

OFFICE ESTIMATE

1@ 35, 1@ 40, 1@ 35' Bridge

PREDESIGN-PRESURVEY REPORT

Project# _____
TIP# _____
Let Date _____
WBS# 17BP.11.R.62

County Alleghany

Bridge# 020031
Road# SR 1464 (Shawtown Rd.)
Stream Big Pine Creek

Type Of Request: POC Force Account TIP NCMA

Date 7/11/13 Name M. G. S. Assigned To _____

Checked By SRH 7-16-13

Prior Survey Date NONE (attach copy of prior survey) BRN BK: NO CD. FILE NONE

Study By Scour Section _____

Flood Zone NO Detail Study — Date — Panel# 4919 (No Flood zone)

B.M. Info 3302 AL (panel not available)

Quad Map Roaring Gap Drainage Area 5.16 SQ MI From USGS / stream stats

Q25 1310 cfs Q50 1550 cfs Q100 1850 cfs Method Regression

DASS = 5.11 mi² STA. 316291876

EXISTING BRIDGE INFORMATION

Location 50 ft. N. JCT. SR 1463

Average Daily Traffic 630 YR 2008

Length 91 ft. Bed- To Crown 23 ft. Water Depth 2 ft.

Type Structure Prestressed conc. channels

Type Spans 1@ 30'-4, 1@ 30' 1@ 30'-4

Upstream Structure 020122 1@ 20'-6" Single span

Location 0.1 m.1 W. JCT SR 1481

Bed- To Crown 6 ft. WD = 1 ft. Prior Survey

Downstream Structure 020027 Reinf. conc. fl. on cont. Precast. conc. GDBS (SIP method form

Location 0.8 m.1 E JCT. SR 1433 (1077'-1.75'; 1275'; 1260' (CONT.)) = 210'

Bed- To Crown 30 ft. WD = 4 ft. Prior Survey

SCS Watershed _____

ENVIRONMENTAL TVA NO

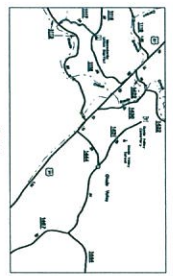
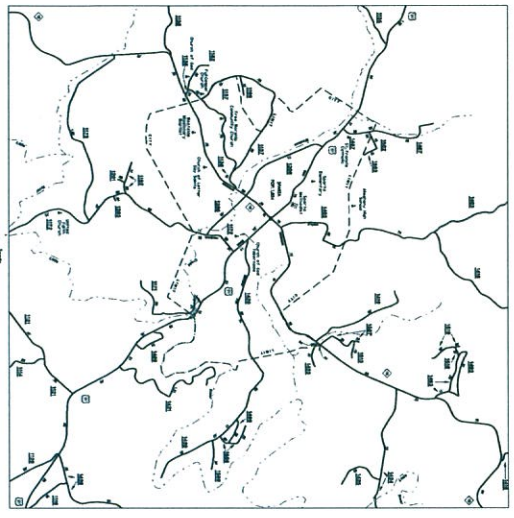
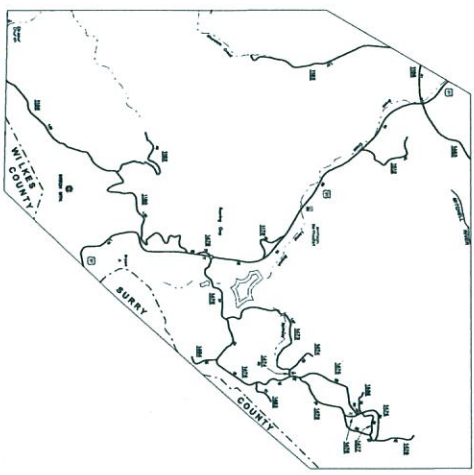
Trout Stream Yes Anadromous Fish NO Primary Nursery Area NO

High Quality Waters NO Nutrient Sensitive Waters NO

Near Water Supply Intake NO CAMA County NO

Stream Classification C; Tr 10-9-10-4

DENR River Basin Info. New From Source to to Brush Creek



ALLEGANY COUNTY
NORTH CAROLINA
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 STATE ROAD MAINTENANCE UNIT - LAYING AND INFORMATION SECTION
 U.S. DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION

LEGEND	
	INTERSTATE HIGHWAY
	U.S. HIGHWAY
	STATE ROAD
	COUNTY ROAD
	LOCAL ROAD
	RAILROAD
	WATERWAY
	AIRPORT
	SCHOOL
	CHURCH
	CEMETERY
	PUBLIC BUILDING
	PRIVATE BUILDING
	INDUSTRIAL BUILDING
	COMMERCIAL BUILDING
	RESIDENTIAL BUILDING
	UNIMPROVED ROAD
	RIGHT-OF-WAY
	EASEMENT
	ENCROACHMENT
	OBSTRUCTION
	HAZARD
	ACCIDENT
	CONSTRUCTION
	MAINTENANCE
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North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Tue Jul 9 2013 08:40:31 Mountain Daylight Time

Site Location: North_Carolina

NAD27 Latitude: 36.4813 (36 28 53)

NAD27 Longitude: -80.9814 (-80 58 53)

NAD83 Latitude: 36.4815 (36 28 53)

NAD83 Longitude: -80.9812 (-80 58 52)

Drainage Area: 5.16 mi² / 3302 AC ✓

Percent Urban: 11.1 %

Percent Impervious: 0.6 %

Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (5.16 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	5.16	1	9000
Percent Area in Region 1 (percent)	0.000	0	100
Percent Area in Region 2 (percent)	100.000	0	100
Percent Area in Region 3 (percent)	0.000	0	100
Percent Area in Region 4 (percent)	0.000	0	100
Percent Area in Region 5 (percent)	0.000	0	100

Urban Flows Region Grid Basin Characteristics			
100% Peak urban Blue Ridge-Piedmont FS007-00 (5.16 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	5.16	0.04	41
Area of Impervious Surfaces (percent)	0.60 (below min value 2)	2	54.6

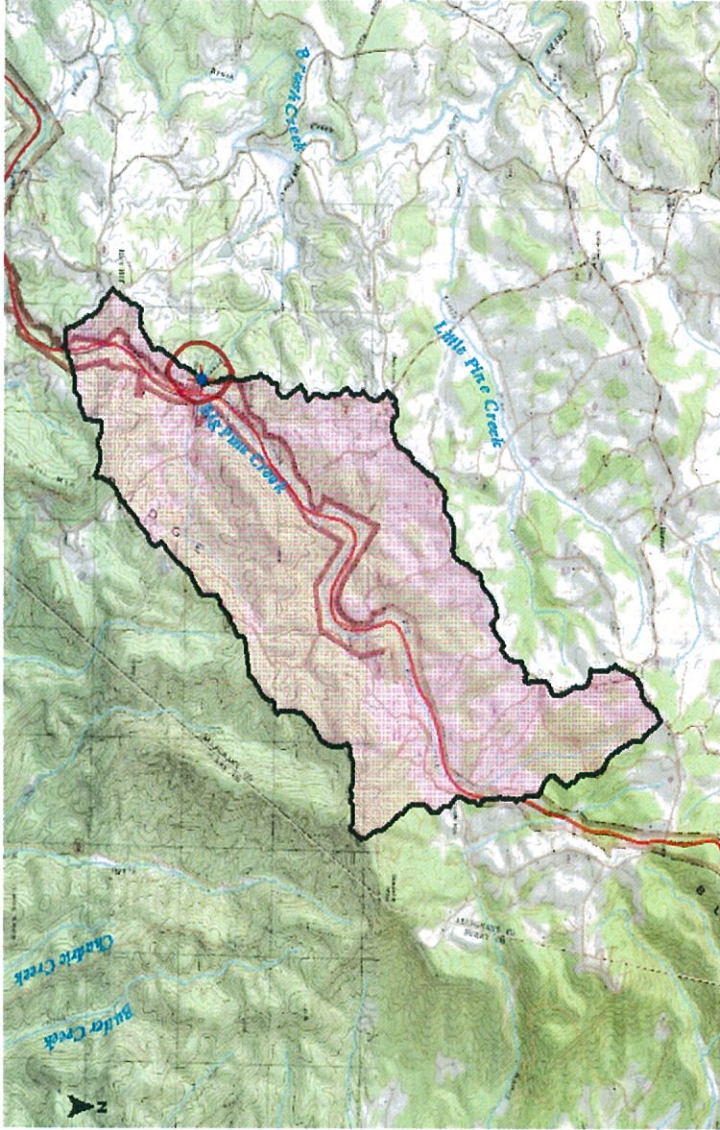
Warning: Some parameters are outside the suggested range. Estimates will be extrapolations with unknown errors.

Peak Flows Region Grid Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Prediction Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
PK2	394	35		225	689
PK5	714	34		411	1240
PK10	965	35		545	1710
PK25	1310	38		711	2400
PK50	1550	40		819	2950
PK100	1850	42		943	3650
PK200	2110	44		1040	4310
PK500	2520	48		1180	5410

Urban Flows Region Grid Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Standard Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
PK2U	78.9				
PK5U	180				
PK10U	275				
PK25U	497				
PK50U	649				
PK100U	824				



StreamStats Print Page



- Explanation**
- ★ Global Watershed Point
 - SLP/OSRP point
 - NC DOT Points
 - ▲ Local Bridges
 - ▲ Gauging Station, Continuous Record
 - ▲ Low Flow, Partial Record
 - ▲ Peak Flow, Partial Record
 - ▲ Peak and Low Flow, Partial Record
 - ▲ Stage Only
 - ▲ Low Flow, Partial Record, Stage
 - ▲ Miscellaneous Record
 - ▲ Unknown
 - Local HHD2
 - Longleaf Swamp HHD
 - Stream Grid
 - Globally Watershed
 - Pilot Study Area
 - Inupat

7/9/2013 8:42:00 AM



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMP REPAIR PRIORITY MAINT.

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ALLEGHANY

BRIDGE NUMBER 020031

INSPECTION CYCLE 2 YRS

ROUTE SR1464

ACROSS BIG PINE CREEK

M.P. 0

LOCATION 50 FT.N.JCT.SR1463

SUPERSTRUCTURE PRESTRESSED CONCRETE CHANNELS

SUBSTRUCTURE E.BTS&INT.BTS:PPC CAPS/TIMBER POST & CONCRETE SILLS

SPANS 1 @ 30'-4; 1 @ 30'; 1 @ 30'-4

LONGITUDE 80° 58' 45.8"

LATITUDE 36° 29' 1.1"

PRESENT CONDITION POOR

INVENTORY RATING

INSPECTION DATE 09/09/2010

OPERATING RATING

PRESENT POSTING SV 38 TTST 44

PROPOSED POSTING

COMPUTER UPDATE 10-07-10

ANALYSIS DATE

POSTING LETTER DATE NA

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELIN.



LOOKING NORTH

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

No	WEIGHT LIMIT	
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

BRIDGE MANAGEMENT UNIT
DATA ON EXISTING STRUCTURE

Run Date: 11/09/2010

COUNTY :	ALLEGHANY	DIV :	11	DIST :	1	STRUCTURE NUMBER :	020031	LENGTH :	91	FEET
ROUTE CARRIED :	SR1464	FEATURE INTERSECTED :	BIG PINE CREEK							
LOCATED :	50 FT.N.JCT.SR1463	BRIDGE NAME :							CITY :	
FUNC. CLASS :	09	SYST.ON :	NFA	SYST.UNDER :	NFA	ADT & YR :	630 2008	RAIL TYPE :	LT 233	RT 233
BUILT :	1965	BY :	BMU	PROJ :		FED.AID PROJ :		DESIGN LOAD :	H 10	
REHAB :		BY :		PROJ :		ALIGNMENT :	TAN	SKEW :	90	LANES :
									ON 2	UNDER
NAVIGATION :						HT. CRN. TO BED :		WATER DEPTH :		
	VC 0.0 FT		HC 0.0 FT				23 FT		2	FT
SUPERSTRUCTURE :	PRESTRESSED CONCRETE CHANNELS									
SUBSTRUCTURE :	E.BTS&INT.BTS:PPC CAPS/TIMBER POST & CONCRETE SILLS									
SPANS :	1 @ 30'-4; 1 @ 30'; 1 @ 30'-4									
BEAMS OR GIRDERS :	10 PRESTRESSED CONCRETE CHANNEL SECTIONS									
FLOOR :	PPC.CH/4.5 AWS	ENCROACHMENT :							DECK (OUT TO OUT) :	25.7 FT
CLEAR ROADWAY :	24.4 FT	BETWEEN RAILS :	25.2 FT	SIDEWALK OR CURB :	LT	0.4 FT	RT	0.4 FT		
VERT.CL.OVER :	99 FT 99 IN	VERT.CL.UNDER :	00 FT 00 IN	HOR.CL.UNDER :	0.0 FT					
INV.RTG. :	HS-1	OPE.RTG. :	HS-1	CONTR.MEMBER :	Ch3&6& 9(SpC)	POSTED :	SV 23	TTST 30	DATE	10/06/2010
SYSTEM :	Secondary S.R. Route						GREEN LINE ROUTE :	N		
2ND OPENING :		3RD OPENING :		4TH OPENING :		5TH OPENING :				
REMARKS :										

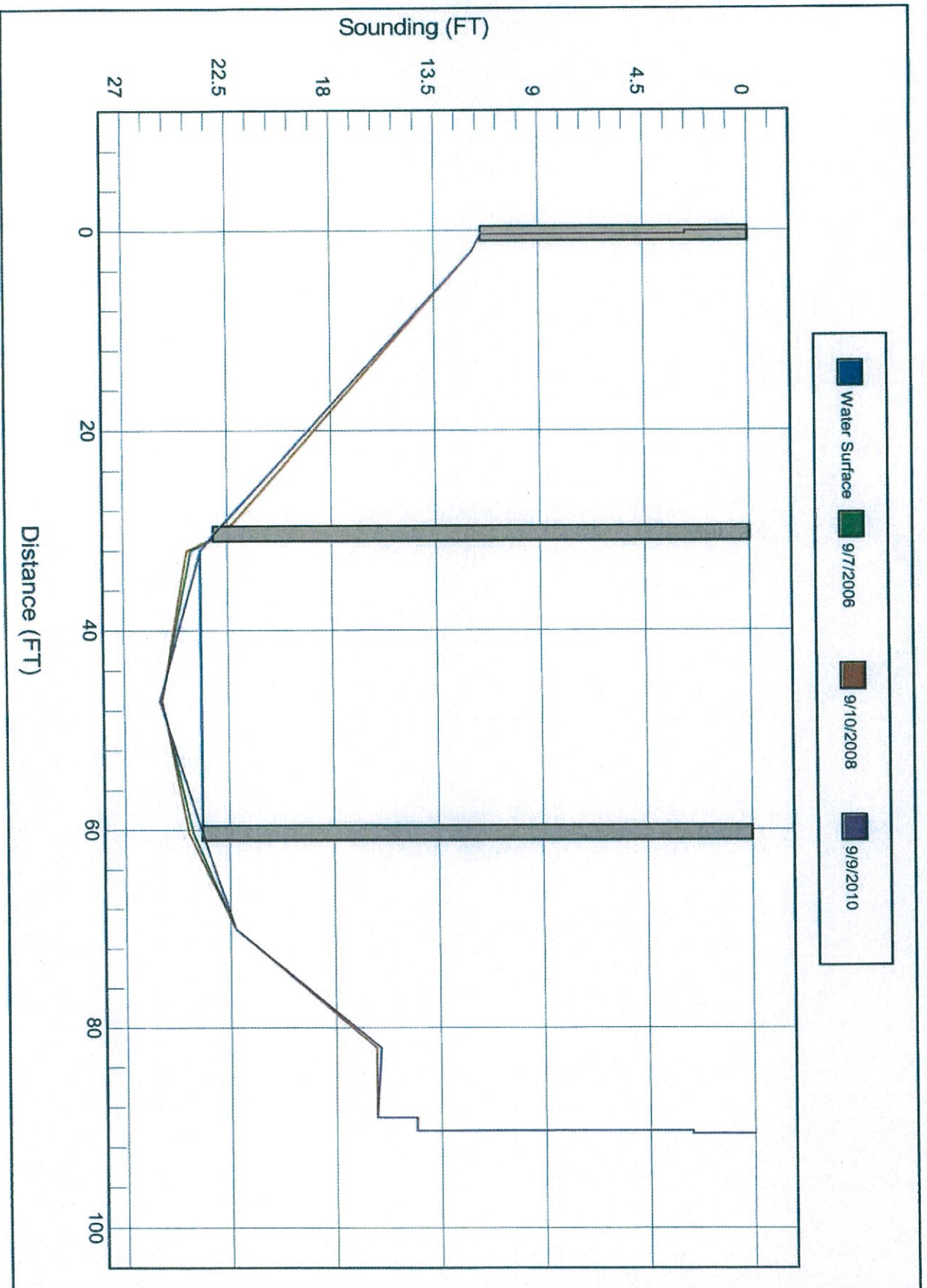
Bridge: 020031

County ALLEGHANY

Date: 09/09/2010

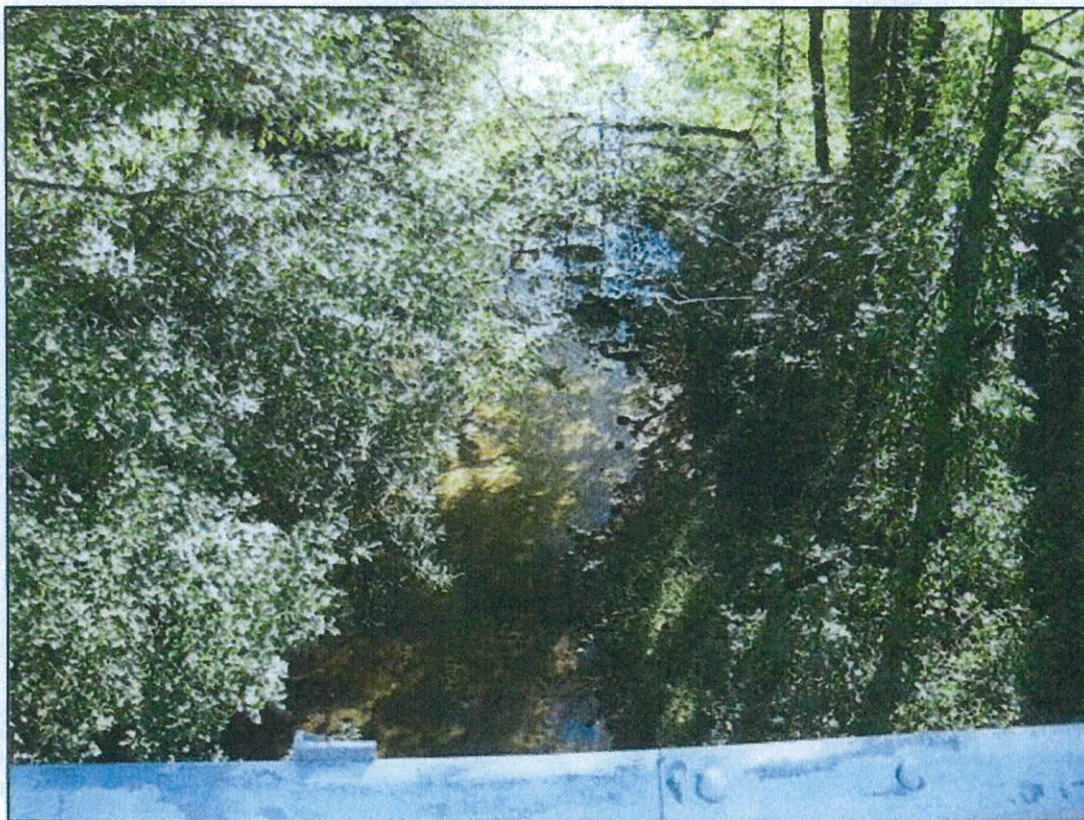
Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)





LOOKING UPSTREAM



LOOKING UPSTREAM