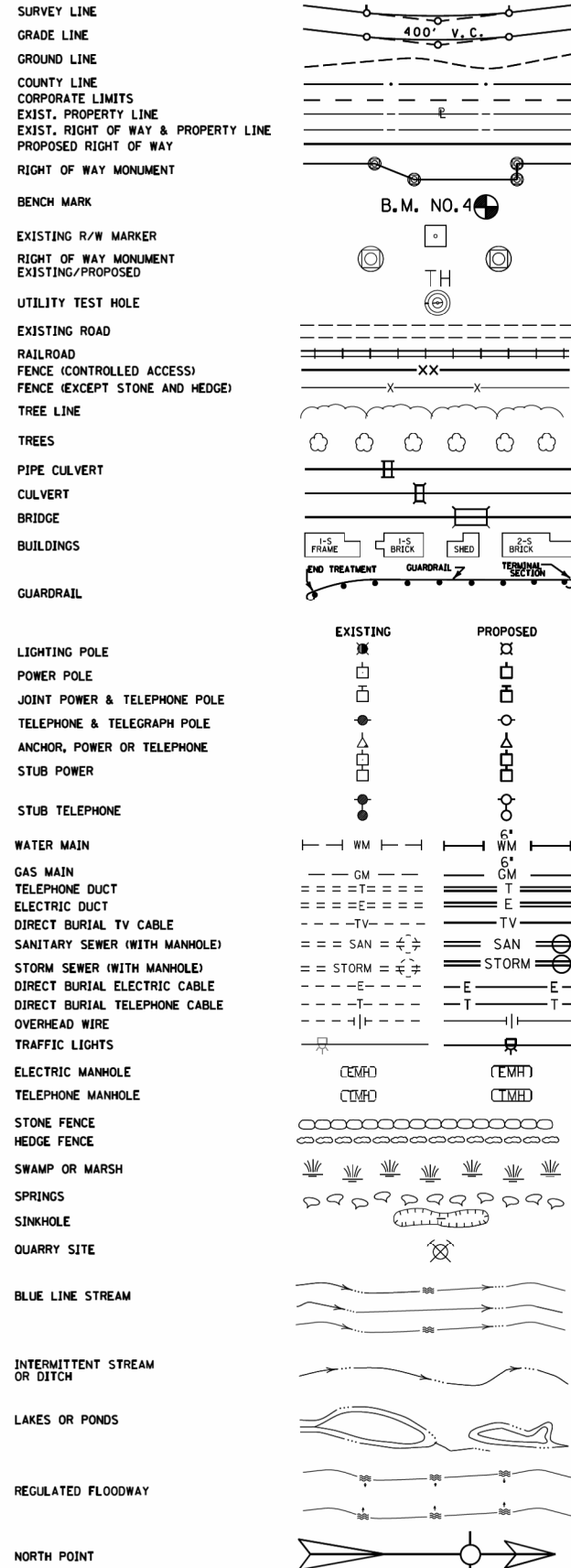


CONVENTIONAL SIGNS



LETCHER COUNTY
BRIDGE# 067C009
BLAIR BRANCH ROAD OVER BLAIR BRANCH

Point	Description	Northing	Easting	Elevation	Station	Offset
CP #1	HUB & TACK	3597675.44	5750687.52	1186.31	9+43.68	6.39' RT
CP #2	MAGNAIL	3597518.50	5750758.08	1188.13	11+14.75	5.55' RT

PROJECT CONTROL

COORDINATES FOR HORIZONTAL CONTROL ARE AUTONOMOUS, THEY ARE NOT AN OPUS SOLUTION. USE FOR DESIGN PURPOSES.

MAINTENANCE OF TRAFFIC NOTE

THE CONTRACTOR SHALL MAINTAIN TRAFFIC ALONG BLAIR BRANCH ROAD AT ALL TIMES AND PROVIDE INGRESS/EGRESS TO ALL RESIDENTS ALONG BLAIR BRANCH ROAD. THE SPECIAL NOTE FOR TRAFFIC CONTROL ON BRIDGE REPAIR CONTRACTS SHALL BE IMPLEMENTED.

ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES SHALL BE INCIDENTAL TO THE BID ITEM FOR "MAINTAIN AND CONTROL TRAFFIC".

ALL FLAGPERSONS AND TRAFFIC CONTROL DEVICES, SUCH AS, BUT NOT LIMITED TO, FLASHERS, BARRICADES, VERTICAL PANELS, PLASTIC DRUMS (STEEL DRUMS ARE NOT PERMITTED), AND CONES NECESSARY FOR THE CONTROL AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC SHALL BE PROVIDED AS SPECIFIED IN THESE NOTES, THE MUTCD, OR THE ENGINEER.

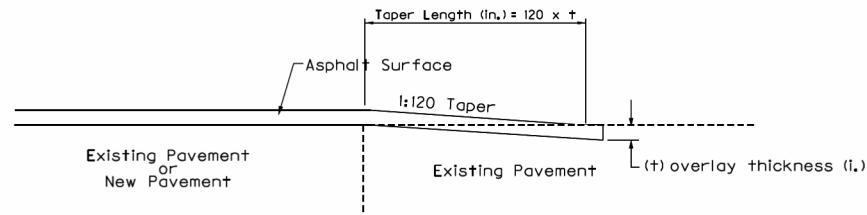
ALL TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS, AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.

ALL TEMPORARY SIGNAGE SHALL BE INCIDENTAL TO THE BID ITEM "MAINTAIN AND CONTROL TRAFFIC"

UTILITY COORDINATION

BEFORE BEGINNING WORK, LOCATE ALL EXISTING UTILITIES. CONSIDER UTILITY LINE LOCATIONS DEPICTED IN THE PLANS TO BE APPROXIMATE AND FOR INFORMATIONAL PURPOSES ONLY. THE DEPARTMENT DOES NOT WARRANT THE LOCATION AND ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OR COMPLETENESS. THE CONTRACTOR MUST MAKE THEIR OWN DETERMINATION. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES AND/OR PROPERTY OWNERS REGARDING ALL UTILITIES, SERVICE LINES, OR PRIVATE LINES DURING CONSTRUCTION.

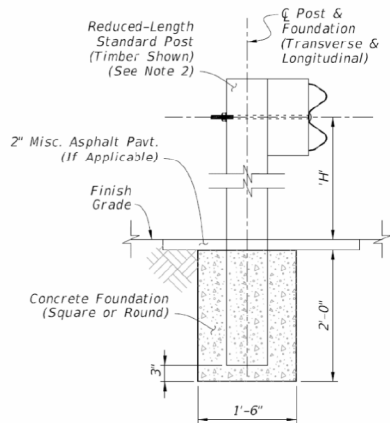
TAPERING OF OVERLAYS ON LOW SPEED FACILITIES < (45mph)



EDGE KEY

Work under this item shall include cutting out the existing asphalt surface to a minimum depth and width as shown, so the new surface may heel into the existing surface. The contract unit price bid per linear foot for EDGE KEY shall include all necessary materials, labor, equipment, etc. to perform the work and dispose of the bituminous material removed.

SPECIAL GUARDRAIL DETAIL ALLOWABLE FOR 3 CONSECUTIVE POSTS



INSTALLED SECTION

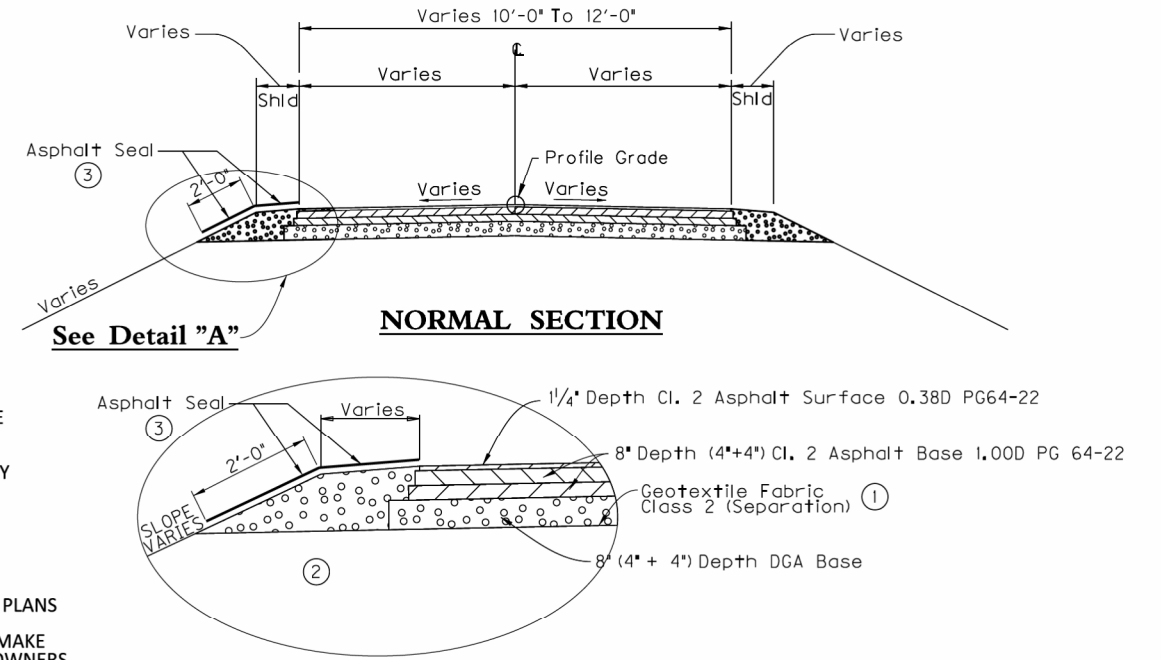
ENCASED POST FOR SHALLOW MOUNT

ADAPED FROM FDOT FY 2022-23 STANDARD PLANS, 536-001, SHEET 23 OF 24

NOTES:

1. **INSTALLATION:** When the construction of Guardrail at the required post spacing results in post(s) conflicting with underground utilities or other underground obstructions, an Encased Post may be used where a 2'-0" depth will avoid the conflict. Install where shown in the plans and/or as-needed, in accordance with Specification 536.
2. **REDUCED-LENGTH STANDARD POST:** Use a Standard Post with reduced Length such that the Panel Height 'H' is maintained while the post bottom terminates 3" from the bottom of the Concrete Foundation. Typically, the Post Length 'L' is 4'-7" for W-Beam Guardrail.
3. **FOUNDATION:** Use non-reinforced Class NS Concrete material in accordance with Specification 347. After casting the concrete, ensure the surrounding soil material is completely backfilled and tamped to provide full passive resistance.
4. **LIMIT:** Encased Posts are not permitted for more than 3 consecutive posts.

TYPICAL SECTIONS

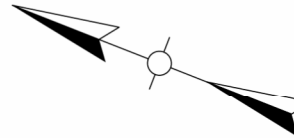


**Detail "A"
FULL-DEPTH MAINLINE & SHOULDER
PAVEMENT RECONSTRUCTION**

NOT TO SCALE

NOTES:

1. GEOTEXTILE FABRIC CLASS 2 (SEPARATION) SHALL BE INCIDENTAL TO DGA.
2. GRANULAR EMBANKMENT FOR NECESSARY WIDENING LOCATIONS AS APPROVED BY ENGINEER. MATERIAL NEEDED FOR SHOULDERS OUTSIDE OF PAVED AREA WILL BE MEASURED AND PAID AS GRANULAR EMBANKMENT.
3. ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2' DOWN THE DITCH OR FILL SLOPE. TWO APPLICATIONS REQUIRED. APPLICATION RATE: 2.40 LBS/SY ASPHALT SEAL COAT (TWO APPLICATIONS) 20 LBS/SY ASPHALT SEAL AGGREGATE SIZE #8 (TWO APPLICATIONS)



BEGIN PROJECT &
BEGIN CONSTRUCTION
STA. 9+60.00
N = 3597662.58
E = 5750699.42

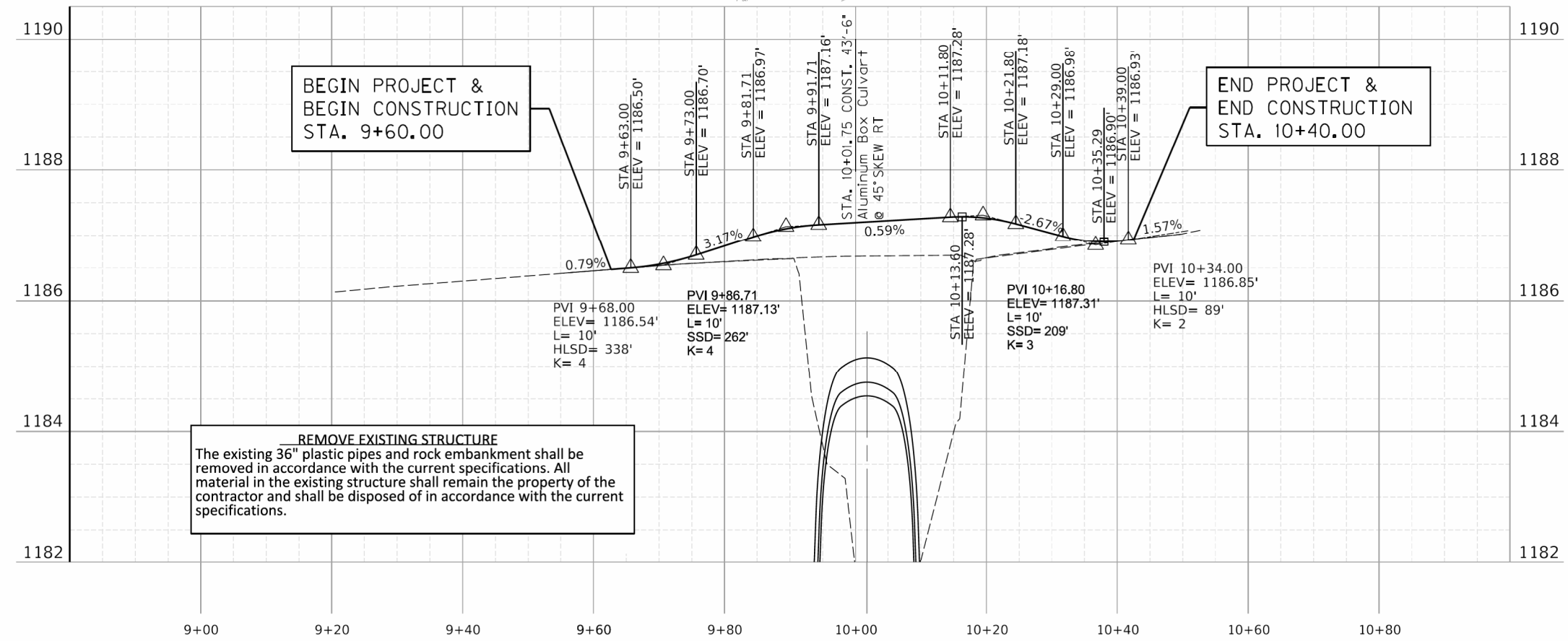
END PROJECT &
END CONSTRUCTION
STA. 10+40.00
N = 3597588.10
E = 5750728.62

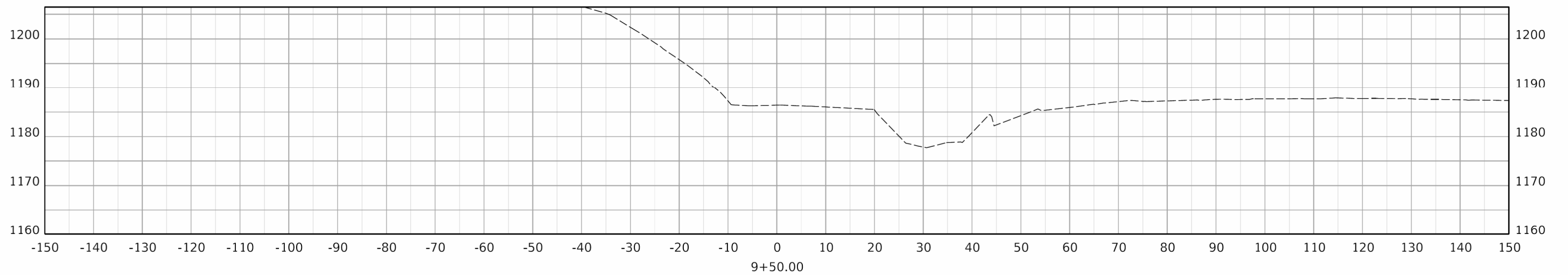
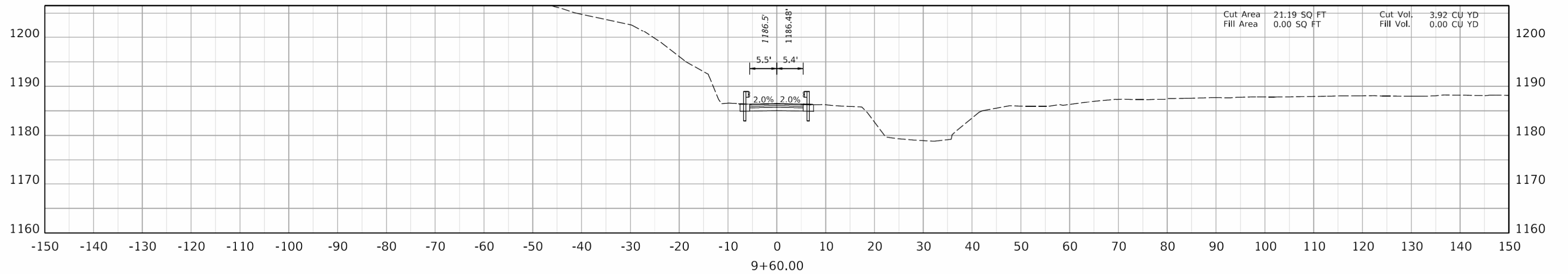
PARCEL NO.	OWNER(S)	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		PORTION REMAINING		SEWER SYSTEM APPLIED BY PROJECT	BUILDINGS ACQUIRED	SOURCE OF TITLE	REMARKS*
		ACRES	SQ. FT.	ACRES	SQ. FT.	PERMANENT	TEMPORARY	ACRES	SQ. FT.				
P-1	JAMES TRUMAN & MARGE CAUDILL	7.9	694			17.51	7.88					DB 290 PG 298	
P-2	DARRYL C. & LANA K. GREER	5.09	522			18.33	5.08					DB 307 PG 24	

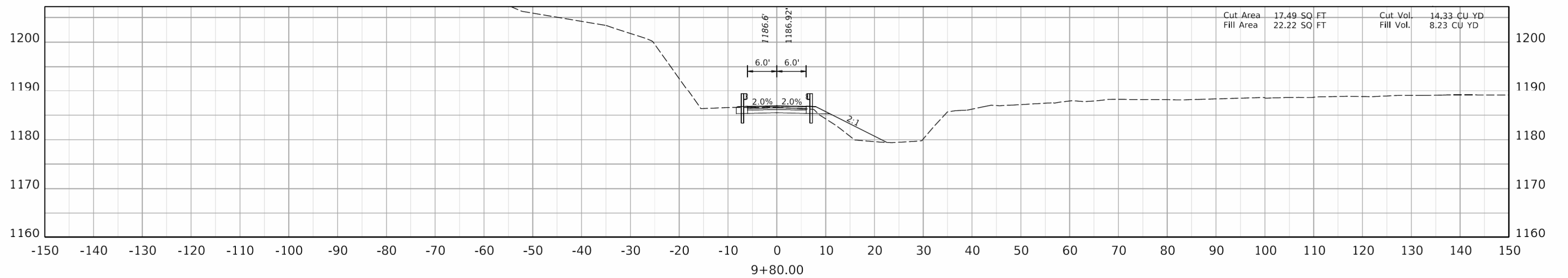
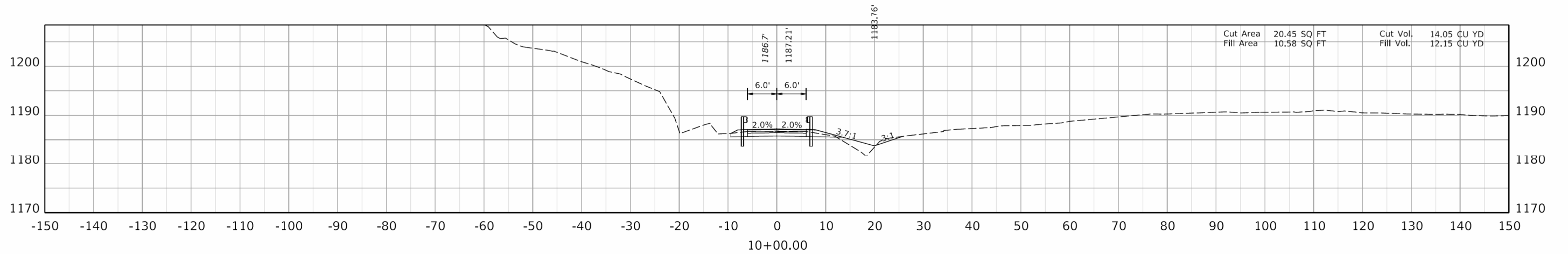
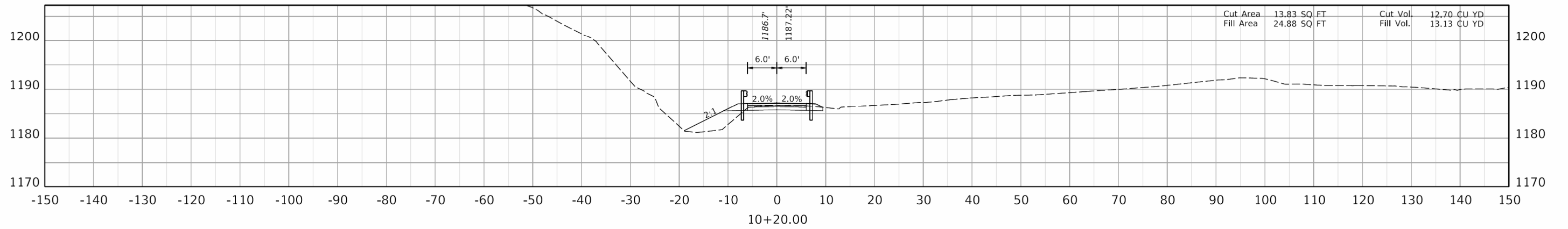
- (A) S23°16'51"E, 20.54'
- (B) S72°32'11"W, 5.42'
- (C) S24°52'38"E, 2.78'
- (a) S39°01'28"W, 7.54'

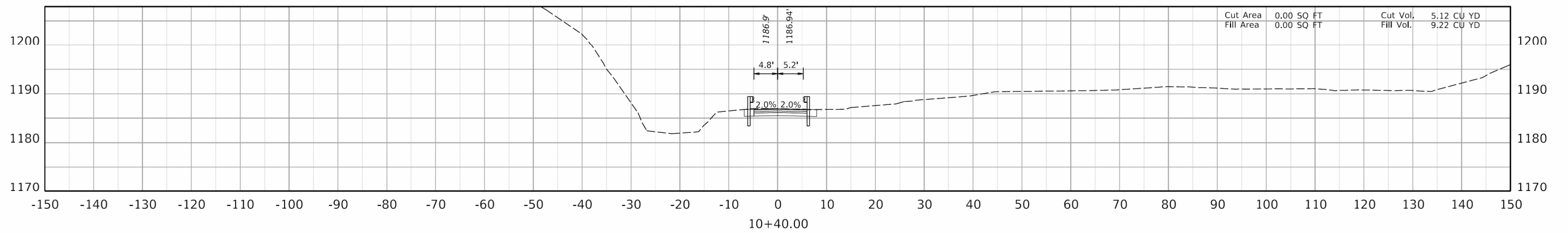
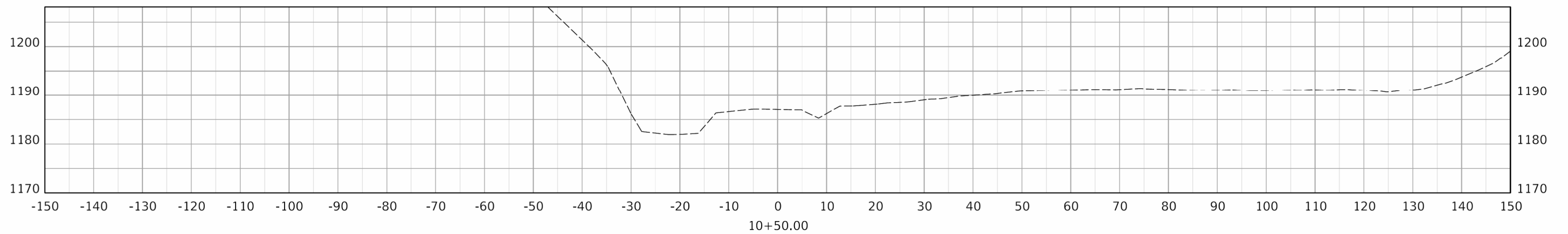
REASONABLE MEANS OF INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL PROPERTIES WITHIN THE PROJECT LIMITS. ACCESS TO FIRE HYDRANTS MUST BE MAINTAINED AT ALL TIMES.
ALL MATERIAL THAT WAS PLACED OR HAD FALLEN INTO THE STREAM SHALL BE REMOVED BY THE CONTRACTOR AT THE END OF THE PROJECT AND THE STREAM SHALL BE RESTORED TO ITS PRECONSTRUCTION CONDITION.

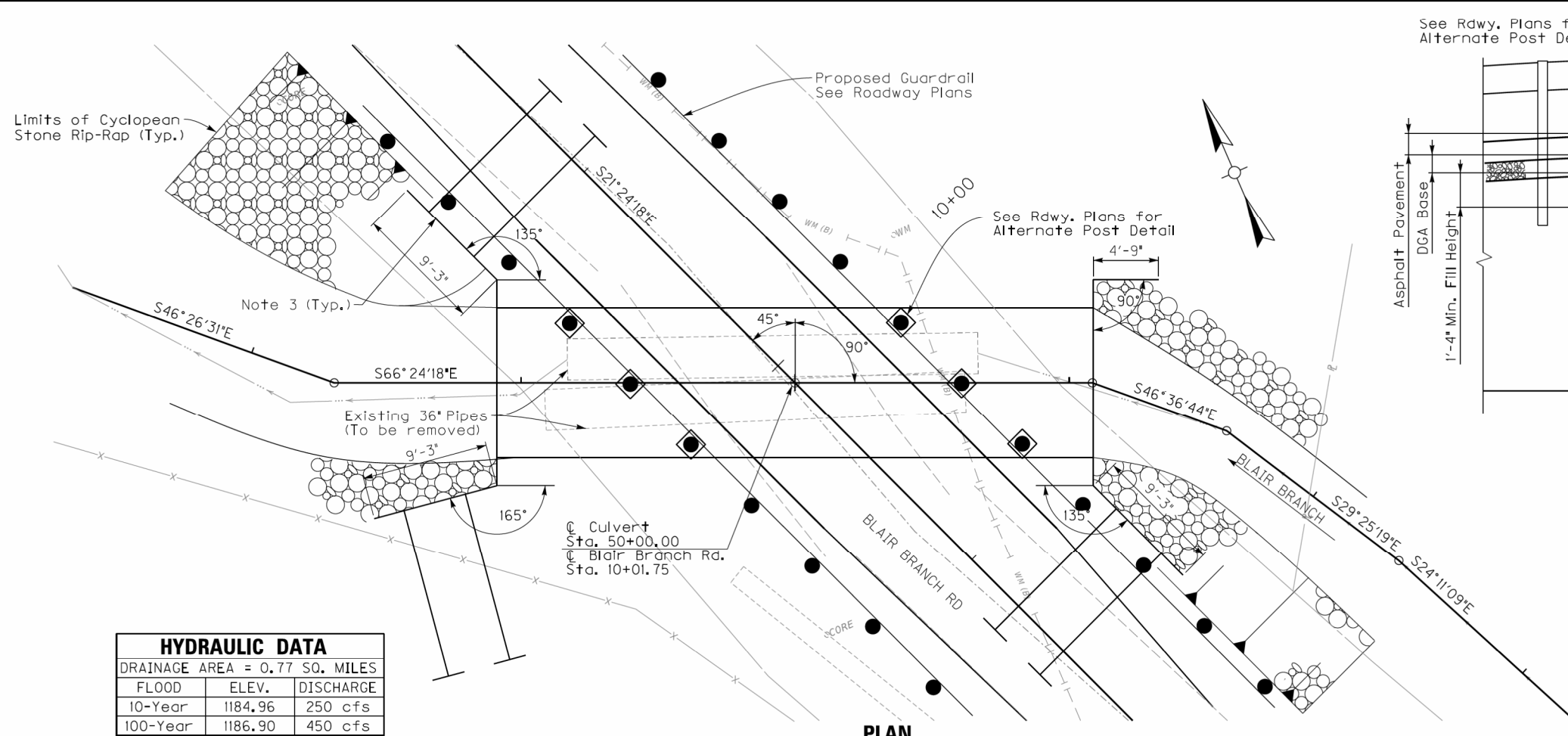
GUARDRAIL NOTES - KY 522					
TYPE	SIDE	BEGIN STATION	END STATION	LF	END TREATMENT
STEEL W BEAM S-FACE	RT	9+33.30	10+27.94	37.5	TYPE 7, TERMINAL SECTION NO. 1
STEEL W BEAM S-FACE	LT	9+45.13	10+70.33	25	2 - TYPE 7









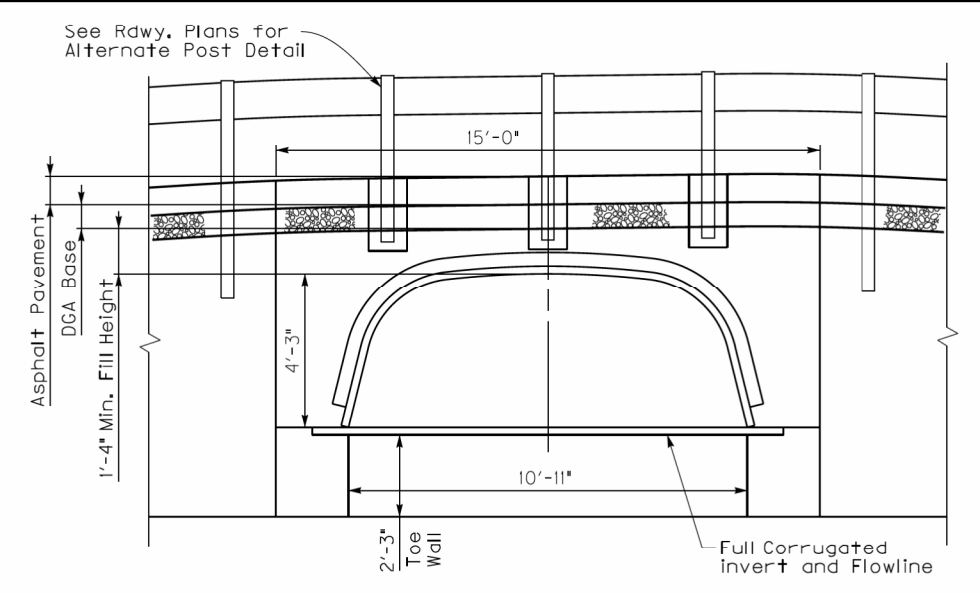


HYDRAULIC DATA

DRAINAGE AREA = 0.77 SQ. MILES

FLOOD	ELEV.	DISCHARGE
10-Year	1184.96	250 cfs
100-Year	1186.90	450 cfs

PLAN
43'-6" Aluminum Box Culvert
12'-0" Roadway Width - 45° Skew Rt.



ALUMINUM BOX CULVERT SECTION

STANDARD DRAWINGS

THE STANDARD DRAWINGS LISTED BELOW ARE CURRENT EDITION AND ARE TO BE USED WITH THESE PLANS.

BGX-006-10 STENCILS FOR STRUCTURES
 BGX-012-02 GEOTECHNICAL LEGEND
 CONTECH DYOB FOR INFORMATION ONLY

SPECIAL NOTES

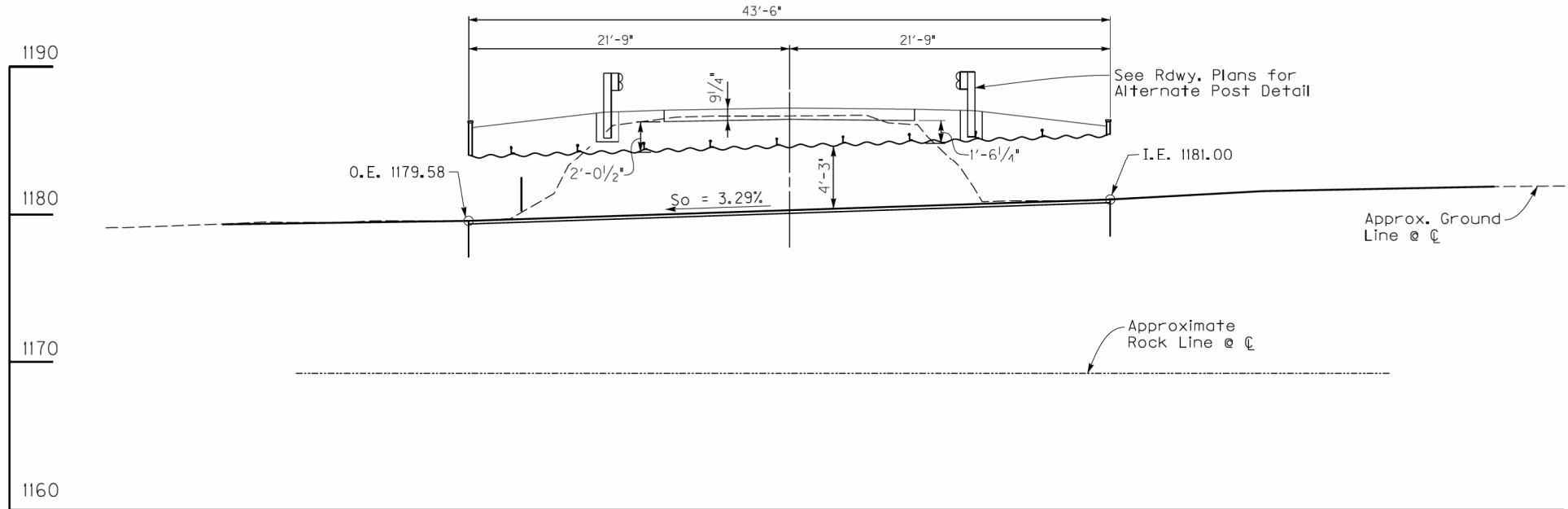
THE SPECIAL NOTES LISTED BELOW ARE APPLICABLE TO THE CULVERT REPLACEMENT.

SPECIAL NOTE FOR CULVERT REPLACEMENT

MODIFIED SPECIAL NOTE FOR ALUMINUM AND STEEL STRUCTURAL PLATE BOX CULVERTS

NOTES

- EXISTING UTILITY POLES MUST REMAIN IN PLACE. SHORE AS REQUIRED TO MAINTAIN SERVICE. COORDINATE WITH UTILITY COMPANY AS NEEDED.
- CULVERT HEADWALL MUST REMAIN SQUARE TO THE BARREL WALLS. CIP HEADWALLS ARE PROHIBITED.
- WINGWALL LENGTHS AND ANGLES SHOWN ARE FOR PROOF OF CONCEPT ONLY. WING ANGLES SHOWN IN THIS PLAN MAY BE ADJUSTED TO AVOID UTILITY AND ROW IMPACTS. FINAL WING LAYOUT SHALL NOT ENCROACH ON PERMANENT RIGHT OF WAY.
- THE BOX CULVERT MUST BE DESIGNED AND SEALED BY A LICENSED KENTUCKY PE. DESIGN SHALL BE FOR A KY HL-93.
- THE CULVERT WAS SIZED FOR A SHAPE 10 ALBC TYPE STRUCTURE PROVIDED BY CONTECH. THE OPENING IS 39.5 SF. PROVIDE A CONTECH SHAPE 10 OR APPROVED EQUIVALENT WITH A HYDRAULIC OPENING OF 39.5 SF OR GREATER
- PROPOSED EMBANKMENT SLOPES ON FRONT FACE OF WINGWALLS SHALL BE NO STEEPER THAN 1.25H:1V.
- CARE SHALL BE TAKEN WHEN DRIVING GUARDRAIL POSTS TO ENSURE THE HDPE MEMBRANE IS NOT DAMAGED.
- TEMPORARY SHEETING OR SHORING/COFFERDAMS AND/OR A DEWATERING METHOD WILL BE REQUIRED FOR INSTALLATIONS OF THE FOOTING.
- ANY BEDROCK OR BOULDERS ENCOUNTERED WITHIN 2 FT. OF THE BOTTOM SLAB MUST BE EXCAVATED AND BACKFILLED WITH SOIL TO THE BASE OF THE FOOTING ELEVATION.



SECTION ALONG CULVERT

DRILLER'S SUBSURFACE LOG

Project ID: <u>067C009</u>		<u>Letcher -</u>		Project Type: <u>Structure Bridge</u>				
Item Number:				Project Manager: <u> </u>				
Hole Number <u>1</u>	Immediate Water Depth <u>NA</u>	Start Date <u>09/27/2022</u>	Hole Type <u>sounding</u>					
Surface Elevation <u> </u>	Static Water Depth <u>NA</u>	End Date <u>09/27/2022</u>	Rig Number <u> </u>					
Total Depth <u>17.9'</u>	Driller <u>Davidson, Cody</u>	Latitude(83) <u> </u>						
Location <u>+ 'Lt.</u>		Longitude(83) <u> </u>						
Lithology		Overburden	Sample No.	Depth (ft)	Rec. (ft)	SPT Blows	Sample Type	Remarks
Elevation	Depth	Rock Core	Std/Ky RQD	Run (ft)	Rec (ft)	Rec (%)	SDI (JS)	
	0.3	Topsoil.						
5								5
	8.7							
10								10
	16.0							15
	17.9							15
20								20
								25
								30
								35
								40
								45
								50

DRILLER'S SUBSURFACE LOG

Project ID: <u>067C009</u>		<u>Letcher -</u>		Project Type: <u>Structure Bridge</u>				
Item Number:				Project Manager: <u> </u>				
Hole Number <u>2</u>	Immediate Water Depth <u>NA</u>	Start Date <u>09/27/2022</u>	Hole Type <u>sounding</u>					
Surface Elevation <u> </u>	Static Water Depth <u>NA</u>	End Date <u>09/27/2022</u>	Rig Number <u> </u>					
Total Depth <u>18.0'</u>	Driller <u>Davidson, Cody</u>	Latitude(83) <u> </u>						
Location <u>+ 'Lt.</u>		Longitude(83) <u> </u>						
Lithology		Overburden	Sample No.	Depth (ft)	Rec. (ft)	SPT Blows	Sample Type	Remarks
Elevation	Depth	Rock Core	Std/Ky RQD	Run (ft)	Rec (ft)	Rec (%)	SDI (JS)	
	0.3	Topsoil.						
5								5
	9.4							
10								10
	14.9							15
	17.4							15
	18.0							20
20								20
								25
								30
								35
								40
								45
								50

