

OFFICE ESTIMATE

1 @ 50' Bridge

PREDESIGN-PRESURVEY REPORT

Project# _____
TIP# _____
Let Date _____
WBS# 17BP. 11. R. 72

County Ashe

Bridge# 040371
Road# SR1100 (Three Top Rd.)
Stream Creek

Type Of Request: POC Force Account TIP NCMA

Date 7/3/13 Name M.G.S Assigned To R.C.H

Checked By SP18 - WSH 8-6-13

Prior Survey Date No (attach copy of prior survey) BRN BK: No CO. FILE No

Study By Scour Section No

Flood Zone No Detail Study - Date 11/4/2009 Panel# 2926

B.M. Info 2202 Ac.

Quad Map Todd + Warrenville Drainage Area 3.44 sq. mi. From USGS/Stream stats

Q25 974 cfs Q50 1160 cfs Q100 1390 cfs Method Regression
980

EXISTING BRIDGE INFORMATION

Location 2.1 MI. N. JCT. SR 1224

Average Daily Traffic 450 YR 2011

Length 27 ft. Bed-To Crown 6 ft. Water Depth 1 ft.

Type Structure Steel Plank floor on I-Beams

Type Spans 1 @ 27' single span

Upstream Structure None

Location _____

Bed-To Crown 040255 Prior Survey _____

Downstream Structure 040255 Steel Plank floor on I-Beams 1 @ 45'-9"

Location 1.0 MI. S. JCT SR 1124

Bed-To Crown 7 ft. W29 = 1 ft. Prior Survey _____

SCS Watershed N/A

ENVIRONMENTAL

TVA No

Trout Stream Yes

Anadromous Fish No

Primary Nursery Area No

High Quality Waters Yes

Nutrient Sensitive Waters _____

Near Water Supply Intake No

CAMA County No

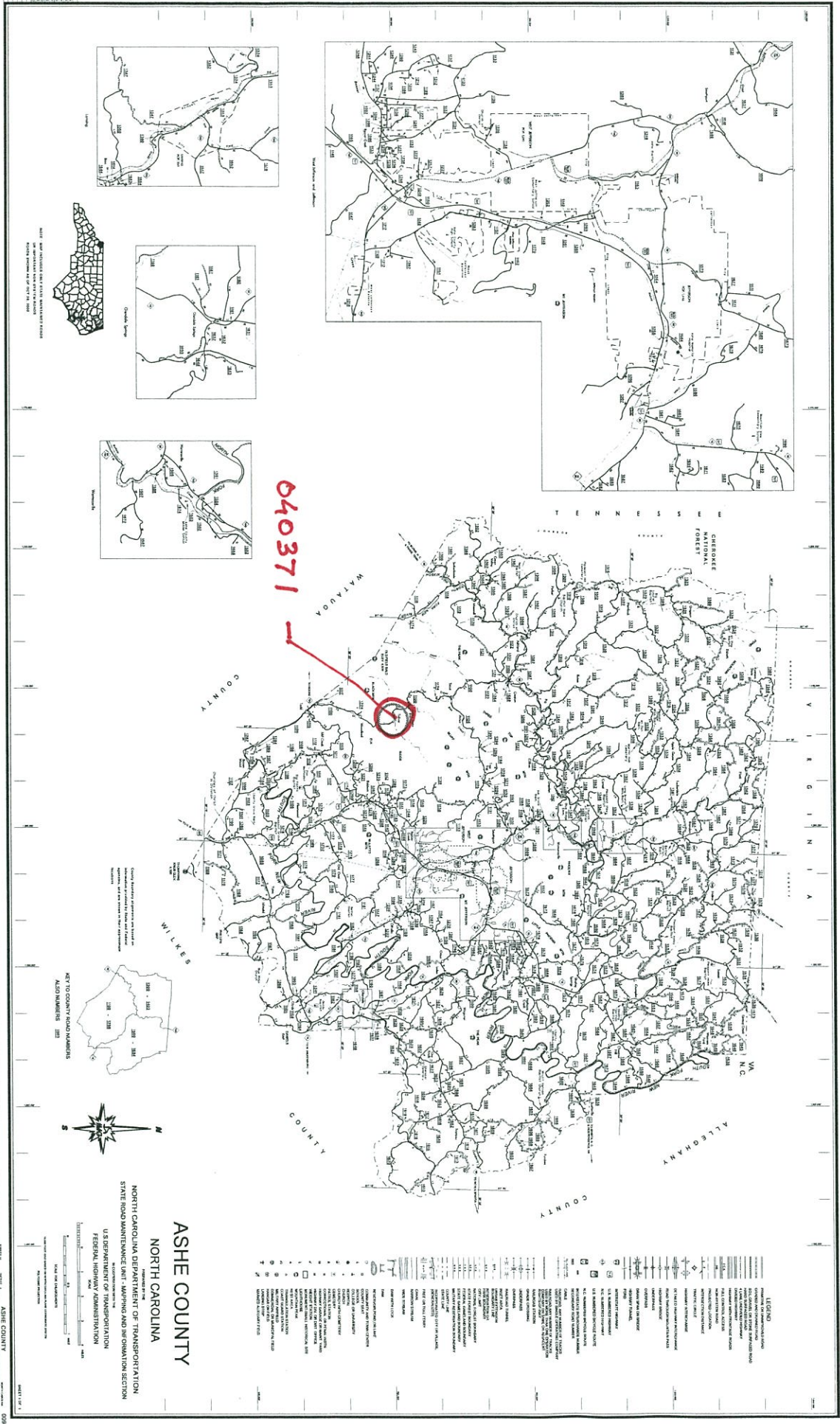
Stream Classification C, Tr, ORW, +

(No Number)

DENR River Basin Info. New

COPIES OF THIS MAP ARE AVAILABLE
TO THE PUBLIC AT A NOMINAL DUST
ADDRESS

U.S. DEPARTMENT OF TRANSPORTATION
BUREAU OF MAPS, SURVEYING AND RECORDS
405 G ST., WASHINGTON, D.C. 20540



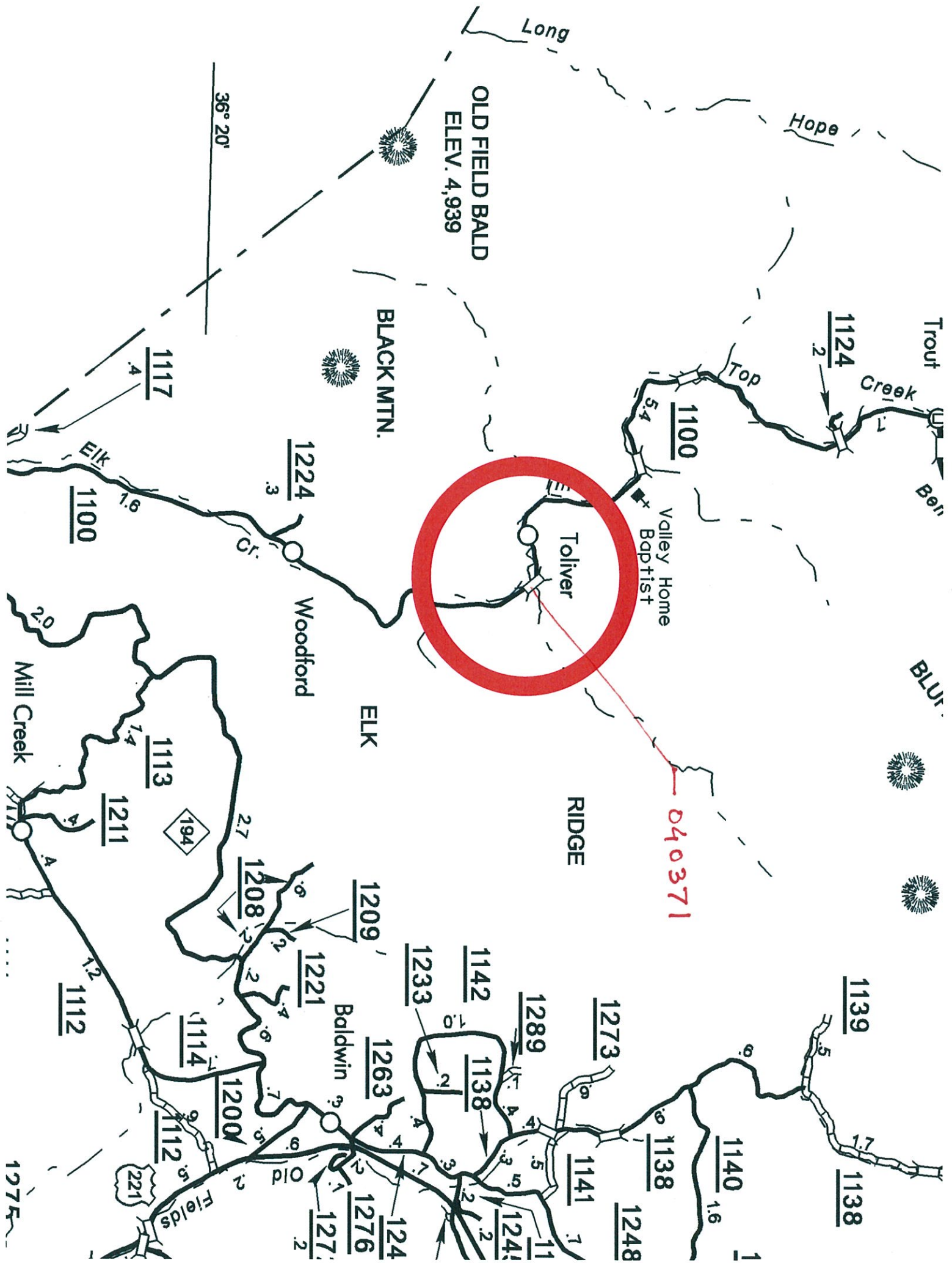
ASHE COUNTY
NORTH CAROLINA

U.S. DEPARTMENT OF TRANSPORTATION
BUREAU OF MAPS, SURVEYING AND RECORDS
405 G ST., WASHINGTON, D.C. 20540

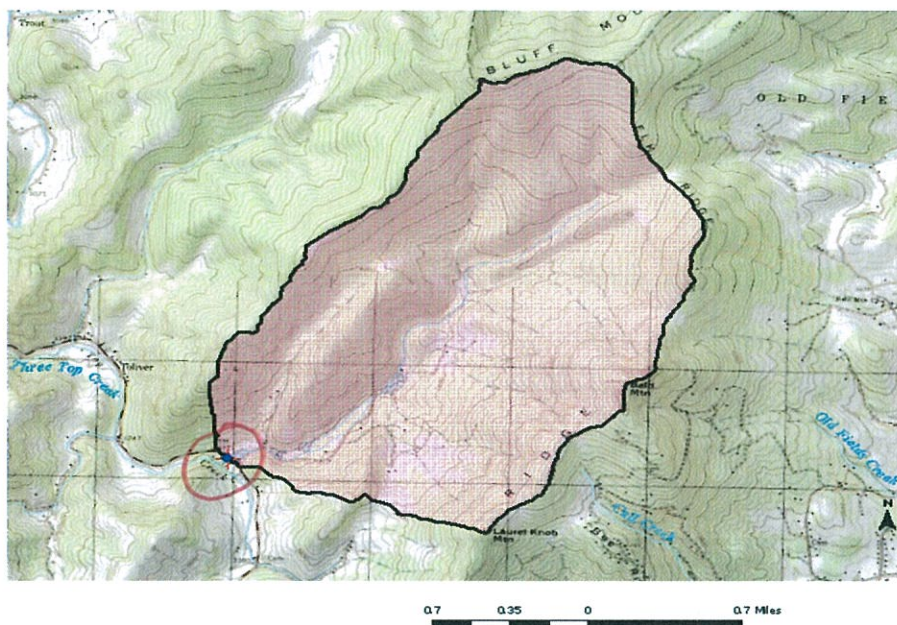
STATE ROAD MAINTENANCE UNIT - MAPING AND INFORMATION SECTION
FEDERAL HIGHWAY ADMINISTRATION

LEGEND

1. MAJOR ROADS
2. MINOR ROADS
3. RAILROADS
4. RIVERS AND STREAMS
5. LAKES AND PONDS
6. FORESTS
7. CULTIVATED LANDS
8. UNDEVELOPED LANDS
9. ELEVATION CONTOURS
10. TOWNSHIP BOUNDARIES
11. COUNTY BOUNDARIES
12. ADJACENT COUNTIES
13. ADJACENT STATES
14. ADJACENT COUNTRIES



StreamStats Print Page



7/2/2013 8:11:58 AM

Explanation

- | | |
|------------------------|-------------------------------------|
| ★ GlobalWatershedPoint | ▲ Gaging Station, Continuous Record |
| ◆ Slp1085Point | ▲ Low Flow, Partial Record |
| ● NCDOT Points | ▲ Peak Flow, Partial Record |
| ▲ LocalGages | ▲ Peak and Low Flow, Partial Record |
| — LocalNHD2 | ▲ Stage Only |
| — LongestFlowpath3D | ▲ Low Flow, Partial Record, Stage |
| ■ Stream Grid | ▲ Miscellaneous Record |
| ■ GlobalWatershed | ▲ Unknown |
| ■ Pilot Study Area | |
| □ hucpoly | |



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

PRIORITY MAINTENANCES

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY ASHE BRIDGE NUMBER 040371 INSPECTION CYCLE 0 YRS
ROUTE SR1100 ACROSS CREEK M.P. 0

LOCATION 2.1 MI.N.JCT.SR1224

SUPERSTRUCTURE STEEL PLANK FLOOR ON I-BEAMS

SUBSTRUCTURE ABUTS: REINFORCED CONCRETE (WIDENED)

SPANS 1 @ 27'

LONGITUDE 81° 35' 27.86"

LATITUDE 36° 21' 41.23"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 07/10/2012

OPERATING RATING

PRESENT POSTING SV 24 TTST 37 SV 24 TTST 37

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT (4) DELINEATORS



NORTH APPROACH LOOKING SOUTH

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: 08/03/2012

COUNTY : ASHE DIVISION : 11 DISTRICT : 3 STRUCTURE NUMBER : 040371 LENGTH : 27 FEET

ROUTE CARRIED : SR1100 FEATURE INTERSECTED : CREEK

LOCATED : 2.1 MI.N.JCT.SR1224 BRIDGE NAME : CITY :

FUNC. CLASS : 09 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 450 2011 RAIL TYPE : LT 233 RT 233

BUILT : 1973 BY : BMU PROJ : FED.AID PROJ : DESIGN LOAD : Unknown

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 75 LANES : ON 2 UNDER

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 6 FT WATER DEPTH : 1 FT

SUPERSTRUCTURE : STEEL PLANK FLOOR ON I-BEAMS

SUBSTRUCTURE : ABUTS: REINFORCED CONCRETE (WIDENED)

SPANS : 1 @ 27'

BEAMS OR GIRDERS : 13 LNS.12 I-BEAMS @ 1'-11 CENTERS

FLOOR : STL.PL/5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 24 FT

CLEAR ROADWAY : 23.9 FT BETWEEN RAILS : 23.9 FT SIDEWALK OR CURB : LT 0 FT RT 0 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-9 OPE.RTG. : HS-16 CONTR.MEMBER : IntBeam (#8Ignored) POSTED : SV 15 TTST 21 DATE 08/02/2012

SYSTEM : Secondary S.R. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

REMARKS :

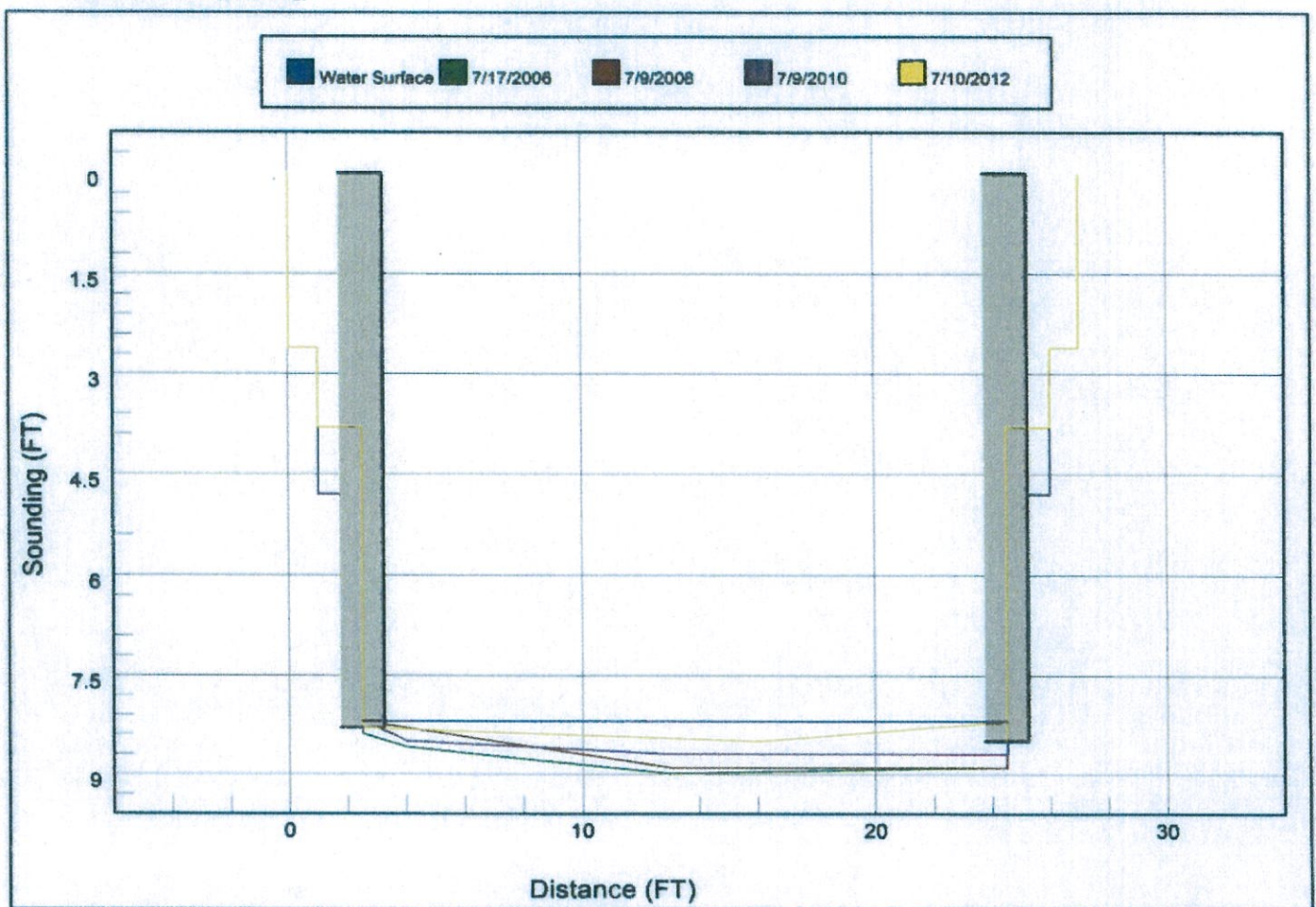
Bridge: 040371

County ASHE

Date: 07/10/2012

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



Structure 040371

County ASHE

Date: 07/10/2012

Structure Photos



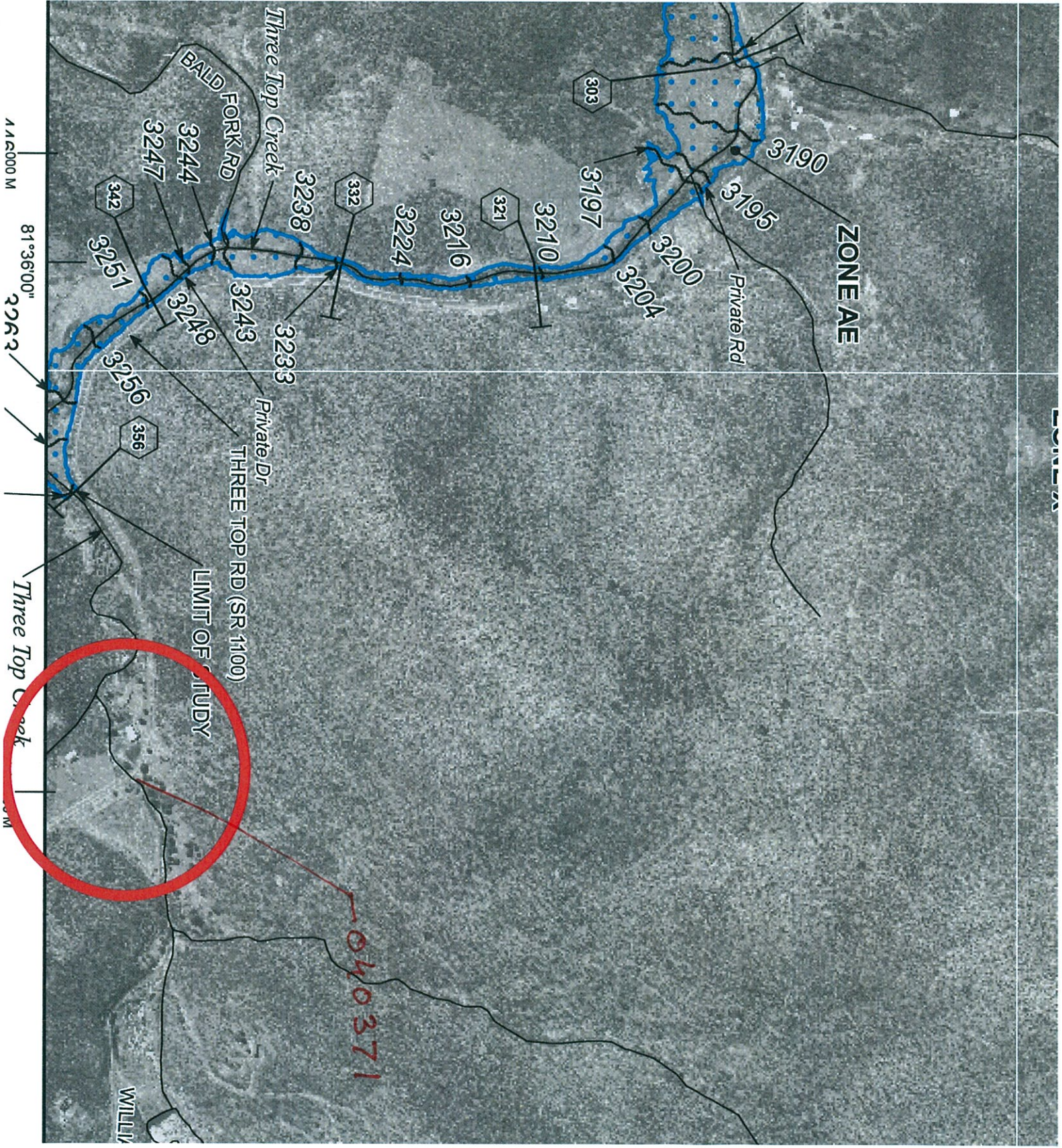
EAST ELEVATION



EAST BRIDGE RAIL CONNECTION (WEST SIMILAR)

New River Basin

Name	Index Number	Classification	Class Date
Description			Special Designation
North Fork New River	10-2-(12)	C;ORW	12/01/10
From confluence with Big Horse Creek (Horse Creek) to New River			
Roundabout Creek	10-2-10	C;Tr,ORW	12/01/10
From source to North Fork New River			
Graybeal Branch	10-2-10-1	C;Tr,ORW	12/01/10
From source to Roundabout Creek			
Cabbage Creek	10-2-10-2	C;Tr,ORW	12/01/10
From source to Roundabout Creek			
Unnamed Tributary to North Fork New River at Knox Knitting Co.	10-2-11	C;ORW	12/01/10
From source to North Fork New River			
* Three Top Creek	10-2-13	C;Tr,ORW	12/01/10
From source to North Fork New River			
Big Branch	10-2-13-1	C;Tr,ORW	12/01/10
From source to Three Top Creek			
Ben Bolen Creek	10-2-13-2	C;Tr,ORW	12/01/10
From source to Three Top Creek			
Long Hope Creek	10-2-13-3	C;Tr,ORW	12/01/10
From source to Three Top Creek			
Big Laurel Creek	10-2-14	C;Tr,ORW	12/01/10
From source to North Fork New River			
Dixon Creek	10-2-14-1	C;Tr,ORW	12/01/10
From source to Big Laurel Creek			
Kilby Creek	10-2-14-2	C;Tr,ORW	12/01/10
From source to Big Laurel Creek			
Woodard Branch	10-2-14-3	C;Tr,ORW	12/01/10
From source to Big Laurel Creek			
Cut Laurel Creek	10-2-14-4	C;Tr,ORW	12/01/10
From source to Big Laurel Creek			
Swift Branch	10-2-14-5	C;Tr,ORW	12/01/10
From source to Big Laurel Creek			
Soup Bean Branch	10-2-14-6	C;Tr,ORW	12/01/10
From source to Big Laurel Creek			





North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Tue Jul 2 2013 08:11:45 Mountain Daylight Time

Site Location: North Carolina

NAD27 Latitude: 36.3613 (36 21 41)

NAD27 Longitude: -81.5913 (-81 35 29)

NAD83 Latitude: 36.3614 (36 21 41)

NAD83 Longitude: -81.5911 (-81 35 28)

Drainage Area: 3.44 mi²

Percent Urban: 0.5 %

Percent Impervious: 0.0 %

Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (3.44 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.44	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 (3.44 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.44	0.04	41
Area of Impervious Surfaces (percent)	0.02 (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	287	35		164	504
PK5	527	34		302	919
PK10	716	35		403	1270
PK25	974	38		528	1790
PK50	1160	40		610	2210
PK100	1390	42		704	2740
PK200	1590	44		775	3250
PK500	1900	48		881	4080

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	5.67				
PK5U	19.5				
PK10U	36.5				
PK25U	88.1				
PK50U	132				
PK100U	192				