

OFFICE ESTIMATE

1@ 40, 1@ 50, 1@ 40

PREDESIGN-PRESURVEY REPORT

Project# 45358.1.23

TIP# _____

Let Date _____

WBS# _____

County ALEXANDER (Div. 12)Bridge# 010 079Road# SR 1328 (KIRBY LACKEY RD.)Stream GRASSY CRK.

Type Of Request: POC Force Account TIP NCMA

Date 5/31/13 Name WshAssigned To RCHChecked By MJY 7-16-13Prior Survey Date NONE (attach copy of prior survey)BRN: _____
BK: NONE ✓ CO. FILE NONE ✓Study By Scour Section NONE ✓Flood Zone AE Detail Study LIMITED Date 12/18/07 Panel# 3840B.M. Info NAQuad Map TAYLORSVILLE Drainage Area 11.6 SQ MI From QUADQ25 = 2400 cfs Q50 = 2900 cfs Q100 = 3300 cfs Method REG. EQU. REGION 1FIS Q100 = 4,200 cfs RURAL

EXISTING BRIDGE INFORMATION

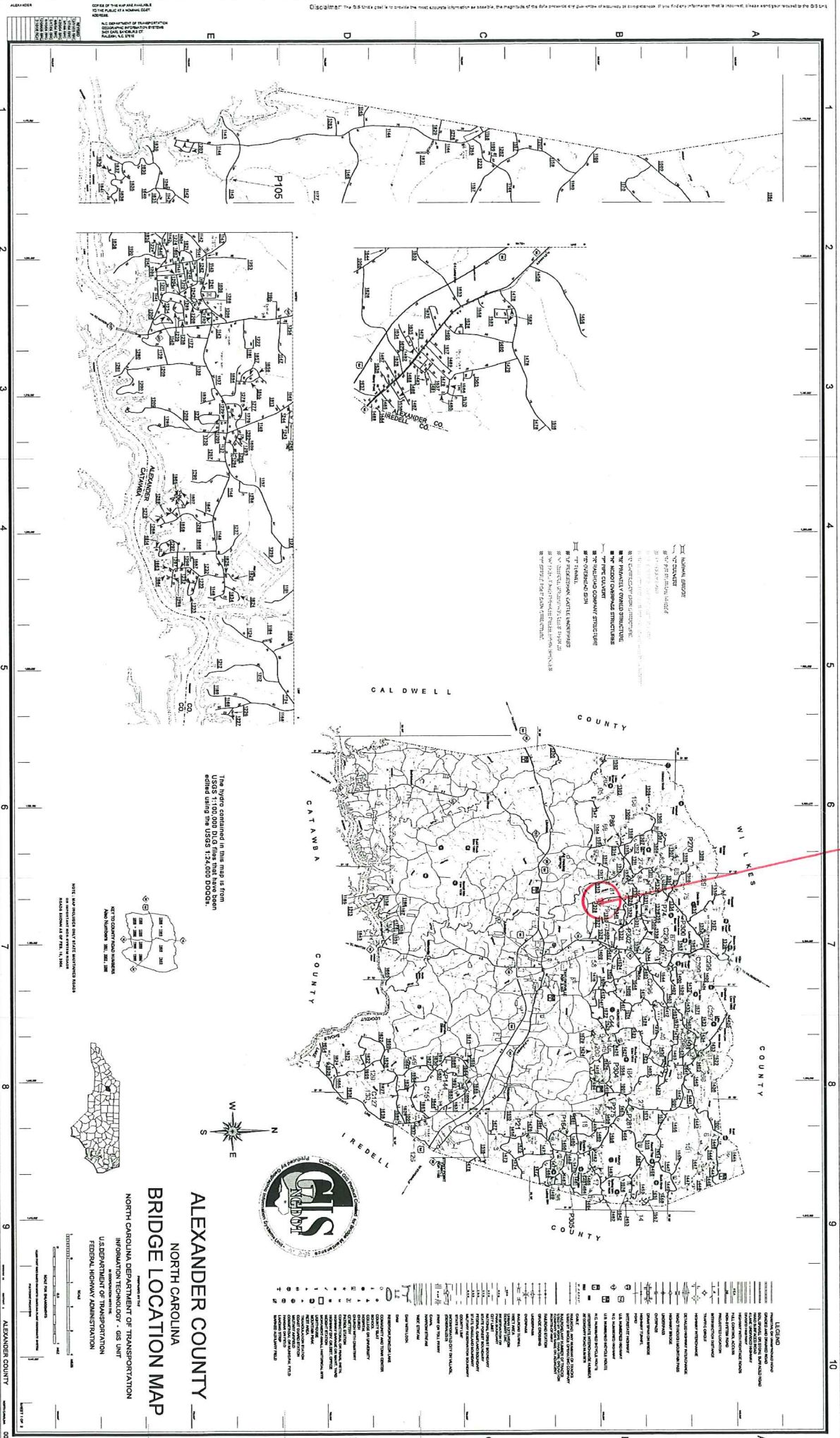
Location 0.4 MI. N. JCT. SR 1313Average Daily Traffic 170 (2010) 6% TRKLength 121' Bed- To Crown 17' Water Depth 2'Type Structure STEEL PLANK DECK ON 1-BEAMS (TIMBER E. B.T.S. CAPS, PILES & BULKHEADS)Type Spans 1c 40'5", 1c 40', 1c 40'5"Upstream Structure 010070 SR 1331Location 0.7 MI. W. JCT. NC16Bed- To Crown 20' (H2O 1' DEEP) Prior Survey _____Downstream Structure FLows DIRECTLY INTO LOWER LITTLE RIVERLocation N/A

Bed- To Crown _____ Prior Survey _____

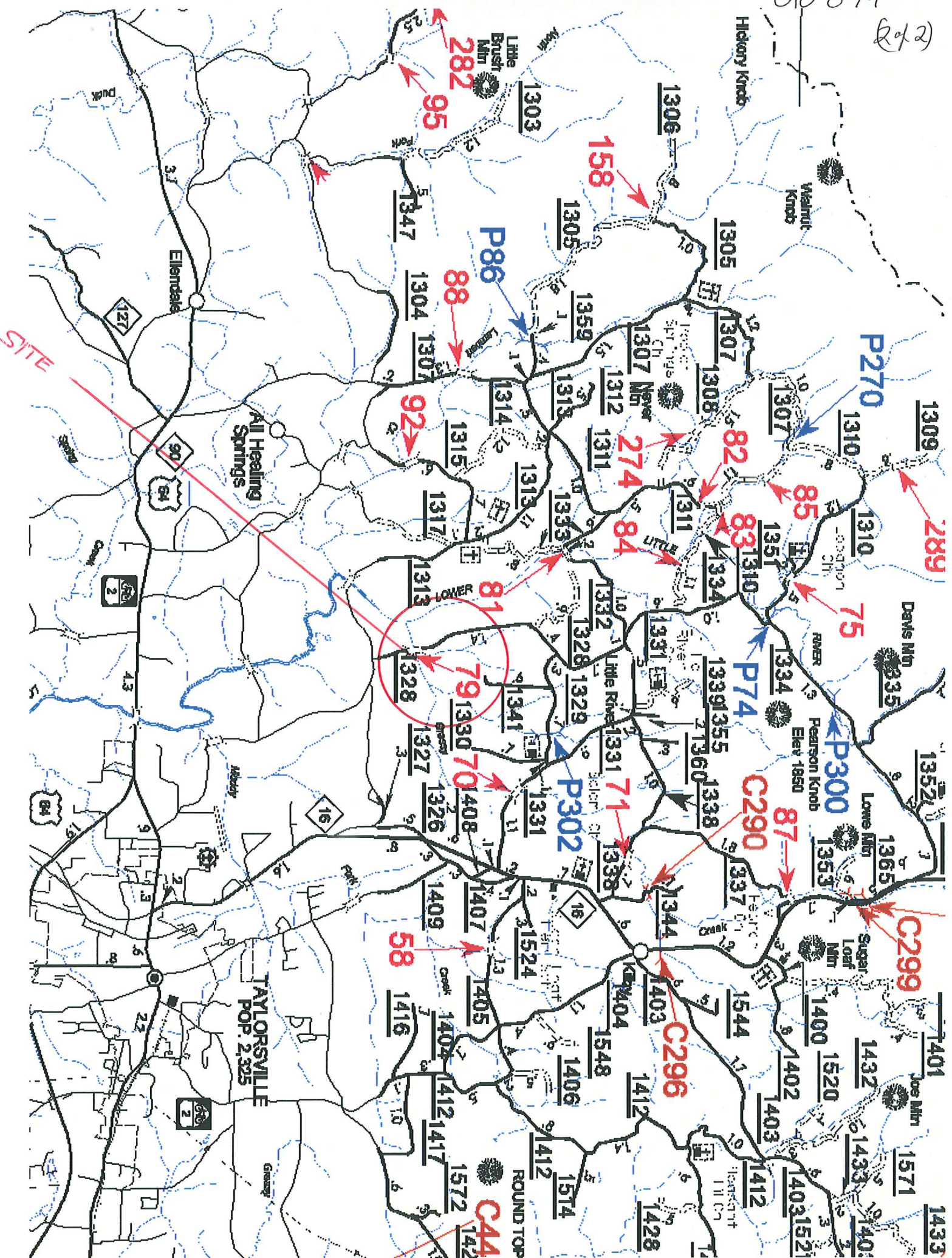
SCS Watershed _____

ENVIRONMENTAL

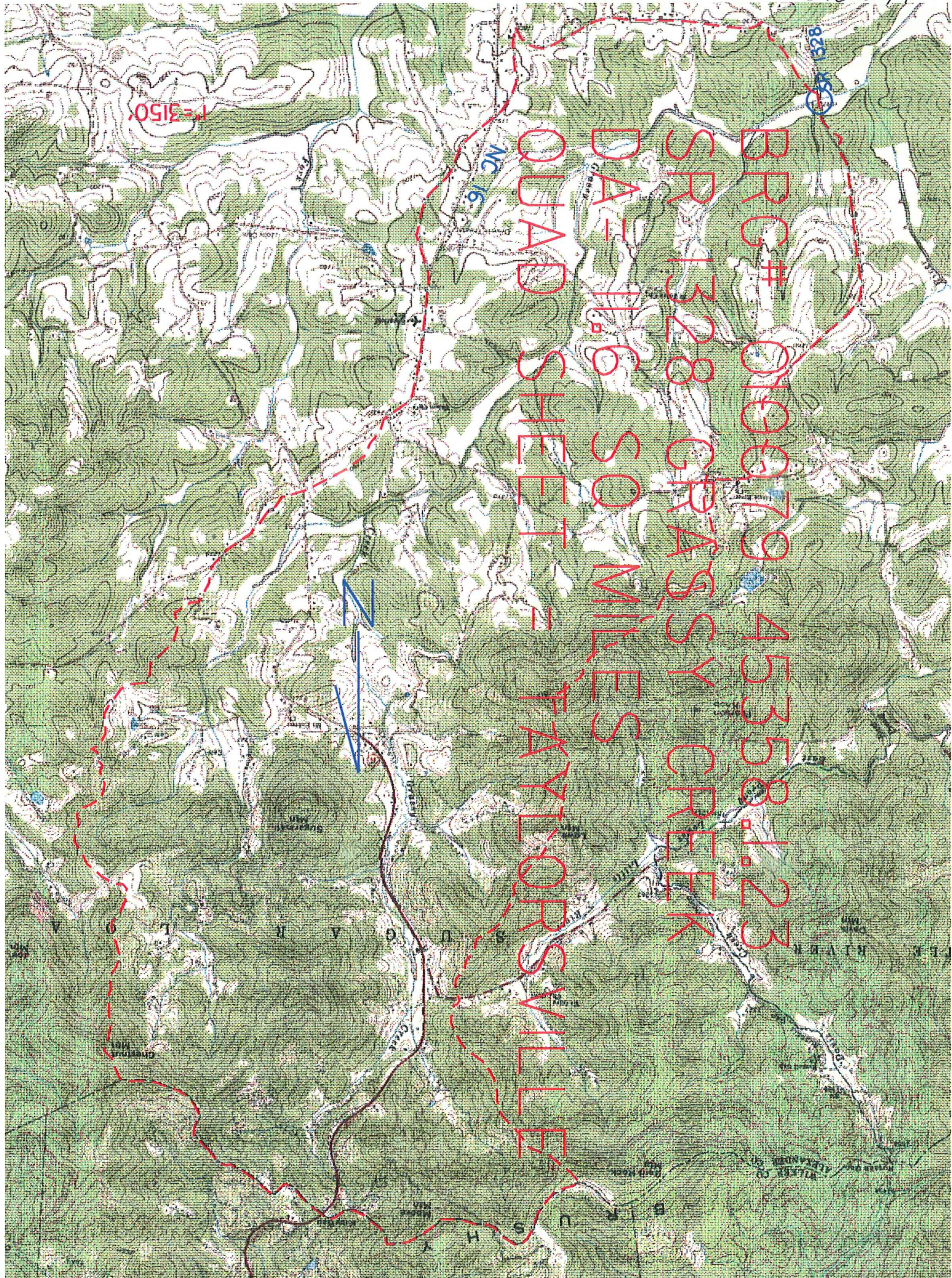
TVA: NO ✓Trout Stream NOAnadromous Fish NO Primary Nursery Area NOHigh Quality Waters NONutrient Sensitive Waters NONear Water Supply Intake NOCAMA County NOStream Classification C# 11-69-2 (FROM SOURCE)DENR River Basin Info. CATAWBA(TO LOWER LITTLE RIVER)L
6/21/13 IN PDR LOG.



SITE #79



010 079



BRG# 010079 45358.1.23
SR 1328 GRASSY CREEK
DA= 11.6 SO MILES
QUAD SHEET - FAYLORSVILLE

3150

NC 16

N

3200

ALEXANDER CO

DAVID ROCK

BUR

SH

CHESTNUT

UGA

POLE RIVER

POLE

RIVER

POLE

RIVER

POLE

RIVER

POLE

RIVER

POLE

RIVER

POLE

RIVER

POLE

RIVER

010079



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ALEXANDER BRIDGE NUMBER 010079 INSPECTION CYCLE 2 YRSROUTE SR1328 ACROSS GRASSY CREEK M.P. 0LOCATION 0.4 MI. N. JCT. SR1313SUPERSTRUCTURE STEEL PLANK DECK ON I-BEAMSSUBSTRUCTURE END & INTERIOR BENTS:TIMBER CAPS & PILES,TIMBER BULKHEADSSPANS 1@40'5, 1@40'0, 1@40'5LONGITUDE 81° 13' 37.46"LATITUDE 35° 57' 13.84"PRESENT CONDITION FAIRINVENTORY RATING INSPECTION DATE 10/02/2012OPERATING RATING PRESENT POSTING SV 30 TTST 30 **30 TONS**PROPOSED POSTING COMPUTER UPDATE ANALYSIS DATE POSTING LETTER DATE SUFFICIENCY RATING OTHER SIGNS PRESENT 4 DELINEATORSSOUTH TO NORTHSIGN NOTICE
ISSUED FORNUMBERED
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>

010079

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 10/24/2012

COUNTY : ALEXANDER DIVISION : 12 DISTRICT : 2 STRUCTURE NUMBER : 010079 LENGTH : 121 FEET

ROUTE CARRIED : SR1328 FEATURE INTERSECTED : GRASSY CREEK

LOCATED : 0.4 MI. N. JCT. SR1313 BRIDGE NAME : CITY :

FUNC. CLASS : 08 SYST.ON : NFA SYST.UNDER : NFA ADT & YR : 170 2010 RAIL TYPE : LT 253 RT 253

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

REHAB : 1985 BY : BMU PROJ : ALIGNMENT : TAN SKEW : 90 LANES : ON 2 UNDER 0

NAVIGATION : VC 0 FT HC 0 FT HT. CRN. TO BED : 17 FT WATER DEPTH : 2 FT

SUPERSTRUCTURE : STEEL PLANK DECK ON I-BEAMS

SUBSTRUCTURE : END & INTERIOR BENTS:TIMBER CAPS & PILES,TIMBER BULKHEADS

SPANS : 1@40'5, 1@40'0, 1@40'5

BEAMS OR GIRDERS : 11 LINES OF W24X68 I-BEAMS @ 2'3 CENTERS

FLOOR : 7GA.STL,1.5 AWS ENCROACHMENT : DECK (OUT TO OUT) : 24.583 FT

CLEAR ROADWAY : 23.75 FT BETWEEN RAILS : 23.75 FT SIDEWALK OR CURB : LT 0 FT RT 0 FT

VERT.CL.OVER : 999.9 FT

INV.RTG. : HS-8 OPE.RTG. : HS-18 CONTR.MEMBER : intpile 2 POSTED : SV 30 TTST 30 DATE 03/28/2007

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

UNDER ROUTES AND CLEARANCES

REMARKS :

010079

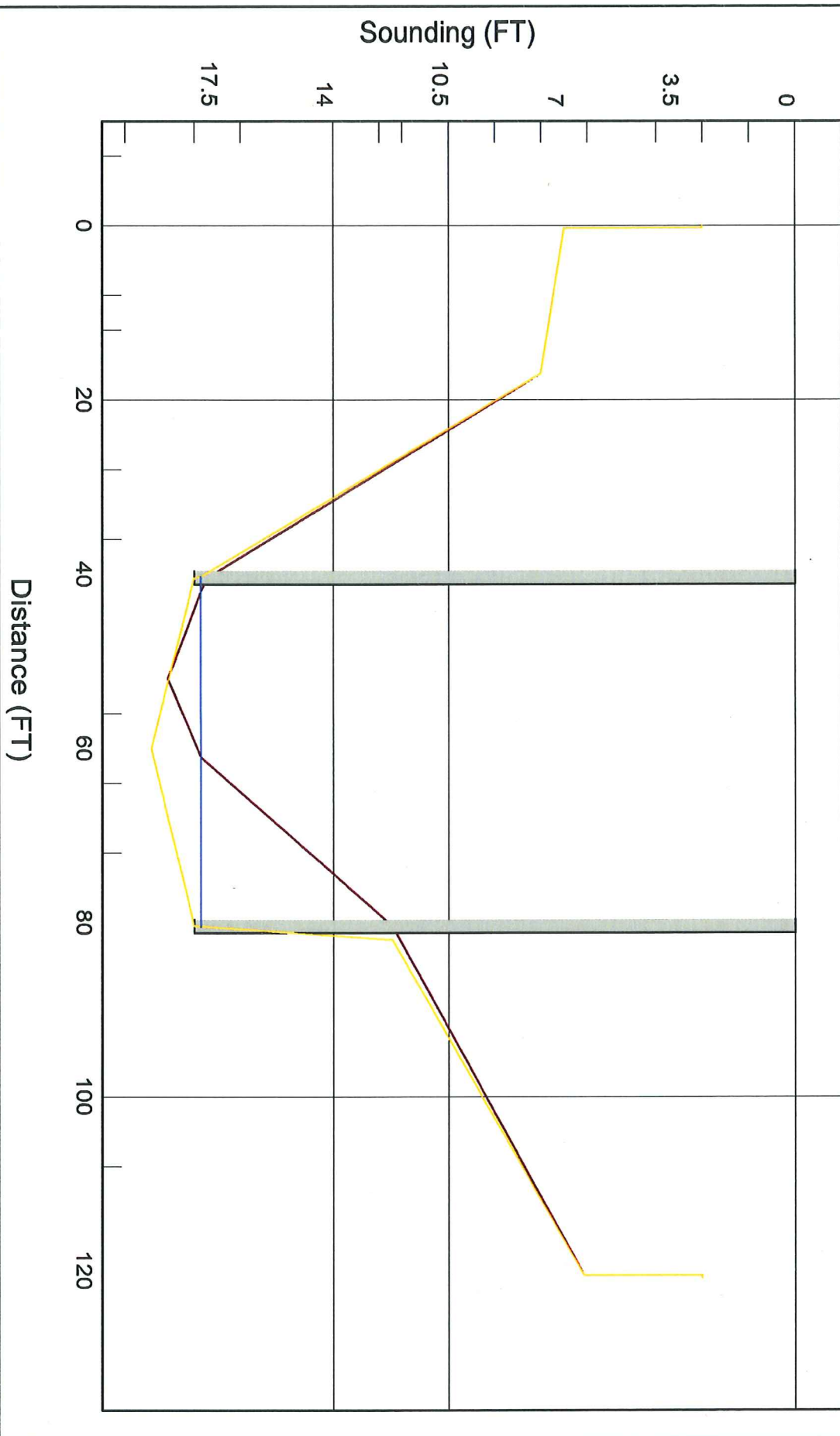
Bridge: 010079

County ALEXANDER

Date: 10/02/2012

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)



010079

Structure 010079

County ALEXANDER

Date: 10/02/2012

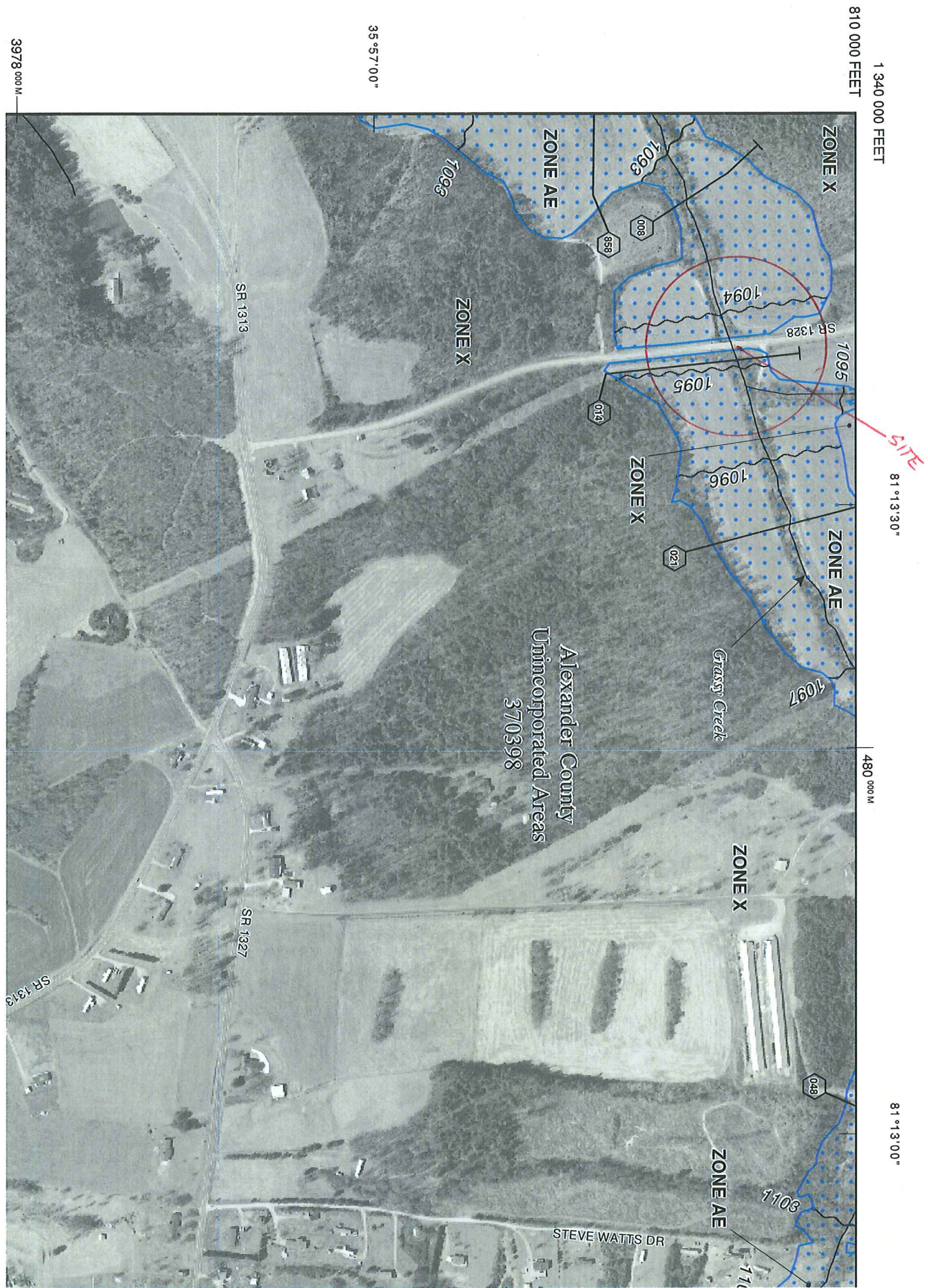
Structure Photos



NORTH FACE PIER (1) AND ABUT. (A)



EAST PROFILE



1 340 000 FEET

810 000 FEET

81°13'30"

480 000 M

81°13'00"

3978 000 M

35°57'00"

Section 5.0 – Engineering Methods

Table 9—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 (feet) ³
GLADE CREEK TRIBUTARY 1				
001	147	488	1,014.9 ⁴	17 / 13
004	352	488	1,016.4	27 / 12
004	427	488	1,020.6	61 / 14
007	725	488	1,020.6	27 / 15
010	993	488	1,025.5	15 / 5
015	1,473	488	1,031.3	12 / 15
018	1,765	451	1,033.3	14 / 11
019	1,891	451	1,035.9	13 / 15
020	1,982	451	1,041.8	21 / 24
021	2,107	451	1,042.5	47 / 11
024	2,380	387	1,046.8	24 / 13
029	2,925	387	1,053.6	16 / 16
034	3,443	320	1,061.5	25 / 6
039	3,915	320	1,074.7	24 / 6
043	4,279	204	1,081.5	12 / 13
048	4,754	204	1,093.1	7 / 7
GRASSY CREEK				
008	758	4,180	1,092.9 ⁴	50 / 182
013	1,282	4,180	1,094.1	119 / 114
014	1,421	4,180	1,095.3	121 / 116
021	2,101	4,180	1,096.5	191 / 125
030	3,046	4,180	1,097.3	42 / 114
039	3,881	3,720	1,098.6	30 / 35
048	4,796	3,720	1,101.5	42 / 28
059	5,911	3,720	1,104.8	27 / 26
067	6,735	3,720	1,108.5	33 / 40
075	7,508	3,720	1,110.3	61 / 43
086	8,565	3,720	1,112.3	38 / 42
101	10,066	3,720	1,117.3	60 / 35
113	11,316	3,380	1,121.4	46 / 39
119	11,887	3,380	1,122.9	48 / 40
121	12,068	3,380	1,124.6	53 / 53
124	12,390	3,380	1,125.8	27 / 26
130	13,040	3,380	1,136.6	39 / 29
137	13,737	3,380	1,148.7	39 / 34
148	14,831	3,380	1,155.3	132 / 36
156	15,638	3,380	1,158.1	163 / 28
166	16,578	3,380	1,161.7	255 / 36
175	17,488	3,380	1,164.1	174 / 26
185	18,493	2,950	1,168.5	35 / 35
186	18,632	2,950	1,170.2	31 / 39

STR. STA.
1350.48 BR.U.

RIVER STA. 1350.48 BR. U.

GrassyCreek Plan: Approximate Study - 100 YR 1/28/2008

Kirby Lick Rd, SR 1328; Bridge : 37003-0012

