

OFFICE ESTIMATE 1 @ 70' Bridge

020057

PREDESIGN-PRESURVEY REPORT

Project# _____
TIP# _____
Let Date _____
WBS# 17BP.11.R74

County Alleghany

Bridge# 020057
Road# SR 1193 (Cleary Rd.)
Stream Waterfalls Creek

Type Of Request: POC Force Account TIP NCMA

Date 7/15/13 Name M. G. S

Assigned To RCH

Checked By Wsh. 7-22-13

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

Study By Scour Section No

Flood Zone X Detail Study No Date - Panel# 3969 (Panel not available)

B.M. Info N/A (2490 AC)

Quad Map Whitehead Drainage Area 3.89 SQ. MI. From USGS / Stream stats

Q25 1060 cfs Q50 1270 cfs Q100 1520 cfs Method Regression EQU.
1100 cfs 1300 cfs 1500 cfs RURAL REGION: 2

EXISTING BRIDGE INFORMATION

Location 0.1 MI S. JCT. SR 1131 ✓

Average Daily Traffic 350 YR 2008 (6% TRK)

Length 41 ft Bed-To Crown 9 ft Water Depth 1 ft

Type Structure Timber floor Salvaged I-Beams

Type Spans 1 @ 40'-6" single span

Upstream Structure 020258 ✓ Timber floor on Sal. I-beams ✓

Location 400 ft. W. JCT SR 1131

Bed-To Crown 14 ft. (WD = 1 ft.) Prior Survey -

Downstream Structure 020039 ✓ (RC floor on stl. gdr. (SIP met) forms)

Location 150 ft. N. JCT. SR 1131

Bed-To Crown 14 ft. (WD = 1 ft.) Prior Survey -

SCS Watershed N/A

ENVIRONMENTAL TVA No ✓

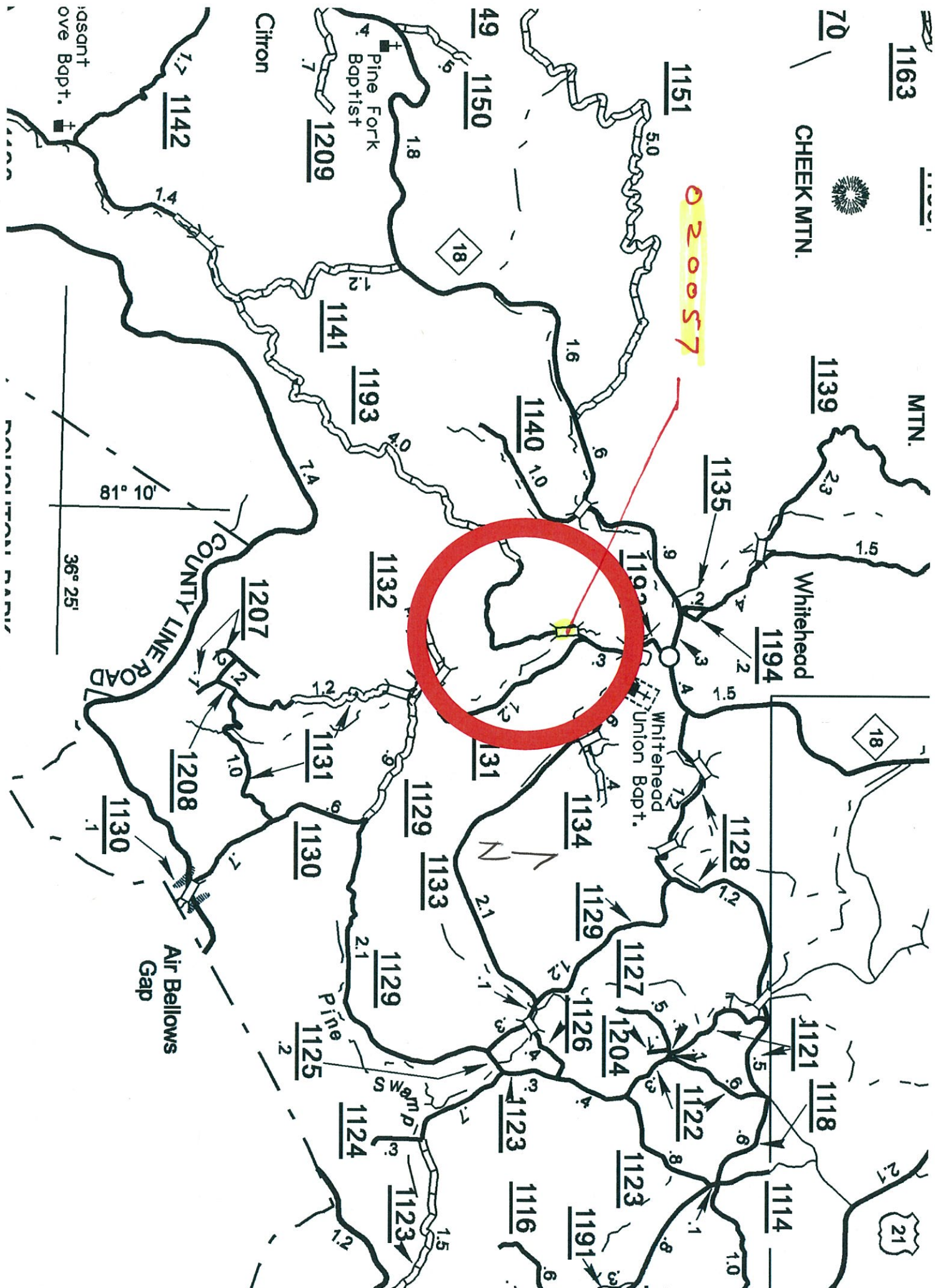
Trout Stream Yes ✓ Anadromous Fish No Primary Nursery Area No ✓

High Quality Waters No ✓ Nutrient Sensitive Waters No ✓

Near Water Supply Intake No ✓ CAMA County No ✓

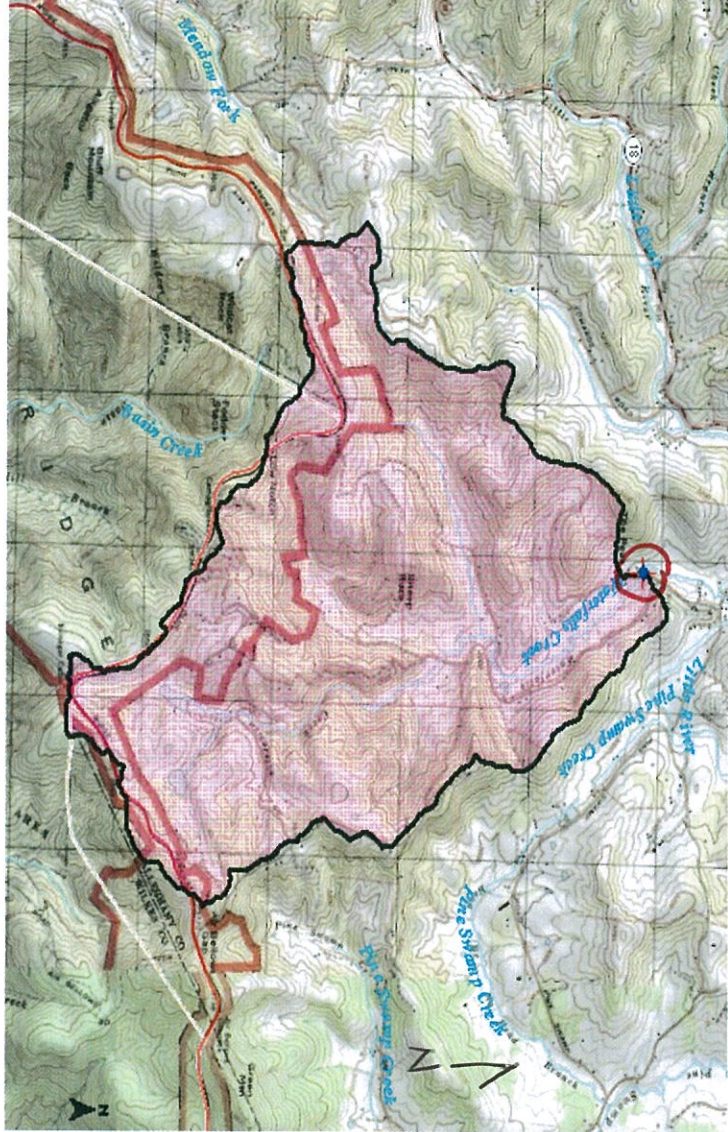
Stream Classification CJ Tr ✓ # 10-9-4 (FROM SOURCE TO LITTLE RIVER)

DENR River Basin Info. New





StreamStats Print Page



- Explanation**
- ★ Global Watershed Point
 - ☆ SPT/OSFP Point
 - NC DOT Points
 - ▲ Local Bridges
 - ▲ 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
 - Local NHD2
 - Longest Flowpath NHD
 - Stream Grid
 - Global Watershed
 - Pick Study Area
 - Inupoly

7/10/2013 6:51:01 AM



North Carolina StreamStats

Streamstats Ungaged Site Report

Date: Wed Jul 10 2013 06:51:09 Mountain Daylight Time

Site Location: North_Carolina

NAD27 Latitude: 36.4589 (36 27 32)

NAD27 Longitude: -81.1553 (-81 09 19)

NAD83 Latitude: 36.4590 (36 27 32)

NAD83 Longitude: -81.1551 (-81 09 18)

Drainage Area: 3.89 mi² — 2490 AC

Percent Urban: 7.3 %

Percent Impervious: 0.4 %

Peak Flows Region Grid Basin Characteristics			
100% Peak Southeast US 2009 5158 (3.89 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.89	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 (3.89 mi ²)			
Parameter	Value	Regression Equation Valid Range	
		Min	Max
Drainage Area (square miles)	3.89	0.04	41
Area of Impervious Surfaces (percent)	0.37 (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	316	35		180	554
PK5	578	34		332	1010
PK10	784	35		442	1390
PK25	1060	38		578	1960
PK50	1270	40		667	2420
PK100	1520	42		769	2990
PK200	1730	44		847	3540
PK500	2070	48		962	4440

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	45.9				
PK5U	113				
PK10U	178				
PK25U	339				
PK50U	452				
PK100U	586				



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION

PRIORITY MAINTENANCE NOTICE ISSUED FOR
WEIGHT LIMIT

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection - Contract

COUNTY ALLEGHANY

BRIDGE NUMBER 020057

INSPECTION CYCLE 0 YRS

ROUTE SR1193

ACROSS WATERFALL CREEK

M.P. 0

LOCATION .1 MI.S.JCT.SR1131

SUPERSTRUCTURE TIMBER FLOOR SALVAGED I-BEAMS

SUBSTRUCTURE E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ VAR.CENTERS

SPANS 1 @ 40'-6

LONGITUDE 81° 9' 18.11"

LATITUDE 36° 27' 32.60"

PRESENT CONDITION FAIR

INVENTORY RATING

INSPECTION DATE 09/05/2012

OPERATING RATING

PRESENT POSTING SV 41 TTST 44 SV 41 TTST 44

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT (4) DELINEATORS; (2) NARROW BRIDGE SIGN



SOUTH APPROACH LOOKING NORTH

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

Yes	WEIGHT LIMIT	1
No	DELINEATORS	
No	NARROW BRIDGE	
No	ONE LANE BRIDGE	
No	LOW CLEARANCE	

BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE

Run Date: 10/22/2012

COUNTY :
ALLEGHANYDIVISION :
11DISTRICT :
1STRUCTURE NUMBER :
020057LENGTH :
41 FEETROUTE CARRIED :
SR1193FEATURE INTERSECTED :
WATERFALL CREEKLOCATED :
.1 MI.S.JCT.SR1131

BRIDGE NAME :

CITY :

FUNC. CLASS :
09SYST.ON :
NFASYST.UNDER :
NFAADT & YR :
350 2008RAIL TYPE :
LT 227 RT 227BUILT :
1961BY :
BMU

PROJ :

FED.AID PROJ :

DESIGN LOAD :
Unknown

REHAB :

BY :

PROJ :

ALIGNMENT :
TANSKEW :
90LANES :
ON 2 UNDER 0NAVIGATION :
VC 0 FT

HC 0 FT

HT. CRN. TO BED :
9 FTWATER DEPTH :
1 FTSUPERSTRUCTURE :
TIMBER FLOOR SALVAGED I-BEAMSSUBSTRUCTURE :
E.BTS:TIMBER CAPS/TIMBER POST&SILLS @ VAR.CENTERSSPANS :
1 @ 40'-6BEAMS OR GIRDERS :
13 LINES 18 I-BEAMS @ 1'-6 CENTERSFLOOR :
4X8 TIM/1 AWS

ENCROACHMENT :

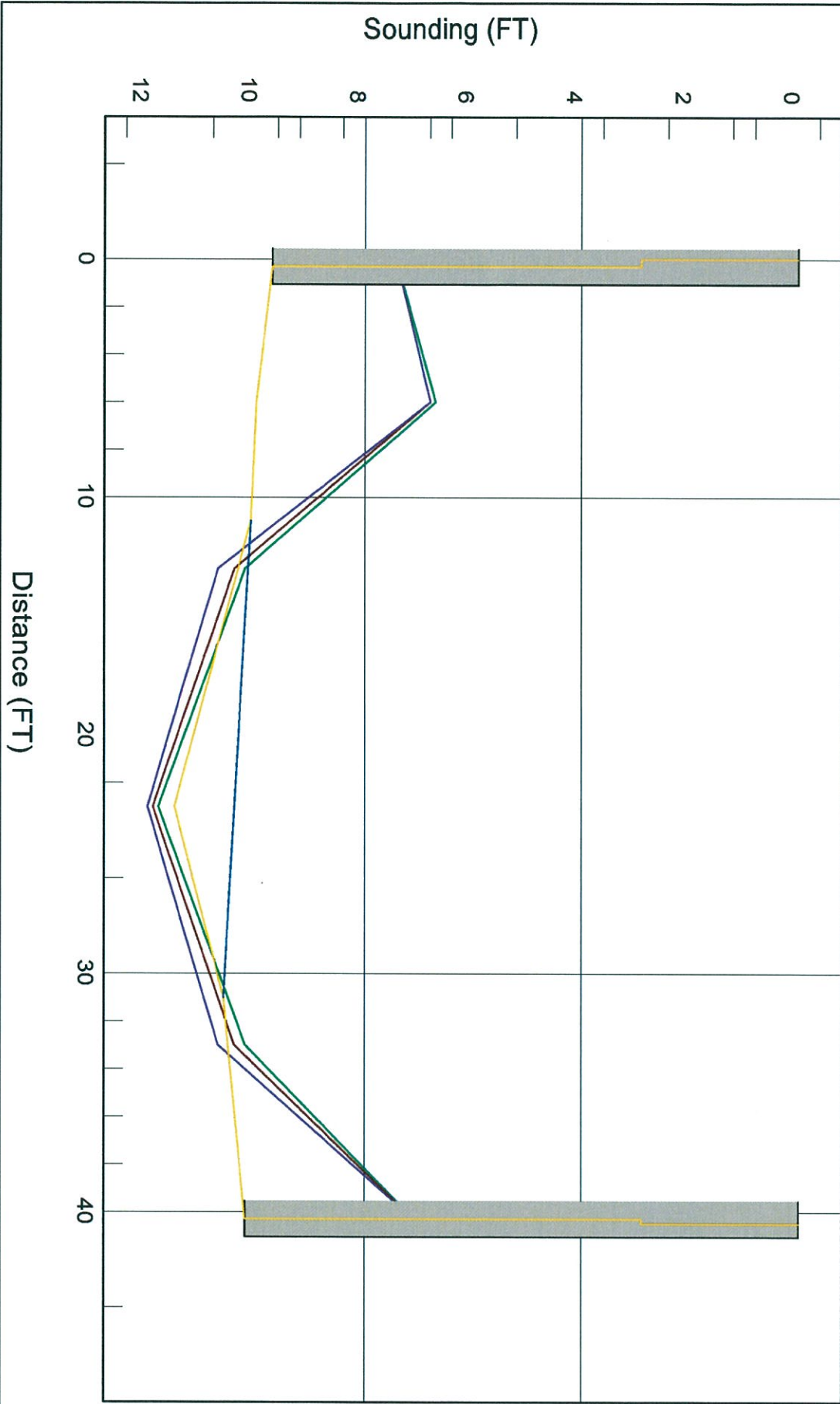
DECK (OUT TO OUT) :
20 FTCLEAR ROADWAY :
19.083 FTBETWEEN RAILS :
19.75 FTSIDEWALK OR CURB :
LT .3 FT RT .3 FTVERT.CL.OVER :
999.9 FTINV.RTG. :
HS-1OPE.RTG. :
HS-1CONTR.MEMBER :
intbm#4POSTED :
SV 41 TTST 44 DATE 02/24/2009SYSTEM :
Secondary S.R. RouteGREEN LINE ROUTE :
N

UNDER ROUTES AND CLEARANCES

REMARKS :

Top of Rail = 0 FT (Sounding)

STREAMBED PROFILE (Downstream)





EAST ELEVATION



SOUTHEAST NARROW BRIDGE SIGN (NORTHWEST SIMILAR)