

Trout

office estimate
Min Brg = 40'
No FEMA - No MOA
No Stormwater Permit

Print Record

Form PDR Action PDR P/P 412

GENERAL INFO

Date 5/16/2011 Div WBS TIP #
13 Proj #
Let Date

County BUNCOMBE Bridge # 117
Road # SR 2776 Road Name: CHESTNUT HILL RD

Stream STREAM

Req Type Name KAS Assigned To Checked By
Prior Survey No Survey Date Recommendation
Study by Scour Section

DRAINAGE INFO

Flood Zone NO Panel # 606 Study Type NO STUDY Study Date 1/6/2010

IS THERE A HEC RAS TYPE MODEL ☐

BM info
Quad BLACK MOUNTAIN
Drainage Area 1.62 Sq. Mi. DA Source QUAD
Q25 565 cfs Q 50 680 cfs Q100 800 cfs
METHOD USGS REGRESSION EQUATION BASIN TYPE REGION 2

EXISTING INFO

Location 0.4 MI W JCT NC 9
GPS CO-ORD(Dec) 35.5697 82.2977
OAL 19 B-C 6 Depth 1
ADT 340 Skew 90 Stream Slope
STRUCTURE TYPE TIMBER DECK/ TIMBER JOISTS
Spans 1@ 18'-6

UP STREAM INFO

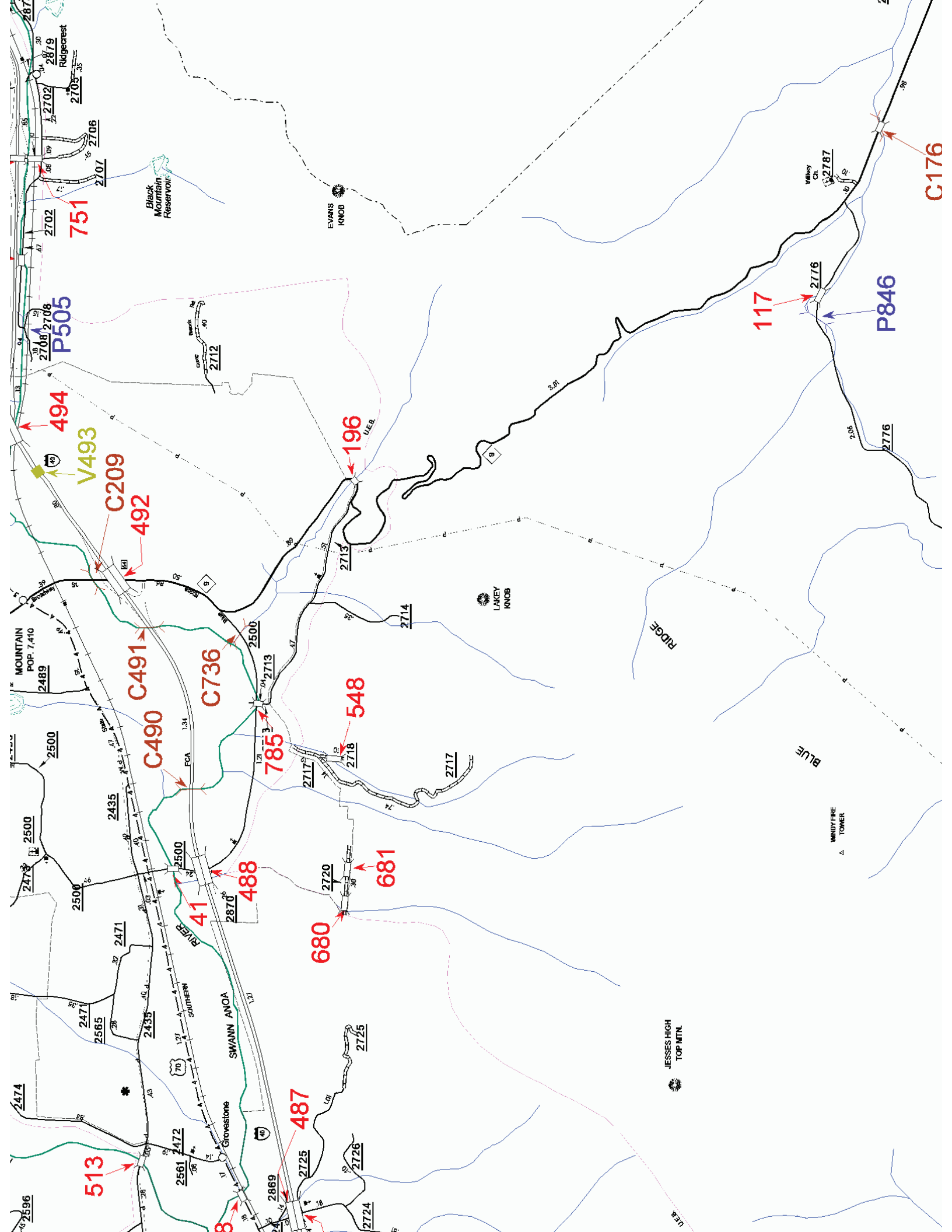
US Structure US Road # US Str OAL
US Location
US B-C US Prior survey

DOWN STREAM INFO

DS Structure P846 DS Road # SR846 DS Str OAL
DS Location **3@87x63 CSPA
DS B-C DS Prior survey SCS Watershed

ENVIRONMENTAL INFO

Trout Stream YES Anadromous Fish NO Primary Nursery Area NO
High Quality Waters NO NUTRIENT SENSITIVE WATERS NO
NEAR WATER SUPPLY INTAKE NO CAMA COUNTY NO
STREAM CLASSIFICATION C; Tr
DENR RIVER BASIN BROAD





NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP. REPAIRS AT BOTH ABUT. (SUPPLEMENT
POSTS)

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY BUNCOMBE BRIDGE NUMBER 100117 INSPECTION CYCLE 2 YRS
ROUTE SR2776 ACROSS CREEK M.P. 0

LOCATION .4 MI.W.JCT.NC9

SUPERSTRUCTURE TIMBER FLOOR ON TIMBER JOISTS

SUBSTRUCTURE E.BNT1 :TIM.CAP/TIM.POST & CONCRETE SILL;E.BNT2: ALL TIM.P&S

SPANS 1 @ 18'-6

LONGITUDE 82° 17' 51.8"

LATITUDE 35° 34' 10.9"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 10/18/2010

OPERATING RATING

PRESENT POSTING SV 12 TTST 20

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT DELINS (4) AND NARROW BRIDGE (2)



EAST

SIGN NOTICE ISSUED FOR	NUMBERED REQUIRED
<u>No</u> WEIGHT LIMIT	<u></u>
<u>No</u> DELINEATORS	<u></u>
<u>No</u> NARROW BRIDGE	<u></u>
<u>No</u> ONE LANE BRIDGE	<u></u>
<u>No</u> LOW CLEARANCE	<u></u>

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 11/29/2010

COUNTY :	BUNCOMBE	DIV :	13	DIST :	2	STRUCTURE NUMBER :	100117	LENGTH :	19	FEET
ROUTE CARRIED :	SR2776		FEATURE INTERSECTED : CREEK							
LOCATED :	.4 MI.W.JCT.NC9		BRIDGE NAME :				CITY :			
FUNC. CLASS :	08	SYST.ON :	NFA	SYST.UNDER :	NFA	ADT & YR :	340 2005	RAIL TYPE :		
								LT	227	RT 227
BUILT :	1959	BY :	BMU	PROJ :	4364	FED.AID PROJ :	DESIGN LOAD :			
								Other or Unknown		
REHAB :		BY :	BMU	PROJ :	5.8451	ALIGNMENT :	TAN	SKEW :	90	LANES :
								ON	2	UNDER
NAVIGATION :		HT. CRN. TO BED :				WATER DEPTH :				
VC	0.0	FT	HC	0.0	FT	6	FT	1	FT	
SUPERSTRUCTURE :		TIMBER FLOOR ON TIMBER JOISTS								
SUBSTRUCTURE :		E.BT1:DBL.TIM.CAP/TIM.P.&CONC.SILL;E.BT2:DBL.TIM/CAP/TIM.P&S								
SPANS :		1 @ 18'-6								
BEAMS OR GIRDERS :		12 LINES 6X12 TIMBER JOISTS @ 1'-8 CENTERS								
FLOOR :	ENCROACHMENT :		DECK (OUT TO OUT) :							
4X8 TIM/3 AWS			20.3 FT							
CLEAR ROADWAY :	BETWEEN RAILS :		SIDEWALK OR CURB :							
19.3 FT	20.0 FT		LT		0.3 FT		RT		0.3 FT	
VERT.CL.OVER :	VERT.CL.UNDER :		HOR.CL.UNDER :							
99 FT 99 IN	00 FT 00 IN		0.0 FT							
INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :		POSTED :						
HS-1	HS-1	Int.jsts		SV	12	TTST	20	DATE	08/29/2006	
SYSTEM :		GREEN LINE ROUTE :								
Secondary S.R. Route		N								
2ND OPENING :		3RD OPENING :		4TH OPENING :		5TH OPENING :				
REMARKS :										

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 100117 County: BUNCOMBE Date: 10/18/2010 By: MER

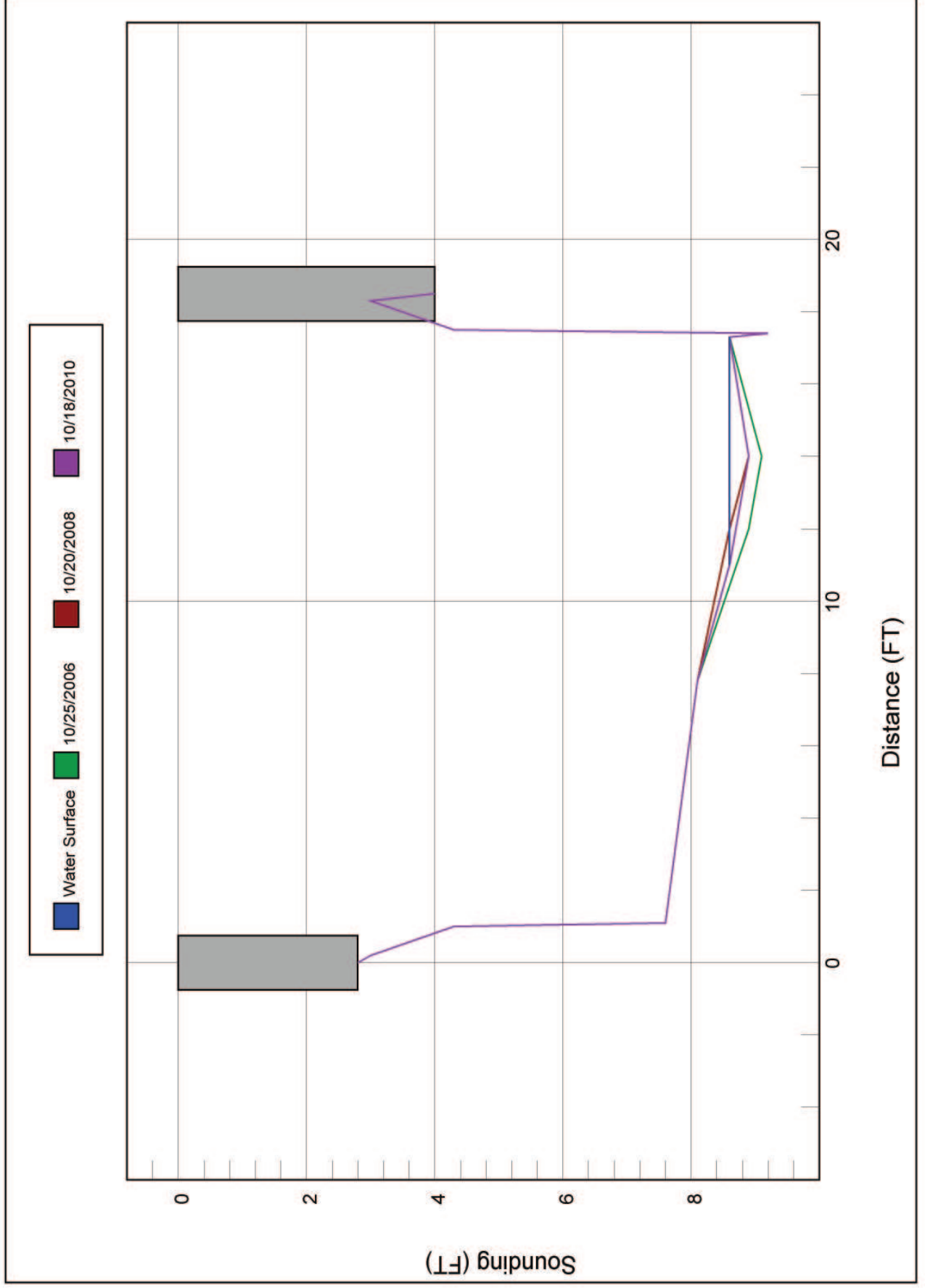
Record sounding from top of rail. Other location if needed: _____

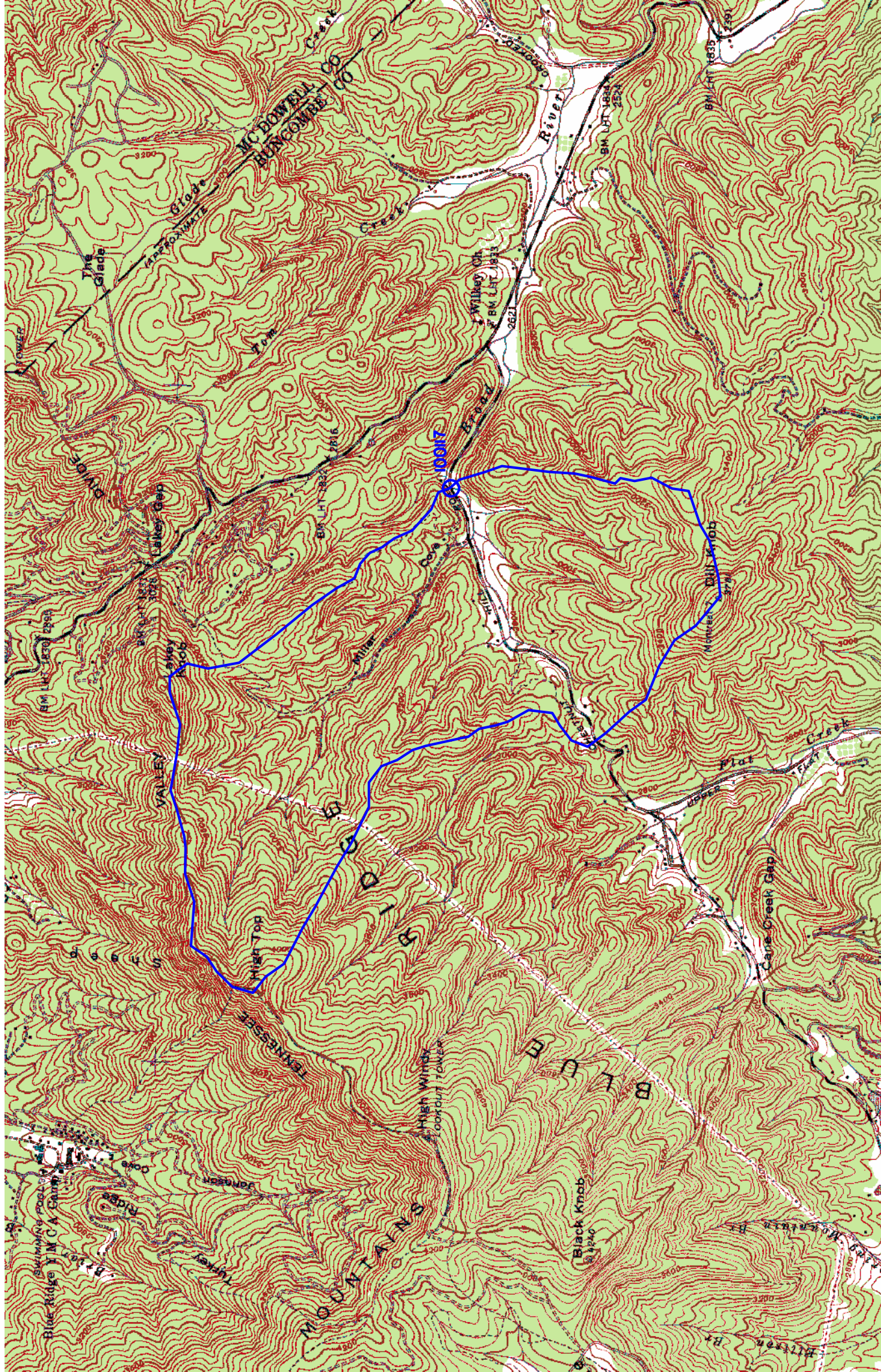
Distance from Highwater Mark to top of rail: _____ Location of Highwater Mark: _____

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.8	FF.END BENT 1			
0.2	3				
1	4.3	RAIL TO CAP			
1.1	7.6		1.1	7.5	SF ABUT.1/TOP REPAIR
7.8	8.1				
11	8.6	Water Surface/Water Edge (WSWE)			
14	8.9				
17.3	8.6	Water Surface/Water Edge (WSWE)			
17.4	9.2		17.4	6.7	
17.5	4.3	RAIL TO CAP			
18.3	3				
18.5	4	FF.END BENT 2			

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)





This spreadsheet computes the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent chance exceedance flows for an ungaged site in Georgia, South Carolina, and North Carolina. The spreadsheet also includes the 95-percent prediction intervals, the minus and plus standard error of prediction intervals, and the average standard error of prediction. To use the spreadsheet, enter requested information in the yellow cells below.

Enter a site-description name: 100117

Enter the explanatory variables:

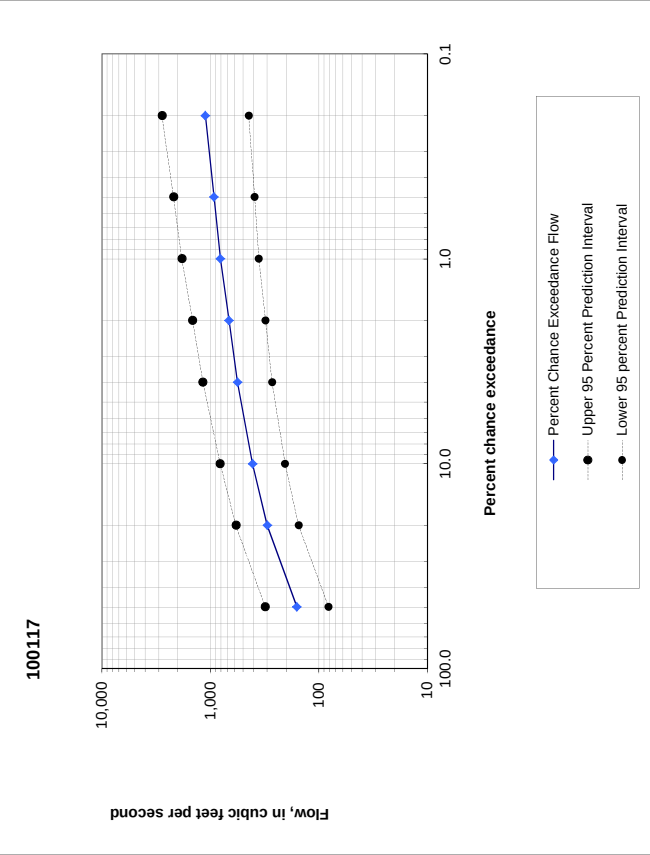
Drainage area, in square miles	1.62
Percent of basin in Hydrologic Region 1	
Percent of basin in Hydrologic Region 2	100
Percent of basin in Hydrologic Region 3	
Percent of basin in Hydrologic Region 4	
Percent of basin in Hydrologic Region 5	

Applicable range of drainage area is 1 to 9,000 square miles.
Hydrologic Region 1 corresponds to the USEPA Level III Ridge and Valley and Piedmont ecoregions
Hydrologic Region 2 corresponds to the USEPA Level III Blue Ridge ecoregion
Hydrologic Region 3 corresponds to the USEPA Level IV Sand Hills ecoregion
Hydrologic Region 4 corresponds to the USEPA Level III Southeastern, Middle Atlantic Coastal, and Southern Coastal Plain ecoregions
Hydrologic Region 5 corresponds to the lower portion of the USEPA Level IV Tifton Uplands ecoregion.

Sum of region percentages	100

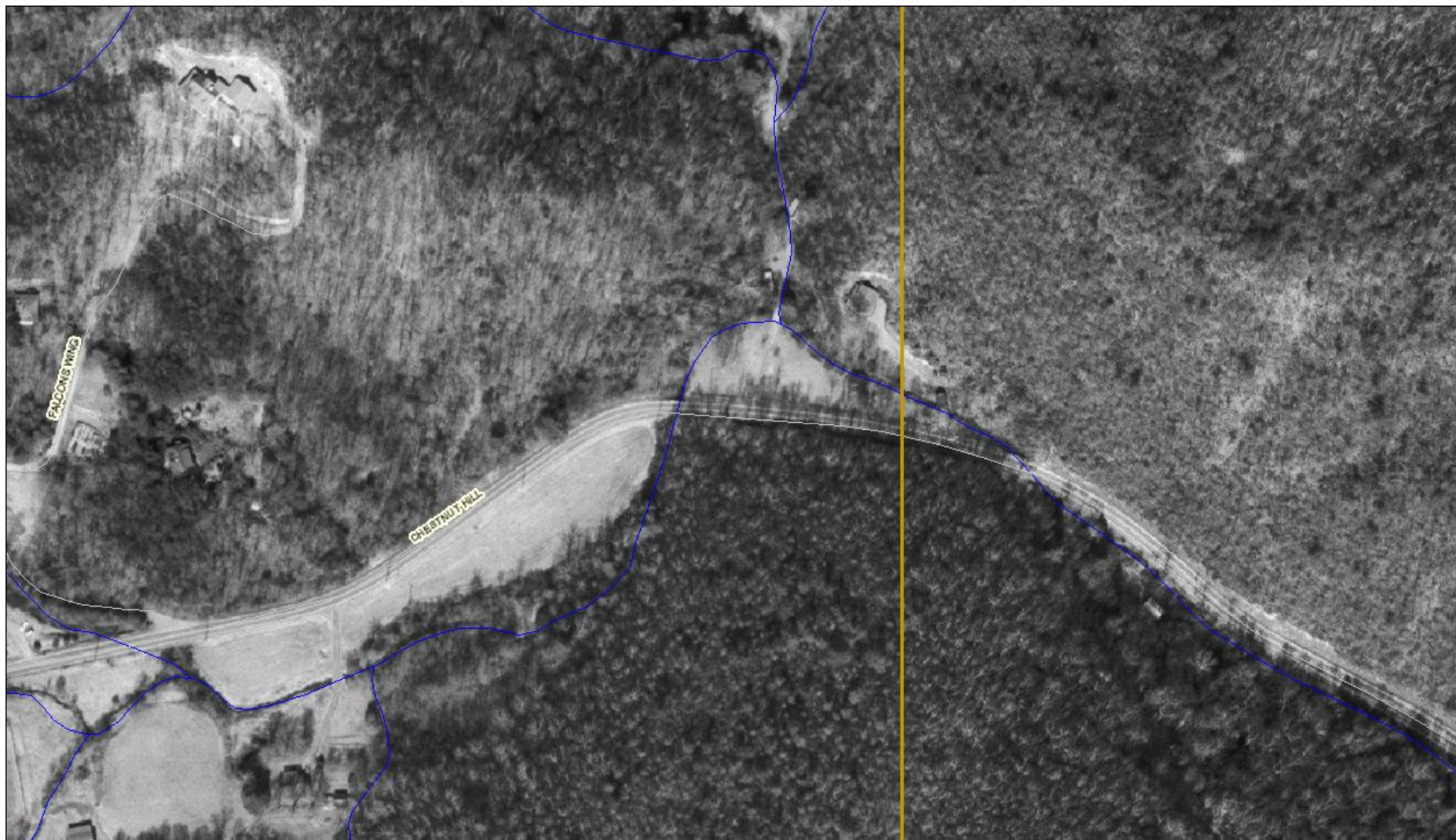
Drainage area check
DRAINAGE AREA WITHIN APPLICABLE LIMITS.

Percent chance exceedance	Percent chance exceedance flow, in ft ³ /s	Lower 95 percent prediction interval flow, in ft ³ /s	Upper 95 percent prediction interval flow, in ft ³ /s	-S _{PH} (percent)	+S _{PH} (percent)	Average S _{PH} (percent)
50	160	82	314	-29.1	41.0	35.4
20	300	154	584	-28.8	40.5	35.0
10	411	206	819	-29.6	42.1	36.3
4	565	271	1,180	-31.2	45.4	38.8
2	677	312	1,470	-32.6	48.4	41.1
1	812	359	1,840	-34.1	51.7	43.5
0.5	930	393	2,200	-35.5	55.1	46.1
0.2	1,120	446	2,810	-37.5	60.0	49.7





0606



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|------------------------------------|----------------------------------|---------------------------------|
| ★ Major Cities | — Roads | 100yr Flooding - Floodway (AE) |
| + Benchmarks | — NC Highway | 100yr Flooding - Has BFE's (AE) |
| DFIRM Grid | — US Highway | 100yr Flooding - No BFE's (A) |
| — Rivers and Streams | — Interstate Highway | 100yr Flooding - Velocity Zone |
| — Transects (Coastal) | — Political Areas | 500yr Flooding (Shaded X) |
| — County Boundaries | — Extraterritorial Jurisdictions | — Base Flood Elevation (Symbol) |
| — Coastal Barrier Resource Systems | — Coastal Sounds | — Cross Sections |



0 300 Feet

North Carolina
Floodplain Mapping Program