

Project Number 45613.1.1

TIP Number B-5658

Let Date _____

PREDESIGN-PRESURVEY REPORT

County NASH

Bridge Number 630126

Road Number SR 1310 - Edwards Road

Stream Big Peachtree Creek

Type Of Request: POC Force Account TIP

Date 2-4-16 Name S J Sykes Assigned To _____

Checked By _____

Prior Survey Date None (attach copy of prior survey)

Study By Scour Section _____

Flood Zone AE Detail Study Limited Date 11-3-2004 (attach copy of flood map) Panel 2862

B.M. Info _____

Quad Map CASTALIA Drainage Area 19.2 sq mi From STREAM STATS

Q25 1500 Q50 1800 Q100 2200 Method USGS ST Report 2009-5158

EXISTING BRIDGE INFORMATION

Location 1.6 mi N of JCT SR 1308

Average Daily Traffic 380 (yr 2011)

Length 53' Bed- To Crown 12' Water Depth 6'

Type Structure Reinforced Conc. floor on timber joists, timber caps & piles

Type Spans 1 @ 17'9", 1 @ 17', 1 @ 17'9"

Upstream Structure #28 (SR 1321)

Location 0.5 mi S of JCT SR 1322

Bed- To Crown 12' Prior Survey None

Downstream Structure #194 (SR 1300)

Location 1.2 mi S of JCT NC 58

Bed- To Crown 17' Prior Survey None

SCS Watershed _____

ENVIRONMENTAL

Trout Stream NO Anadromous Fish NO Primary Nursery Area NO

High Quality Waters NO Nutrient Sensitive Waters Yes

Near Water Supply Intake NO CAMA County NO

Stream Classification C, NSW

DENR River Basin Info. Tar - Pamlico

office estimated min. brg. length = 100'



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION TEMPORARY REPAIRS

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY NASH BRIDGE NUMBER 630126 INSPECTION CYCLE 0 YRS
BIG PEACHTREE CREEK
ROUTE SR1310 ACROSS BIG PEACHTREE CRE M.P. 0
0.7 MI. S. JCT. SR1324
LOCATION 1.6 MI. N. SR1308

SUPERSTRUCTURE REINFORCED CONCRETE FLOOR ON TIMBER JOISTS, STD BMD-10.

SUBSTRUCTURE E.BTS&INT.BTS:TIM.CAPS & PILES @ 8'CTS.&STL.PILE CRUTCHBT.

SPANS 1@17'9", 1@17', 1@17'9"

LONGITUDE 78° 4' 32.53"

LATITUDE 36° 1' 54.09"

INSPECTION DATE 04/03/2014

PRESENT CONDITION FAIR

PRESENT POSTING Y

SV 17 TTST 25

PROPOSED POSTING _____

OTHER SIGNS PRESENT FOUR (4) DELINEATORS



LOOKING NORTH

Fracture Critical No
Temporary Shoring No
Scour Critical No
Scour POA Yes

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

NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL Run Date: 05/13/2014

IDENTIFICATION							
(1) STATE NAME -NORTH CAROLINA	BRIDGE	630126		SUFFICIENCY RATING =		28.55	
(8) STRUCTURE NUMBER(FEDERAL)		000000001270126		STATUS =	Structurally Deficient		
(5) INVENTORY ROUTE (ON/UNDER) - ON		31013100					
(2) STATE HIGHWAY DEPARTMENT DISTRICT		2		CLASSIFICATION		CODE	
(3) COUNTY CODE 127 (4) PLACE CODE		0		(112)NBIS BRIDGE SYSTEM -		YES	
(6) FEATURE INTERSECTED - BIG PEACHTREE CRE				(104)HIGHWAY SYSTEM Is not on NHS		0	
(7) FACILITY CARRIED SR1310				(26) FUNCTIONAL CLASS - Minor Collector		08	
(9) LOCATION 1.6 MI.N.SR1308				(100)STRAHNET HIGHWAY - Not a STRAHNET Route		0	
(11)MILEPOINT		0		(101)PARALLEL STRUCTURE - No Parallel Structure		N	
(16)LAT 36° 1' 54.09" (17)LONG 78° 4' 32.53"				(102)DIRECTION OF TRAFFIC - 2-way Traffic		2	
(98)BORDER BRIDGE STATE CODE	PCT SHARE			(103)TEMPORARY STRUCTURE - Temporary Structure/Conditions		T	
(99)BORDER BRIDGE STRUCTURE NO				(110)DESIGNATED NATIONAL NETWORK - Not on the National Network		0	
				(20) TOLL On Free Road		3	
				(31) MAINTAIN - State Highway Agency		01	
				(22) OWNER - State Highway Agency		01	
				(37) HISTORICAL SIGNIFICANCE - Not Eligible		5	
STRUCTURE TYPE AND MATERIAL							
(43) STRUCTURE TYPE MAIN: Wood or Timber							
TYPE - Stringer Multibeam or Girder	CODE	702					
(44) STRUCTURE TYPE APPR :				CONDITION		CODE	
TYPE -	CODE	000					
(45) NUMBER OF SPANS IN MAIN UNIT		3		(58) DECK		6	
(46) NUMBER OF APPROACH SPANS				(59) SUPERSTRUCTURE		6	
(107)DECK STRUCTURE TYPE - 1	CODE			(60) SUBSTRUCTURE		4	
(108)WEARING SURFACE / PROTECTIVE SYSTEM :				(61) CHANNEL & CHANNEL PROTECTION		6	
(A) TYPE OF WEARING SURFACE -	CODE			(62) CULVERTS		N	
(B) TYPE OF MEMBRANE -	CODE						
(C) TYPE OF DECK PROTECTION -	CODE			LOAD RATING AND POSTING		CODE	
				(31) DESIGN LOAD Unknown		0	
				(63) OPERATING RATING METHOD - Allowable Stress		2	
				(64) OPERATING RATING - HS-1		1	
				(65) INVENTORY RATING METHOD - Allowable Stress		2	
				(66) INVENTORY RATING - HS-1		1	
				(70) BRIDGE POSTING - Posting Required		0	
				(41) STRUCTURE OPEN, POSTED ,OR CLOSED		P	
				DESCRIPTION - Posted for Load			
AGE AND SERVICE				APPRAISAL			
(27) YEAR BUILT		1952		(67) STRUCTURAL EVALUATION		3	
(106)YEAR RECONSTRUCTED				(68) DECK GEOMETRY		5	
(42) TYPE OF SERVICE : ON - Highway				(69) UNDERCLEARANCES,VERTI & HORIZ		N	
UNDER - Waterway	CODE	15		(71) WATERWAY ADEQUACY		7	
(28) LANES: ON STRUCTURE 2 UNDER STRUCTURE		0		(72) APPROACH ROADWAY ALIGNMENT		8	
(29) AVERAGE DAILY TRAFFIC		380		(36) TRAFFIC SAFETY FEATURES		0000	
(30) YEAR OF ADT 2011 (109) TRUCK ADT PCT		6%		(113)SCOUR CRITICAL BRIDGES		U	
(19) BYPASS OR DETOUR LENGTH		9 MI					
GEOMETRIC DATA				PROPOSED IMPROVEMENTS			
(48) LENGTH OF MAXIMUM SPAN		17 FT		(75) TYPE OF WORK -		CODE	
(49) STRUCTURE LENGTH		53 FT		(76) LENGTH OF STRUCTURE IMPROVEMENT			
(50)CURB OR SIDEWALK: LEFT .7915 FT RIGHT .7915 FT				(94) BRIDGE IMPROVEMENT COST			
(51) BRIDGE ROADWAY WIDTH CURB TO CURB		24 FT		(95) ROADWAY IMPROVEMENT COST			
(52) DECK WIDTH OUT TO OUT		25.333 FT		(96) TOTAL PROJECT COST			
(32) APPROACH ROADWAY WIDTH (W/SHOULDERS)		20 FT		(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(33) BRIDGE MEDIAN - No Median	CODE	0		(114)FUTURE ADT 760 (115) YEAR FUTURE ADT 2025			
(34) SKEW 0° (35) STRUCTURE FLARED		0					
(10) INVENTORY ROUTE MIN VERT CLEAR		999.9 FT					
(47) INVENTORY ROUTE TOTAL HORIZ CLEAR		24 FT					
(53) MIN VERT CLEAR OVER BRIDGE RDWY		999.9 FT					
(54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad		0 FT					
(55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad		000 FT					
(56) MIN LAT UNDERCLEAR LT REF -		000 FT					
NAVIGATION DATA				INSPECTIONS			
(38) NAVIGATION CONTROL - No Navigational Control	CODE	0		(90) INSPECTION DATE		04/03/2014	
(111)PIER PROTECTION -	CODE			(92) CRITICAL FEATURE INSPECTION :		(93) CFI DATE	
(39) NAVIGATION VERTICAL CLEARANCE		0		A) FRACTURE CRIT DETAIL - NO		A)	
(116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR		FT		B) UNDERWATER INSP - YES 48Mo		B)	11/12/2013
(40) NAVIGATION HORIZONTAL CLEARANCE		0 FT		C) OTHER SPECIAL INSP NO		C)	
				SCOUR			

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 05/13/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :	
NASH	4	2	630126	53	FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1310	BIG PEACHTREE CRE

LOCATED :	BRIDGE NAME :	CITY :
1.6 MI.N.SR1308		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
08	NFA	NFA	380 2011	LT 241 RT 241

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1952	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :	
	DBM		TAN	90	ON 2	UNDER 0

NAVIGATION :			HT. CRN. TO BED :		WATER DEPTH :	
VC 0 FT	HC 0 FT		12 FT		6	FT

SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON TIMBER JOISTS,STD BMD-10.

SUBSTRUCTURE : E.BTS&INT.BTS:TIM.CAPS & PILES @ 8'CTS.&STL.PILE CRUTCHBT.

SPANS : 1@17'9,1@17',1@17'9

BEAMS OR GIRDERS : 19 LINES 6X12 TIMBER JOISTS @ VAR CTS.

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
5RC/3AWS		25.333 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24 FT	25.583 FT	LT .7915 FT RT .7915 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :			
HS-1	HS-1	int.joist	SV 19	TTST 27	DATE	05/12/2014

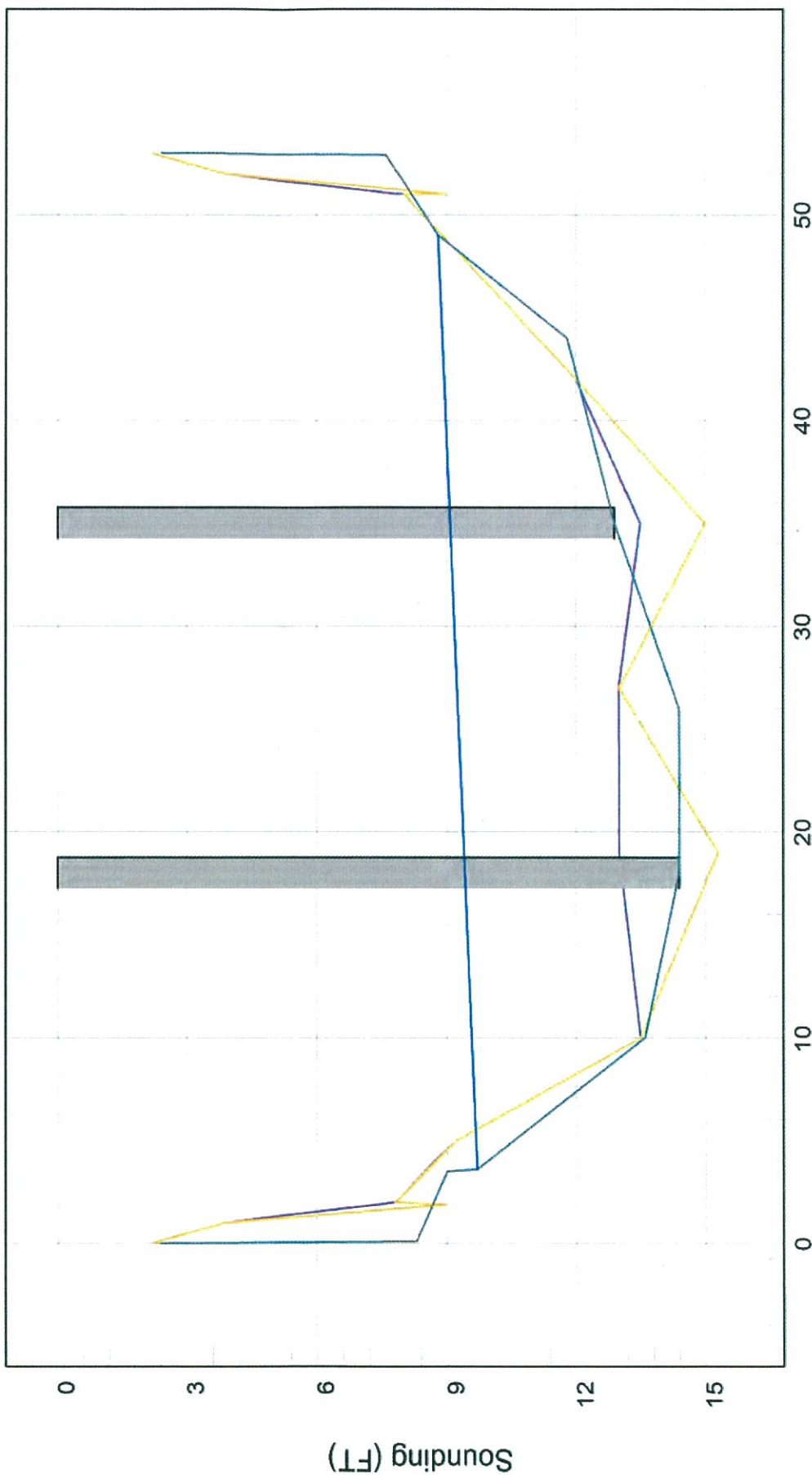
SYSTEM :	GREEN LINE ROUTE :
Secondary S.R. Route	N

UNDER ROUTES AND CLEARANCES

REMARKS :

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



$$12 \times 1.5 = 18 \times 2 = 36 + 45 + 20 = 101'$$

Section 5.0 – Engineering Methods

Table 9—Summary of Discharges

Flooding Source	Location	Drainage Area (square miles)	Discharges (cfs)			
			10% Annual Chance	2% Annual Chance	1% Annual Chance	0.2% Annual Chance
Beech Branch	Nash/Edgecombe County Boundary	5.8	555	1,020	1,270	2,000
	Approximately 0.15 mile upstream of Highway 301	5.0	507	934	1,170	1,840
	Approximately 0.37 mile upstream of Highway 301	3.9	435	809	1,010	1,610
	Approximately 1.0 mile upstream of Highway 301	3.5	406	758	951	1,520
	Approximately 0.65 mile downstream of Red Oak–Battleboro Road	2.4	322	610	769	1,240
	Red Oak–Battleboro Road	1.6	254	487	617	1,010
Big Peachtree Creek	Approximately 1.5 miles upstream of Boddie Mill Pond Road	32.31	*	*	6,540	*
	Approximately 1.16 miles downstream of Edwards Road	20.92	*	*	4,980	*
	Approximately 1,368 feet downstream of Edwards Road	19.63	*	*	4,790	*
	Approximately 2,530 feet upstream of Edwards Road	16.80	*	*	4,340	*
	Approximately 2,426 feet downstream of Lancaster Store Road	15.25	*	*	4,090	*
	Approximately 500 feet upstream of Lancaster Store Road	11.19	*	*	3,370	*

HEC-RAS Plan: Base Plan River: Main Stem Reach: Reach - 1

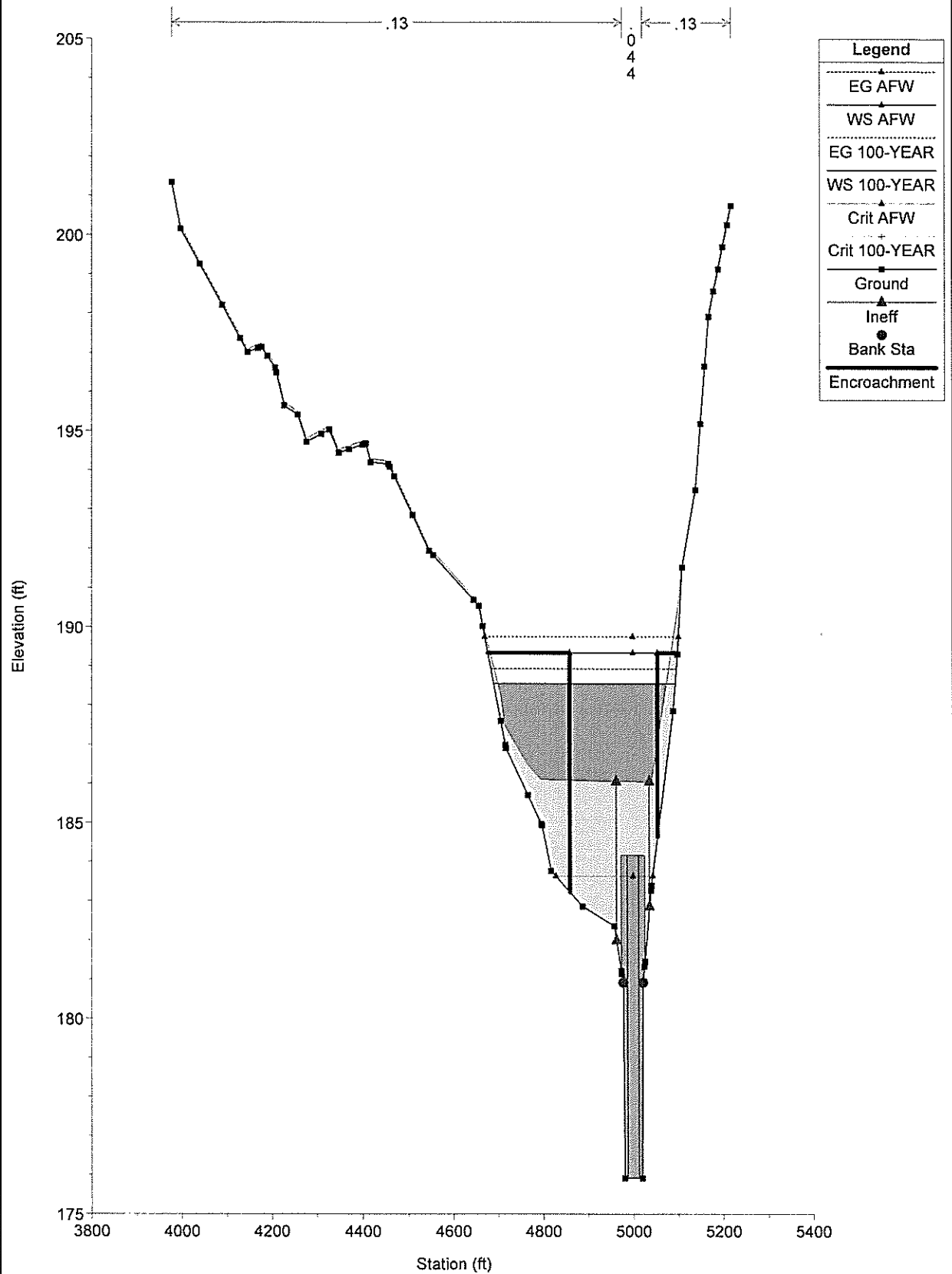
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
Reach - 1	14003.3	100-YEAR	4394.00	179.44	190.71		190.77	0.000582	3.50	5960.99	1494.00	0.19
Reach - 1	14003.3	AFW	4394.00	179.44	191.51		191.58	0.000583	3.67	3882.09	626.84	0.19
Reach - 1	12854.4	100-YEAR	4840.00	179.17	189.98		190.04	0.000678	3.73	4859.61	1081.92	0.20
Reach - 1	12854.4	AFW	4840.00	179.17	190.77		190.85	0.000682	3.93	3831.72	600.16	0.21
Reach - 1	11935.9	100-YEAR	4840.00	177.46	189.58		189.59	0.000362	2.95	8592.64	1728.59	0.15
Reach - 1	11935.9	AFW	4840.00	177.46	190.35		190.39	0.000363	3.08	5211.95	775.05	0.15
Reach - 1	10922.0	100-YEAR	4840.00	175.96	188.56	183.61	188.93	0.001276	5.93	2037.91	403.14	0.30
Reach - 1	10922.0	AFW	4840.00	175.96	189.34	183.61	189.75	0.001192	5.97	1586.16	195.00	0.29
Reach - 1	10899.5		Bridge									
Reach - 1	10877.0	100-YEAR	4840.00	175.79	188.51	183.43	188.87	0.001211	5.81	2089.16	406.11	0.29
Reach - 1	10877.0	AFW	4840.00	175.79	189.24	183.43	189.64	0.001165	5.92	1600.71	195.00	0.29
Reach - 1	10525.4	100-YEAR	4840.00	175.61	187.93		188.34	0.001895	6.83	2059.34	419.79	0.35
Reach - 1	10525.4	AFW	4840.00	175.61	188.62		189.10	0.001903	7.10	1601.05	220.89	0.35
Reach - 1	9392.5	100-YEAR	5035.00	175.56	186.03		186.25	0.001594	5.80	3188.54	883.61	0.32
Reach - 1	9392.5	AFW	5035.00	175.56	186.75		187.02	0.001679	6.05	2375.92	408.02	0.32
Reach - 1	7586.1	100-YEAR	5035.00	174.80	184.02		184.07	0.000867	3.80	5489.75	1193.99	0.23
Reach - 1	7586.1	AFW	5035.00	174.80	184.85		184.92	0.000813	3.91	3852.76	617.82	0.22

BIG_PEACHTREE_CREEK

Plan: BIG_PEACHTREE_CREEK

11/25/2003

Edwards Rd-TOR



BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 05/22/2014

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :
NASH	4	2	630028	121 FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1321	BIG PEACHTREE CRE

LOCATED :	BRIDGE NAME :	CITY :
2.1 MI N JCT SR1308		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	AOT & YR :	RAIL TYPE :
09	NFA	NFA	400 2012	LT 241 RT 241

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1961	BMU			Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
	DBM		TAN	90	ON 2 UNDER 0

NAVIGATION :	HT. CRN. TO BED :	WATER DEPTH :
VC 0 FT IC 0 FT	12 FT	5 FT

SUPERSTRUCTURE : RC FLOOR ON TIMBER JOISTS,STD. BMD-10

SUBSTRUCTURE : E.BTS&BTS:TIM.CAPS/TIMBER PILES@8'CTS,

SPANS : 1 @ 17'9.5@17',1@17'9

BEAMS OR GIRDERS : 19 LINES 6X12 TIMBER JOISTS@VAR.CTS.

FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) :
5RCX.12 AWS		25 333 FT

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
24 FT	25.5 FT	LT 75 FT RT 75 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	21	DATE	11/20/2008
HS-1	HS-1	Jst 15Sp6	SV 12				

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

UNDER ROUTES AND CLEARANCES

UPSTREAM STRUCTURE

REMARKS :

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 05/20/2014

COUNTY : NASH DIVISION : 4 DISTRICT : 2 STRUCTURE NUMBER : 630194 LENGTH : 154 FEET

ROUTE CARRIED : SR1300 FEATURE INTERSECTED : STONEY CREEK

LOCATED : 1.2 MI S.JCT NC58 BRIDGE NAME : CITY :

FUNC. CLASS : 09 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 400 2003 RAIL TYPE : LT 241 RT 241

BUILT : 1956 BY : SHPWC PROJ : 8037 FED.AID PROJ : DESIGN LOAD : Unknown

REHAB : BY : PROJ : ALIGNMENT : TAN SKEW : 85 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 17 FT WATER DEPTH : 1 FT

SUPERSTRUCTURE : REINFORCED CONCRETE FLOOR ON TIMBER JOISTS

SUBSTRUCTURE : E.BT1:RC ABUT;E.BT2&BTS:TIM.CAP/TIM.POST&SILLS

SPANS : 1@17'6";7@17';1@17'9

BEAMS OR GIRDERS : 19 LINES 6X12 TIMBER JOISTS @ VARIOUS CENTERS

FLOOR : 5RC/25 AWS ENCROACHMENT : DECK (OUT TO OUT) : 25.3 FT

CLEAR ROADWAY : 24 FT BETWEEN RAILS : 26.5 FT SIDEWALK OR CURB : LT .8 FT RT .8 FT

VERT.CL.OVER : 999.9 FT

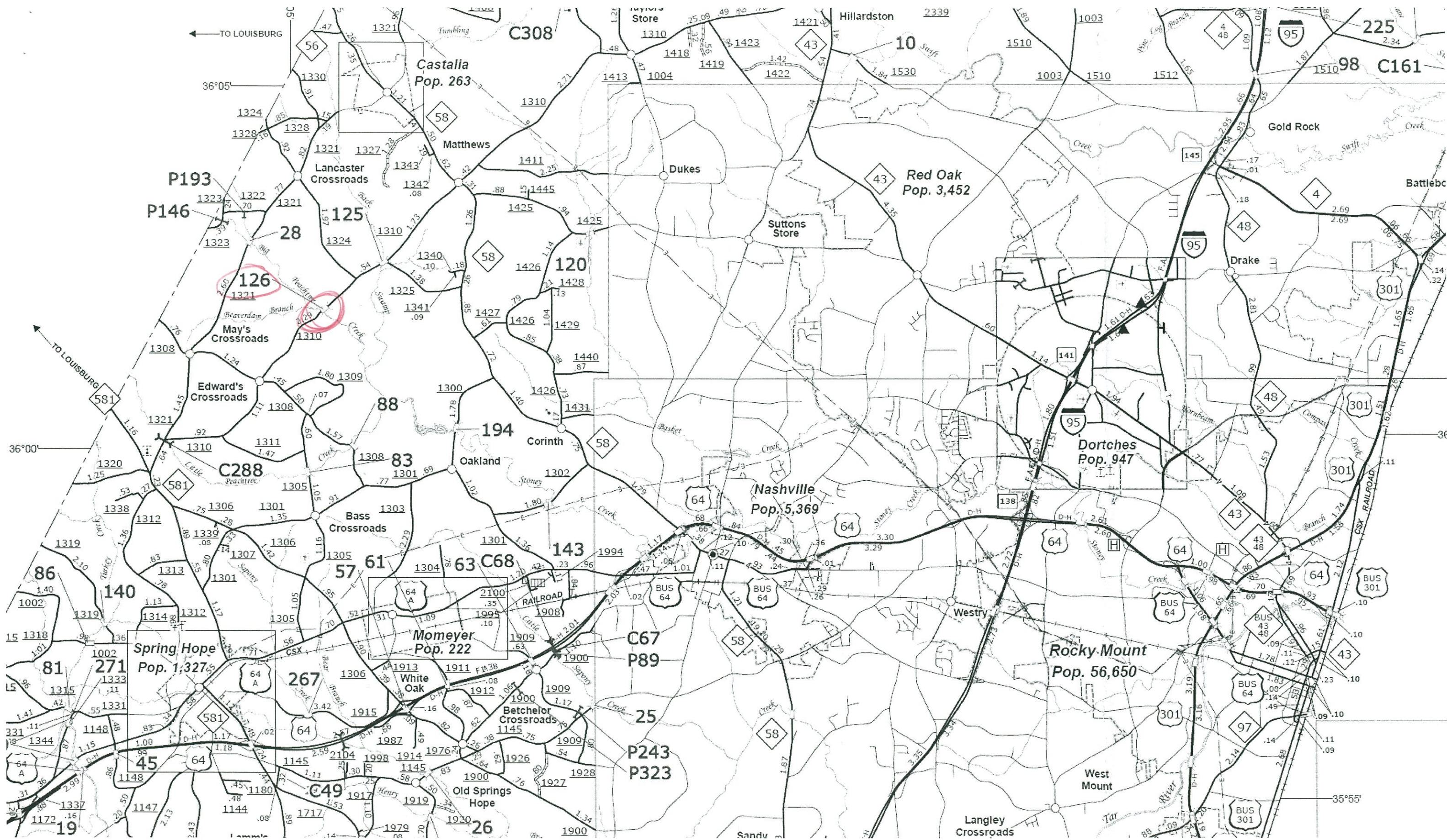
INV.RTG. : HS-11 OPE.RTG. : HS-17 CONTR.MEMBER : Ext Joist POSTED : SV 19 TTST 27 DATE 05/11/2012

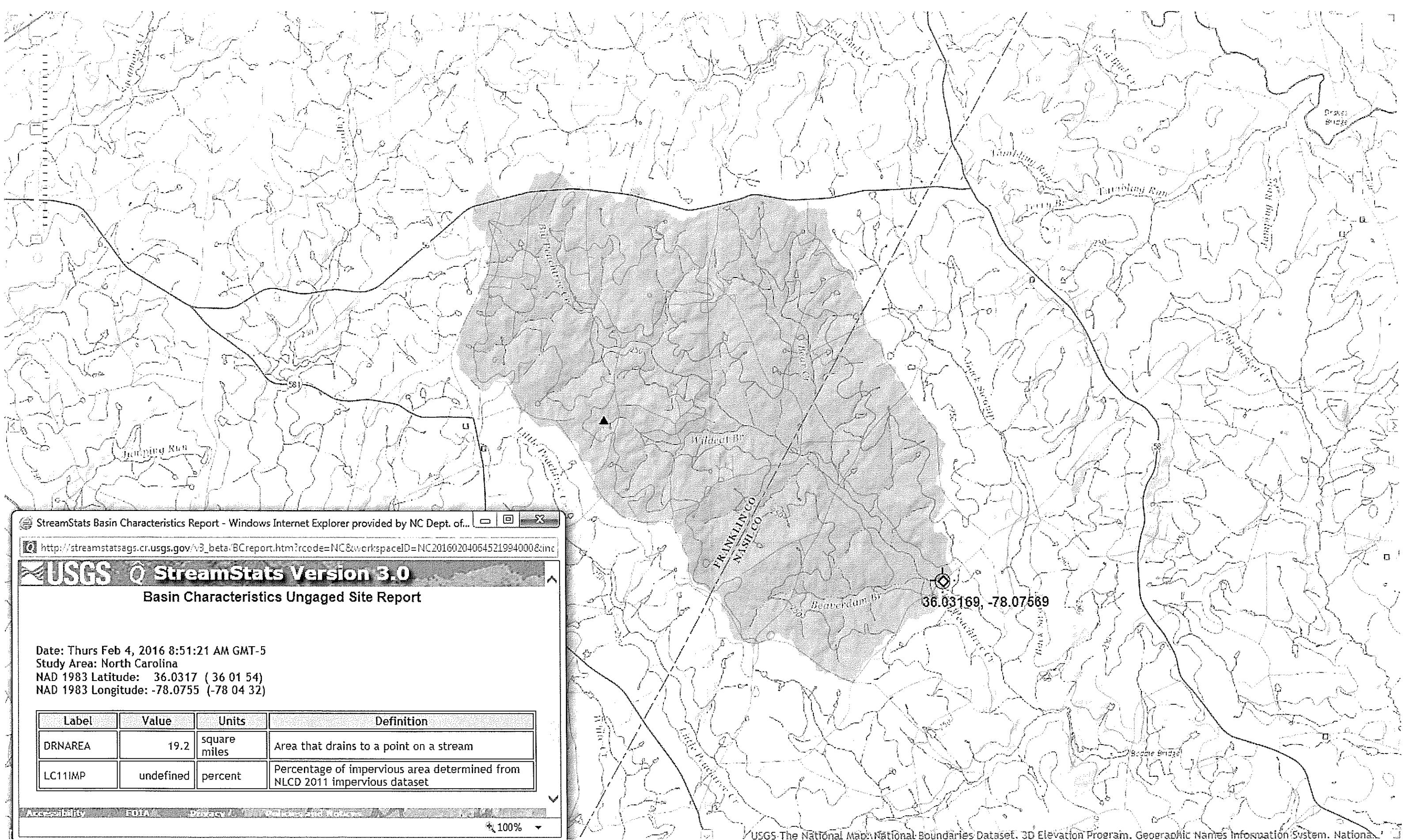
SYSTEM : Secondary S.R. Route GREEN LINE ROUTE : N

UNDER ROUTES AND CLEARANCES

DOWNSTREAM STRUCTURE

REMARKS :





StreamStats Basin Characteristics Report - Windows Internet Explorer provided by NC Dept. of...

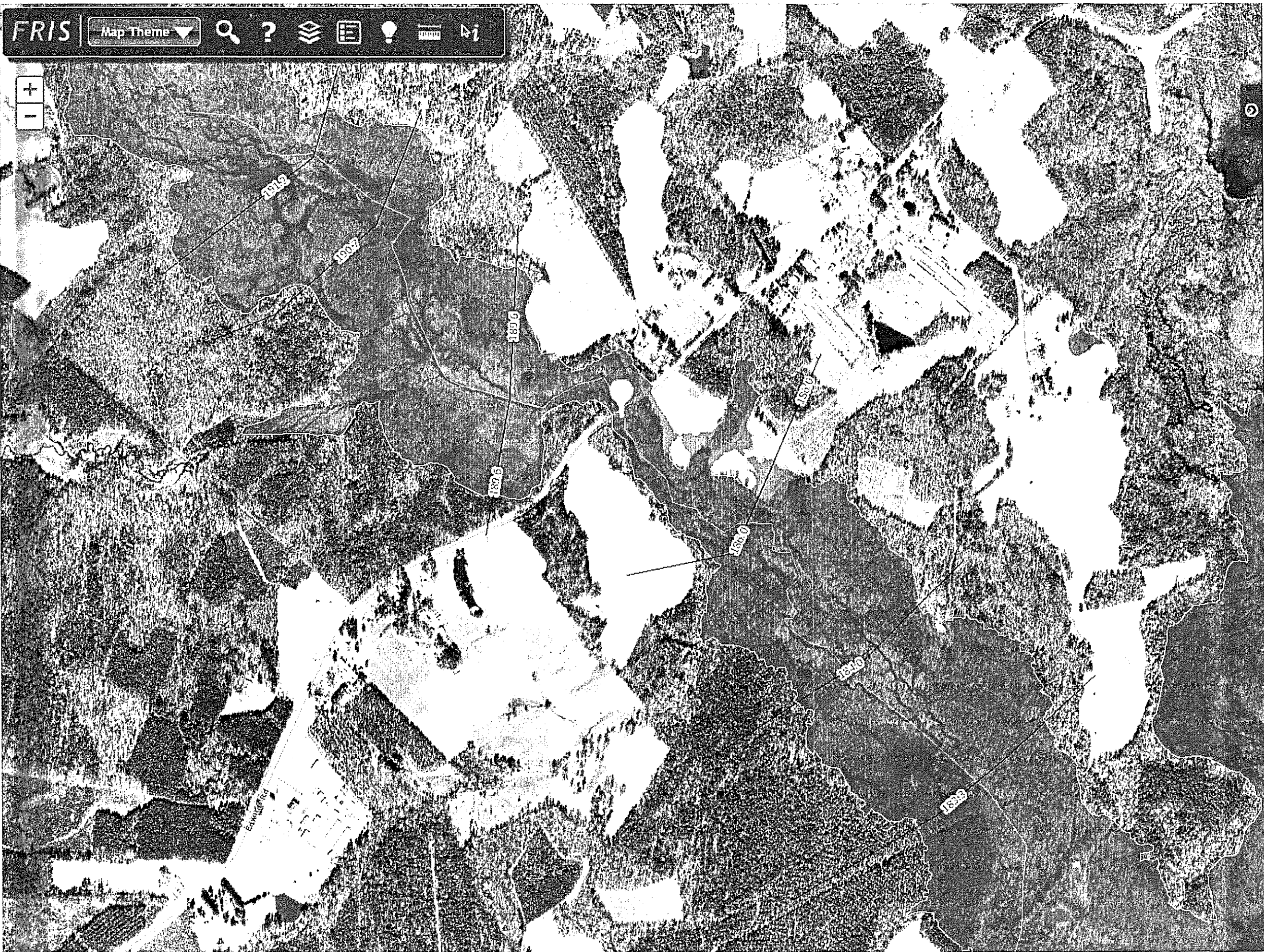
http://streamstats.cr.usgs.gov/v3_beta/BCreport.htm?rcode=NC&workspaceID=NC20160204064521994000&inc

USGS StreamStats Version 3.0

Basin Characteristics Ungaged Site Report

Date: Thurs Feb 4, 2016 8:51:21 AM GMT-5
Study Area: North Carolina
NAD 1983 Latitude: 36.0317 (36 01 54)
NAD 1983 Longitude: -78.0755 (-78 04 32)

Label	Value	Units	Definition
DRNAREA	19.2	square miles	Area that drains to a point on a stream
LC11IMP	undefined	percent	Percentage of impervious area determined from NLCD 2011 impervious dataset



Who Am I: General Public Effective

Flood Information

Click the map to view information.

Map Location

Flood Zone: A5

Flood Source: Big Peachtree Creek

Base Flood Elevation: 188.6 ft

County: Nash

Political Area: Nash County

CID: 370278

Panel: 2862 Download

Map Number: 3720286200K

Panel Effective Date: 11/3/2004

Latitude: 36.03169

Longitude: -78.0757

Risk Information

Financial Vulnerability

FIS Reports

Map Export

Data Export

