

OFFICE ESTIMATE

1@45' Bridge

PREDESIGN-PRESURVEY REPORT

Project# _____

TIP# _____

Let Date _____

WBS# 17BP.11.R.88

County SURRY (DIV 11)

Bridge# 850257

Road# SR1600 (LUMBER PLANT RD)

Stream FISHER RIVER

Type Of Request: POC Force Account TIP NCMA

Date 7/03/13 Name MJY

Assigned To BLH

Checked By WSH 7-3-13

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

Study By Scour Section NO

Flood Zone AE Detail Study LIMITED Date 8/18/09 Panel# 4042

B.M. Info N/A

Quad Map LAMBSBURG Drainage Area 3.8 SQ. MI. From USGS STREAM STATS
Q25 1100 cfs Q50 1300 cfs Q100 1500 cfs Method REGR. EQNS. / REG 2

EXISTING BRIDGE INFORMATION

Location 0.5 MI. N. JCT. SR1601

Average Daily Traffic 380 6% TRK (2010)

Length 31' Bed- To Crown 8' Water Depth 1'

Type Structure TIM. FLOORS ON I-BEAMS; TIM. LAPS, POSTS, & SILLS

Type Spans 1@31'

Upstream Structure 850299 (SR1600 CRK)

Location 0.1 MI. E. JCT. NC 89

Bed- To Crown 5' (D=6') Prior Survey _____

Downstream Structure 850261 (SR1601 CRK)

Location 0.1 MI. E. JCT. SR1600

Bed- To Crown 9' (D=1') Prior Survey _____

SCS Watershed _____

HATCHERY-SUPPORTED ENVIRONMENTAL

TVA NO

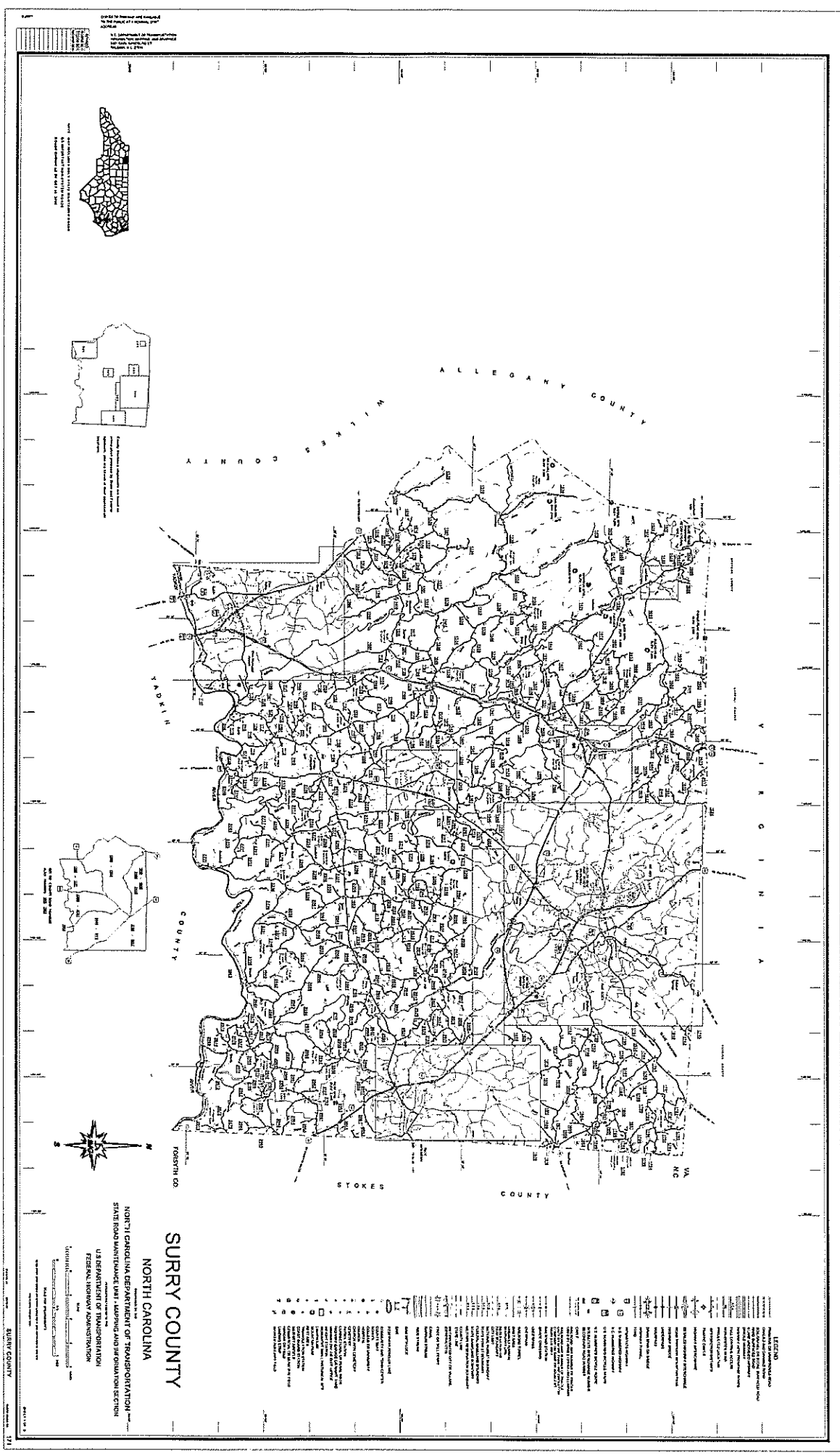
Trout Stream YES Anadromous Fish NO Primary Nursery Area NO

High Quality Waters YES Nutrient Sensitive Waters NO

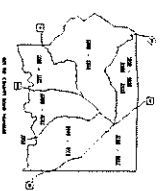
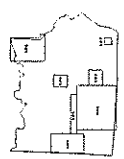
Near Water Supply Intake NO CAMA County NO

Stream Classification WS-II; Tr; HQW 12-63-(1) (From

DENR River Basin Info. YADKIN VA. STATE LINE TO BURRIS CREEK)



Copyright © 1995 by the U.S. Government
This map is a reproduction of a map published by the U.S. Government
under authority of the Department of the Interior
Bureau of Land Management
Washington, D.C. 20240
Map Scale: 1:50,000
Map Date: 1995



SURRY COUNTY
NORTH CAROLINA
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
STATE ROAD MAINTENANCE UNIT - LAPPING AND RECONSTRUCTION SECTION
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Map Date: 1995
Map Scale: 1:50,000
Map Date: 1995

- LEGEND**
- 1. Major Road (2+ lanes, paved)
 - 2. Minor Road (2+ lanes, unpaved)
 - 3. Road (2+ lanes, paved)
 - 4. Road (2+ lanes, unpaved)
 - 5. Road (2+ lanes, paved)
 - 6. Road (2+ lanes, unpaved)
 - 7. Road (2+ lanes, paved)
 - 8. Road (2+ lanes, unpaved)
 - 9. Road (2+ lanes, paved)
 - 10. Road (2+ lanes, unpaved)
 - 11. Road (2+ lanes, paved)
 - 12. Road (2+ lanes, unpaved)
 - 13. Road (2+ lanes, paved)
 - 14. Road (2+ lanes, unpaved)
 - 15. Road (2+ lanes, paved)
 - 16. Road (2+ lanes, unpaved)
 - 17. Road (2+ lanes, paved)
 - 18. Road (2+ lanes, unpaved)
 - 19. Road (2+ lanes, paved)
 - 20. Road (2+ lanes, unpaved)
 - 21. Road (2+ lanes, paved)
 - 22. Road (2+ lanes, unpaved)
 - 23. Road (2+ lanes, paved)
 - 24. Road (2+ lanes, unpaved)
 - 25. Road (2+ lanes, paved)
 - 26. Road (2+ lanes, unpaved)
 - 27. Road (2+ lanes, paved)
 - 28. Road (2+ lanes, unpaved)
 - 29. Road (2+ lanes, paved)
 - 30. Road (2+ lanes, unpaved)
 - 31. Road (2+ lanes, paved)
 - 32. Road (2+ lanes, unpaved)
 - 33. Road (2+ lanes, paved)
 - 34. Road (2+ lanes, unpaved)
 - 35. Road (2+ lanes, paved)
 - 36. Road (2+ lanes, unpaved)
 - 37. Road (2+ lanes, paved)
 - 38. Road (2+ lanes, unpaved)
 - 39. Road (2+ lanes, paved)
 - 40. Road (2+ lanes, unpaved)
 - 41. Road (2+ lanes, paved)
 - 42. Road (2+ lanes, unpaved)
 - 43. Road (2+ lanes, paved)
 - 44. Road (2+ lanes, unpaved)
 - 45. Road (2+ lanes, paved)
 - 46. Road (2+ lanes, unpaved)
 - 47. Road (2+ lanes, paved)
 - 48. Road (2+ lanes, unpaved)
 - 49. Road (2+ lanes, paved)
 - 50. Road (2+ lanes, unpaved)
 - 51. Road (2+ lanes, paved)
 - 52. Road (2+ lanes, unpaved)
 - 53. Road (2+ lanes, paved)
 - 54. Road (2+ lanes, unpaved)
 - 55. Road (2+ lanes, paved)
 - 56. Road (2+ lanes, unpaved)
 - 57. Road (2+ lanes, paved)
 - 58. Road (2+ lanes, unpaved)
 - 59. Road (2+ lanes, paved)
 - 60. Road (2+ lanes, unpaved)
 - 61. Road (2+ lanes, paved)
 - 62. Road (2+ lanes, unpaved)
 - 63. Road (2+ lanes, paved)
 - 64. Road (2+ lanes, unpaved)
 - 65. Road (2+ lanes, paved)
 - 66. Road (2+ lanes, unpaved)
 - 67. Road (2+ lanes, paved)
 - 68. Road (2+ lanes, unpaved)
 - 69. Road (2+ lanes, paved)
 - 70. Road (2+ lanes, unpaved)
 - 71. Road (2+ lanes, paved)
 - 72. Road (2+ lanes, unpaved)
 - 73. Road (2+ lanes, paved)
 - 74. Road (2+ lanes, unpaved)
 - 75. Road (2+ lanes, paved)
 - 76. Road (2+ lanes, unpaved)
 - 77. Road (2+ lanes, paved)
 - 78. Road (2+ lanes, unpaved)
 - 79. Road (2+ lanes, paved)
 - 80. Road (2+ lanes, unpaved)
 - 81. Road (2+ lanes, paved)
 - 82. Road (2+ lanes, unpaved)
 - 83. Road (2+ lanes, paved)
 - 84. Road (2+ lanes, unpaved)
 - 85. Road (2+ lanes, paved)
 - 86. Road (2+ lanes, unpaved)
 - 87. Road (2+ lanes, paved)
 - 88. Road (2+ lanes, unpaved)
 - 89. Road (2+ lanes, paved)
 - 90. Road (2+ lanes, unpaved)
 - 91. Road (2+ lanes, paved)
 - 92. Road (2+ lanes, unpaved)
 - 93. Road (2+ lanes, paved)
 - 94. Road (2+ lanes, unpaved)
 - 95. Road (2+ lanes, paved)
 - 96. Road (2+ lanes, unpaved)
 - 97. Road (2+ lanes, paved)
 - 98. Road (2+ lanes, unpaved)
 - 99. Road (2+ lanes, paved)
 - 100. Road (2+ lanes, unpaved)

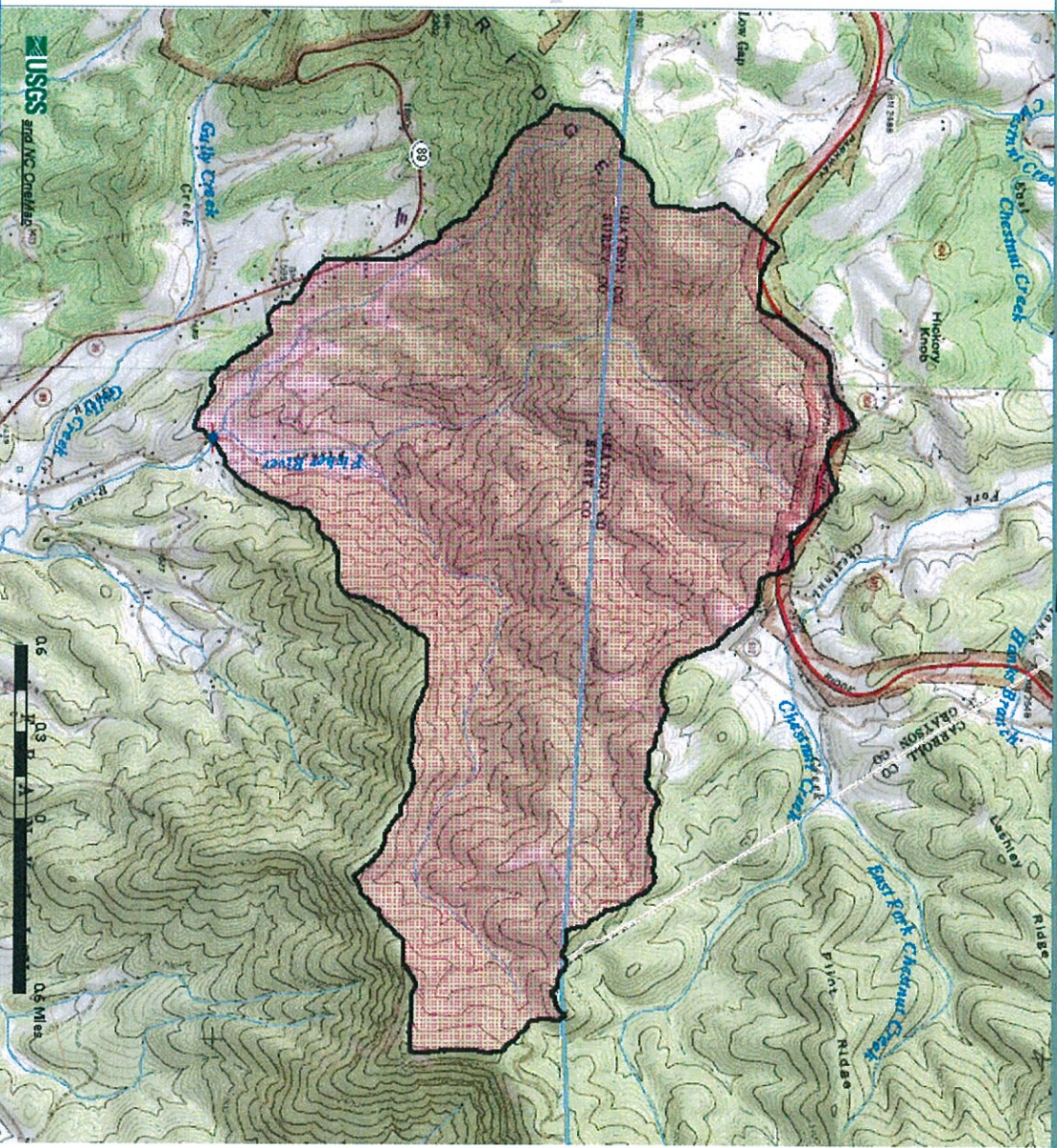


North Carolina StreamStats

- Results >>
- Map Contents >>
- Navigation >>
- Overview >>



Lat/Long 1:29,852



Accessibility

FOIA

Privacy

Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey
URL: <http://streamstats.cr.usgs.gov/nc/ss/default.aspx>
Page Contact Information: StreamStats Help
Page Last Modified: 07/03/2013 13:59:37

StreamStats Status

News



850257



North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Wed Jul 3 2013 12:11:51 Mountain Daylight Time

Site Location: North_Carolina

NAD27 Latitude: 36.5410 (36 32 28)

NAD27 Longitude: -80.8708 (-80 52 15)

NAD83 Latitude: 36.5411 (36 32 28)

NAD83 Longitude: -80.8706 (-80 52 14)

Drainage Area: 3.79 mi²

Percent Urban: 2.7 %

Percent Impervious: 0.2 %

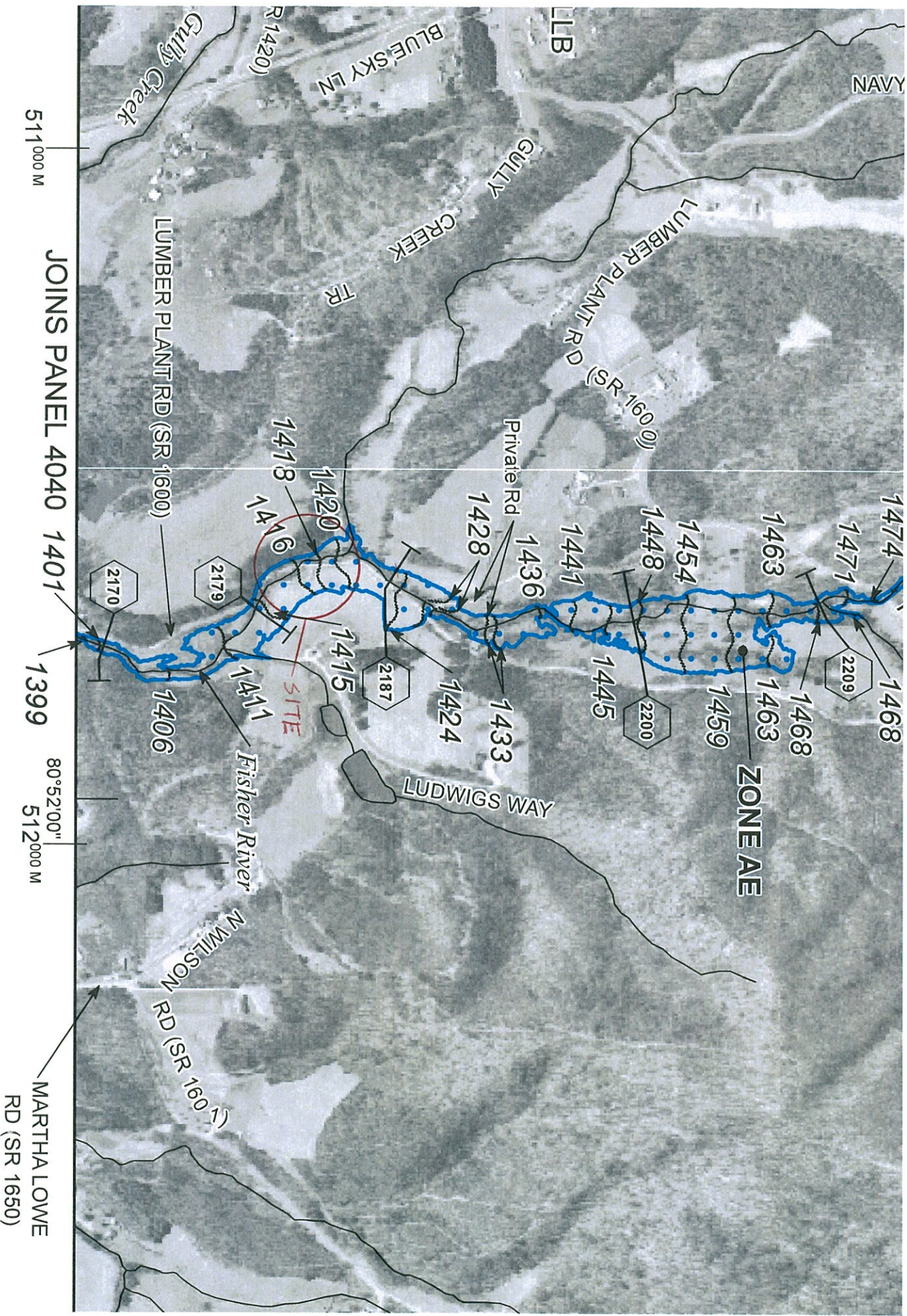
Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (3.79 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.79	1	9000
Percent Area in Region 1 (percent)	5.521	0	100
Percent Area in Region 2 (percent)	94.479	0	100
Percent Area 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 (3.79 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.79	0.04	41
Area of Impervious Surfaces (percent)	0.16 (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	313	35		179	548
PK5	573	34		329	996
PK10	776	35		438	1370
PK25	1050	38		573	1940
PK50	1260	40		662	2390
PK100	1500	42		762	2950
PK200	1710	44		839	3490
PK500	2040	48		953	4390

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	25.4				
PK5U	68.5				
PK10U	114				
PK25U	231				
PK50U	319				
PK100U	428				



NOTES TO USERS



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

(PMN) ISSUED... DECK, (NE) WING...

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY SURRY BRIDGE NUMBER 850257 INSPECTION CYCLE 2 YRS
ROUTE SR1600 ACROSS CREEK M.P. 0

LOCATION .5 MI.N.JCT.SR1601

SUPERSTRUCTURE TIMBER FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:TIM.CAPS/TIMBER POST&SILLS @ 6' CENTERS

SPANS 1 @ 31'

LONGITUDE 80° 52' 13.7"

LATITUDE 36° 32' 27.2"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 11/10/2011

OPERATING RATING

PRESENT POSTING SV 14 TTST 19 SV 14 TTST 19

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT 4 DELINEATORS



SOUTH TO NORTH

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: 12/22/2011

COUNTY :	DIVISION :	DISTRICT :	STRUCTURE NUMBER :	LENGTH :
SURRY	11	1	850257	31 FEET

ROUTE CARRIED :	FEATURE INTERSECTED :
SR1600	CREEK

LOCATED :	BRIDGE NAME :	CITY :
.5 MI.N.JCT.SR1601		

FUNC. CLASS :	SYST.ON :	SYST.UNDER :	ADT & YR :	RAIL TYPE :
09	NFA	NFA	380 2010	LT 227 RT 227

BUILT :	BY :	PROJ :	FED.AID PROJ :	DESIGN LOAD :
1959	BMU			Other or Unknown

REHAB :	BY :	PROJ :	ALIGNMENT :	SKEW :	LANES :
			TAN	117	ON 2 UNDER

NAVIGATION :	VC	0	FT	HC	0	FT	HT. CRN. TO BED :	8	FT	WATER DEPTH :	1	FT
--------------	----	---	----	----	---	----	-------------------	---	----	---------------	---	----

SUPERSTRUCTURE :	TIMBER FLOOR ON I-BEAMS
------------------	-------------------------

SUBSTRUCTURE :	E.BTS:TIM.CAPS/TIMBER POST&SILLS @ 6' CENTERS
----------------	---

SPANS :	1 @ 31'
---------	---------

BEAMS OR GIRDERS :	8 LINES 14 I-BEAMS @ 2'-3.5 CENTERS
--------------------	-------------------------------------

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

CLEAR ROADWAY :	BETWEEN RAILS :	SIDEWALK OR CURB :
17 FT	17.7 FT	LT .3 FT RT .3 FT

VERT.CL.OVER :
999.9 FT

INV.RTG. :	OPE.RTG. :	CONTR.MEMBER :	POSTED :	TTST	19	DATE	09/25/2008
HS-7	HS-13	Ext Bm	SV 14				

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

UNDER ROUTES AND CLEARANCES

REMARKS :

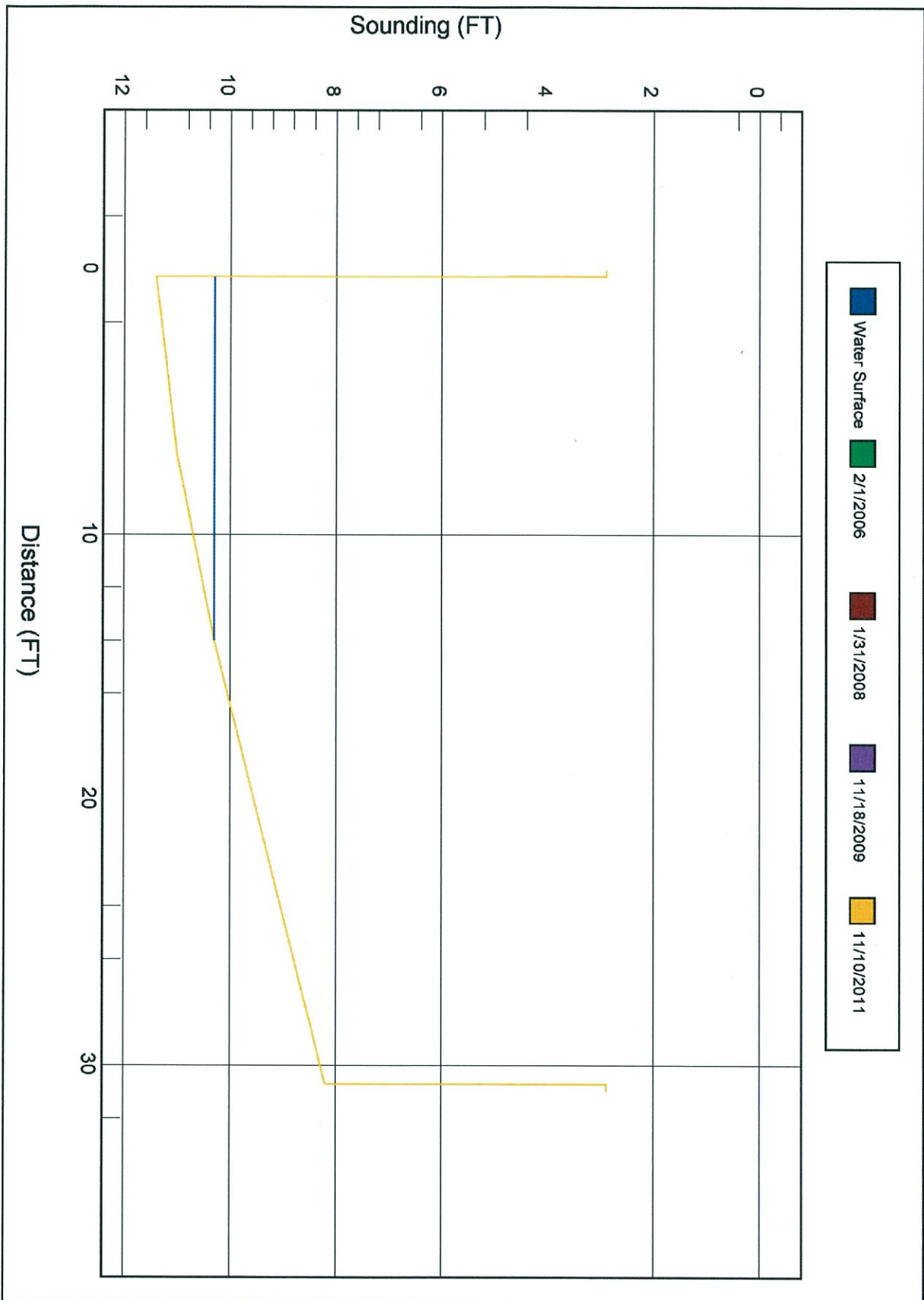
Bridge: 850257

County: SURRY

Date: 11/10/2011

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)





EAST PROFILE



ABUT. (B)

Section 5.0 – Engineering Methods

Table 11—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)
FISHER RIVER				
1949	194,867	6,768	1,229.4	27 / 27
1951	195,072	6,768	1,230.2	23 / 41
1958	195,766	6,768	1,233.6	45 / 26
1961	196,130	6,768	1,234.4	50 / 27
1965	196,454	6,768	1,236.7	28 / 42
1970	196,982	6,768	1,242.4	167 / 64
1975	197,483	6,768	1,245.1	35 / 200
1980	198,000	6,768	1,246.3	129 / 37
1984	198,429	6,768	1,248.0	94 / 23
1990	198,994	6,768	1,249.9	164 / 23
1994	199,412	5,621	1,251.8	33 / 96
2000	199,995	5,621	1,255.3	112 / 326
2005	200,491	5,621	1,256.1	188 / 285
2010	200,989	5,621	1,257.0	46 / 45
2015	201,510	5,621	1,258.6	30 / 46
2025	202,498	3,044	1,270.6	42 / 119
2030	203,003	3,044	1,271.2	85 / 35
2039	203,929	3,044	1,276.3	117 / 43
2050	204,994	3,044	1,283.4	23 / 21
2055	205,500	3,044	1,290.2	50 / 40
2060	206,003	3,044	1,294.4	25 / 190
2065	206,493	3,044	1,299.9	12 / 328
2070	207,000	3,044	1,302.2	30 / 13
2075	207,493	3,044	1,307.8	34 / 55
2080	208,008	3,044	1,312.6	42 / 34
2085	208,504	3,044	1,316.9	18 / 157
2090	209,009	3,044	1,320.4	120 / 40
2095	209,505	2,898	1,323.1	41 / 28
2100	210,000	2,898	1,327.7	200 / 24
2110	210,987	2,898	1,335.6	77 / 309
2115	211,487	2,898	1,340.4	27 / 236
2120	212,016	2,898	1,343.6	46 / 140
2125	212,517	2,898	1,348.0	68 / 35
2130	212,999	2,481	1,351.4	90 / 53
2136	213,590	2,481	1,355.1	15 / 144
2140	214,015	2,481	1,359.2	20 / 31
2148	214,841	1,825	1,371.4	26 / 132
2154	215,419	1,825	1,378.3	75 / 17
2159	215,891	1,825	1,384.6	92 / 65
2166	216,617	1,825	1,394.4	55 / 26
2170	217,010	1,825	1,401.1	27 / 16
2175	217,503	1,825	1,408.2	32 / 36
2179	217,923	1,825	1,414.5	125 / 6
2187	218,720	1,559	1,423.9	60 / 24
2192	219,159	1,559	1,431.6	21 / 78
2195	219,498	1,559	1,436.2	38 / 16
2200	219,999	1,559	1,447.7	43 / 32
2205	220,497	1,559	1,458.9	94 / 20

TR. STA.
18235 BRV

850257

RIVER STA. : 218235 BR U

Fisher River Limited Detail Study Plan: Floodway Run 8/20/2009
Lumber Plant Rd - TORStructure ID: LDS_FR_25AA Approximate Survey

