

OFFICE ESTIMATE

1 @ 70' Bridge

Project# _____

TIP# _____

Let Date _____

PREDESIGN-PRESURVEY REPORT

WBS# 17 BP. 11. R. 03

County SURRY (DIV II)

Bridge# 850202

Road# SR 1338 (HIDDEN VALLEY RD)

Stream CAMP BRANCH

Type Of Request: POC Force Account TIP NCMA

Date 7/03/13 Name MJY

Assigned To RLH

Checked By wsh 7-3-13

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 8/18/09 Panel# 4040 ✓

B.M. Info _____

Quad Map LAMBSBURG Drainage Area 4.3 SQ. MI. From USGS STREAM STATS

Q25 1200 cfs ✓ Q50 1400 cfs Q100 1700 cfs Method REG. EQNS.

REGION 1 ✓

EXISTING BRIDGE INFORMATION

Location 0.6 MI. S. JCT. SR 1408 ✓

Average Daily Traffic 660 6% TRK (2008)

Length 51' Bed- To Crown 11' ✓ Water Depth 1' ✓

Type Structure STEEL PLANK FLOOR ON I-BEAMS; TIM. CAPS + POST, CONC. SILLS

Type Spans 1 @ 50'-6"

Upstream Structure 8500163 ✓

Location 0.8 MI. E. JCT. SR 1338

Bed- To Crown 20' (D=1') Prior Survey _____

Downstream Structure (NO - MERGES INTO FISHER RIVER)

Location _____

Bed- To Crown _____ Prior Survey _____

SCS Watershed _____

ENVIRONMENTAL TVA NO ✓

Trout Stream YES Anadromous Fish NO Primary Nursery Area NO

High Quality Waters YES ✓ Nutrient Sensitive Waters NO ✓

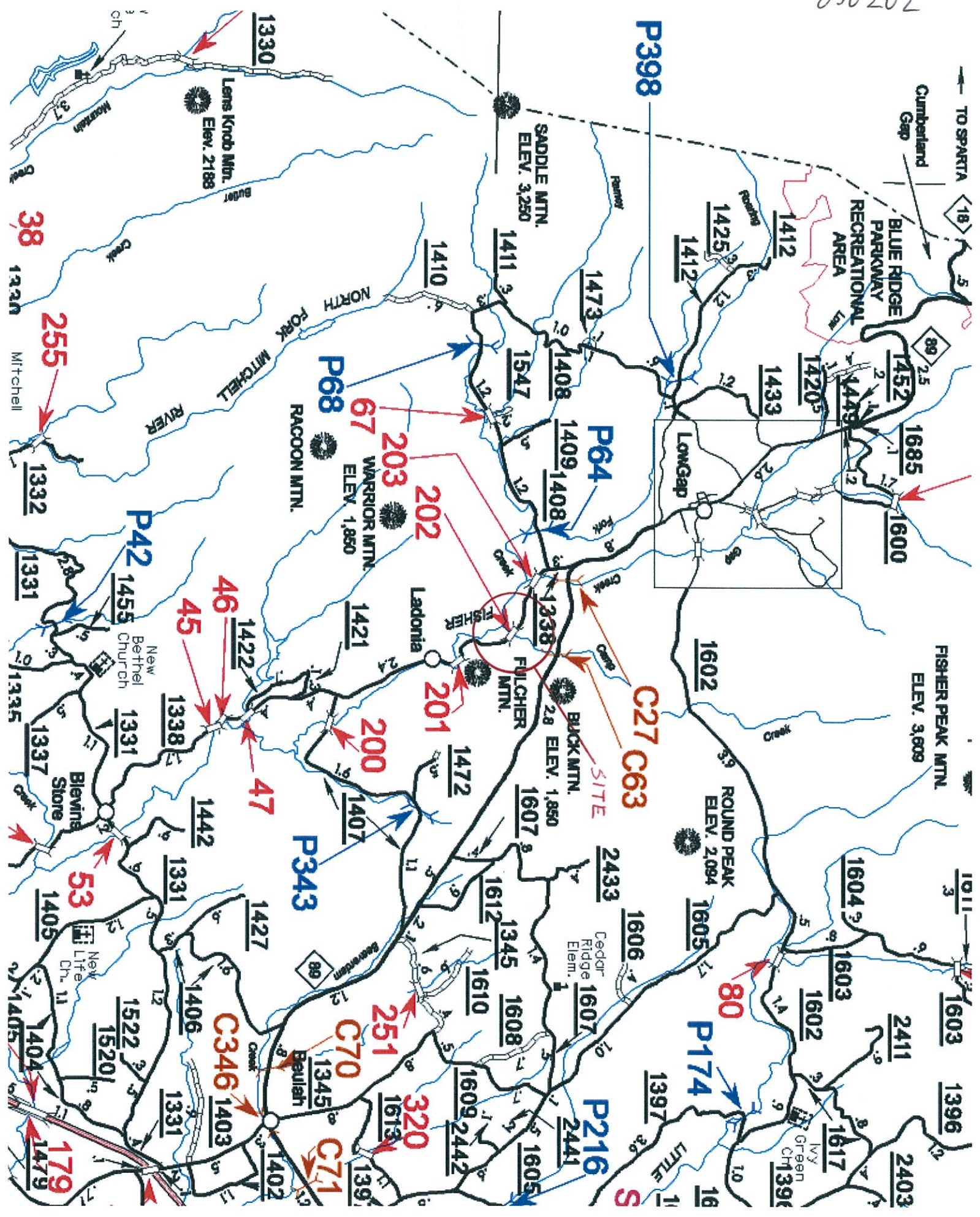
Near Water Supply Intake NO ✓ CAMA County NO ✓

Stream Classification WS-II; Tr; H&W

DENR River Basin Info. YADKIN PEE DEE ✓

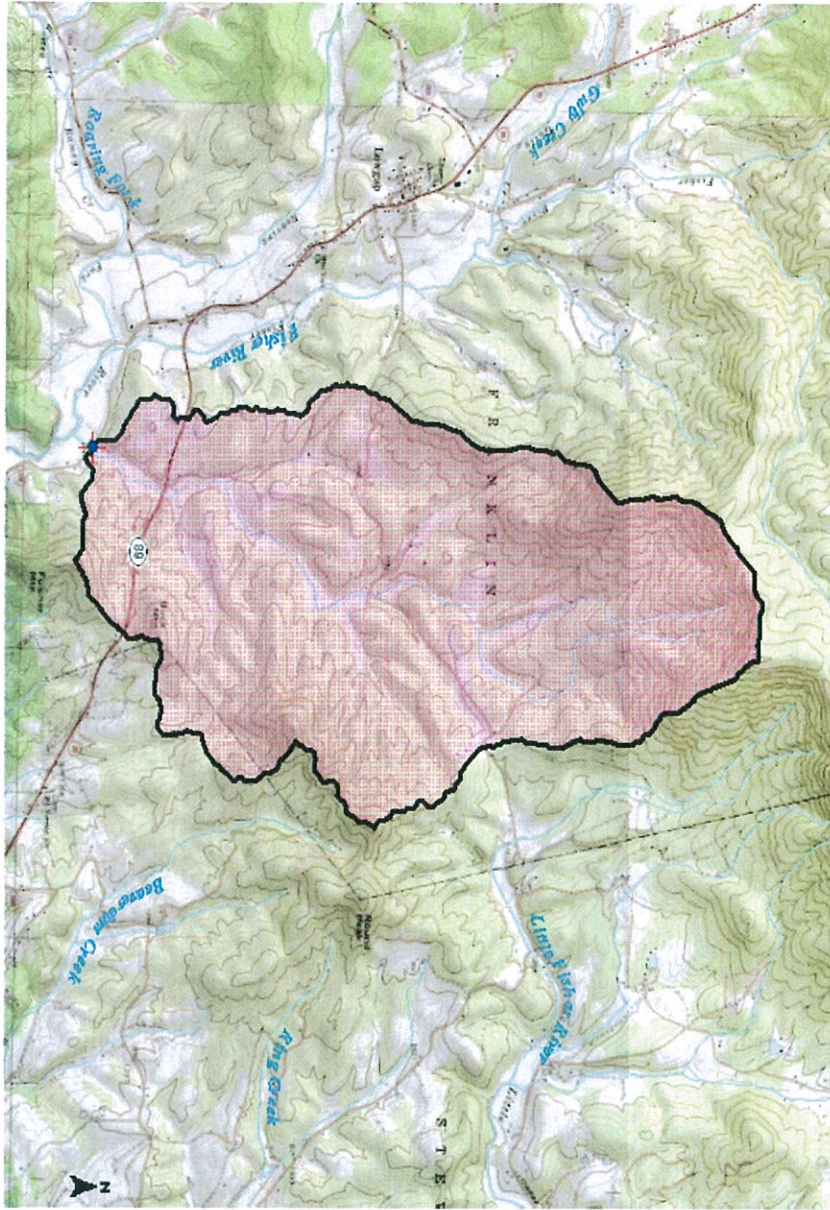
LEGEND

- 1. ROAD (2-4 LANE)
- 2. ROAD (4-6 LANE)
- 3. ROAD (6-8 LANE)
- 4. ROAD (8-12 LANE)
- 5. ROAD (12-16 LANE)
- 6. ROAD (16-20 LANE)
- 7. ROAD (20-24 LANE)
- 8. ROAD (24-32 LANE)
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- 10. ROAD (40-48 LANE)
- 11. ROAD (48-56 LANE)
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- 14. ROAD (72-80 LANE)
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- 16. ROAD (88-96 LANE)
- 17. ROAD (96-104 LANE)
- 18. ROAD (104-112 LANE)
- 19. ROAD (112-120 LANE)
- 20. ROAD (120-128 LANE)
- 21. ROAD (128-136 LANE)
- 22. ROAD (136-144 LANE)
- 23. ROAD (144-152 LANE)
- 24. ROAD (152-160 LANE)
- 25. ROAD (160-168 LANE)
- 26. ROAD (168-176 LANE)
- 27. ROAD (176-184 LANE)
- 28. ROAD (184-192 LANE)
- 29. ROAD (192-200 LANE)
- 30. ROAD (200-208 LANE)
- 31. ROAD (208-216 LANE)
- 32. ROAD (216-224 LANE)
- 33. ROAD (224-232 LANE)
- 34. ROAD (232-240 LANE)
- 35. ROAD (240-248 LANE)
- 36. ROAD (248-256 LANE)
- 37. ROAD (256-264 LANE)
- 38. ROAD (264-272 LANE)
- 39. ROAD (272-280 LANE)
- 40. ROAD (280-288 LANE)
- 41. ROAD (288-296 LANE)
- 42. ROAD (296-304 LANE)
- 43. ROAD (304-312 LANE)
- 44. ROAD (312-320 LANE)
- 45. ROAD (320-328 LANE)
- 46. ROAD (328-336 LANE)
- 47. ROAD (336-344 LANE)
- 48. ROAD (344-352 LANE)
- 49. ROAD (352-360 LANE)
- 50. ROAD (360-368 LANE)
- 51. ROAD (368-376 LANE)
- 52. ROAD (376-384 LANE)
- 53. ROAD (384-392 LANE)
- 54. ROAD (392-400 LANE)
- 55. ROAD (400-408 LANE)
- 56. ROAD (408-416 LANE)
- 57. ROAD (416-424 LANE)
- 58. ROAD (424-432 LANE)
- 59. ROAD (432-440 LANE)
- 60. ROAD (440-448 LANE)
- 61. ROAD (448-456 LANE)
- 62. ROAD (456-464 LANE)
- 63. ROAD (464-472 LANE)
- 64. ROAD (472-480 LANE)
- 65. ROAD (480-488 LANE)
- 66. ROAD (488-496 LANE)
- 67. ROAD (496-504 LANE)
- 68. ROAD (504-512 LANE)
- 69. ROAD (512-520 LANE)
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- 75. ROAD (560-568 LANE)
- 76. ROAD (568-576 LANE)
- 77. ROAD (576-584 LANE)
- 78. ROAD (584-592 LANE)
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- 82. ROAD (616-624 LANE)
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- 84. ROAD (632-640 LANE)
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- 86. ROAD (648-656 LANE)
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- 88. ROAD (664-672 LANE)
- 89. ROAD (672-680 LANE)
- 90. ROAD (680-688 LANE)
- 91. ROAD (688-696 LANE)
- 92. ROAD (696-704 LANE)
- 93. ROAD (704-712 LANE)
- 94. ROAD (712-720 LANE)
- 95. ROAD (720-728 LANE)
- 96. ROAD (728-736 LANE)
- 97. ROAD (736-744 LANE)
- 98. ROAD (744-752 LANE)
- 99. ROAD (752-760 LANE)
- 100. ROAD (760-768 LANE)
- 101. ROAD (768-776 LANE)
- 102. ROAD (776-784 LANE)
- 103. ROAD (784-792 LANE)
- 104. ROAD (792-800 LANE)
- 105. ROAD (800-808 LANE)
- 106. ROAD (808-816 LANE)
- 107. ROAD (816-824 LANE)
- 108. ROAD (824-832 LANE)
- 109. ROAD (832-840 LANE)
- 110. ROAD (840-848 LANE)
- 111. ROAD (848-856 LANE)
- 112. ROAD (856-864 LANE)
- 113. ROAD (864-872 LANE)
- 114. ROAD (872-880 LANE)
- 115. ROAD (880-888 LANE)
- 116. ROAD (888-896 LANE)
- 117. ROAD (896-904 LANE)
- 118. ROAD (904-912 LANE)
- 119. ROAD (912-920 LANE)
- 120. ROAD (920-928 LANE)
- 121. ROAD (928-936 LANE)
- 122. ROAD (936-944 LANE)
- 123. ROAD (944-952 LANE)
- 124. ROAD (952-960 LANE)
- 125. ROAD (960-968 LANE)
- 126. ROAD (968-976 LANE)
- 127. ROAD (976-984 LANE)
- 128. ROAD (984-992 LANE)
- 129. ROAD (992-1000 LANE)
- 130. ROAD (1000-1008 LANE)
- 131. ROAD (1008-1016 LANE)
- 132. ROAD (1016-1024 LANE)
- 133. ROAD (1024-1032 LANE)
- 134. ROAD (1032-1040 LANE)
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- 136. ROAD (1048-1056 LANE)
- 137. ROAD (1056-1064 LANE)
- 138. ROAD (1064-1072 LANE)
- 139. ROAD (1072-1080 LANE)
- 140. ROAD (1080-1088 LANE)
- 141. ROAD (1088-1096 LANE)
- 142. ROAD (1096-1104 LANE)
- 143. ROAD (1104-1112 LANE)
- 144. ROAD (1112-1120 LANE)
- 145. ROAD (1120-1128 LANE)
- 146. ROAD (1128-1136 LANE)
- 147. ROAD (1136-1144 LANE)
- 148. ROAD (1144-1152 LANE)
- 149. ROAD (1152-1160 LANE)
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- 152. ROAD (1176-1184 LANE)
- 153. ROAD (1184-1192 LANE)
- 154. ROAD (1192-1200 LANE)
- 155. ROAD (1200-1208 LANE)
- 156. ROAD (1208-1216 LANE)
- 157. ROAD (1216-1224 LANE)
- 158. ROAD (1224-1232 LANE)
- 159. ROAD (1232-1240 LANE)
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- 161. ROAD (1248-1256 LANE)
- 162. ROAD (1256-1264 LANE)
- 163. ROAD (1264-1272 LANE)
- 164. ROAD (1272-1280 LANE)
- 165. ROAD (1280-1288 LANE)
- 166. ROAD (1288-1296 LANE)
- 167. ROAD (1296-1304 LANE)
- 168. ROAD (1304-1312 LANE)
- 169. ROAD (1312-1320 LANE)
- 170. ROAD (1320-1328 LANE)
- 171. ROAD (1328-1336 LANE)
- 172. ROAD (1336-1344 LANE)
- 173. ROAD (1344-1352 LANE)
- 174. ROAD (1352-1360 LANE)
- 175. ROAD (1360-1368 LANE)
- 176. ROAD (1368-1376 LANE)
- 177. ROAD (1376-1384 LANE)
- 178. ROAD (1384-1392 LANE)
- 179. ROAD (1392-1400 LANE)
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- 187. ROAD (1456-1464 LANE)
- 188. ROAD (1464-1472 LANE)
- 189. ROAD (1472-1480 LANE)
- 190. ROAD (1480-1488 LANE)
- 191. ROAD (1488-1496 LANE)
- 192. ROAD (1496-1504 LANE)





StreamStats Print Page



7/3/2013 7:50:41 AM

- Explanation**
- ★ Global Watershed Point
 - SPT/OGSP Point
 - NCDOT Points
 - ▲ Localities
 - ▲ Gauging 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
 - LocaNH2
 - Longest Low at 30
 - Stream Old
 - Global Watershed
 - Pilot Study Area
 - Inupoly

850202



North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Wed Jul 3 2013 07:51:35 Mountain Daylight Time

Site Location: North_Carolina

NAD27 Latitude: 36.5028 (36 30 10)

NAD27 Longitude: -80.8480 (-80 50 53)

NAD83 Latitude: 36.5030 (36 30 11)

NAD83 Longitude: -80.8478 (-80 50 52)

Drainage Area: 4.26 mi²

Percent Urban: 3.2 %

Percent Impervious: 0.2 %

Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (4.26 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	4.26	1	9000
Percent Area in Region 1 (percent)	37.093	0	100
Percent Area in Region 2 (percent)	62.907	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 (4.26 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	4.26	0.04	41
Area of Impervious Surfaces (percent)	0.18 (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	363	35		208	631
PK5	659	34		381	1140
PK10	886	35		503	1560
PK25	1190	38		654	2170
PK50	1430	40		761	2700
PK100	1700	42		870	3300
PK200	1930	44		958	3910
PK500	2310	48		1090	4890

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	30				
PK5U	79.4				
PK10U	130				
PK25U	262				
PK50U	359				
PK100U	478				



850202 SR 1338
DA = 4.2 SO MILES

850202



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION (PMN) ISSUED FOR P-5 OF ABUT. (B)...

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY SURRY BRIDGE NUMBER 850202 INSPECTION CYCLE 2 YRS

ROUTE SR1338 ACROSS CREEK M.P. 0

LOCATION .6 MI.S.JCT.SR1408

SUPERSTRUCTURE STEEL PLANK FLOOR ON I-BEAMS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST&CONC.SILLS @ 5'-10 CENTERS

SPANS 1 @ 50'-6

LONGITUDE 80° 50' 53.4" 80.848166667 LATITUDE 36° 30' 10.6" 36.502444447

PRESENT CONDITION POOR

INVENTORY RATING

INSPECTION DATE 10/05/2011

OPERATING RATING

PRESENT POSTING SV 30 TTST 30 30 TONS

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

Yes	WEIGHT LIMIT	<u>1</u>
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

850202

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

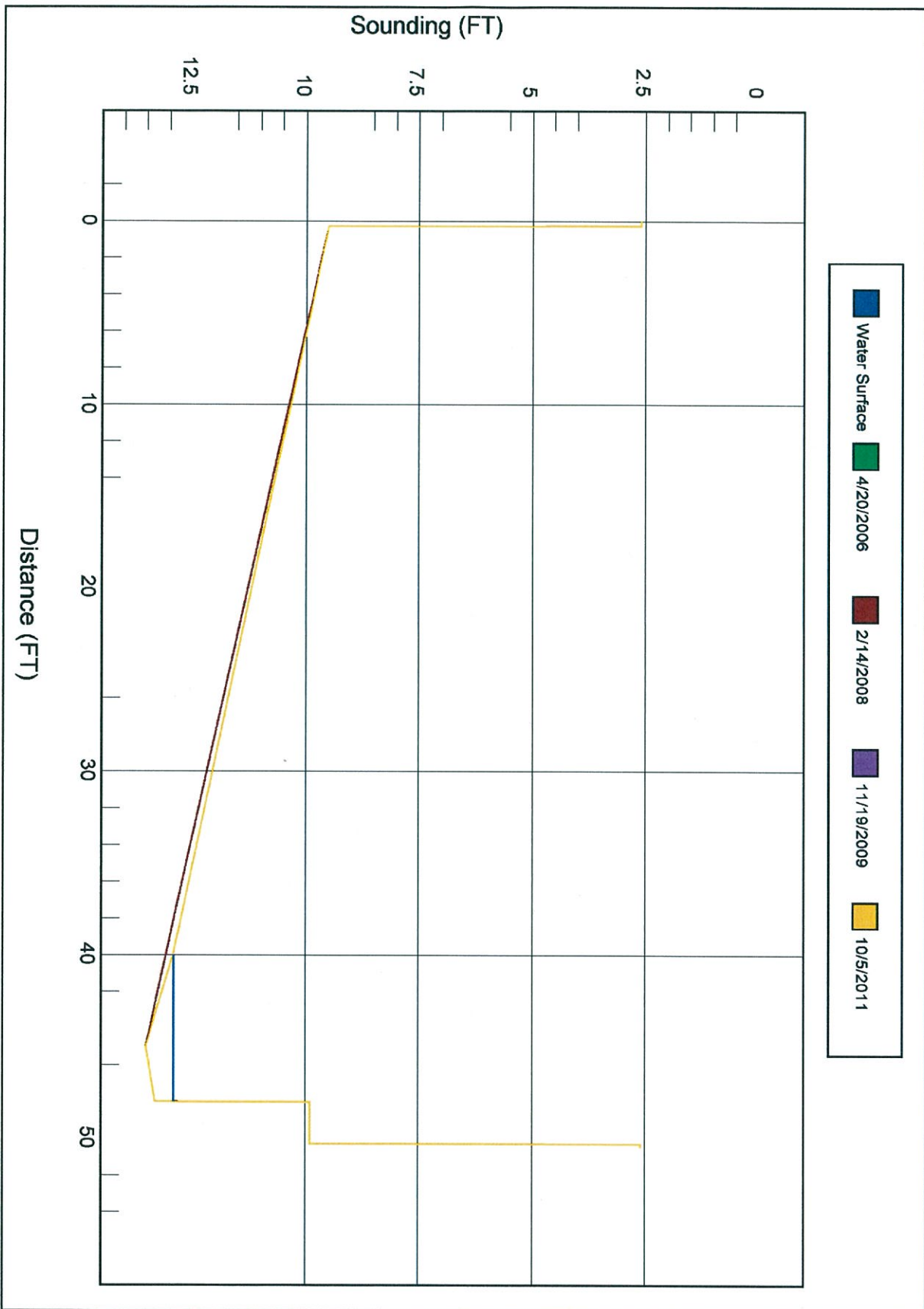
COUNTY : SURREY	DIVISION : 11	DISTRICT : 1	STRUCTURE NUMBER : 850202	LENGTH : 51 FEET
ROUTE CARRIED : SR1338		FEATURE INTERSECTED : CREEK		
LOCATED : .6 MI.S.JCT.SR1408		BRIDGE NAME :		CITY :
FUNC. CLASS : 09	SYST.ON : NFA	SYST.UNDER : NFA	ADT & YR : 660 2008	RAIL TYPE : LT 233 RT 233
BUILT : 1968	BY : BMU	PROJ :	FED.AID PROJ :	DESIGN LOAD : Other or Unknown
REHAB :	BY :	PROJ :	ALIGNMENT : TAN	SKEW : 90
			LANES : ON 2 UNDER	
NAVIGATION : VC 0 FT	HC 0 FT	HT. CRN. TO BED : 11 FT	WATER DEPTH : 1 FT	
SUPERSTRUCTURE : STEEL PLANK FLOOR ON I-BEAMS				
SUBSTRUCTURE : E.BTS:TIMBER CAPS/TIMBER POST&CONC.SILLS @ 5'-10 CENTERS				
SPANS : 1 @ 50'-6				
BEAMS OR GIRDERS : 10 LINES 21 I-BEAMS @ 2'-7 CENTERS				
FLOOR :	ENCROACHMENT :	DECK (OUT TO OUT) : 24.3 FT		
CLEAR ROADWAY : 24 FT	BETWEEN RAILS : 24.6 FT	SIDEWALK OR CURB : LT .3 FT RT .3 FT		
VERT.CL.OVER : 999.9 FT				
INV.RTG. : HS-1	OPE.RTG. : HS-1	CONTR.MEMBER : int bm	POSTED : SV 30	TTST 30 DATE 06/28/2006
SYSTEM : Secondary S.R. Route		GREEN LINE ROUTE : N		

UNDER ROUTES AND CLEARANCES

REMARKS :

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)

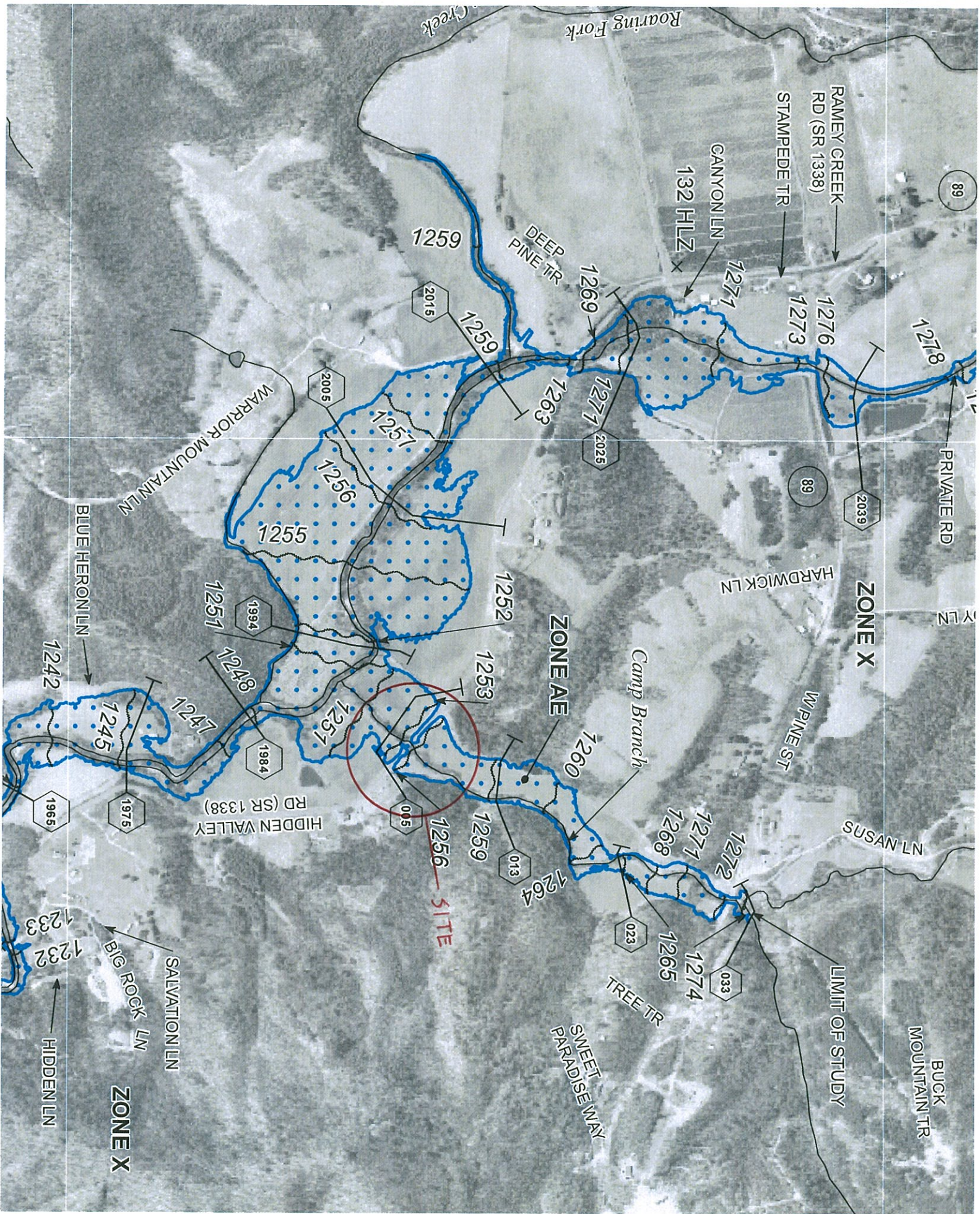




EAST PROFILE



WEST PROFILE



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)
BUTLER CREEK				
026	2,594	1,538	1,270.5	67 / 20
027	2,678	1,538	1,273.0	55 / 31
029	2,864	1,439	1,278.3	65 / 19
030	2,958	1,439	1,279.0	53 / 10
CADDLE CREEK				
004	432	1,736	939.5 ⁴	40 / 26
006	616	1,736	939.5 ⁴	25 / 22
009	897	1,736	939.5 ⁴	15 / 72
013	1,304	1,736	940.0	71 / 10
016	1,635	1,736	941.5	54 / 10
020	2,000	1,736	944.4	56 / 10
024	2,360	1,736	946.9	71 / 10
028	2,845	1,736	951.3	124 / 10
031	3,108	1,736	952.6	140 / 13
035	3,460	1,736	956.6	10 / 67
036	3,633	1,736	957.9	20 / 42
039	3,868	1,736	962.3	12 / 56
041	4,137	1,736	965.1	10 / 27
044	4,435	1,736	969.3	10 / 12
048	4,800	1,736	972.6	10 / 10
052	5,208	1,736	977.8	58 / 10
057	5,656	1,485	980.5	24 / 16
061	6,145	1,485	984.4	64 / 9
066	6,592	1,485	987.4	10 / 93
068	6,800	1,485	989.5	49 / 43
071	7,123	1,485	994.4	67 / 9
073	7,346	1,485	996.7	48 / 9
075	7,540	1,485	999.7	93 / 9
080	7,970	1,423	1,002.0	66 / 20
084	8,358	1,423	1,005.3	76 / 19
086	8,618	1,423	1,007.1	73 / 9
091	9,139	1,423	1,011.8	73 / 6
094	9,426	1,423	1,015.1	36 / 70
096	9,615	1,423	1,017.5	40 / 55
CAMP BRANCH				
001	127	1,857	1,250.5 ⁴	100 / 51
003	259	1,857	1,251.3	59 / 167
005	469	1,857	1,252.6	26 / 161
013	1,273	1,857	1,259.0	13 / 170
016	1,594	1,857	1,260.2	20 / 100
018	1,813	1,857	1,262.5	10 / 60
020	1,981	1,857	1,264.1	10 / 42
023	2,286	1,857	1,264.9	57 / 10
027	2,743	1,857	1,270.5	80 / 13
033	3,293	1,610	1,274.3	110 / 29
CAMP CREEK				
010	1,000	2,421	914.6 ⁵	120 / 26
013	1,250	2,421	914.6 ⁵	18 / 109

STR, STA,
622 BRU

RIVER STA: 6222 BRU

Camp Branch Limited Detail Study Plan: Floodway Run 8/20/2009
Hidden Valley Rd TORStructure ID: LDS_CB_01Approximate Survey

