

**LOAD AND RESISTANCE FACTOR DESIGN**

**DESIGN DATA**  
 Class AA Concrete  $f'_c = 4 \text{ KSI}$   
 Reinforcing Steel  $f_y = 60 \text{ KSI}$

**HYDRAULIC DATA**

Q2 = 272 cfs  
 V2 = 1.40 fps  
 CHW2 = 723.38 ft

Q5 = 552 cfs  
 V5 = 2.76 fps  
 CHW5 = 725.95 ft

Q10 = 825 cfs  
 V10 = 4.13 fps  
 CHW10 = 727.23 ft

Q25 = 1280 cfs  
 V25 = 6.40 fps  
 CHW25 = 728.89 ft

Q50 = 1580 cfs  
 V50 = 7.90 fps  
 CHW50 = 730.02 ft

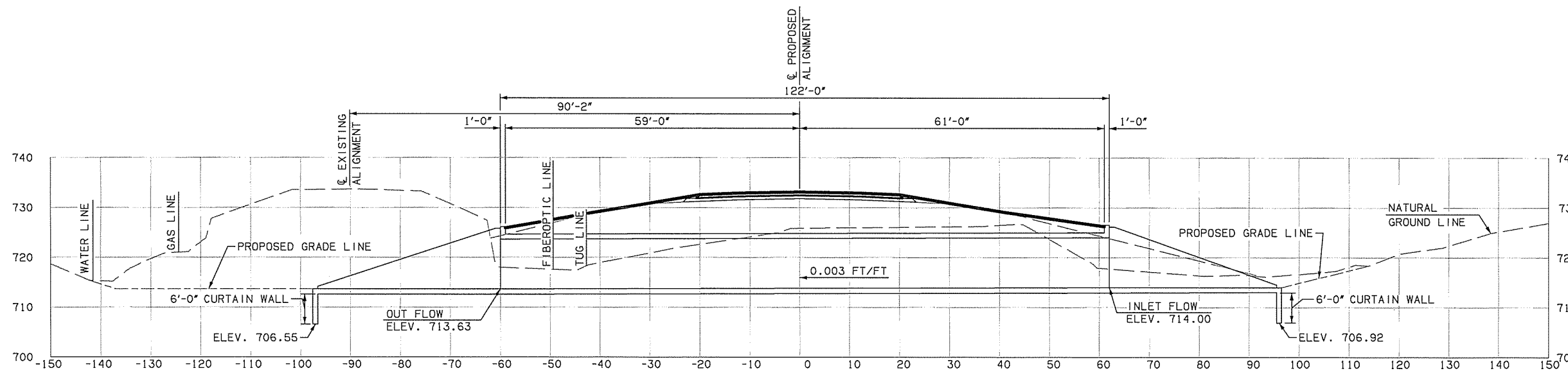
Q100 = 1980 cfs  
 V100 = 9.90 fps  
 CHW100 = 731.50 ft

Q500 = 3040 cfs  
 V500 = 11.30 fps  
 CHW500 = 733.90 ft

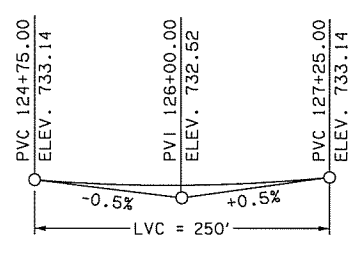
Qot = 2511 cfs  
 Overtopping Year = 244  
 Vot = 11.36 fps  
 Overtopping Elev. = 733.44

Total Drainage Area = 755 acres  
 Controlled Drainage Area = 0 acres  
 Effective Drainage Area = 755 acres

**PLAN**



**ELEVATION**



QUANTITIES		
ITEM	UNIT	TOTAL
Unclassified Excavation	C.Y.	4,548
Structural Excavation Unclassified	C.Y.	412
Class 'AA' Concrete	C.Y.	570
Reinforcing Steel	LB.	78,446
(SP) Nest Prevention - Netting	L.SUM	1.00
Type I Plain Riprap	TON	2,243
Filter Fabric (Riprap)	S.Y.	2,556
Removal of Exst. Bridge Structure	L.SUM	1.00

DESIGN	SDK	9-14	S.H.-16 OVER UNNAMED CREEK
DRAWN	TLN	9-14	
CHECKED	DGB	9-14	
APPROVED			
SQUAD	<b>SCHEMMER</b>		

BRIDGE 'A' CONSTRUCT 2-10'x10'x20' CL. RDY RCB  
**GENERAL PLAN & ELEVATION**

STATE JOB NO. 28858(04) SHEET NO. 46  
 CREEK COUNTY SH-16

6/16/2016 Twin 10x10 2D.dgn