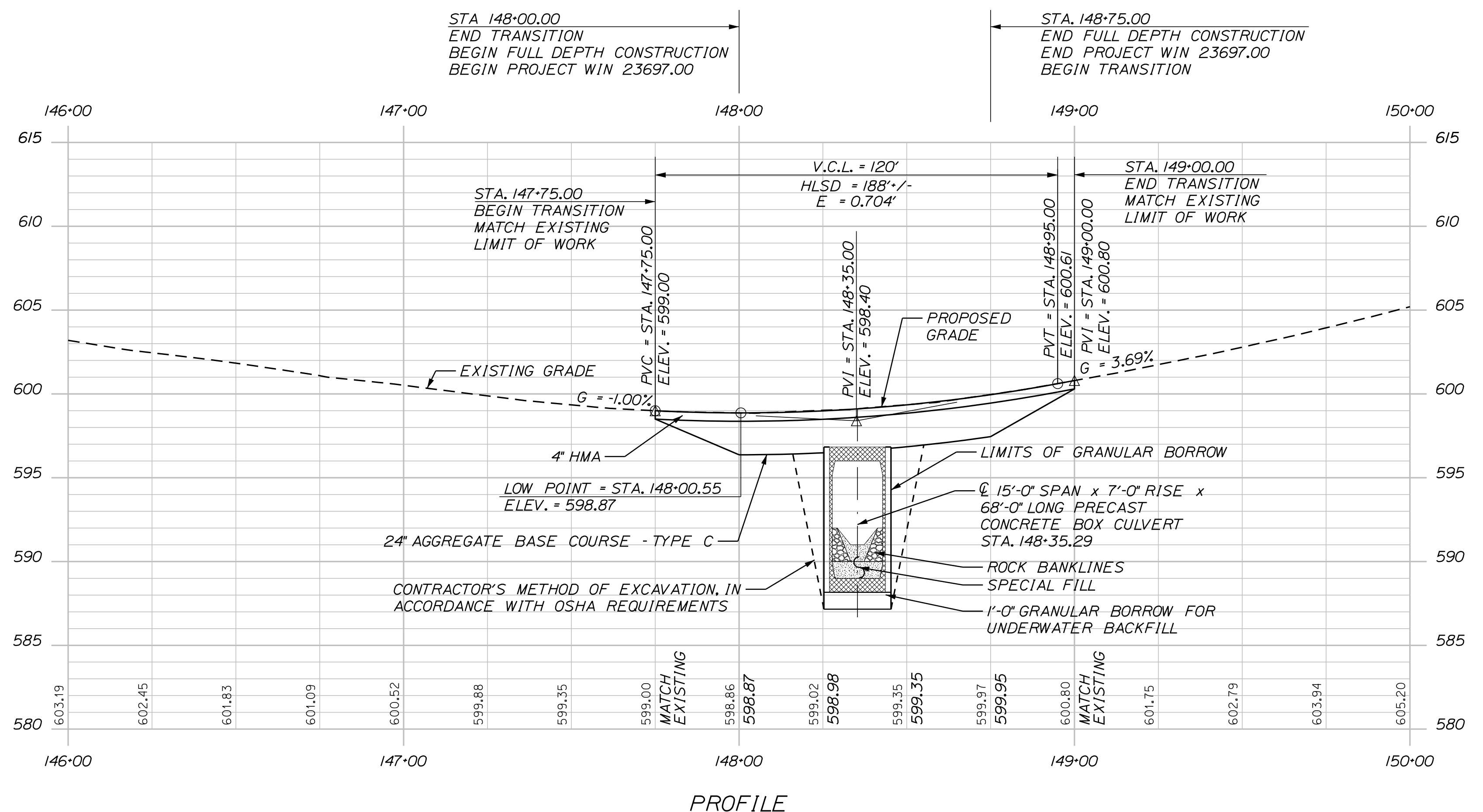
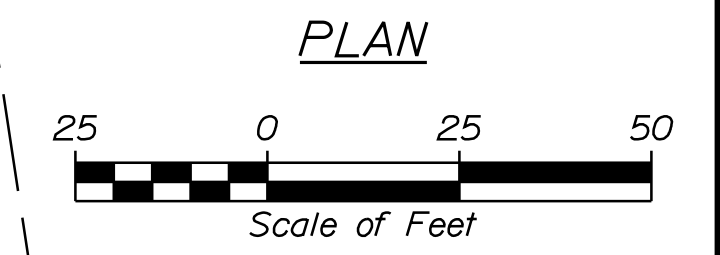
CURVE DATA #2  
 PI = 148+27.58  
 D = 4°46'28.7"  
 Δ = 21°53'32.0" Lt.  
 R = 1200.00'  
 L = 458.51'  
 T = 232.09'  
 E = 22.24'

PROPOSED CULVERT LAYOUT CONTROLS				
	INLET INVERT CONROLS		OUTLET INVERT CONROLS	
PERPENDICULAR STATION	148+27.57	148+43.01	148+28.00	148+42.58
PERPENDICULAR OFFSET	33.98' LT	33.98' LT	34.02' RT	34.02' RT
INVERT ELEVATION	EL. 591.00'	EL. 591.00'	EL. 591.00'	EL. 591.00'

STA. 147-75.00  
 BEGIN TRANSITION  
 MATCH EXISTING  
 LIMIT OF WORK

STA. 148-00.00  
 END TRANSITION  
 BEGIN FULL DEPTH CONSTRUCTION  
 BEGIN PROJECT WIN 23697.00

STA. 148-75.00  
 END FULL DEPTH CONSTRUCTION  
 END PROJECT WIN 23697.00  
 BEGIN TRANSITION



STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 23697.00  
 WIN 23697.00  
 BRIDGE NO. 6638  
 HIGHWAY PLANS

DATE	BY	ROGER SOUCY	DATE	BY	W. GORDON
		L. KALLOCH			J. BEAUBIET
		S. FORTIER			

DESIGN-DETAILED	CHECKED-REVIEWED	DESIGN-DETAILED	DESIGN-DETAILED	REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	FIELD CHANGES

OAKFIELD  
 RIDGE ROAD  
 PLAN AND PROFILE

SHEET NUMBER  
 8  
 OF 14

Date: 1/17/2024

Username: common

Division: HIGHWAY

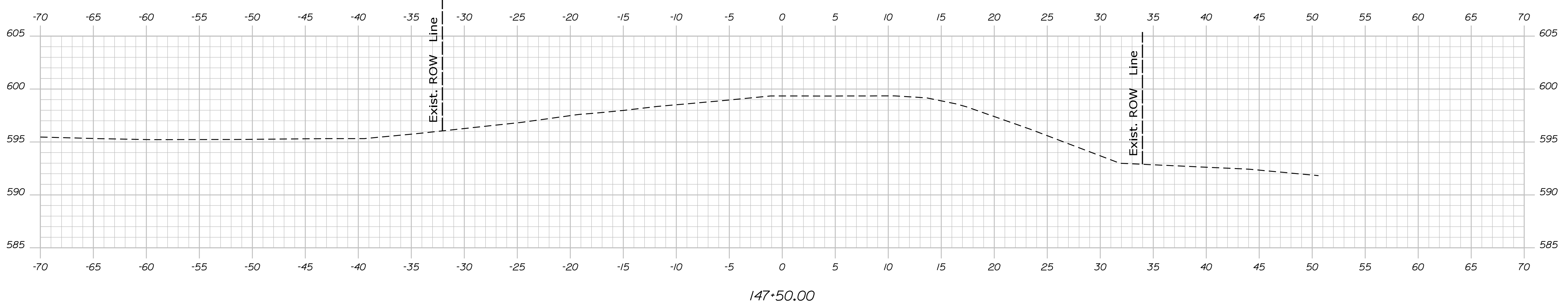
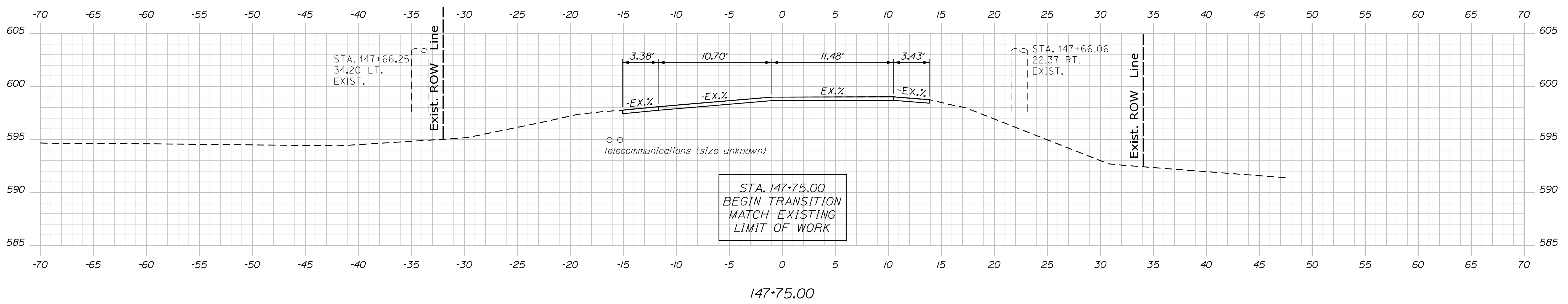
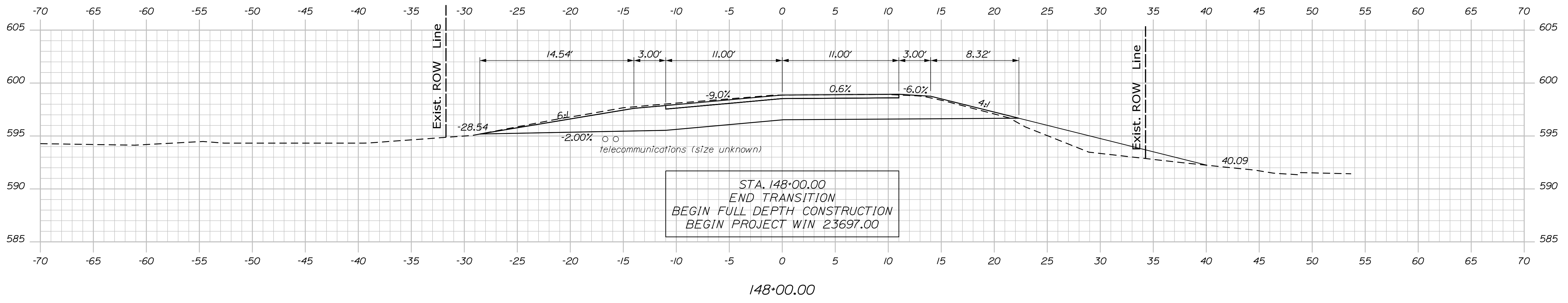
Filename: ... \Consultant\006\_HDPlan.dgn

Date: 1/17/2024

Username: common

Division: HIGHWAY

Filename: ... \Consultant\007\_Xsect.dgn



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
23697.00  
WIN 23697.00  
BRIDGE NO. 6638  
HIGHWAY PLANS

SIGNATURE	P.E. NUMBER	DATE

DATE	BY	PROJ. MANAGER	ROGER SOUCY
	L. KALLOCH W. GORDON S. FORTIER J. BEAUBIET	CHECKED-REVIEWED	DESIGN-DETAILED
		DESIGN-DETAILED	DESIGN-DETAILED
		REVISIONS 1	REVISIONS 1
		REVISIONS 2	REVISIONS 2
		REVISIONS 3	REVISIONS 3
		REVISIONS 4	REVISIONS 4
		FIELD CHANGES	FIELD CHANGES

OAKFIELD  
RIDGE ROAD  
CROSS SECTIONS

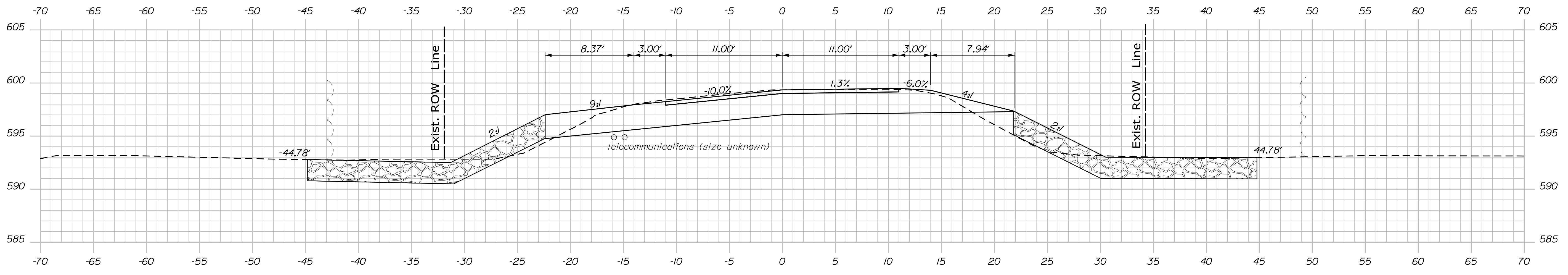
SHEET NUMBER  
**9**  
OF 14

Date: 1/17/2024

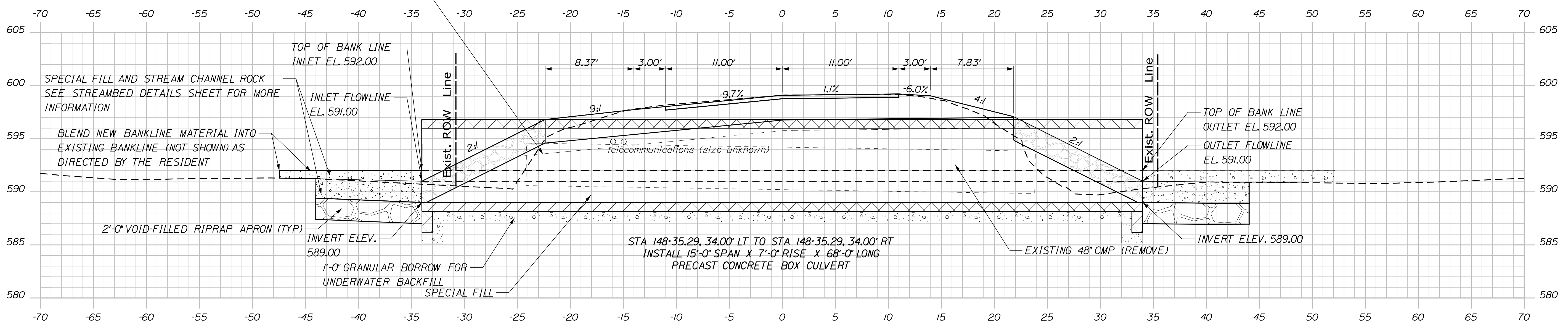
Username: common

Division: HIGHWAY

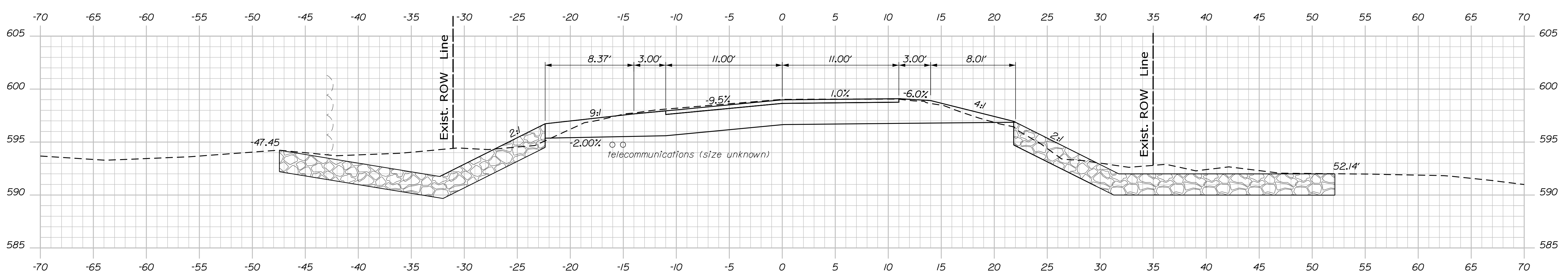
Filename: ... \Consultant\007\_Xsect.dgn



LIMIT OF ADDITIONAL 1'-0" LIFT OF SUBBASE FOR FROST TRANSITION AT CULVERT  
 148+50.00



148+35.29



148+25.00

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 23697.00  
 WIN  
 23697.00  
 BRIDGE NO. 6638  
 HIGHWAY PLANS

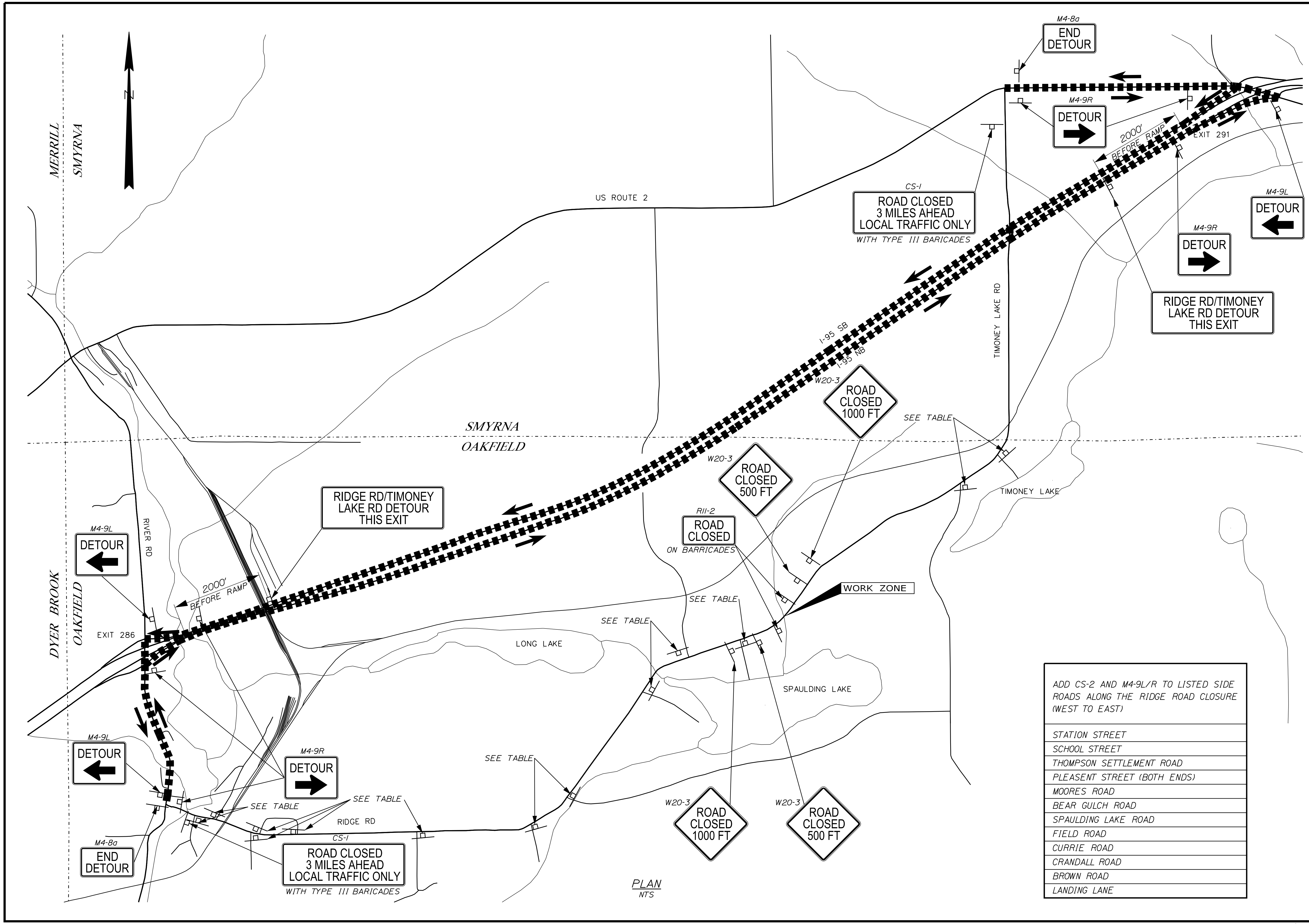
DATE	SIGNATURE
BY	P.E. NUMBER
PROJ. MANAGER	DATE

DESIGN-DETAILED	DATE
CHECKED-REVIEWED	BY
DESIGN-DETAILED	PROJ. MANAGER
REVISIONS 1	DESIGN-DETAILED
REVISIONS 2	BY
REVISIONS 3	PROJ. MANAGER
REVISIONS 4	DATE
FIELD CHANGES	

OAKFIELD  
 RIDGE ROAD  
 CROSS SECTIONS

SHEET NUMBER  
 10  
 OF 14





ADD CS-2 AND M4-9L/R TO LISTED SIDE ROADS ALONG THE RIDGE ROAD CLOSURE (WEST TO EAST)

STATION STREET
SCHOOL STREET
THOMPSON SETTLEMENT ROAD
PLEASENT STREET (BOTH ENDS)
MOORES ROAD
BEAR GULCH ROAD
SPAULDING LAKE ROAD
FIELD ROAD
CURRIE ROAD
CRANDALL ROAD
BROWN ROAD
LANDING LANE

PLAN  
NTS

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		23697.00
OAKFIELD RIDGE ROAD		WIN 23697.00
ROAD CLOSURE PLAN		BRIDGE NO. 6638 HIGHWAY PLANS
PROJ. MANAGER	ROGER SOUCY	DATE
DESIGN-DETAILED	L. KALLOCH	BY
CHECKED-REVIEWED	S. FORTIER	W. GORDON
DESIGN-DETAILED		J. BEAUBIET
DESIGN-DETAILED		SIGNATURE
REVISIONS 1		P.E. NUMBER
REVISIONS 2		DATE
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		
SHEET NUMBER		12
		OF 14

CONSTRUCTION SIGN SUMMARY

ITEM NUMBER	IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		AREA IN SQUARE FEET
		WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR		BACK-GROUND	LEGEND BOARDER	
652.35	CS-1	60"	30"	ROAD CLOSED 3 MILES AHEAD LOCAL TRAFFIC ONLY	6" 5" 4"	3.4" 3.4"		2	ORANGE	BLACK	12.50 (25.00)
652.35	CS-2	30"	30"	RIDGE ROAD CLOSED USE DETOUR	4" 4" 4"	3.0" 3.0"		13	ORANGE	BLACK	6.25 (81.25)
652.35	CS-3	54"	30"	RIDGE RD/TIMONEY LAKE RD DETOUR THIS EXIT	6" 5" 4"	3.4" 3.4"		2	ORANGE	BLACK	11.25 (22.50)
652.35	M4-8A	24"	18"	END DETOUR	TEXT DIMENSIONS SHALL CONFORM TO 'STANDARD HIGHWAY SIGNS'			2	ORANGE	BLACK	3.00 (6.00)
652.35	M4-9R	30"	24"	DETOUR →				12	ORANGE	BLACK	5.00 (60.00)
652.35	M4-9L	30"	24"	DETOUR ←				10	ORANGE	BLACK	5.00 (50.00)
652.35	R11-2	48"	30"	ROAD CLOSED				2	ORANGE	BLACK	10.00 (20.00)
652.35	W20-3 (500 FT)	48"	48"	ROAD CLOSED 500 FT				2	ORANGE	BLACK	16.00 (32.00)
652.35	W20-3 (1000 FT)	48"	48"	ROAD CLOSED 1000 FT				2	ORANGE	BLACK	16.00 (32.00)

NOTES:

- SIGN LOCATIONS ARE APPROXIMATE AND TO BE VERIFIED IN THE FIELD.
- INFORMATION SHOWN REFLECTS SIGNAGE FOR DETOUR PLANS ONLY. ADDITIONAL SIGNAGE IS REQUIRED FOR HIGHWAY CONSTRUCTION WORK.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION

23697.00

WIN

HIGHWAY PLANS

BRIDGE NO. 8638

SIGNATURE

P.E. NUMBER

DATE

DATE

BY

ROGER SOUCY

L. KALLOCH

W. GORDON

S. FORTIER

J. BEAUBIET

DESIGN-DETAILED

DESIGN-REVIEWED

DESIGN-DETAILED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

OAKFIELD  
RIDGE ROAD

SIGN SUMMARY

SHEET NUMBER

13

OF 14

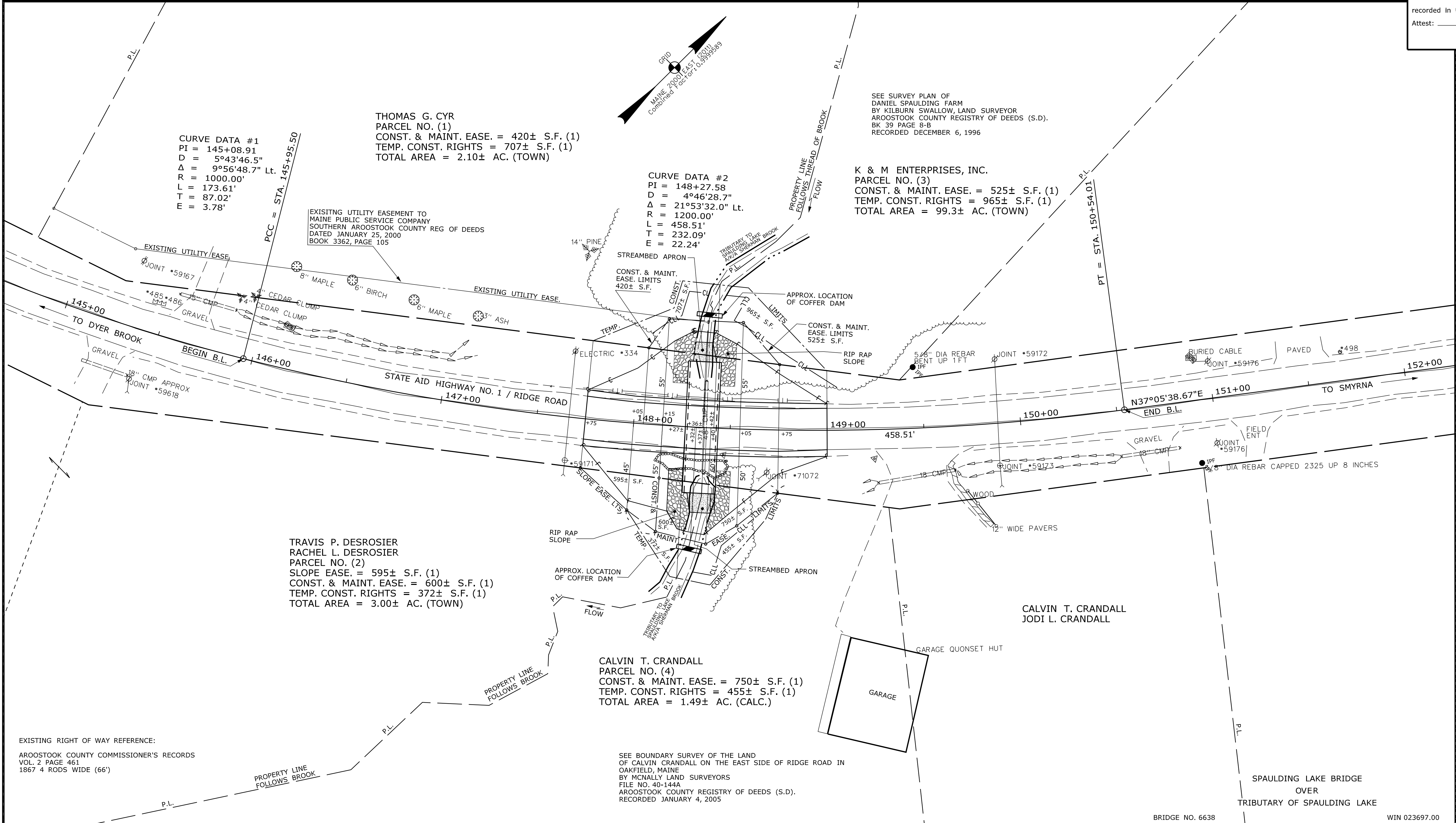
PLAN LEGEND	
Town, County, State Approx. Property Lines Existing Right of Way Limits of Wrought Portion Control Of Access New Right of Way New Easement New Temporary Rights New R/W Within Existing R/W	New R/W Along Existing R/W Building Trees Water Edge Ledge Fence Sign Clearing Limit Line Conifer Deciduous Bush Line Rock/Boulder Flag Pole CHAIN LINK BARB WIRE STOCKADE WELL Mailbox
Sanitary Sewer Telephone Line Electric Line Water Line Underdrain Line Gas Line Guardrail Culvert	Existing Proposed Traveled Way Ditch Catch Basin Manhole Sewer Manhole Utility Pole Fire Hydrant Curbing
Cut Line Stonewall Baseline Monument Iron Rod Found Replacement Pin Set	Existing Proposed Fill Line Retaining Wall Traverse Point Pipe Found

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

Scale of Feet  
 0 25 50 75 100

STATE OF MAINE  
 REGISTRY OF DEEDS

COUNTY \_\_\_\_\_  
 RECEIVED \_\_\_\_\_,  
 at \_\_\_\_\_ h \_\_\_\_\_ m \_\_\_\_\_ M and  
 recorded in Plan Bk \_\_\_\_\_, Pg. \_\_\_\_\_  
 Attest: \_\_\_\_\_ REGISTER



Date: \$date\$  
 Username: \$user\$  
 Division: \$wkgroup\$  
 Filename: \$file\$

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	T.L.B.	D.H.
FINAL RIGHT OF WAY	T.L.B.	B.D.M.
AREAS	T.L.B.	J.D.F.

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460  
 OAKFIELD  
 RIGHT OF WAY MAP

REVISIONS			PLAN FILED IN PLAN BOOK				PAGE COUNTY RECORD				
NO.	DATE	DESCRIPTION	NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE			

BRUCE A. VAN NOTE  
 COMMISSIONER  
 JOYCE NOEL TAYLOR  
 CHIEF ENGINEER

DATE \_\_\_\_\_

STATE AID HIGHWAY NO. 1  
 RIDGE ROAD  
 OAKFIELD AROOSTOOK COUNTY  
 STATE PROJECT NO. 23697.00

SEPTEMBER 2023  
 SCALE 1" = 25'

RIGHT-OF-WAY MAP  
 SHEET 1 OF 1

D.O.T. FILE NO. 2-647

SHEET NUMBER  
**14**  
 OF 14