

OFFICE ESTIMATE 1 @ 35' Bridge

PREDESIGN-PRESURVEY REPORT

Project# 17BP.11.R.113
TIP# _____
Let Date _____
WBS# _____

County WILKES (Div. 11)

Bridge# 960150
Road# SR 1728 (LONG BOTTOM RD)
Stream ✓ DUNGEON CREEK, MULBERRY CR.
Esm

Type Of Request: POC Force Account TIP NCMA

Date 4/14/14 Name MJY

Assigned To RCH

Checked By 4-21-14 wsh

BRN. NO CO. FILE NO

Prior Survey Date NONE (attach copy of prior survey)

Study By Scour Section NONE

Flood Zone X Detail Study NONE ✓ Date 3/2/09 Panel# 3944 ✓

B.M. Info N/A

Quad Map MCGRADY Drainage Area 1.55 SQ. MI. From STREAM STATS
Q25 550 cfs ✓ Q50 650 cfs ✓ Q100 800 cfs ✓ Method REG. EQNS.
REGION 2/RURAL

EXISTING BRIDGE INFORMATION

Location 1.3 MI. NE. JCT. NC 18 (LONG: 81° 13' 21.78" LAT: 36° 20' 56.69")

Average Daily Traffic 320 (2010) 6% TRK.

Length 27' Bed-To Crown 5' Water Depth 1'

Type Structure TIM. FLOOR ON I-BEAMS, TIM. CAPS/POST & SILLS

Type Spans 1 @ 26'-7"

Upstream Structure NO NUMBERED STR'S U/S ✓ (UNNUMBERED PIPE U/S ON LONG BOTTOM ROAD)

Location _____

Bed-To Crown _____ Prior Survey _____

Downstream Structure 960151 ✓ (TIM. FLOOR ON I-BEAMS, TIM. CAPS/POST & SILLS, 26' long; 1 @ 26'-2")

Location 1.2 MI. NE. JCT. NC 18 (Str. on Longbottom Rd)

Bed-To Crown 6' (D=1') ✓ Prior Survey _____

SCS Watershed N/A

ENVIRONMENTAL

TVA: NO ✓

Trout Stream YES (WILD) ✓ 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 ✓ #12-42-1-1 ✓

DENR River Basin Info. YADKIN

SCOPING SURVEY

COUNTY: *WILKES*

BRIDGE #: *960150*

DATE:

SURVEYED BY:

OAL =

L OPENING =

CLEAR RDWY =

CLEAR RDWY ALONG SKEW =

RAIL TO BED =

RAIL TO SEAT =

HEIGHT OF RAIL =

NW DEPTH =

STREAM WIDTH =

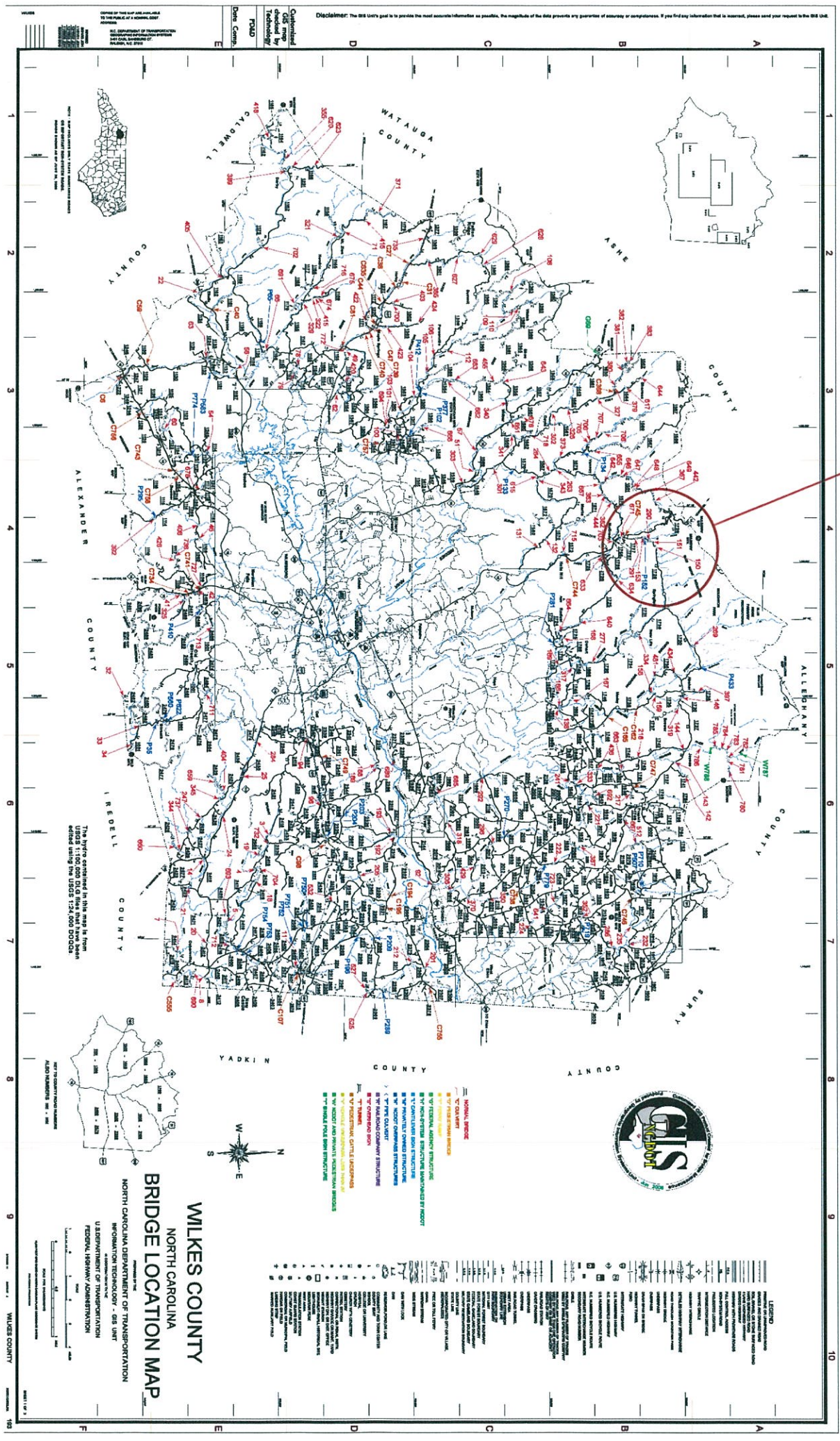
WATERWAY OPENING =

DETOUR =

NOTES:

150

SITE



150

UNIT Y

1:320,000

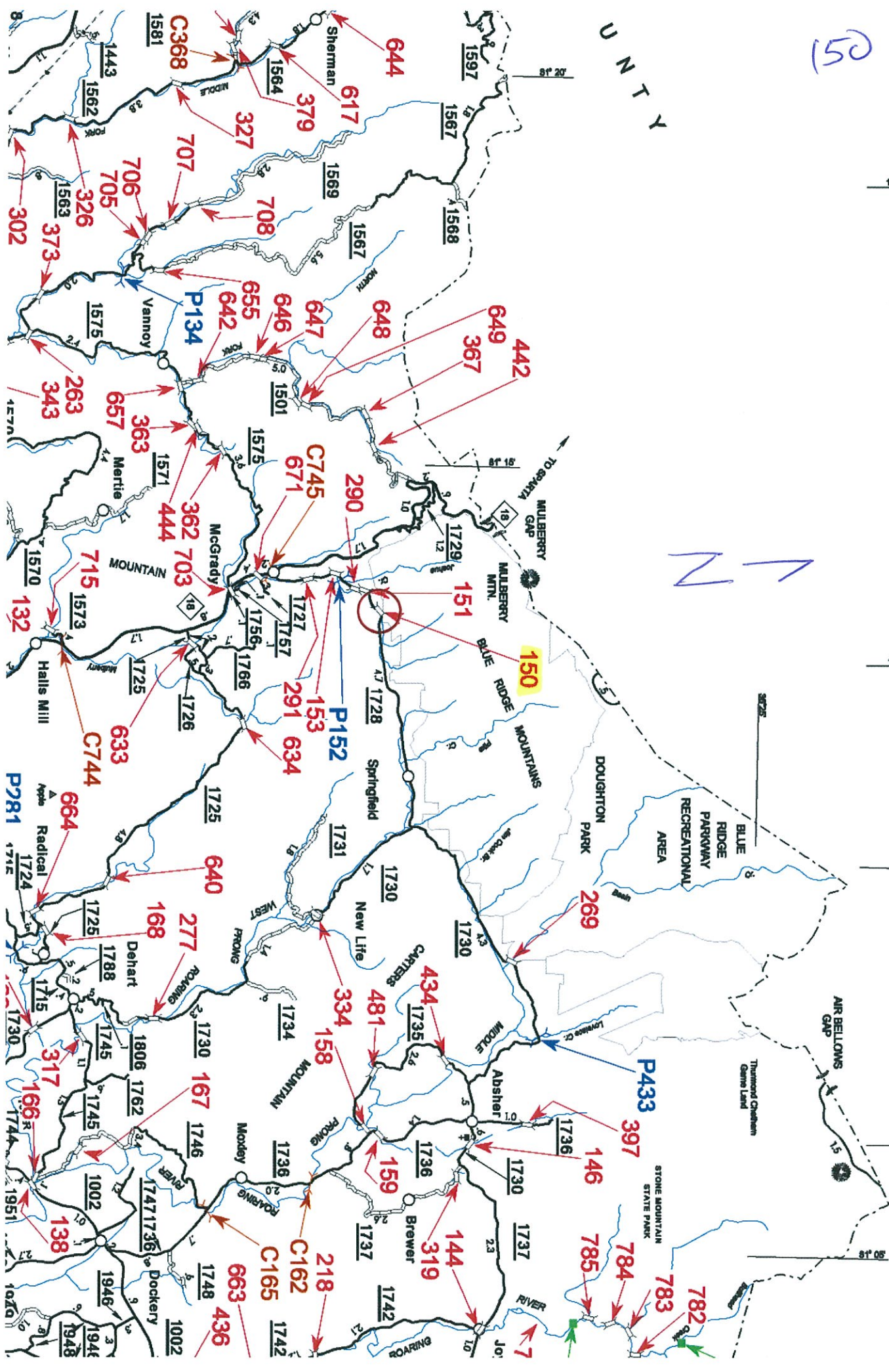
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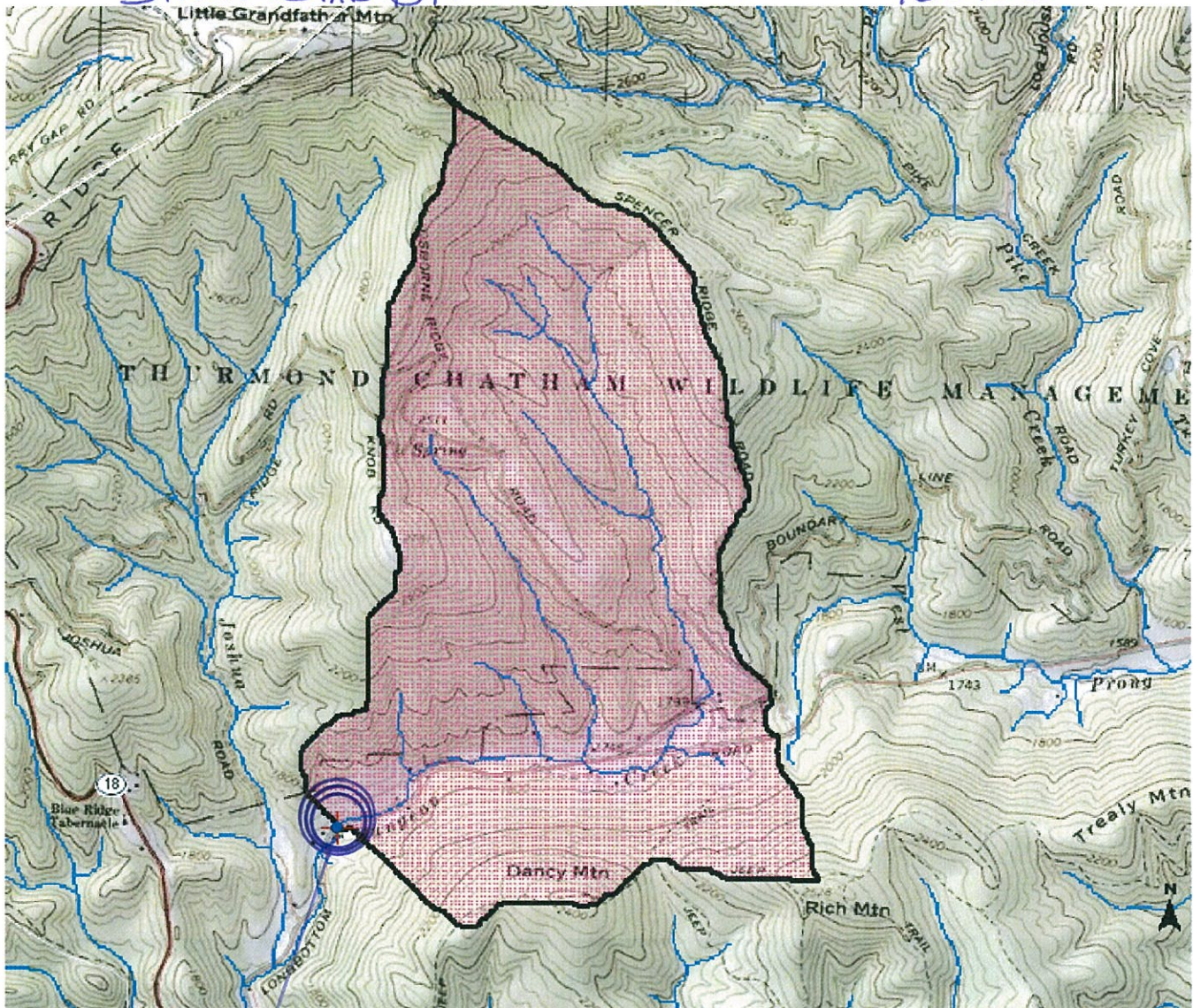
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ALLEGHANY



STREAM STATS: DA = 155 Sq Mi

960150



SITE



North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Mon Apr 14 2014 08:38:42 Mountain Daylight Time

Site Location: North Carolina

NAD27 Latitude: 36.3490 (36 20 56)

NAD27 Longitude: -81.2228 (-81 13 22)

NAD83 Latitude: 36.3491 (36 20 57)

NAD83 Longitude: -81.2227 (-81 13 22)

Drainage Area: 1.55 mi²

Percent Urban: 5.7 %

Percent Impervious: 0.2 %

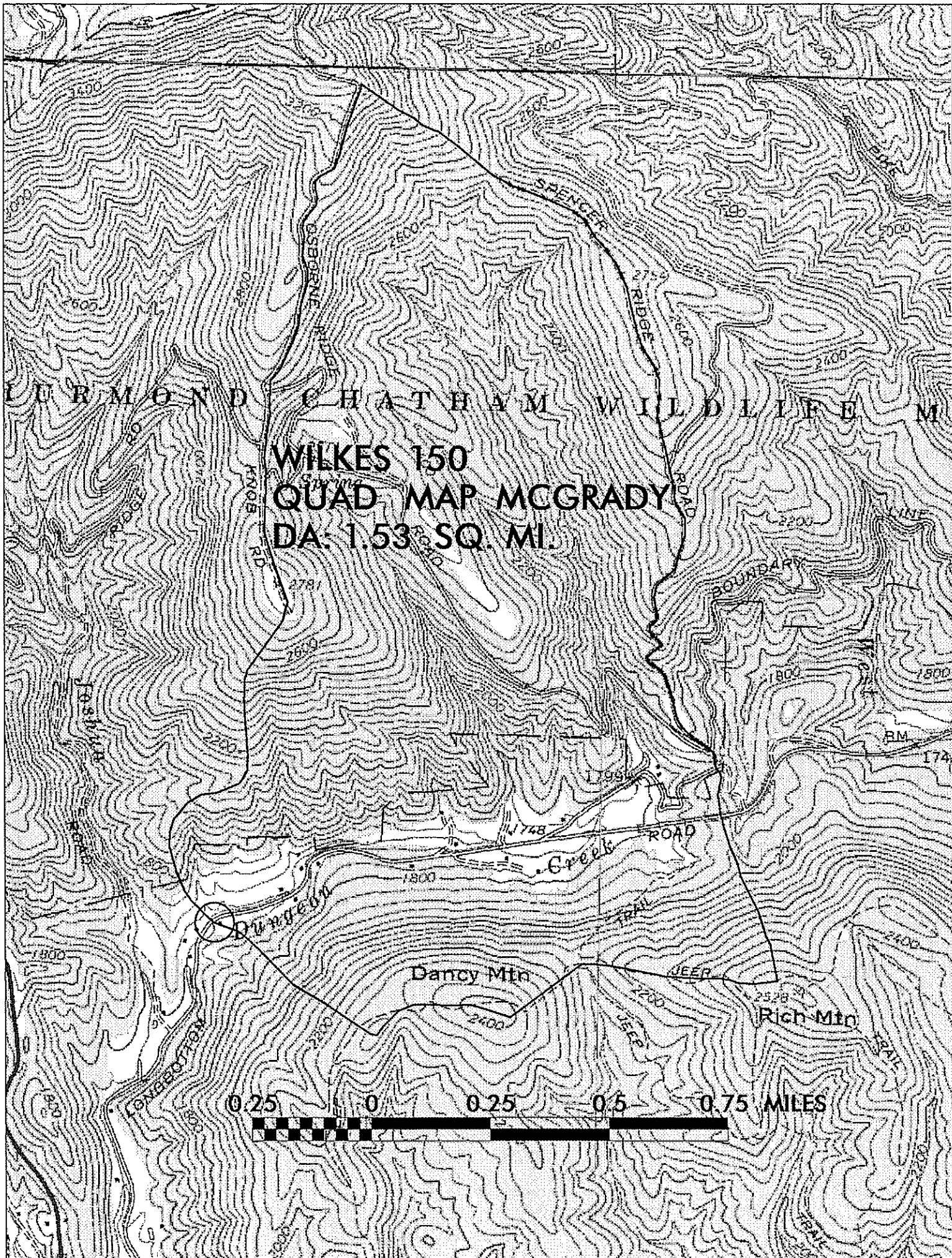
Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (1.55 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	1.55	1	9000
Percent Area in Region 1 (percent)	0.000	0	100
Percent Area in Region 2 (percent)	100.000	0	100
Percent Area 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 (1.55 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	1.55	0.04	41
Area of Impervious Surfaces (percent)	0.22 (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	154	35		87.5	272
PK5	290	34		165	509
PK10	398	35		223	711
PK25	547	38		295	1010
PK50	656	40		342	1260
PK100	787	42		395	1560
PK200	901	44		437	1860
PK500	1080	48		498	2350

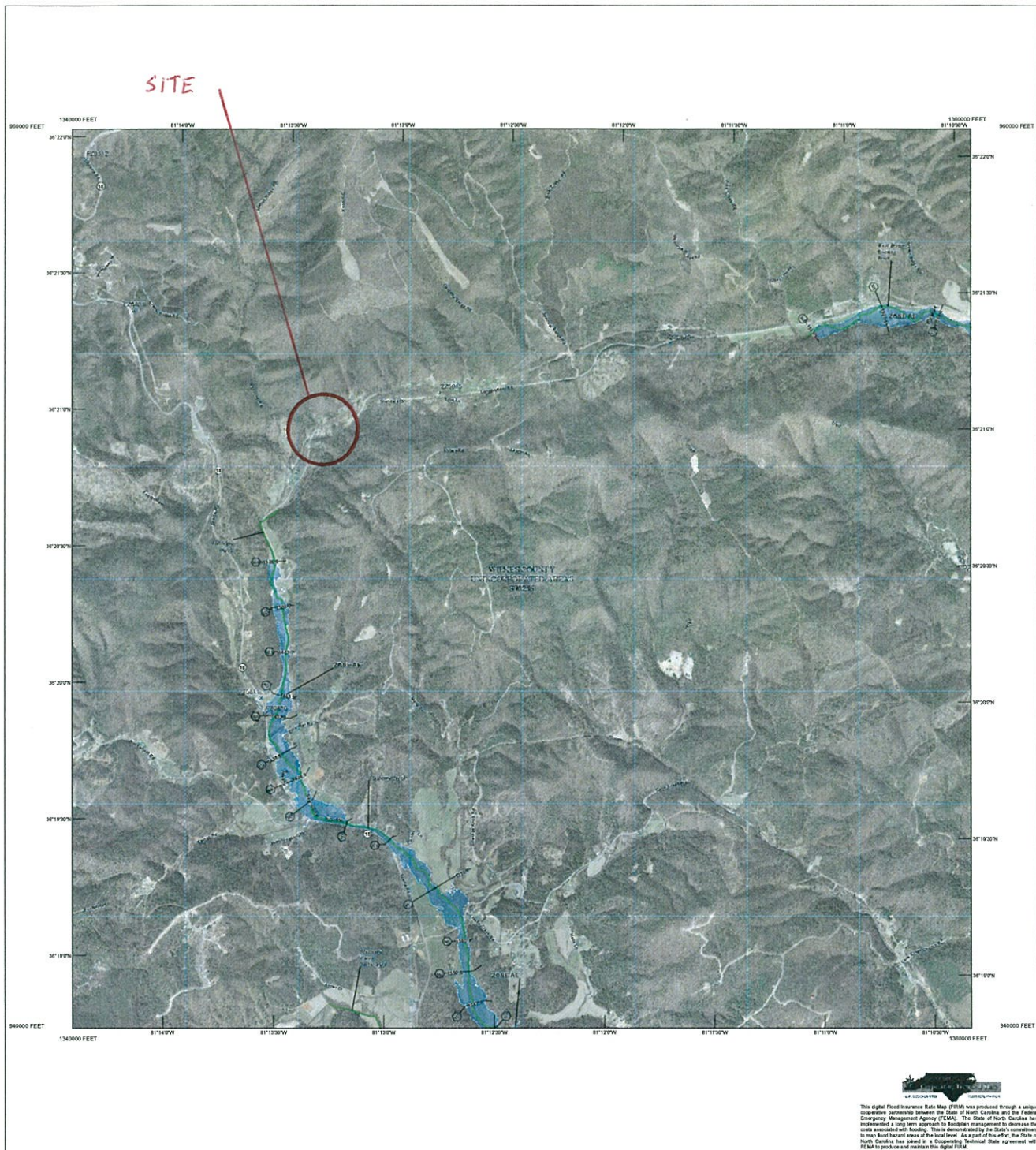
Urban Flows Region Grid Streamflow Statistics					
Statistic	Flow (ft ³ /s)	Standard Error (percent)	Equivalent years of record	90-Percent Prediction Interval	
				Minimum	Maximum
PK2U	16.3				
PK5U	44.7				
PK10U	74.5				
PK25U	154				
PK50U	212				
PK100U	282				



LURMOND CHATHAM WILDLIFE M

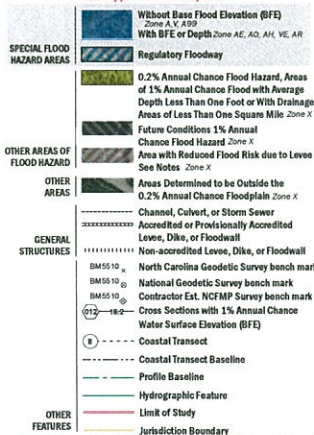
WILKES 150
QUAD MAP MCGRADY
DA: 1.53 SQ. MI.

0.25 0 0.25 0.5 0.75 MILES



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTP://FRIS.NC.GOV/FRIS](http://FRIS.NC.GOV/FRIS)



NOTES TO USERS

For information and questions about this map, available products associated with this FIS including historic versions of this FIS, how to order products, or the National Flood Insurance Program in general, contact the FEMA Map Information Center at 1-877-FEMA-8087 (1-877-366-2842) or the FEMA Map Service Center website at <http://www.fema.gov>. An accompanying Flood Insurance Study report, Letter of Map Revision (LOMR), or Letter of Map Amendment (LOMA) having portions of the period, and digital versions of this FIS may be available. Visit the North Carolina Floodplain Mapping Program website at <http://www.ncfloodmaps.com> or contact the FEMA Map Service Center.

Communities seeking land on adjacent FIS panels must obtain a current copy of the adjacent panel as well as the current FIS panel. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map data refer to the Flood Insurance Study report for the jurisdiction.

To determine if flood insurance is available in the community, contact your insurance agent or call the National Flood Insurance Program at 1-800-433-6533.

Base map information shown on this FIS was provided in digital format by the North Carolina Floodplain Mapping Program (NCFPMP). The source of this information can be determined from the metadata available in the digital FLOOD database and in the Technical Support Data Notebook (TSDB).

ACCREDITED LEVEE NOTES TO USERS: If an accredited levee rate appears on this panel along with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1 percent annual-chance level) and Emergency Action Plan, on the levee system shown, as providing protection. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.12 of the NFIP regulations. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicates the levee system does not comply with Section 65.12 requirements, FEMA will remove the flood hazard and risk information for this area to reflect the accreditation of the levee system. To mitigate flood risk to insurance and floodplain management, property owners and residents are encouraged to consider flood insurance and floodplain management or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at <http://www.fema.gov/newsroom/floodinfo>.

PROVISIONALLY ACCREDITED LEVEE NOTES TO USERS: If a Provisionally Accredited Levee (PAL) rate appears on this panel, check with your local community to obtain more information, such as the estimated level of protection provided (which may exceed the 1 percent annual-chance level) and Emergency Action Plan, on the levee system shown, as providing protection. To maintain accreditation, the levee owner or community is required to submit the data and documentation necessary to comply with Section 65.12 of the NFIP regulations. If the community or owner does not provide the necessary data and documentation or if the data and documentation provided indicates the levee system does not comply with Section 65.12 requirements, FEMA will remove the flood hazard and risk information for this area to reflect the accreditation of the levee system. To mitigate flood risk to insurance and floodplain management, property owners and residents are encouraged to consider flood insurance and floodplain management or other protective measures. For more information on flood insurance, interested parties should visit the FEMA Website at <http://www.fema.gov/newsroom/floodinfo>.

LIMIT OF MODERATE WAVE ACTION NOTES TO USERS: For some coastal flooding zones the AE Zone category has been replaced by a Limit of Moderate Wave Action (LMWA). The LMWA represents the approximate landward limit of a 1.5-foot breaking wave. The effects of wave hazards between the VE Zone and the LMWA (or between the LMWA and the LMWA for areas where VE Zones are not identified) will be similar to, but less severe than those in the VE Zone.

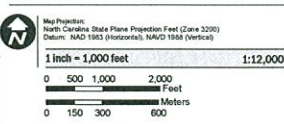
Limit of Moderate Wave Action (LMWA)

COASTAL BARRIER RESOURCES SYSTEM (CBRS) NOTE

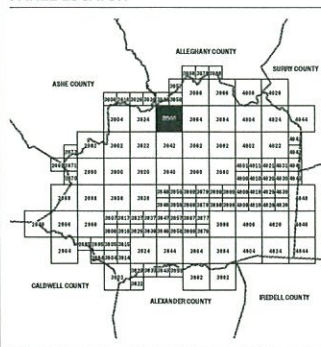
This map includes appropriate boundaries of the CBRS for informational purposes only. Flood insurance is not provided for areas within the CBRS that are not part of an approved flood insurance policy. For more information on the CBRS, visit the FEMA website at <http://www.fema.gov/floodinsurance/cbrs>. For more information on the CBRS, visit the FEMA website at <http://www.fema.gov/floodinsurance/cbrs>.

CBRS Area **Otherwise Protected Area**

SCALE



PANEL LOCATOR



National Flood Insurance Program

NORTH CAROLINA FLOODPLAIN MAPPING PROGRAM
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

NORTH CAROLINA

PANEL 3944

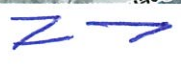
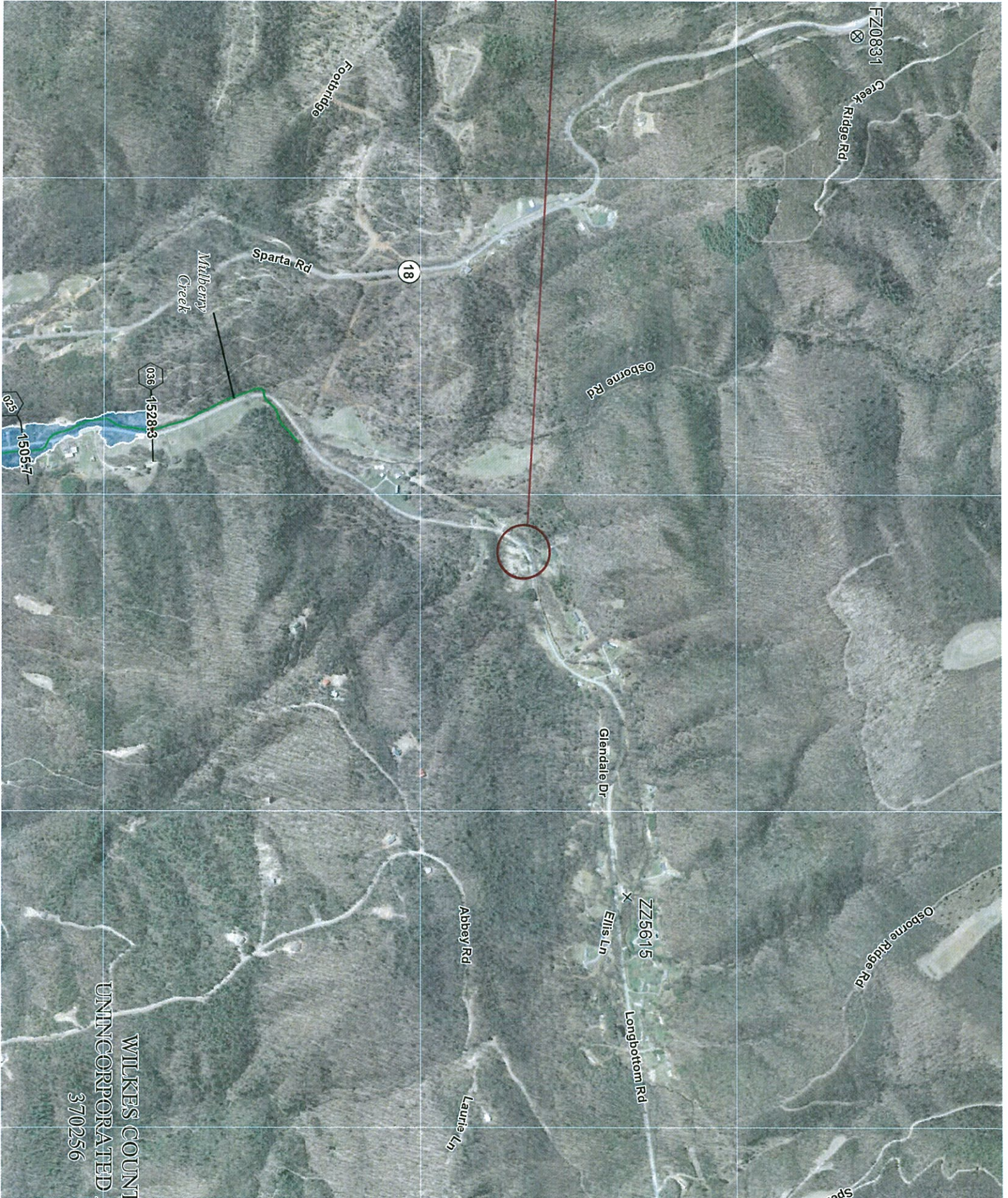
Panel Contains:
COMMUNITY
WALKER COUNTY

CID PANEL SUFFIX
39256 3944 J

MAP NUMBER
3710394400J
MAP REVISED
3/2/2009

150

ITE



WILKES COUNTY
UNINCORPORATED
370256



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

TEMPORARY REPAIR AT BENT 1

BRIDGE INSPECTION REPORT

INSPECTION TYPE: 2 Year Complete Underwater and Topside

COUNTY WILKES BRIDGE NUMBER 960150 INSPECTION CYCLE 2 YRS
ROUTE SR1728 ACROSS MULBERRY CREEK M.P. 0

LOCATION 1.3 MI.NE.JCT.NC18

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS: TIMBER CAPS/TIMBER POST&SILLS @ VAR.CENTERS

SPANS 1 @ 26'-7

LONGITUDE 81° 13' 21.78"

LATITUDE 36° 20' 56.69"

INSPECTION DATE 12/18/2012

PRESENT CONDITION FAIR

PRESENT POSTING SV 17 TTST 22

SV 17 TTST 22

PROPOSED POSTING

OTHER SIGNS PRESENT



LOOKING EAST AT APPROACH

Fracture Critical	<u>No</u>
Temporary Shoring	<u>Yes</u>
Scour Critical	<u>No</u>
Scour POA	<u>No</u>

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: 02/13/2013

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
WILKES	11	3	960150	27	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1728	MULBERRY CREEK

LOCATED :	BRIDGE NAME :	CITY :
1.3 MI.NE.JCT.NC18		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	320 2010	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1966	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :	
			TAN	135	ON 2 UNDER 0	

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT HC 0 FT 5 FT		1 FT

SUPERSTRUCTURE : TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE : E.BTS: TIMBER CAPS/TIMBER POST&SILLS @ VAR.CENTERS

SPANS : 1 @ 26'-7

BEAMS OR GIRDERS : 11 LINES 12 I-BEAMS @ 2'-3.5 CENTETRS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
4X8 TIM/1 AWS		25.5 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24.333 FT	25 FT	LT .3 FT RT .3 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	22	DATE	01/25/1995
HS-1	HS-1	int bm	SV 17				

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

UNDER ROUTES AND CLEARANCES

REMARKS :

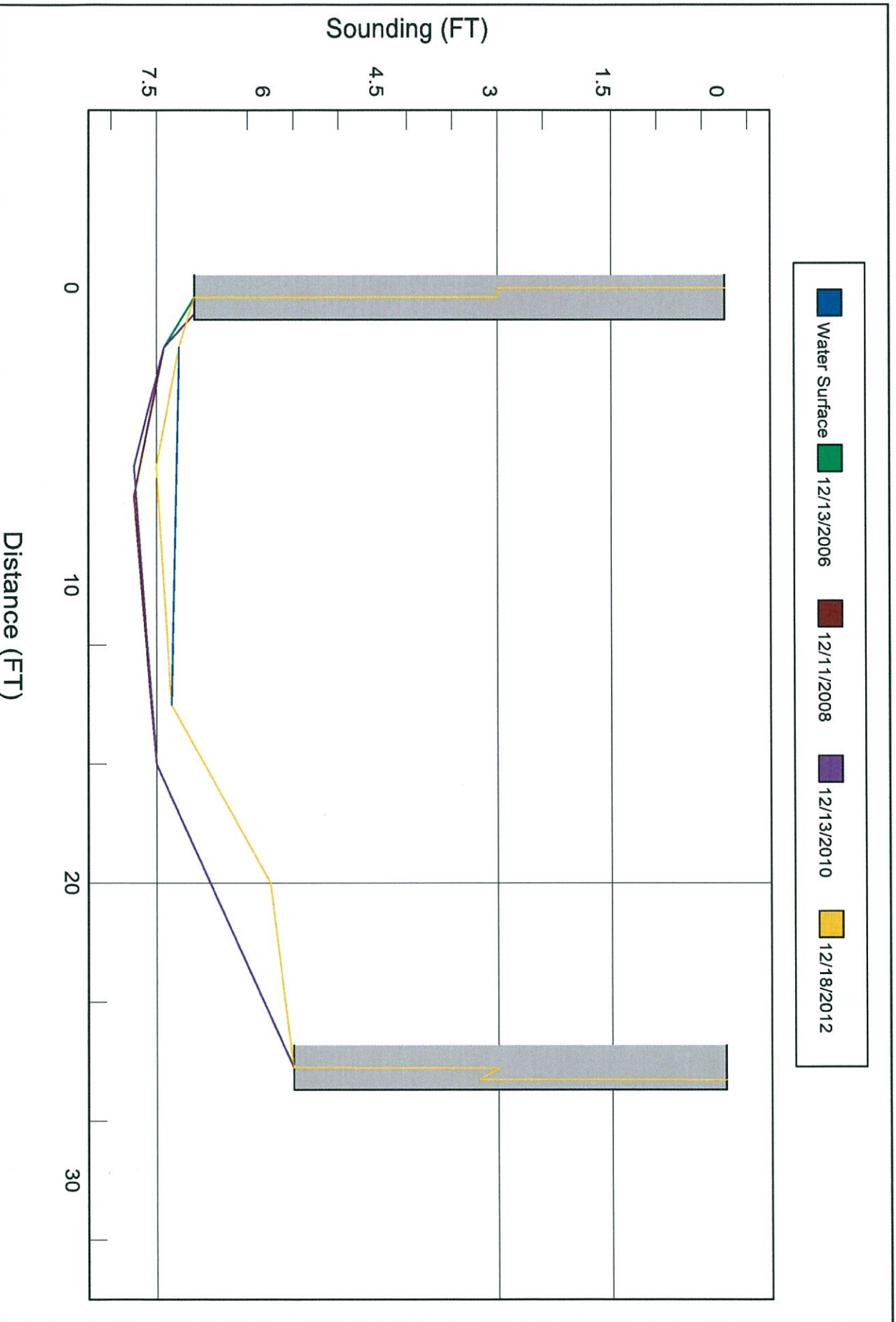
Bridge: 960150

County WILKES

Date: 12/18/2012

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)



960150

Structure 960150

County WILKES

Date: 12/18/2012

Structure Photos



AWS



LOOKING NORTH



BEARING



BEAMS