

Bench Mark: BM6257 - Chiseled cross on top of center anchor bolt westerly side of northerly concrete pier for westerly supports of overhead traffic sign northbound N Main Street (IL 116) at ramp to eastbound US 24 (Washington). Elev. 473.99

Existing Structure: SN. 090-2013 built in 1993 as double 10'x6' R.C. box culvert with Culvert length of 80'-7 1/4". Traffic to be maintained on existing ramp.

No salvage

Precast alternate is not allowed.

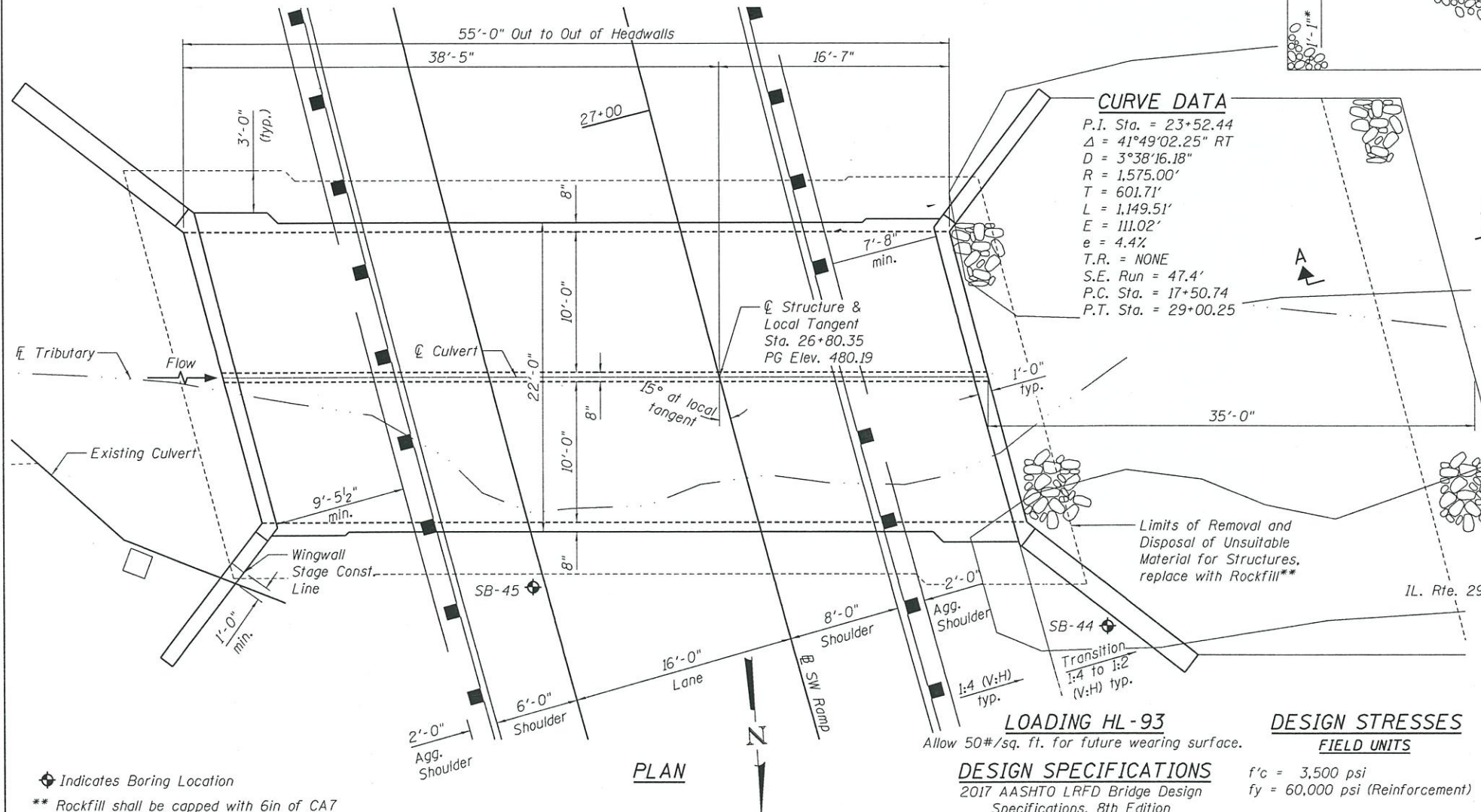
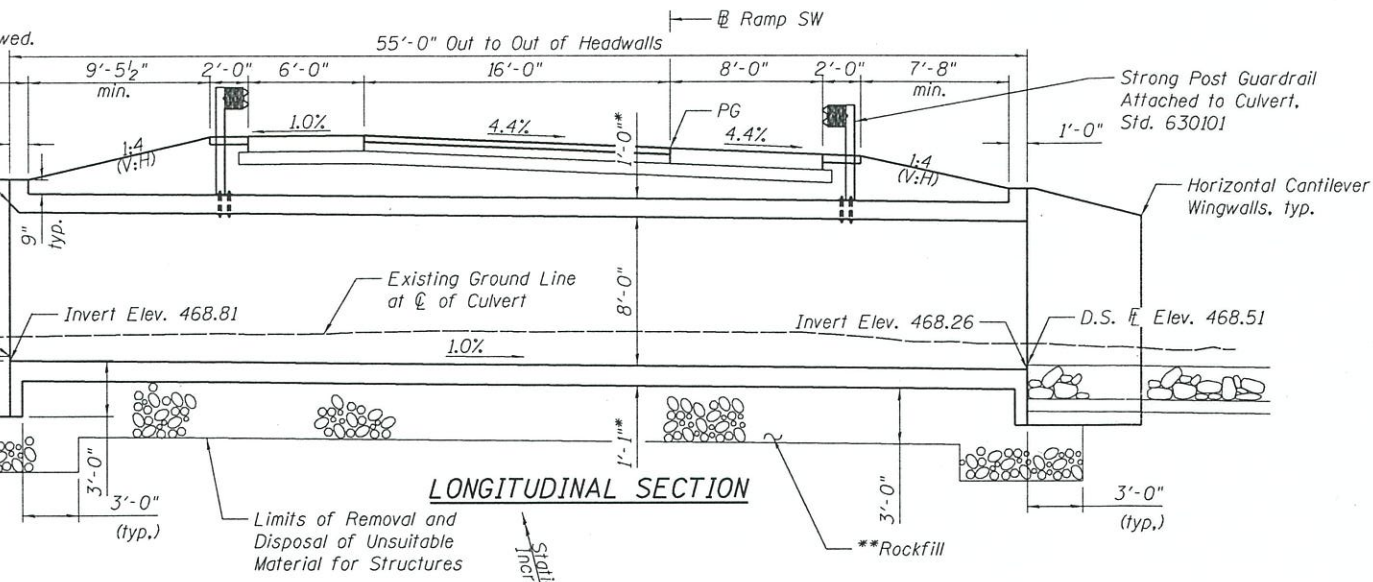
Measured at Right Angles to  $\bar{C}$  of Roadway

Chamfer 6", Upstream End Only

$\nabla$  D.H.W. Elev. 475.70

$\nabla$  EWSE Elev. 472.10

U.S.  $\bar{C}$  Elev. 469.06



**CURVE DATA**  
 P.I. Sta. = 23+52.44  
 $\Delta = 41^{\circ}49'02.25''$  RT  
 $D = 3^{\circ}38'16.18''$   
 $R = 1,575.00'$   
 $T = 601.71'$   
 $L = 1,149.51'$   
 $E = 111.02'$   
 $e = 4.47'$   
 T.R. = NONE  
 S.E. Run = 47.4'  
 P.C. Sta. = 17+50.74  
 P.T. Sta. = 29+00.25

**LOADING HL-93**  
 Allow 50#/sq. ft. for future wearing surface.

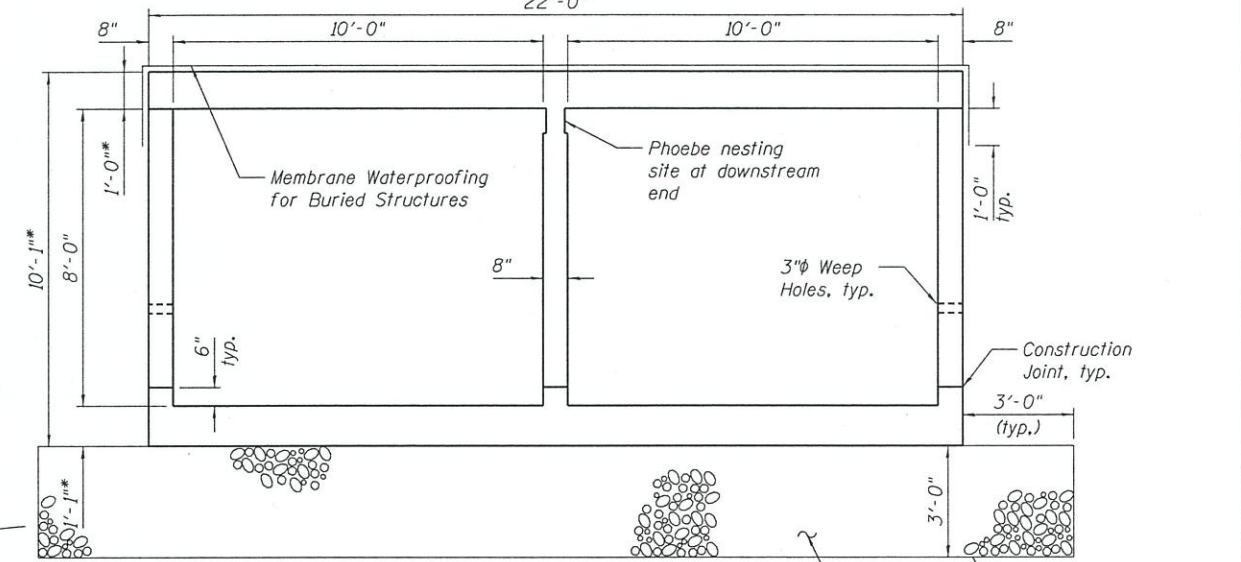
**DESIGN STRESSES**  
 FIELD UNITS  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

**DESIGN SPECIFICATIONS**  
 2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

**WATERWAY INFORMATION**

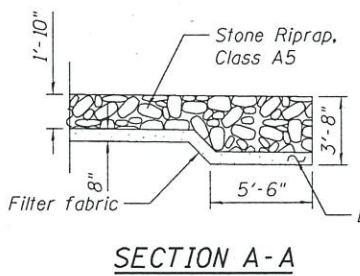
Drainage Area = 0.96 Sq.Mi.		Existing Low Grade Elev. 480.71 @ Sta. 28+00.00		Proposed Low Grade Elev. 480.77 @ Sta. 28+00.00			
Flood Yr.	Freq.	O C.F.S.		Opening Sq. Ft.	Nat. Head - Ft.	Headwater El.	
		Exist.	Prop.	Exist.	Exist.	Exist.	Prop.
Design	10	660	660	77	110	474.6	475.6
Base	50	1,170	1,170	100	133	475.7	477.3
Ex. Overtop.	100	1,420	1,420	109	142	476.2	478.7
Prop. Overtop.	150	N/A	1,800	114	N/A	476.4	N/A
	290	N/A	N/A	153	N/A	476.7	480.7

10-Year Velocity through Existing Structure = 8.6 fps      10-Year Velocity through Proposed Structure = 6.0 fps

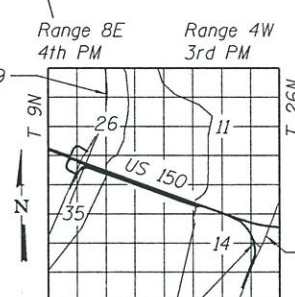


**SECTION THRU BARREL**

(Dimensions at Rt. angles to barrel)  
 \*Slab thickness may be refined in final design.



**SECTION A-A**



**LOCATION SKETCH**

**PROFILE GRADE**  
 (along B Ramp SW)  
**APPROVED**

**JUN 22 2018**  
 AS A BASIS FOR  
**PREPARATION OF DETAILED PLANS**  
**HIGHWAY CLASSIFICATION**  
 F.A.P. Rte. 317 - Ramp SW  
 Functional Class: Other Principal Arterial  
 ADT: 4350 (2014); 4728 (2040)  
 ADTT: 282 (2014); 306 (2040)  
 DHV: 438 (2040)  
 Design Speed: 55 m.p.h.  
 Posted Speed: 55 m.p.h.

**GENERAL PLAN & ELEVATION**  
**RAMP SW OVER IL RIVER TRIBUTARY**  
**F.A.P. 317 - SECTION 15B(BR)**  
**TAZEWELL COUNTY**  
**STATION 26+80.35**  
**STRUCTURE NO. 090-2020**