

APPROX. LIMITS OF RIPRAP: 61 FEET LEFT, 59 FEET RIGHT
CARRY RIPRAP TO FOURTH GUARD RAIL POST AT EACH WING WALL.

HYDRAULIC DATA

DRAINAGE AREA = 6.17 SQ. MI.

Q2 = 467 CFS	Q25 = 2,470 CFS
V2 = 1.43 FPS	V25 = 6.05 FPS
CHW = 936.56 FT	CHW = 938.67 FT
Q5 = 1,010 CFS	Q50 = 3,210 CFS
V5 = 2.78 FPS	V50 = 7.64 FPS
CHW = 937.88 FT	CHW = 939.31 FT
Q10 = 1,550 CFS	Q100 = 4,080 CFS
V10 = 4.03 FPS	V100 = 9.56 FPS
CHW = 938.13 FT	CHW = 940.10 FT

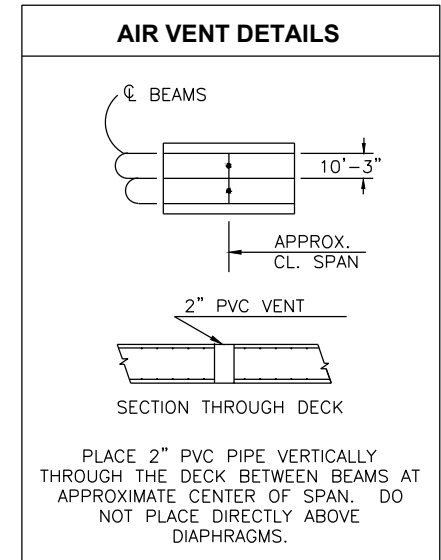
Q_{ot} = Q₂₇

LOAD AND RESISTANCE FACTOR DESIGN DATA

CONCRETE CLASS AA f'_c = 4 KSI
 CONCRETE CLASS A f'_c = 3 KSI
 REINF. STEEL f_y = 60 KSI
 STRUCTURAL STEEL
 M270 (GRADE 50W) F_y = 50 KSI

LFD OPERATING RATING: HS 43.0
 LOADING: HL-93
 20 P.S.F. FUTURE WEARING SURFACE.
 5 P.S.F. STAY-IN-PLACE FORMS

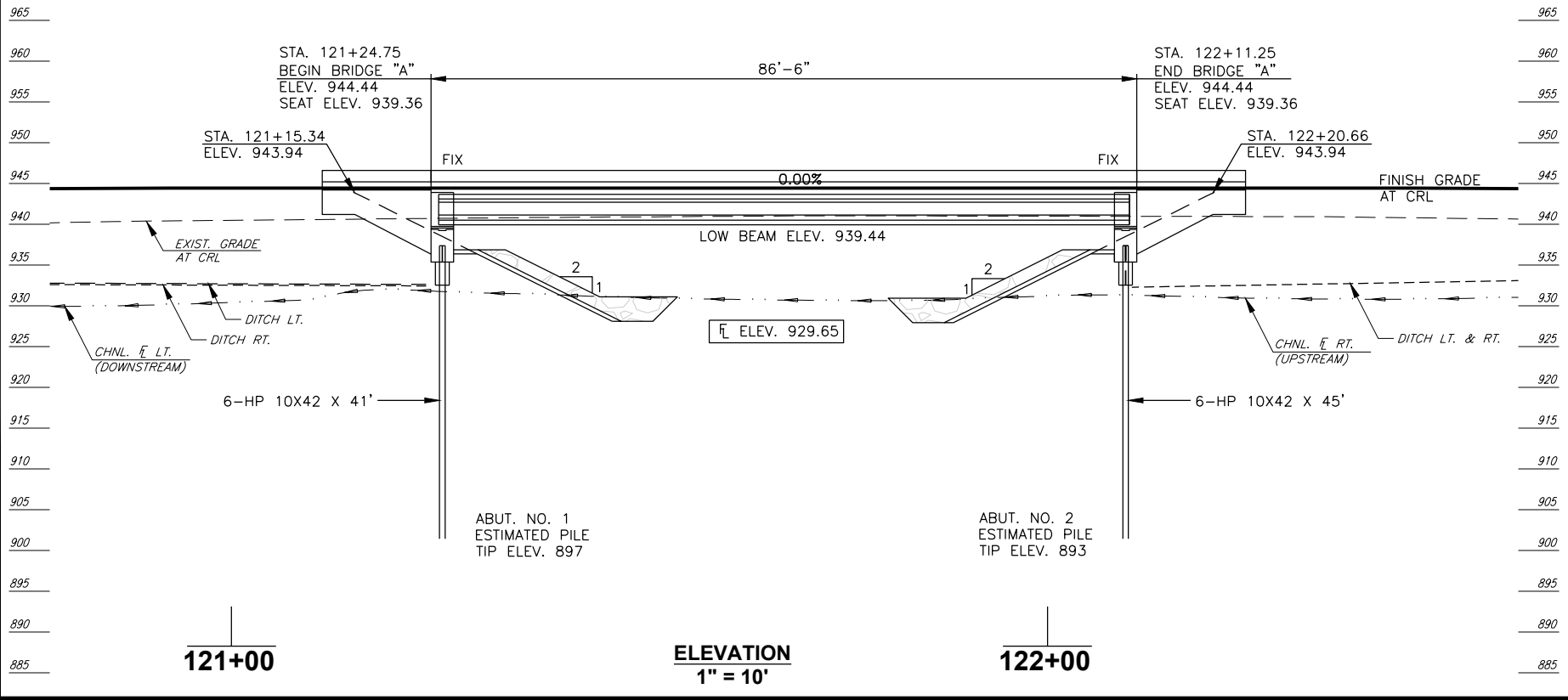
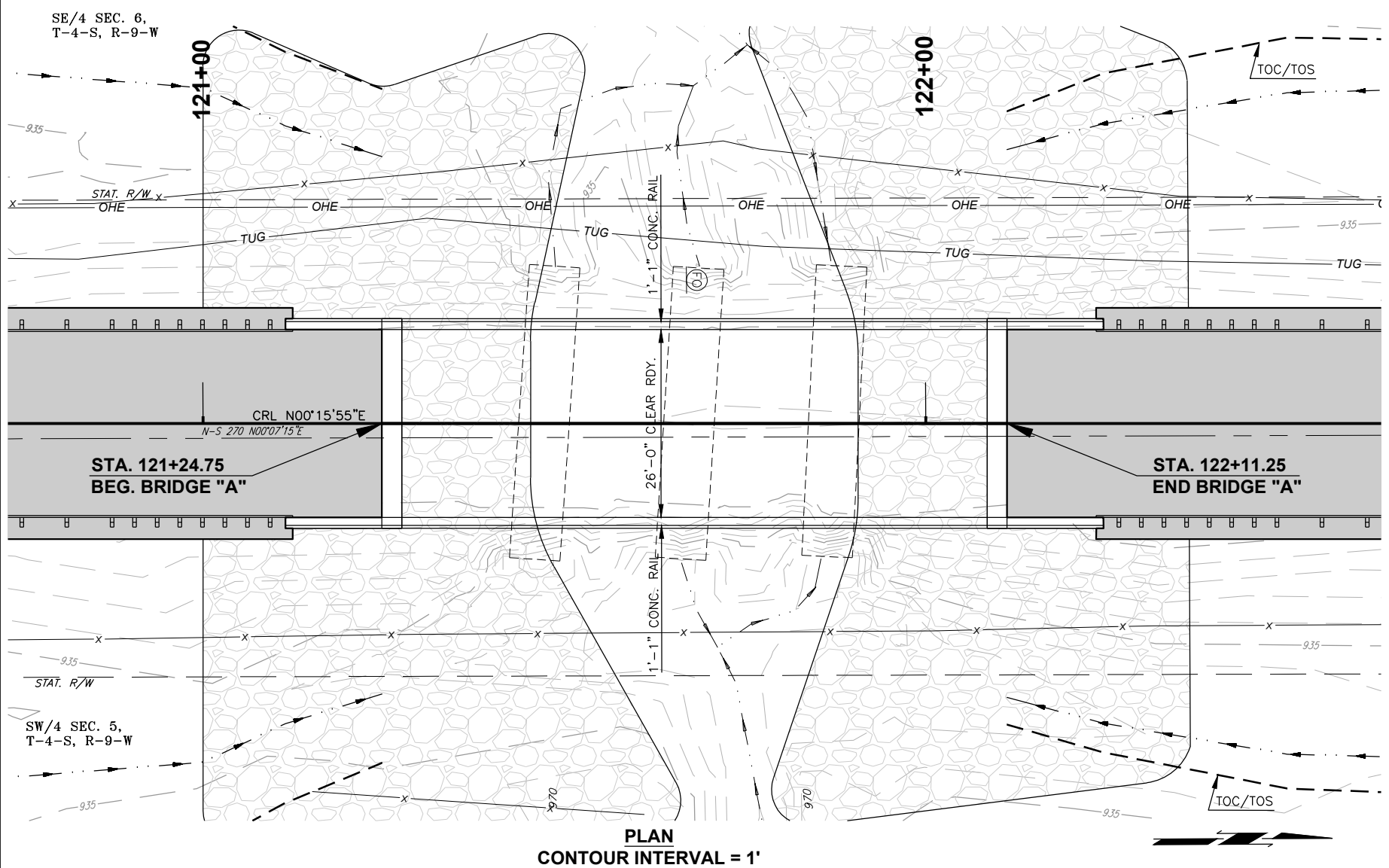
DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 5TH EDITION WITH 2010 INTERIMS, EXCEPT AS MODIFIED BY CURRENT ODOT BRIDGE DIVISION DESIGN POLICIES. ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.



ABUTMENT FOUNDATION DATA

ABUTMENTS: HP 10X42 PILING **ABUTMENTS NO. 1 & 2**
 REQUIRED ULTIMATE PILE CAPACITY 73.5 TON/PILE

PILE CAPACITY SHALL BE VERIFIED USING THE ODOT MODIFIED GATES EQUATION SHOWN ON SHEET AR01. ALL ABUTMENT PILING SHALL BE DRIVEN THROUGH THE COMPACTED FILL TO POINT BEARING ON SOLID FOUNDATION MATERIAL. PILING SHALL BE DRIVEN TO THE APPROXIMATE ELEVATION SHOWN ON THE PLANS. IF THE REQUIRED ULTIMATE PILE CAPACITY IS NOT OBTAINED AT THIS ELEVATION, DRIVING SHALL CONTINUE UNTIL THE REQUIRED ULTIMATE PILE CAPACITY IS OBTAINED. THE LENGTH OF STEEL PILING SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY.



BRIDGE "A" PAY QUANTITIES

85' X 26' CLEAR ROADWAY INTEGRAL TYPE III PCB SPAN ZERO DEGREE SKEW

ITEM	DESCRIPTION	UNITS	ABUTS.	SUPSTR.	TOTALS
501(B)	SUBSTRUCTURE EXCAVATION COMMON	CY	100.00		100.00
501(F)	GRANULAR BACKFILL	CY	56.00		56.00
503(A)	PRESTRESSED CONCRETE BEAMS (TYPE III)	LF		254.00	254.00
504(D)	CONCRETE RAIL (TR3)	LF	53.60	173.00	226.60
506(A)	STRUCTURAL STEEL	LB		320.00	320.00
507(A)	WEATHERING STEEL FIXED BEARING ASSEMBLY	EA		6.00	6.00
509(A)	CLASS AA CONCRETE	CY		85.50	85.50
509(B)	CLASS A CONCRETE	CY	39.20		39.20
511(A)	REINFORCING STEEL	LB	6,040.00	15,430.00	21,470.00
514(A)	PILES, FURNISHED (HP 10X42)	LF	516.00		516.00
514(B)	PILES, DRIVEN (HP 10X42)	LF	516.00		516.00
601(B)	TYPE I-A PLAIN RIPRAP	TON	1,337.00		1,337.00
601(C)	TYPE I-A FILTER BLANKET	TON	273.00		273.00
613(H)	6" PERFORATED PIPE UNDERDRAIN ROUND	LF	52.00		52.00
613(I)	6" NON-PERF. PIPE UNDERDRAIN RND.	LF	50.00		50.00
623(F)	GUARDRAIL ANCHOR UNIT (TYPE D-BF)	EA	4.00		4.00
623(F)	GUARDRAIL ANCHOR UNIT (TYPE A)	EA	4.00		4.00

BRIDGE "A" - 85' TYPE III P.C. BEAM SPAN BRIDGE, CENTERLINE STATION 121+68.00.

EXISTING STRUCTURE - 3-96" X 40' CGMP. (REMOVE)

BM # 202 STA. 120+87.19 50.97' LT.
SET 5/8 IP ELEV= 936.62

BM # 203 STA. 124+42.72 57.75' RT.
SET 5/BIN IP ELEV= 936.96

TRIBUTARY TO WHISKEY CREEK COTTON COUNTY

GENERAL PLAN AND ELEVATION BRIDGE "A"