OFFICE ESTIMATE
1 @ 70' Bridge
w/vert. on curve side

Project# _____
TIP# _____
Let Date _____

PREDESIGN-PRESURVEY REPORT

WBS# 17BP.11.R.73 ✓

Bridge# 130164 ✓
Road# SR 1503 (STONE MOUNTAIN RD) ✓
Stream ~~BUFFALO CRK.~~ ? John fork creek

County CALDWELL (DIV 11) ✓

Type Of Request: POC Force Account TIP NCMA

Date 7/16/13 Name MJY Assigned To RLH

Checked By M.W.S 7/23/13

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

Study By Scour Section NO

Flood Zone AE Detail Study LIMITED Date 7/07/09 Panel# 2846

B.M. Info _____ (8576 AC)

Quad Map BUFFALO COVE ✓ Drainage Area 13.4 SQ. MI. From USGS STREAM STATS ✓

Q25 2600 cfs Q50 3100 cfs Q100 3700 cfs Method REGR. EQNS. / REG 2 ✓

EXISTING BRIDGE INFORMATION

Location 0.2 MI. E. JCT. SR1503 ✓

Average Daily Traffic 270 6% TRK (2000) ✓

Length 46' ✓ Bed- To Crown 12' ✓ Water Depth 2' ✓

Type Structure TIM. FLOOR ON I-BEAMS; TIM. CAP, POST, & SILL ✓

Type Spans 1@45'-8" ✓

Upstream Structure ~~NO~~ None that is applicable ✓

Location _____

Bed- To Crown _____ Prior Survey _____

Downstream Structure ~~130343~~ N/A

Location 0.1 MI. W. JCT. SR 1504

Bed- To Crown ~~7'~~ (D=3') Prior Survey _____

SCS Watershed _____

ENVIRONMENTAL TVA NO ✓

Trout Stream YES ✓ Anadromous Fish NO ✓ Primary Nursery Area NO ✓

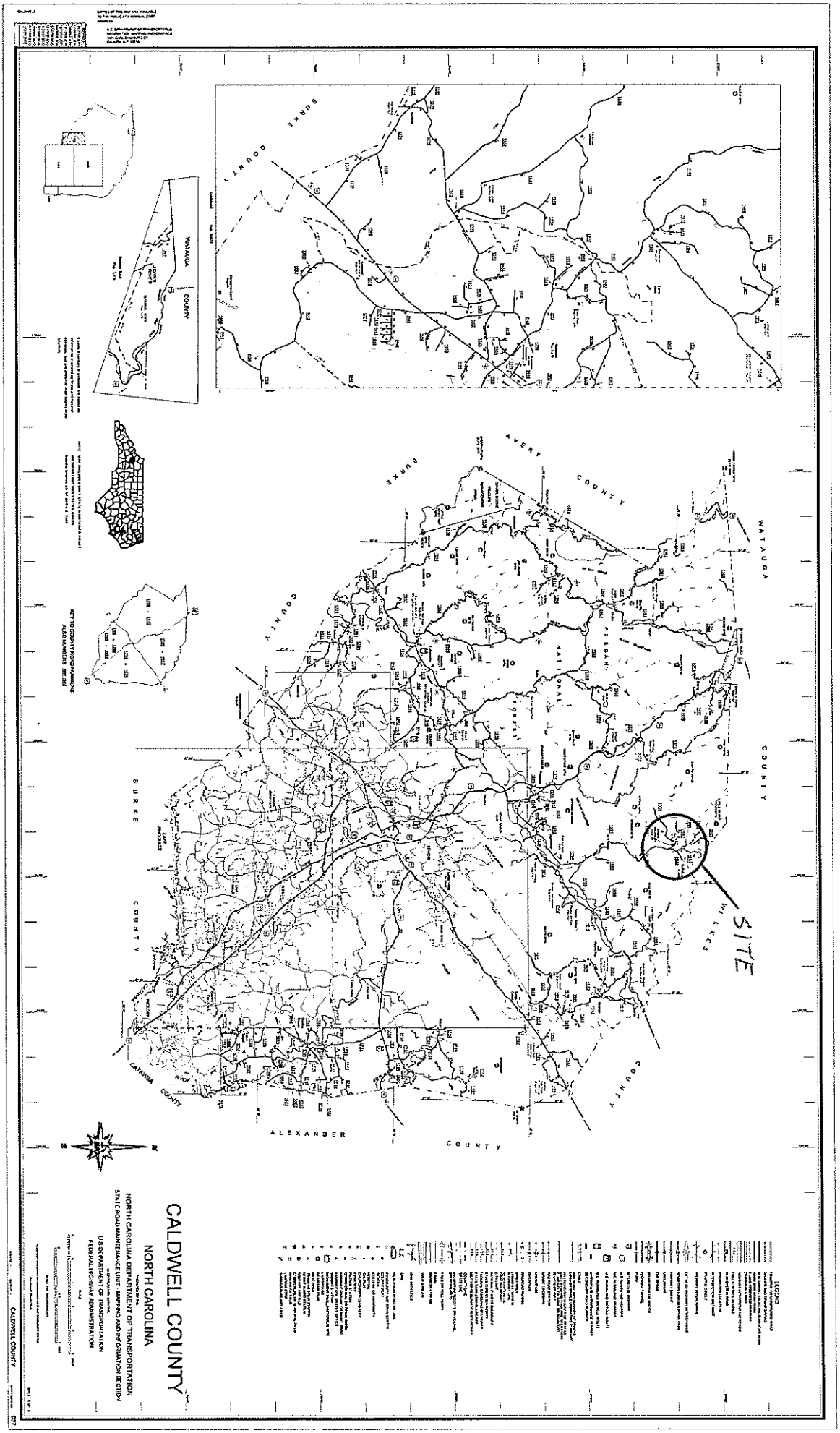
High Quality Waters NO ✓ Nutrient Sensitive Waters NO ✓

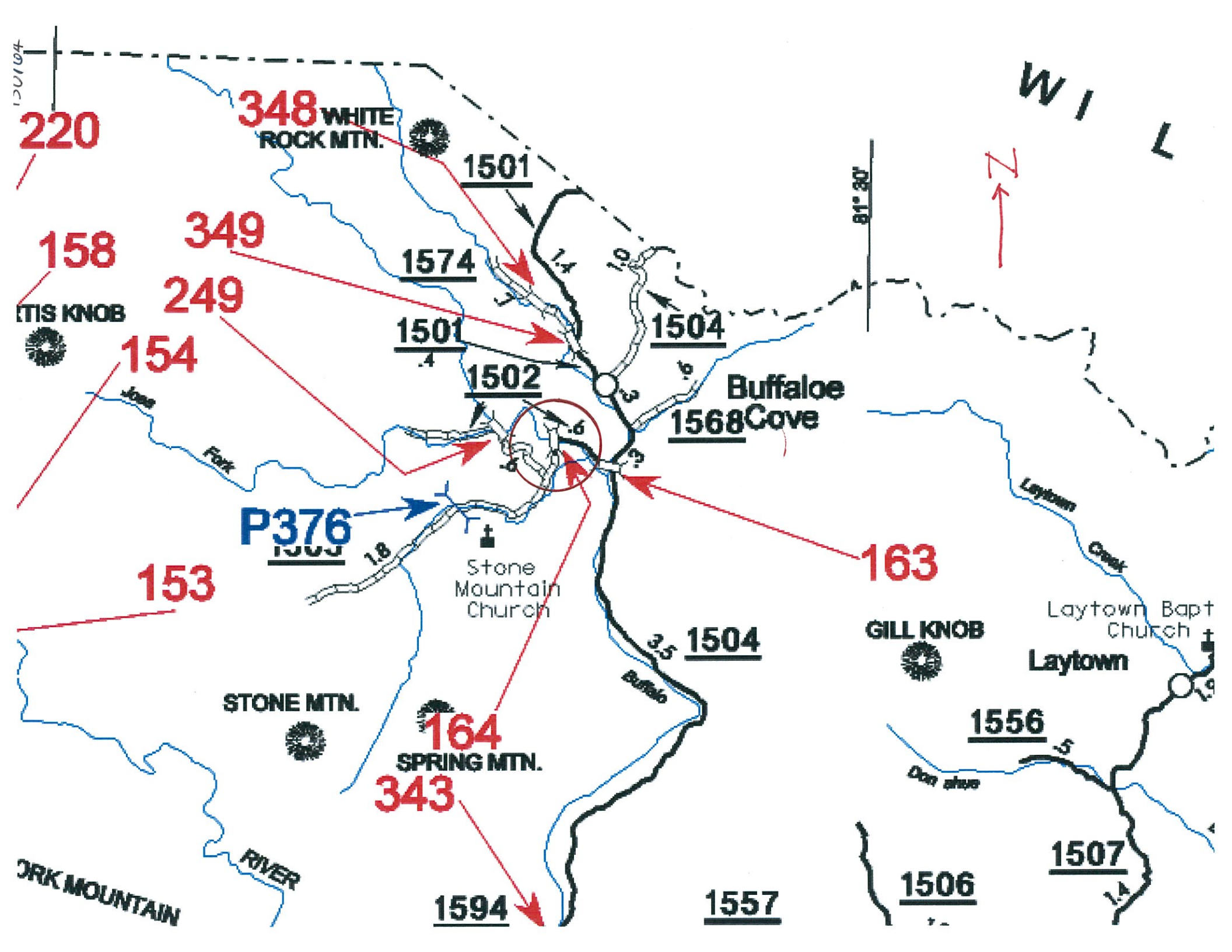
Near Water Supply Intake NO ✓ CAMA County NO ✓

Stream Classification C; Tr. ✓ 12-19 ✓

DENR River Basin Info. YADKIN ✓

130164


CALDWELL COUNTY
NORTH CAROLINA
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
STATE ROAD MAINTENANCE UNIT - MAPPING AND INFORMATION SECTION
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
SITE
WATAUGA COUNTY
AVERY COUNTY
BURKE COUNTY
ALEXANDER COUNTY
CATAWBA COUNTY
LEGEND


220
348
WHITE ROCK MTN.
1501
158
349
1574
249
1501
1504
ITIS KNOB
154
1502
Buffaloe
1568
Cove
Jones
Fork
P376
Stone Mountain Church
153
163
Laytown
Creek
Laytown Bapt Church
GILL KNOB
Laytown
1504
STONE MTN.
164
SPRING MTN.
343
1556
Dan shue
1507
1506
RIVER
1594
1557
81° 30'
N
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1.0
.6
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.6
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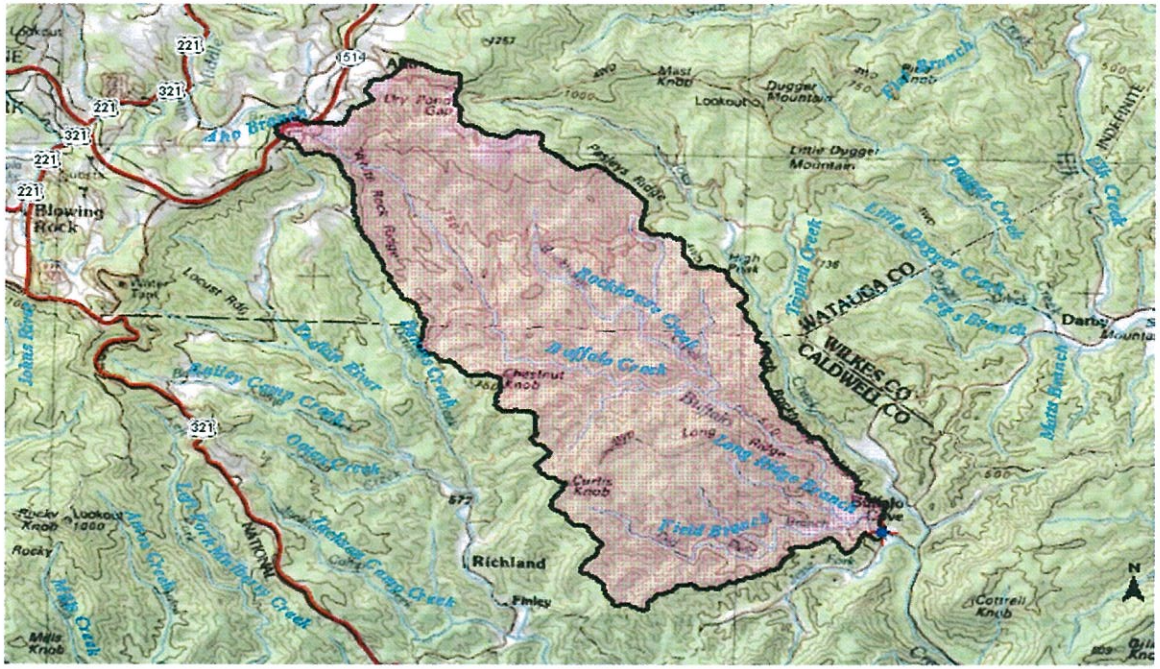
3.5
.5
1.4

130164

USGS North Carolina StreamStats

StreamStats Print Page



Explanation

- GlobalWatershedPoint
- Sip1085Point
- NCDOTPoints
- LocalGages
- Gaging 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
- LocalNHD2
- LongestFlowpath3D
- Stream Grid
- GlobalWatershed
- Pilot Study Area
- hucpoly

7/15/2013 2:59:02 PM

130164

USGS North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Mon Jul 15 2013 14:58:52 Mountain Daylight Time
Site Location: North_Carolina
NAD27 Latitude: 36.0866 (36 05 12)
NAD27 Longitude: -81.5318 (-81 31 55)
NAD83 Latitude: 36.0867 (36 05 12)
NAD83 Longitude: -81.5317 (-81 31 54)
Drainage Area: 13.4 mi2 8576 AC
Percent Urban: 2.1 %
Percent Impervious: 0.1 %

Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (13.4 mi2)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	13.4	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 (13.4 mi2)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	13.4	0.04	41
Area of Impervious Surfaces (percent)	0.10 (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	828	35		475	1440
PK5	1460	34		843	2530
PK10	1950	35		1110	3430
PK25	2610	38		1430	4760
PK50	3090	40		1630	5820
PK100	3660	42		1870	7150
PK200	4160	44		2050	8420
PK500	4940	48		2320	10500

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	46.7				
PK5U	124				
PK10U	204				
PK25U	408				
PK50U	567				
PK100U	764				

130164

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION TEMP REPAIR

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY CALDWELL **BRIDGE NUMBER** 130164 **INSPECTION CYCLE** 2 **YRS**

ROUTE SR1503 **ACROSS** JOES FORK CREEK **M.P.** 0

LOCATION .2 MI.E.JCT.SR1503

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BT1:TIM.CAP/TIM.P&S; E.BT.2:TIM.CAP/TIM.P&CONC.SILL

SPANS 1 @ 45'-8

LONGITUDE 81° 31' 48.4" **LATITUDE** 36° 5' 21.5"

PRESENT CONDITION FAIR **INVENTORY RATING**

INSPECTION DATE 01/12/2012 **OPERATING RATING**

PRESENT POSTING SV 17 TTST 21 **PROPOSED POSTING**

COMPUTER UPDATE **ANALYSIS DATE**

POSTING LETTER DATE **SUFFICIENCY RATING**

OTHER SIGNS PRESENT 4 DELIN. 2 ONE LANE BR.

LOOKING EAST

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

130164

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE Run Date: 02/09/2012

COUNTY :	DIVISION :	DISTRICT:	STRUCTURE NUMBER :	LENGTH :
CALDWELL	11	2	130164	46 FEET

ROUTE CARRIED : SR1503

FEATURE INTERSECTED : JOES FORK CREEK

LOCATED : .2 MI.E.JCT.SR1503

BRIDGE NAME :

CITY :

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :		RAIL TYPE :	
09	NFA	NFA	270	2000	LT 227	RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1963	BMU			Other or Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	90	ON 2 UNDER

NAVIGATION :					HT. CRN. TO BED :		WATER DEPTH :	
VC	0	FT	HC	0 FT	12	FT	2	FT

SUPERSTRUCTURE : TIMBER FLOOR ON CONT. I-BEAMS

SUBSTRUCTURE : E.BT.1:TIM.CAP/TIM.P&CONC.SILL; E.BT.2&INT.BT:TIM.CAPS/TIM.P&SILLS

SPANS : 1 @ 23', 1 @ 22'-8 CONT.

BEAMS OR GIRDERS : 8 LINES 18 CONT. I-BEAMS @ 2'-7 CENTERS

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
		20 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :			
19.3 FT	19.9 FT	LT	.3 FT	RT	.3 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :				
HS-1	HS-1	Int Bm	SV	17	TTST 21	DATE	09/30/2008

SYSTEM : Secondary S.R. Route

GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

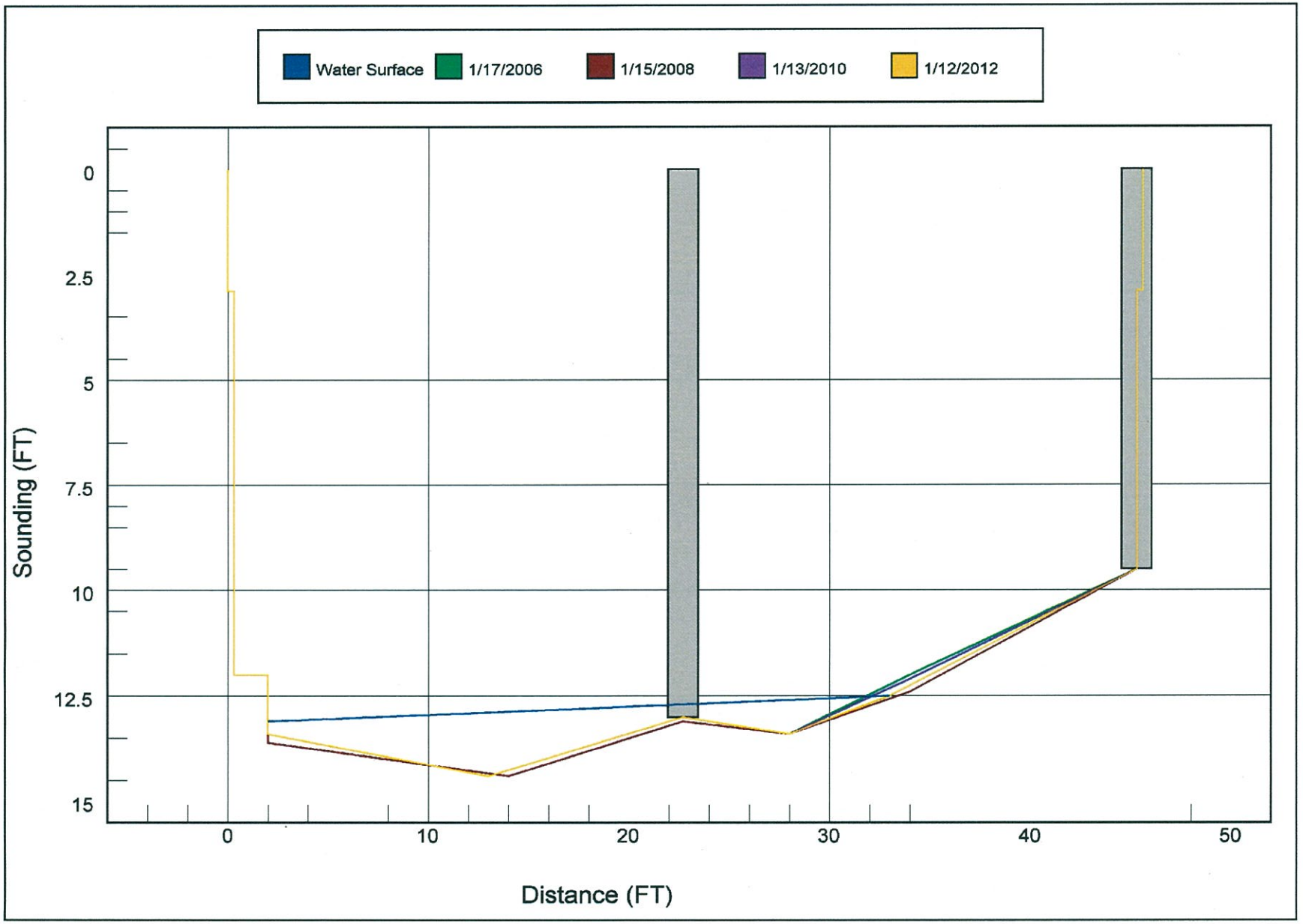
REMARKS :

130164

Bridge: 130164 County CALDWELL Date: 01/12/2012

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



130164

130164

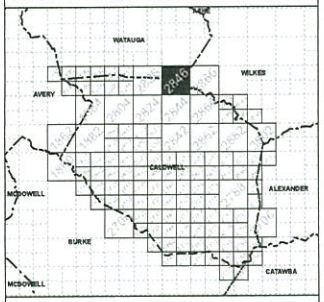
Structure 130164 County CALDWELL Date: 01/12/2012 Structure Photos

LOOKING UPSTREAM

LOOKING UPSTREAM

130164

STATE OF NORTH CAROLINA FIRM PANEL LOCATOR DIAGRAM



DATUM INFORMATION

The projection used in the preparation of this map was the North Carolina State Plane (FIPSZONE 3200). The horizontal datum was the North American Datum of 1983, GRS80 ellipsoid. Differences in datum, ellipsoid, projection, or Universal Transverse Mercator zones used in the production of FIRMS for adjacent jurisdictions may result in slight positional differences in map features across jurisdictional boundaries. These differences do not affect the accuracy of this FIRM. All coordinates on this map are in U.S. Survey Feet, where
1 U.S. Survey Foot = 1200/3937 Meters.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988 (NAVD 88). These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. An average offset between NAVD 88 and the National Geodetic Vertical Datum of 1929 (NGVD 29) has been computed for each North Carolina county. This offset was then applied to the NGVD 29 flood elevations that were not revised during the creation of this statewide format FIRM. The offsets for each county shown on this FIRM panel are shown in the vertical datum offset table below. Where a county boundary and a flooding source with unrevised NGVD 29 flood elevations are coincident, an individual offset has been calculated and applied during the creation of this statewide format FIRM. See Section 6.1 of the accompanying Flood Insurance Study report to obtain further information on the conversion of elevations between NAVD 88 and NGVD 29. To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the North Carolina Geodetic Survey at the address shown below. You may also contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at http://www.ngs.noaa.gov.

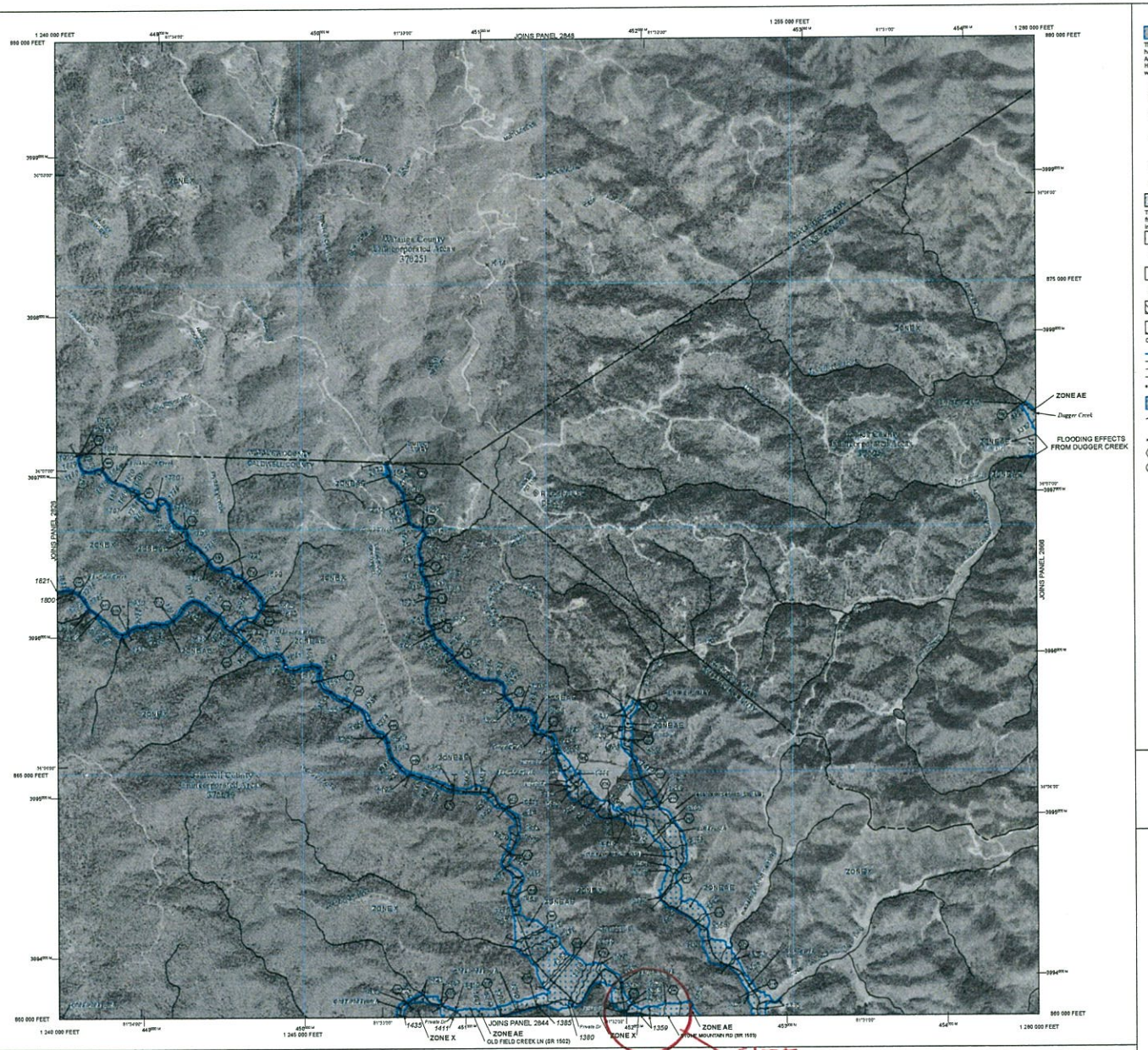
North Carolina Geodetic Survey
121 West Jones Street
Raleigh, NC 27601
(919) 733-3836
http://www.ncgs.state.nc.us

County Average Vertical Datum Offset Table

County	Vertical Datum Offset (ft)
CALDWELL	-0.61
WATAUGA	-0.29
WILKES	-0.44

Example: NAVD 88 = NGVD 29 + (-0.47)

All streams listed in the Flood Hazard Data Table below were studied by detailed methods using field survey. Other flood hazard data shown on this map may have been derived using either a coastal analysis or limited detailed riverine analysis. More information on the flooding sources studied by these analyses is contained in the Flood Insurance Study report.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD EVENT

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

- ZONE A — No Base Flood Elevation determined.
- ZONE AE — Base Flood Elevations determined.
- ZONE AH — Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
- ZONE AO — Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
- ZONE AR — Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
- ZONE A99 — Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
- ZONE VE — Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

- ZONE X — Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

- ZONE X — Areas determined to be outside the 0.2% annual chance floodplain.
- ZONE D — Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- 1% annual chance floodplain boundary
- 0.2% annual chance floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area Zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*
- * Referenced to the North American Vertical Datum of 1988
- Cross section line
- Transect line
- 97°07'30", 32°22'30" — Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
- 4279000 m — 2000-meter Universal Transverse Mercator grid ticks, zone 17
- 1 477 500 FEET — 5000-foot grid values: North Carolina State Plane coordinate system (FIPSZONE 3200, State Plane NAD 83 feet)
- BM5510 — North Carolina Geodetic Survey bench mark (for more information visit http://www.ncgs.state.nc.us)
- BM5510 — National Geodetic Survey bench mark (for more information visit http://www.ngs.noaa.gov)
- BM5510 — NGS-59 GPS 2-5 cm Vertical Control Marks or Contractor-Established NCFMP Bench Marks (for more information visit http://www.ngs.state.nc.us)
- M1.5 — River Mile

GRID NORTH
MAP SCALE 1" = 1,000' (1 : 12,000)
500 0 500 1,000 1,500 2,000 FEET
300 0 300 600 METERS

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles, Floodway Data, Limited Detailed Flood Hazard Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of regulatory floodways shown on the FIRM for flooding sources studied by detailed methods were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data for flooding sources studied by detailed methods as well as non-encroachment widths for flooding sources studied by limited detailed methods are provided in the Flood Insurance Study (FIS) report for this jurisdiction. The FIS report also provides instructions for determining a floodway using non-encroachment widths for flooding sources studied by limited detailed methods.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 4.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures in this jurisdiction.

FEMA recommends that a Flood Insurance Policy be purchased for structures in areas where levees are shown as providing protection from the 1% annual chance flood. Flooding is not covered by standard property/life/dwelling insurance policies nor is it covered by Homeowners Insurance, Renters Insurance, Condominium Owners Insurance, or Commercial Property Insurance. Contact your insurance agent and local floodplain administrator for further information. Visit http://www.fema.gov/plan/prevent/fhm/fm_qsah.pdf for information on levees and the risk of flooding in areas shown as being protected by levees.

Base map information and geospatial data used to develop this FIRM were obtained from various organizations, including the participating local community(ies), state and federal agencies, and/or other sources. The primary base for this FIRM is aerial imagery acquired by the State, Caldwell County, and Wilkes County. The time period of collection for the State imagery is 2006 and 2006. The time period of collection for the Caldwell County imagery is 2004. The time period of collection for the Wilkes County imagery is 2003. Information and geospatial data supplied by the local community(ies) that met FEMA base map specifications were considered the preferred source for development of the base map. See geospatial metadata for the associated digital FIRM for additional information about base map preparation.

Base map features shown on this map, such as corporate limits, are based on the most up-to-date data available at the time of publication. Changes in the corporate limits may have occurred since this map was published. Map users should consult the appropriate community official or website to verify current conditions of jurisdictional boundaries and base map features. This map may contain roads that were not considered in the hydraulic analysis of streams where no new hydraulic models were created during the production of this statewide form a FIRM.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

If you have questions about this map, or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA website at http://www.fema.gov.

An accompanying Flood Insurance Study report, Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) revising portions of this panel, and digital versions of this FIRM may be available. Visit the North Carolina Floodplain Mapping Program website at http://www.ncfloodmaps.com, or contact the FEMA Map Service Center at 1-800-358-9616 for information on all related products associated with this FIRM. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov.

MAP REPOSITORY
Refer to listing of Map Repositories on Map Index or visit http://www.ncfloodmaps.com.

EFFECTIVE DATE OF FLOOD INSURANCE RATE MAP PANEL
MARCH 2, 2009

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL
JULY 7, 2009*

*Updated flood hazards to reflect seamless statewide mapping

For community map revision history prior to statewide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent, the North Carolina Division of Emergency Management or the National Flood Insurance Program at the following phone numbers or websites:

NC Division of Emergency Management
(919) 715-8000 http://www.ncdmcentral.org/nfip

National Flood Insurance Program
1-800-638-6620 http://www.fema.gov/business/nfip

This digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long term approach of floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map floodplain areas at the local level. As a part of this effort, the state of North Carolina has joined in a Cooperating Technical State agreement with FEMA to produce and maintain this digital FIRM.

www.ncfloodmaps.com

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 2846K

FIRM
FLOOD INSURANCE RATE MAP
NORTH CAROLINA

PANEL 2846

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

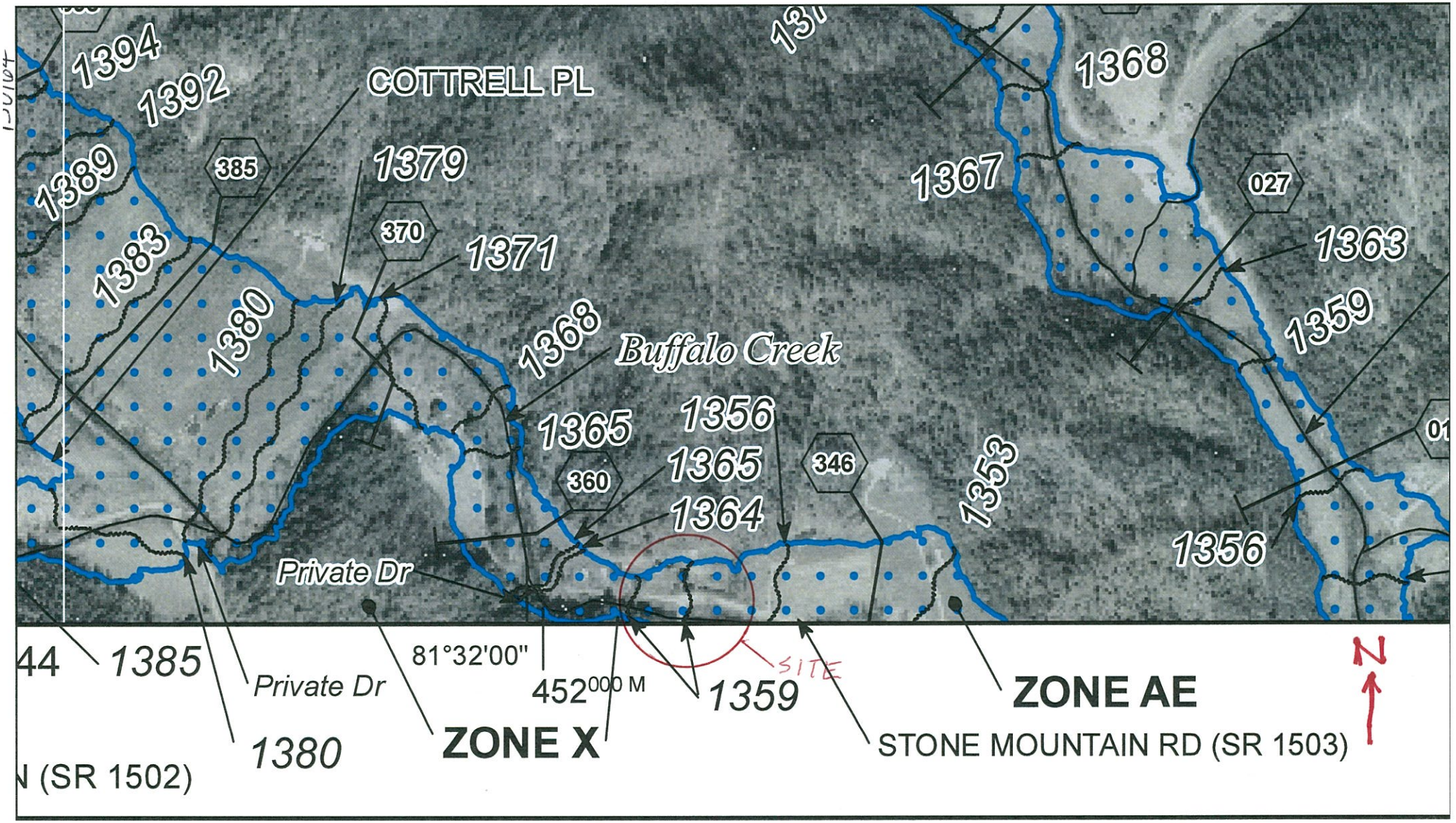
COMMUNITY	CID No.	PANEL	SUFFIX
CALDWELL COUNTY	370098	2846	K
WATAUGA COUNTY	370251	2846	K
WILKES COUNTY	370255	2846	K

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP REVISED JULY 7, 2009

MAP NUMBER 3710284600K

State of North Carolina
Federal Emergency Management Agency



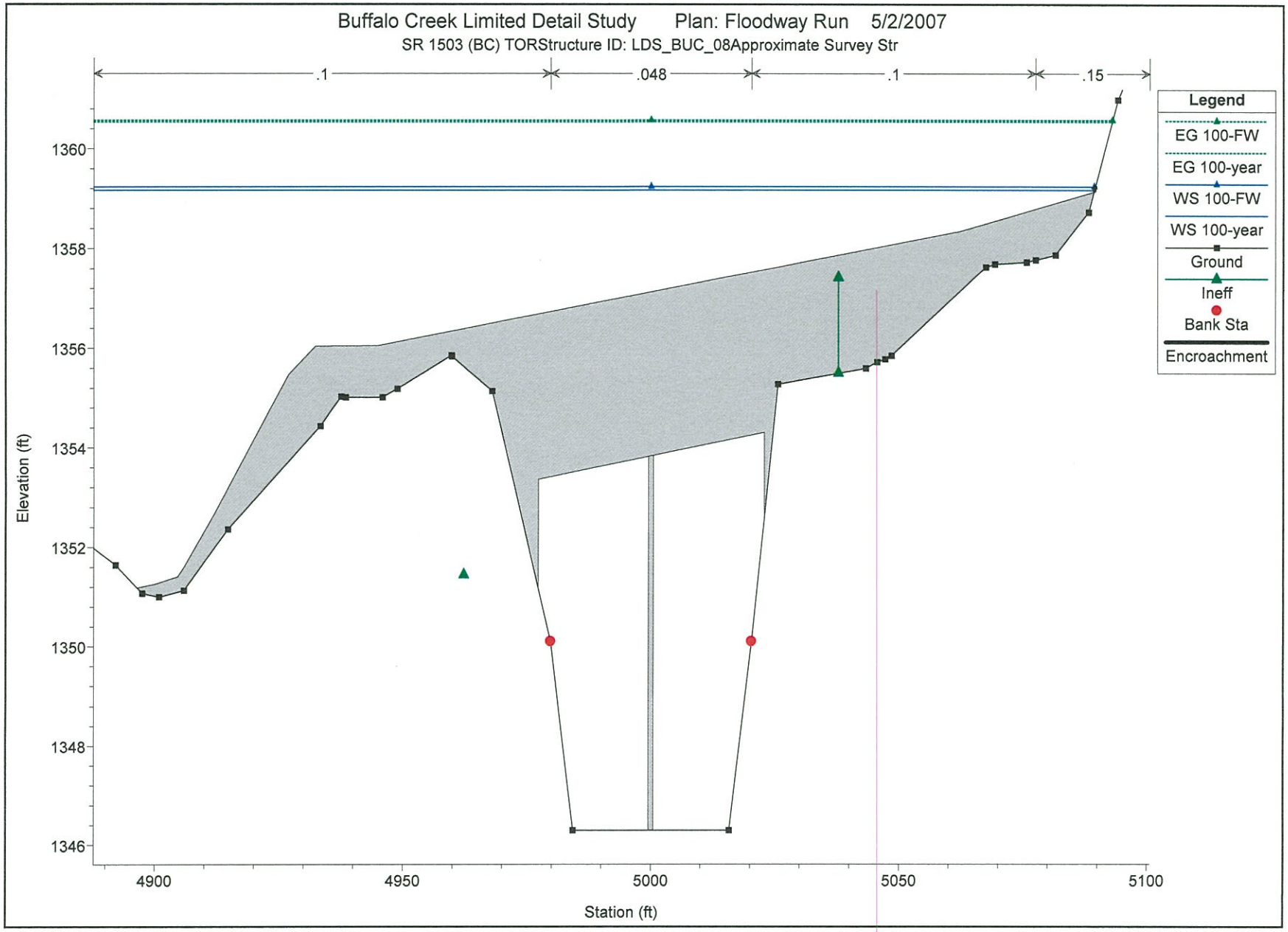
'O USERS

4.4 This map reflects more detailed and up-to-date **stream channel configurations** t
his previous FIRM for this jurisdiction. The floodplains and floodways that were transferre
may have been adjusted to conform to these new stream channel configurations. As a

Table 10—Limited Detailed Flood Hazard Data

Cross Section[1]	Stream Station[2]	Flood Discharge *(cfs)*	1% Annual Chance Water-Surface Elevation *(feet NAVD 88)*	Non-Encroachment Width[3] *(feet)*
BUFFALO CREEK				
224	22,443	12,214	1,295.8	42 / 47
230	22,950	11,889	1,299.6	82 / 53
235	23,499	11,889	1,301.4	78 / 30
240	23,961	11,889	1,304.5	67 / 36
244	24,439	11,889	1,308.7	49 / 80
249	24,946	11,641	1,313.6	165 / 73
254	25,400	11,641	1,314.6	187 / 57
258	25,783	11,641	1,316.1	105 / 65
259	25,946	11,641	1,316.6	84 / 74
264	26,417	11,641	1,318.4	90 / 53
269	26,945	11,641	1,321.3	134 / 74
275	27,477	11,559	1,322.9	180 / 53
279	27,944	11,559	1,323.9	181 / 39
284	28,438	11,559	1,327.0	62 / 96
289	28,935	11,559	1,330.0	161 / 81
294	29,423	11,559	1,331.0	83 / 156
299	29,934	11,559	1,333.1	60 / 195
304	30,440	11,559	1,335.5	264 / 98
309	30,855	11,559	1,335.6	94 / 245
314	31,444	11,411	1,338.5	51 / 219
321	32,135	11,411	1,343.3	78 / 66
325	32,496	11,411	1,345.4	141 / 200
329	32,945	11,411	1,346.3	226 / 123
332	33,173	11,411	1,346.8	245 / 72
334	33,442	8,791	1,347.8	360 / 27
339	33,943	7,959	1,349.0	204 / 74
344	34,431	7,959	1,352.6	209 / 209
346	34,626	7,959	1,353.7	100 / 174
350	34,953	7,959	1,356.2	75 / 194
354	35,436	7,959	1,359.3	75 / 33
360	35,965	7,959	1,364.9	131 / 195
362	36,243	7,959	1,365.3	26 / 158
364	36,434	7,959	1,368.1	58 / 250
370	36,956	7,959	1,371.1	160 / 160
374	37,425	7,959	1,375.6	192 / 41
378	37,788	7,959	1,378.9	348 / 80
385	38,462	6,874	1,382.8	209 / 210
389	38,929	6,874	1,388.9	167 / 67
395	39,515	6,874	1,394.1	277 / 195
400	39,994	6,688	1,396.7	31 / 39
404	40,435	6,688	1,405.2	65 / 35
409	40,927	6,688	1,411.2	75 / 100
416	41,646	6,688	1,424.3	50 / 67
419	41,916	6,688	1,430.1	31 / 59
420	42,043	6,688	1,433.9	45 / 70
423	42,257	6,688	1,435.4	60 / 56
424	42,402	6,688	1,435.4	64 / 44
427	42,694	6,688	1,441.3	34 / 43

R. STA. 5,244 BR.U.

130164

RIVER STATION: 35244 BRU.