

NO BRIDGE IN MODEL.
MOA POSSIBLE.
GOOD CANDIDATE

PREDESIGN-PRESURVEY REPORT

County Columbus

Type Of Request: POC Force Account TIP NCMA

Date 8/1/2011 Name Sungate Design

Checked By JGD

Prior Survey Date None (attach copy of prior survey)

Study By Scour Section No

Flood Zone Yes Detail Study Limited Date 6/2/06 Panel# 0182

B.M. Info EB0609 T 225

Quad Map Pireway Drainage Area 3.6 Sq Miles From USGS Quad Map
Q25 530 cfs Q50 670 cfs Q100 810 cfs Method Rural Regression Eqs

Project# _____

TIP# _____

Let Date _____

WBS# 17BP.6.R.20

Bridge# 230075

Road# SR 1006

Name MM Ray Rd

Stream Big Branch

into Monte Swamp

Assigned To _____

EXISTING BRIDGE INFORMATION

Location 0.1 miles east of junction with SR 1141

Average Daily Traffic 460

Length 37'-0" Bed- To Crown 10' Water Depth 4'

Type Structure Reinforced concrete deck on I-beams, RC caps and timber piles

Type Spans 1 @ 18'-8", 1 @ 18'-4"

Upstream Structure N/A

Location _____

Bed- To Crown _____ Prior Survey _____

Downstream Structure Quad 12'x 9' RCBC; 43'-8" Along Centerline Culvert

Location SR 1108

Bed- To Crown 12' Prior Survey _____

SCS Watershed _____

ENVIRONMENTAL

Trout Stream No Anadromous Fish No Primary Nursery Area No

High Quality Waters No Nutrient Sensitive Waters No

Near Water Supply Intake No CAMA County No

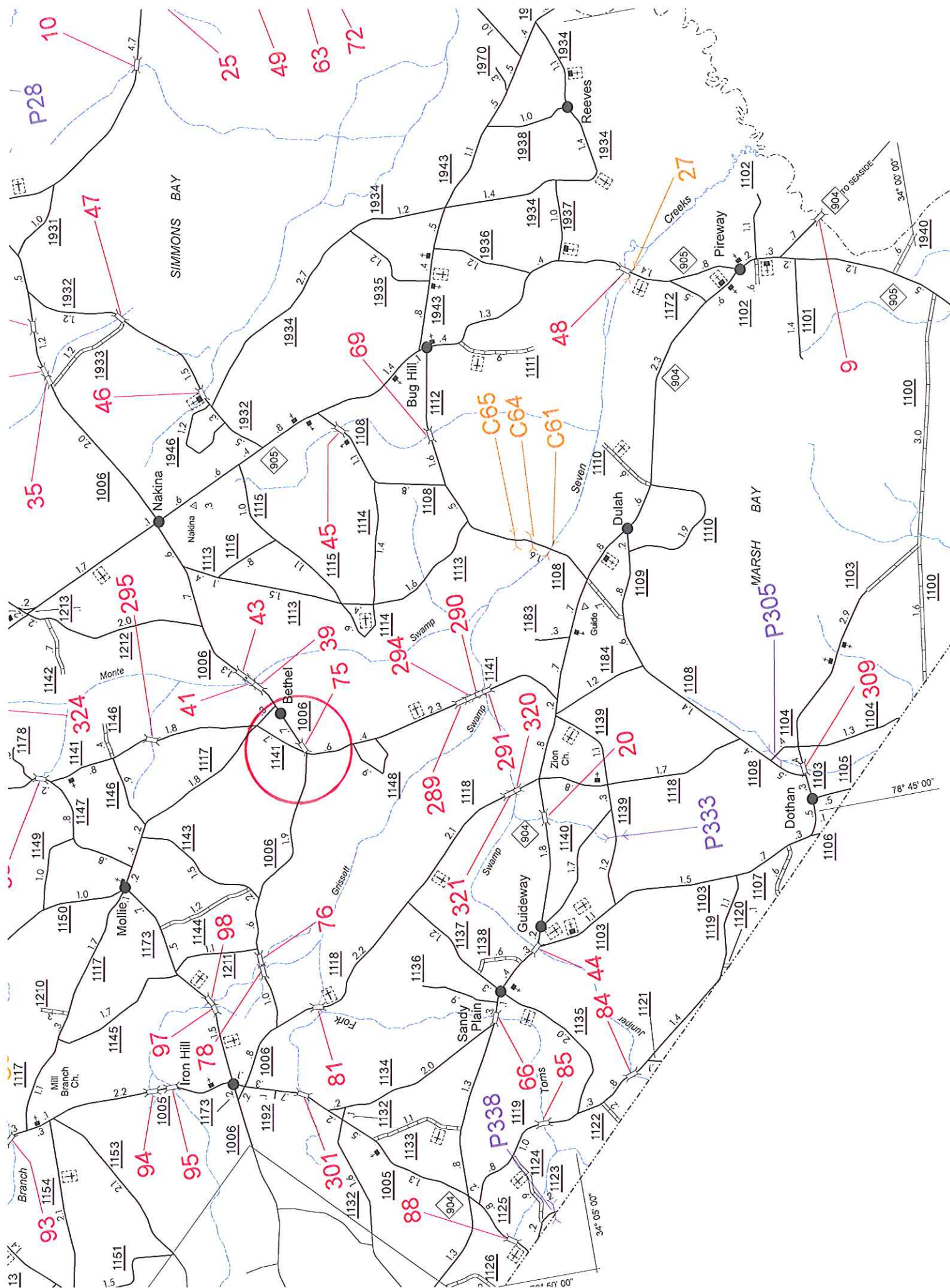
Stream Classification Class C, Sw

DENR River Basin Info. Lumber

State Stormwater Permit Not Required

Estimated Min. Bridge Length = 75'

$$37' + 20' + 3(6') = 75'$$





NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION SIGN NOTICE ISSUED 10/19/2010
CHANGES TO STRUCTURE DATA

BRIDGE INSPECTION REPORT

INSPECTION TYPE: 2 Year Complete Underwater and Topside

COUNTY COLUMBUS BRIDGE NUMBER 230075 INSPECTION CYCLE 2 YRS
ROUTE SR1006 ACROSS CREEK M.P. 0

LOCATION 0.1 MI E JCT SR1141

SUPERSTRUCTURE RC FLOOR ON I-BEAMS

SUBSTRUCTURE EBTS&BT:RC CAP/TIMBER PILES @ 7'4CTS.

SPANS 1@18'8";1@18'4"

LONGITUDE 78° 43' 5.4"

LATITUDE 34° 7' 1.7"

PRESENT CONDITION POOR

INVENTORY RATING

INSPECTION DATE 10/18/2010

OPERATING RATING

PRESENT POSTING SV 17 TTST 24

PROPOSED POSTING

COMPUTER UPDATE

ANALYSIS DATE

POSTING LETTER DATE

SUFFICIENCY RATING

OTHER SIGNS PRESENT



LOOKING EAST

SIGN NOTICE
ISSUED FOR

NUMBERED
REQUIRED

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



NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
BRIDGE MANAGEMENT UNIT

ATTENTION SIGN NOTICE ISSUED 10/19/2010
CHANGES TO STRUCTURE DATA

UNDERWATER BRIDGE INSPECTION REPORT

INSPECTION TYPE: 2 Year Complete Underwater and Topside

COUNTY COLUMBUS BRIDGE NUMBER 230075 INSPECTION CYCLE 2 YRS

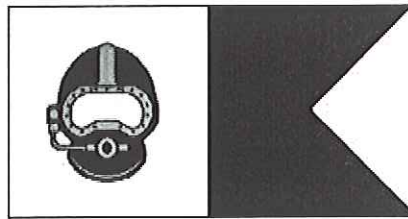
ROUTE SR1006 ACROSS CREEK

Inspection Date 10/18/2010

Inspected By WILLIAM MUELLER

Type Work Performed

Man Hours (Spec. Work Only)



EQUIPMENT USED
COMPRESSOR ☐ WET SUIT ☐ COMMUNICATION - AMRON ☐
SCUBA ☐ DRY SUIT ☒ COMMUNICATION OTS ☐
LIGHTS ☒ ROPE ☐ UNDERWATER PHOTOS TAKEN ☐
BOAT ☐ CONSTRUCTION EQUIPMENT ☐

DATE	DIVER	CURRENT	VISIBILITY	METEOROLOGY	DEPTH	DIVE TIME
10/18/2010	LJH	NONE	1.0'	82 DEG/CLEAR	4.4'	40 MIN.

BRIDGE MANAGEMENT UNIT
DATA ON EXISTING STRUCTURE

Run Date: 11/23/2010

COUNTY : COLUMBUS		DIV : 6		DIST : 3		STRUCTURE NUMBER : 230075		LENGTH : 37 FEET	
ROUTE CARRIED : SR1006				FEATURE INTERSECTED : CREEK					
LOCATED : 0.1 MI E JCT SR1141				BRIDGE NAME :				CITY :	
FUNC. CLASS : 08		SYST.ON : NFA		SYST.UNDER : NFA		ADT & YR : 460 2009		RAIL TYPE : LT 241 RT 241	
BUILT : 1950		BY : SHPWC		PROJ :		FED.AID PROJ :		DESIGN LOAD : H 10	
REHAB :		BY :		PROJ :		ALIGNMENT : TAN.		SKEW : 90	
								LANES : ON 2 UNDER	
NAVIGATION : VC 0.0 FT HC 0.0 FT				HT. CRN. TO BED : 10 FT				WATER DEPTH : 4 FT	
SUPERSTRUCTURE : RC FLOOR ON I-BEAMS									
SUBSTRUCTURE : EBTS&BT:RC CAP/TIMBER PILES @ 7'4CTS.									
SPANS : 1@18'8;1@18'4									
BEAMS OR GIRDERS : 12 LINES W12X16.5 I-BEAMS @ 2'2.5CENTERS									
FLOOR : 5RC/1AWS		ENCROACHMENT :				DECK (OUT TO OUT) : 25.3 FT			
CLEAR ROADWAY : 24.0 FT		BETWEEN RAILS : 25.5 FT				SIDEWALK OR CURB : LT 0.8 FT RT 0.8 FT			
VERT.CL.OVER : 99 FT 99 IN		VERT.CL.UNDER : 00 FT 00 IN				HOR.CL.UNDER : 0.0 FT			
INV.RTG. : HS-9		OPE.RTG. : HS-15		CONTR.MEMBER : BEAM INT.		POSTED : SV 17 TTST 24		DATE 02/10/2009	
SYSTEM : Secondary S.R. Route						GREEN LINE ROUTE : N			
2ND OPENING :		3RD OPENING :		4TH OPENING :		5TH OPENING :			
REMARKS :									

Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 230075 County: COLUMBUS Date: 10/18/2010 By: WRM

Record sounding from top of rail. Other location if needed: DOWNSTREAM END TOP OF RAIL

Distance from Highwater Mark to top of rail: Location of Highwater Mark:

DOWNSTREAM			UPSTREAM		
Distance (Station) (ft)	Sounding (ft)	Description	Distance (Station) (ft)	Sounding (ft)	Description
0	2.6	GROUND AT BULKHEAD			
0.1	2.5	TOP OF BULKHEAD			
0.2	3.9	Top of Cap			
0.3	5.6	Water Surface/Water Edge (WSWE)			
1	8.4	END BENT 1	1	7.2	END BENT 1
7	9.2				
13	10.8				
18.6	9.5	BENT 1	18.6	10	BENT 1
25.2	8.2				
31.2	7.5				
37.6	5.6	Water Surface/Water Edge (WSWE)			
37.7	5.8	END BENT 2	37.7	7.2	END BENT 2
37.8	3.9	Top of Cap			
38.4	2.5	TOP OF BULKHEAD			
38.5	2.6	GROUND AT BULKHEAD			

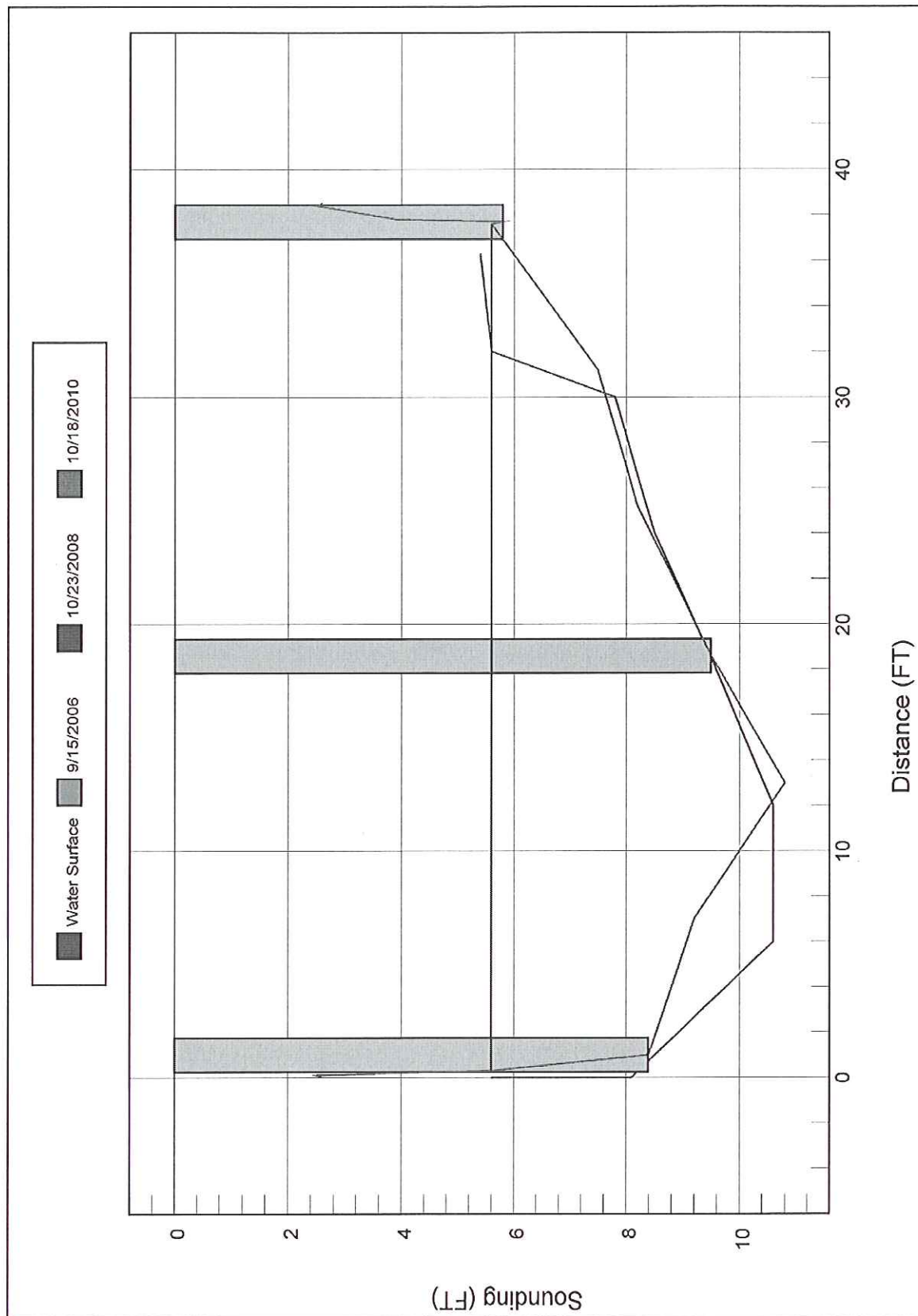
Bridge: 230075

County COLUMBUS

Date: 10/18/2010

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)

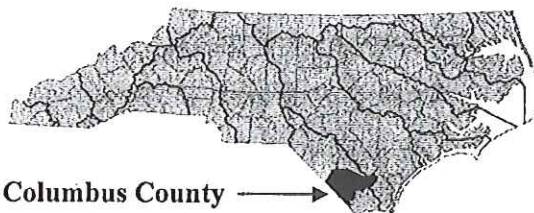


FLOOD INSURANCE STUDY

A Report of Flood Hazards in

COLUMBUS COUNTY, NORTH CAROLINA

AND INCORPORATED AREAS



Community Name	Community Number	River Basins
Boardman, Town of	370659	Lumber
Bolton, Town of	370274	Cape Fear/Lumber
Cerro Gordo, Town of	370311	Lumber
Chadbourn, Town of	370065	Lumber
Columbus County (Unincorporated Areas)	370305	Cape Fear/Lumber
Fair Bluff, Town of	370067	Lumber
Lake Waccamaw, Town of	370069	Lumber
Sandyfield, Town of	370644	Cape Fear
Tabor City, Town of	370070	Lumber
Whiteville, City of	370071	Lumber



June 2, 2006

**Federal Emergency Management Agency
State of North Carolina**

**Flood Insurance Study Number
37047CV000A**

www.fema.gov and www.ncfloodmaps.com



Section 4.0 – Area Studied

Table 6—Flooding Sources Studied by Detailed Methods: Limited Detailed

Source	Riverine Sources		Affected Communities
	From	To	
Bay Branch	Confluence with Big Branch	Approximately 1.1 miles upstream of Big Branch Road	Columbus County (Unincorporated Areas)
Beaverdam Creek	Confluence with Waymans Creek	Columbus/Bladen County Boundary	Town of Sandyfield, Columbus County (Unincorporated Areas)
Beaverdam Swamp	At the confluence with Monte Swamp	Approximately 0.5 mile upstream of Chadbourne Clarendon Road	Columbus County (Unincorporated Areas)
Big Branch	Confluence with Livingston Creek	Approximately 1.2 miles upstream of the confluence with Livingston Creek	Columbus County (Unincorporated Areas)
Big Branch into Beaverdam Swamp	At the confluence with Beaverdam Swamp	Approximately 900 feet downstream of Railroad	Columbus County (Unincorporated Areas)
Big Branch into Monte Swamp	At the confluence with Monte Swamp	Approximately 1.4 miles upstream of M M Ray Road	Columbus County (Unincorporated Areas)
Big Branch into Western Prong Creek	At the confluence with Western Prong Creek	Approximately 1,700 feet upstream of Greens Mill Road Swamp	Columbus County (Unincorporated Areas)
Big Branch into Monte Swamp Tributary	At the confluence with Big Branch into Monte Swamp	Approximately 1.4 miles upstream of Lebanon Church Road	Columbus County (Unincorporated Areas)
Big Creek into Marlow Branch	At the confluence with Marlow Branch	Approximately 0.5 mile upstream of Big Avenue	Columbus County (Unincorporated Areas)
Big Creek into Marlow Branch Tributary	At the confluence with Big Creek into Marlow Branch	Approximately 1.0 mile upstream of the confluence with Big Creek into Marlow Branch	Columbus County (Unincorporated Areas)
Big Cypress Swamp	At the confluence with Seven Creeks	Approximately 0.9 mile upstream of Ramsey Ford Road	Columbus County (Unincorporated Areas)
Big Freshwater Branch	At the confluence with Gapway Swamp	Approximately 1.0 mile upstream of Peanut Worley Road	Columbus County (Unincorporated Areas)

Section 5.0 – Engineering Methods

Table 7—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
Big Branch (continued)	Approximately 0.42 mile upstream of confluence with Bay Branch	5.4	*	*	1,219	*
	Approximately 1.04 miles upstream of confluence with Bay Branch	4.5	*	*	1,101	*
Big Branch into Beaverdam Swamp	Approximately 2,200 feet downstream of Mercer Road	2.40	*	*	720	*
	Approximately 1,850 feet upstream of Mercer Road	1.96	*	*	640	*
	Approximately 1,950 feet upstream of Mercer Road	1.45	*	*	540	*
	Approximately 7,100 feet upstream of Mercer Road	0.92	*	*	420	*
Big Branch into Monte Swamp	Approximately 7,400 feet downstream of M. M. Ray Road	4.54	*	*	1,030	*
	Approximately 3,800 feet downstream of M. M. Ray Road	4.03	*	*	970	*
	Approximately 3,550 feet upstream of Lebanon Church Road	3.03	*	*	820	*
	Approximately 3,650 feet upstream of Lebanon Church Road	1.65	*	*	580	*

Section 5.0 – Engineering Methods

Table 7—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
Big Branch into Monte Swamp (continued)	Approximately 7,500 feet upstream of Lebanon Church Road	0.97	*	*	430	*
Big Branch into Monte Swamp Tributary	Confluence with Big Branch to Monte Swamp	1.38	*	*	520	*
	Approximately 3,000 feet upstream of the confluence with Big Branch into Monte Swamp	1.03	*	*	440	*
Big Branch into Western Prong Creek	Approximately 2,800 feet downstream of Silver Spoon Road	6.04	*	*	1,220	*
	Approximately 50 feet upstream of Silver Spoon Road	5.89	*	*	1,200	*
	Approximately 3,800 feet downstream of Greens Mill Road	5.01	*	*	1,100	*
	Approximately 3,300 feet downstream of Greens Mill Road	4.10	*	*	980	*
	Approximately 50 feet upstream of Greens Mill Road	3.52	*	*	900	*
	Approximately 1,800 feet upstream of Greens Mill Road	3.14	*	*	840	*
Big Creek into Lake Waccamaw	Just upstream of Bella Coola Road	80.3	2,670	4,430	5,360	7,890
	Just upstream of US HWY 74/76	72.7	2,480	4,130	5,000	7,390

Section 5.0 – Engineering Methods

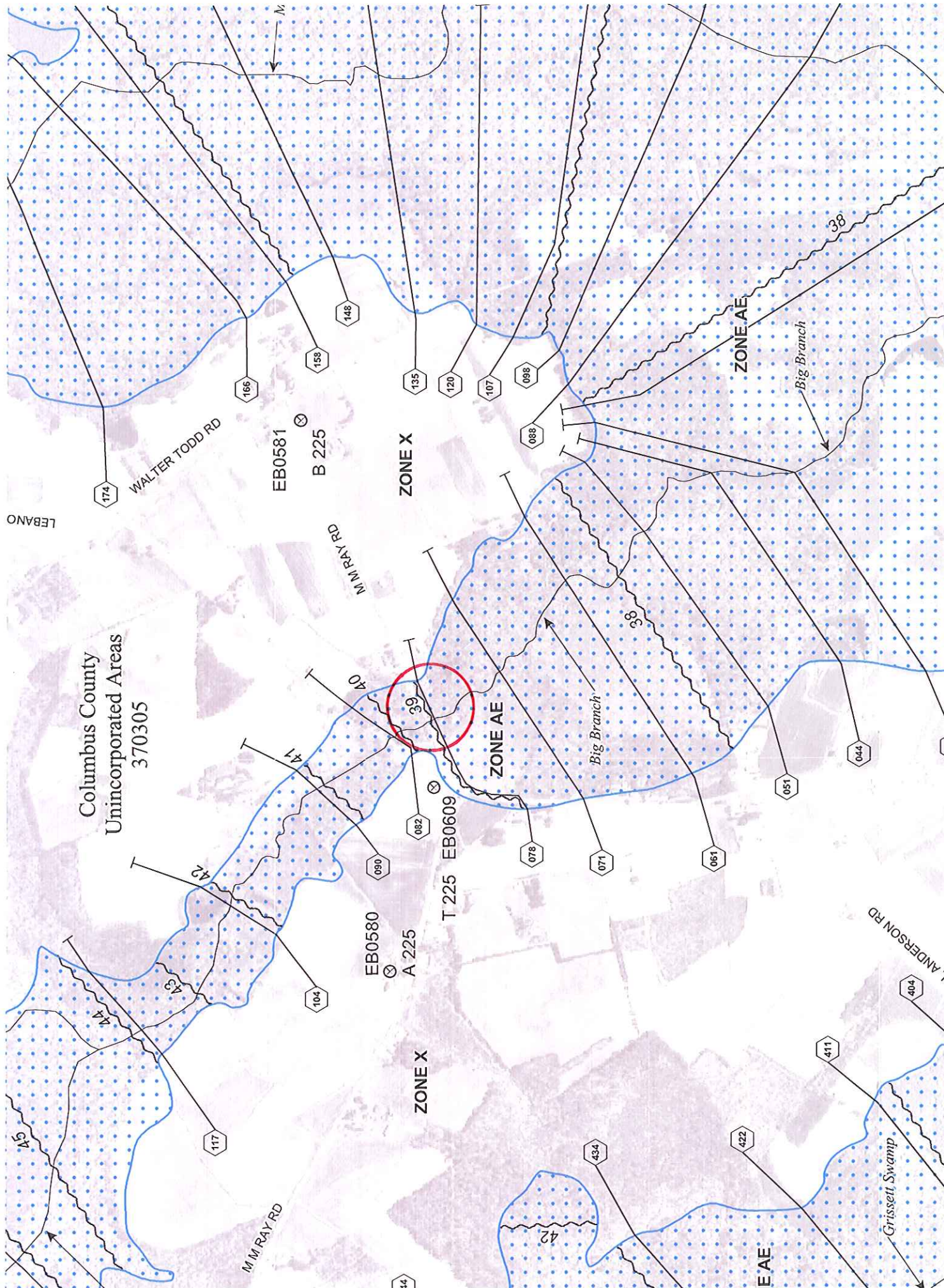
Table 10—Limited Detailed Flood Hazard Data

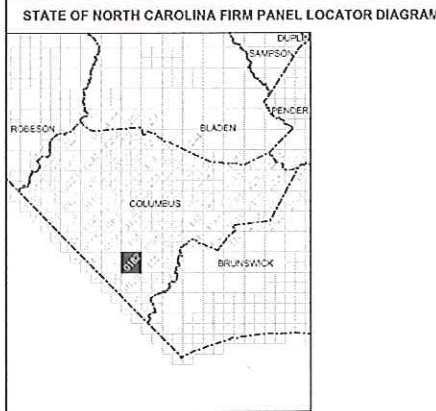
Cross Section ¹	Stream Station ²	Flood Discharge (cfs)	1% Annual Chance Water-Surface Elevation (feet NAVD 88)	Non-Encroachment Width ³ (feet)
BIG BRANCH INTO BEAVERDAM SWAMP (continued)				
051	5,069	420	91.7	10 / 113
055	5,523	420	92.2	79 / 20
060	5,970	420	93.4	11 / 15
065	6,454	420	95.1	11 / 63
069	6,871	420	95.8	58 / 13
074	7,354	420	97.1	31 / 20
078	7,816	420	99.0	30 / 47
083	8,317	420	100.7	64 / 13
088	8,798	420	102.0	22 / 14
093	9,292	420	103.5	13 / 20
BIG BRANCH INTO MONTE SWAMP				
000	40	1,030	37.5 ⁴	650 / 318
005	475	970	37.5 ⁴	687 / 281
010	975	970	37.5 ⁴	783 / 206
015	1,463	970	37.5 ⁴	604 / 145
019	1,937	970	37.5 ⁴	194 / 236
026	2,554	970	37.5 ⁴	184 / 9
029	2,891	970	37.5	144 / 77
034	3,417	970	37.9	97 / 151
038	3,766	970	38.1	85 / 178
041	4,067	970	38.2	148 / 216
044	4,377	820	38.3	207 / 150
047	4,728	820	38.4	138 / 303
051	5,131	820	38.4	66 / 379
056	5,621	820	38.5	11 / 471
061	6,102	820	38.6	11 / 548
066	6,610	820	38.6	15 / 509
071	7,087	820	38.7	50 / 520
074	7,424	820	38.7	9 / 503
078	7,826	820	38.9	30 / 70
079	7,933	820	39.7	29 / 71
080	8,024	820	39.8	39 / 61
082	8,208	820	40.1	81 / 19
083	8,309	820	40.6	77 / 23
087	8,679	820	40.9	116 / 86
090	8,983	820	41.0	35 / 220
094	9,376	820	41.2	16 / 219
100	9,974	820	41.6	9 / 197
104	10,365	820	42.1	10 / 285
108	10,775	820	42.6	11 / 199
112	11,221	820	43.1	113 / 18
117	11,717	820	44.0	12 / 161
124	12,441	580	44.8	9 / 248

Section 5.0 – Engineering Methods

Table 10—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)
BIG BRANCH INTO MONTE SWAMP (continued)				
128	12,824	430	44.9	11 / 127
134	13,382	430	45.0	13 / 264
138	13,842	430	45.2	9 / 201
142	14,191	430	45.4	10 / 252
146	14,574	430	45.6	73 / 99
151	15,056	430	45.9	15 / 183
154	15,427	430	46.4	11 / 132
158	15,801	430	47.0	109 / 38
BIG BRANCH INTO WESTERN PRONG CREEK				
000	29	1,220	73.8 ⁴	347 / 157
003	322	1,220	73.8 ⁴	74 / 156
006	611	1,220	73.8 ⁴	139 / 65
010	961	1,200	73.8 ⁴	158 / 104
013	1,309	1,200	73.3	159 / 51
017	1,674	1,200	74.0	19 / 189
019	1,877	1,200	74.3	11 / 183
021	2,142	1,200	74.7	44 / 158
026	2,557	1,200	75.2	209 / 10
028	2,795	1,200	75.7	154 / 111
029	2,941	1,200	76.0	35 / 40
031	3,059	1,200	78.2	40 / 35
031	3,118	1,200	78.3	55 / 21
034	3,427	1,100	78.4	55 / 45
038	3,789	1,100	78.5	231 / 164
042	4,224	1,100	78.5	231 / 12
047	4,718	1,100	78.7	139 / 205
052	5,167	1,100	78.8	259 / 37
057	5,707	1,100	79.1	126 / 102
061	6,148	1,100	79.4	83 / 187
068	6,826	1,100	79.9	29 / 172
075	7,495	1,100	80.3	208 / 120
080	8,006	980	80.6	218 / 90
084	8,358	980	80.8	69 / 160
087	8,741	900	81.1	81 / 147
091	9,142	900	81.4	99 / 117
095	9,508	900	81.8	141 / 43
099	9,871	900	82.2	80 / 92
104	10,414	900	82.7	186 / 111
109	10,866	900	83.5	11 / 76
111	11,148	900	85.3	153 / 15
113	11,329	900	85.9	33 / 47
114	11,431	900	88.7	35 / 45
115	11,495	900	88.7	56 / 69





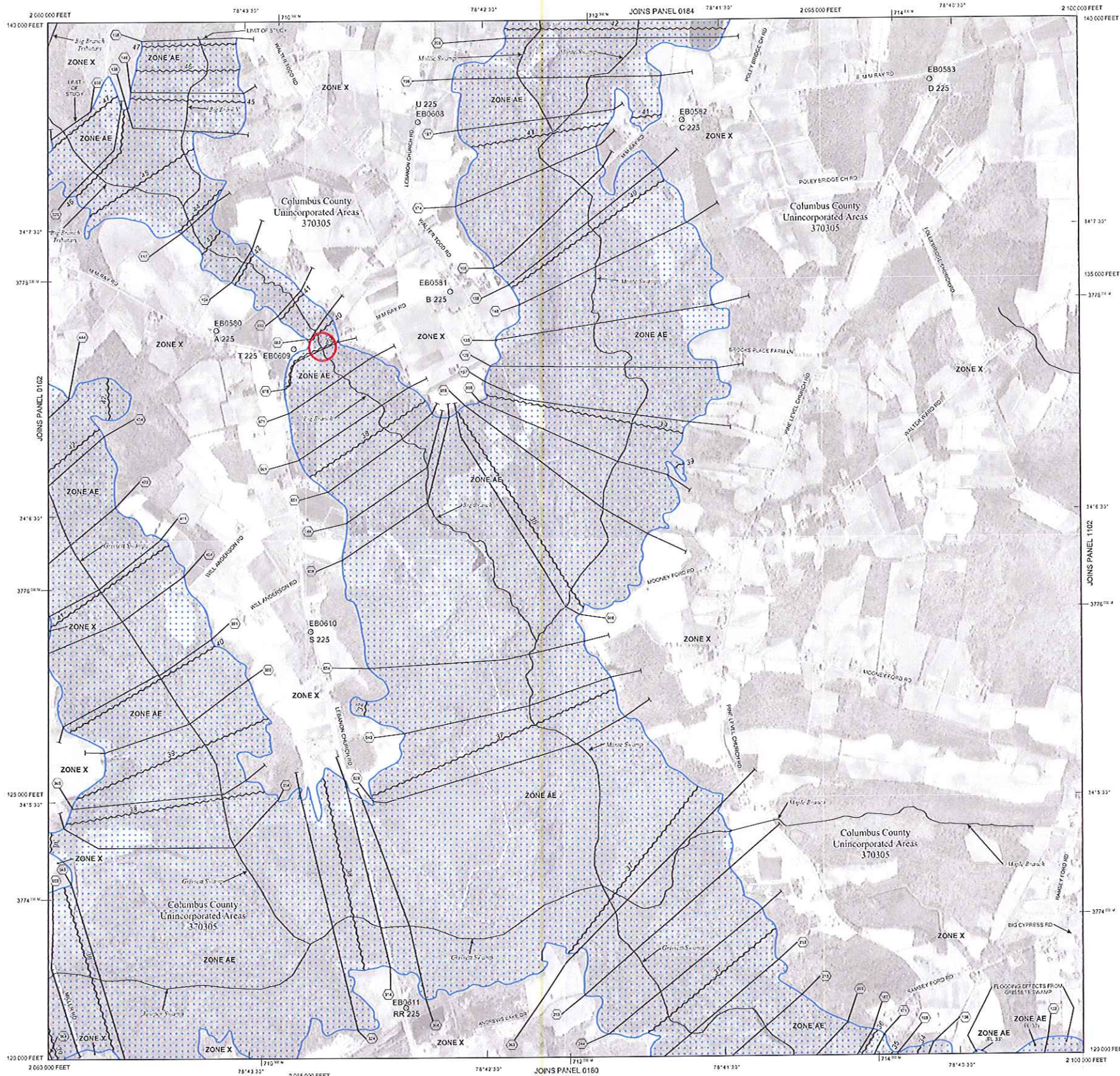
DATUM INFORMATION

The projection used in the preparation of this map was the North Carolina State Plane (NAD83). The horizontal datum was the North American Datum of 1983 (NAD 83). Differences in datum, ellipsoid, projection, or Universal Transverse Mercator zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdictional boundaries. These differences do not affect the accuracy of this FIRM. All coordinates on this map are in U.S. Survey Feet, where 1 U.S. Survey Foot = 1200.3537 Meters.

Flood elevations on this map are referenced to the North American Vertical Datum of 1983 (NAVD 83). These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. An average offset between NAVD 83 and the National Geodetic Vertical Datum of 1929 (NGVD 29) has been computed for each North Carolina county. This offset was then applied to the NGVD 29 flood elevations that were not revised during the creation of this statewide format FIRM. The offsets for each county shown on this FIRM panel are shown in the vertical datum offset table below. Where a county boundary and a flooding source with unreviewed NGVD 29 flood elevations are coincident, an individual offset has been calculated and applied during the creation of this statewide format FIRM. See Section 6.1 of the accompanying Flood Insurance Study report to obtain further information on the conversion of elevations between NAVD 83 and NGVD 29. To obtain current elevation, description, and/or location information for bench marks shown on this map, please contact the North Carolina Geodetic Survey at the address shown below. You may also contact the Information Services Branch of the National Geodetic Survey at (301) 713-3242, or visit its website at www.ngs.noaa.gov.

North Carolina Geodetic Survey
121 West Jones Street
Raleigh, NC 27601
(919) 733-5353
www.ncgs.state.nc.us

County Average Vertical Datum Offset Table		
County	Vertical Datum Offset (ft)	Estimated NAVD 83 + NGVD 29 + 1.041
Columbus	-1.04	



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood) also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding). Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain). Average depths determined. For areas of elevated fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently discontinued. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action). Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain. Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary defining Special Flood Hazard Zones and boundary defining Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
Base Flood Elevation line and value, elevation in feet
Base Flood Elevation value where uniform within zone elevation in feet
(EL 507)
Reference to the North American Vertical Datum of 1983
Cross section line
Transverse line
Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
428 M
1 477 500 FEET
BM5510 X
BM5510
M1.5
River/Mile

GRID NORTH

MAP SCALE 1" = 1000' (1 : 12,000)

500 0 1000 2000 FEET
300 0 300 600 METERS

NOTES TO USERS

This map is for use in administering the National Flood Insurance program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The community map repository should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where Base Flood Elevations (BFEs) and/or floodways have been determined, users are encouraged to consult the Flood Profiles, Floodway Data, Limited Detailed Flood Hazard Data, and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Boundaries of regulatory floodways shown on the FIRM for flooding sources studied by detailed methods were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data for flooding sources studied by detailed methods as well as non-detailed methods for flooding sources studied by limited detailed methods are provided in the Flood Insurance Study report for the jurisdiction. The FIS report also provides instructions for determining a floodway using non-encroachment widths for flooding sources studied by limited detailed methods.

Certain areas not in Special Flood Hazard Areas may be protected by flood control structures. Refer to Section 4.4 "Flood Protection Measures" of the Flood Insurance Study report for information on the flood control structures in the jurisdiction.

Base map information and geospatial data used to develop this FIRM were obtained from various organizations, including the participating local communities, state and federal agencies, and/or other sources. The primary base for this FIRM is aerial imagery acquired by Columbus County. The time period of collection for the imagery is 1997. Information and geospatial data supplied by the local community(ies) that met FEMA base map specifications were considered the preferred source for development of the base map. See geospatial metadata for the associated digital FIRM for additional information about base map preparation.

Base map features shown on this map, such as corporate limits, are based on the most up-to-date data available at the time of publication. Changes in the corporate limits may have occurred since this map was published. Map users should consult the appropriate community official or website to verify current conditions of jurisdictional boundaries and base map features. This map may contain roads that were not considered in the hydraulic analysis of streams where no new hydraulic model was created during the production of this statewide format FIRM.

This map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables in the Flood Insurance Study report (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Please refer to the separately printed Map Index for an overview map of the county showing the layout of map panels, community map repository addresses, and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each is located.

If you have questions about this map, or questions concerning the National Flood Insurance Program in general, please call 1-877-FEMA MAP (1-877-336-2627) or visit the FEMA website at www.fema.gov.

An accompanying Flood Insurance Study report, Letter of Map Revision (LOMR) or Letter of Map Amendment (LOMA) revising portions of this panel, and digital versions of this FIRM may be available. Visit the North Carolina Floodplain Mapping Program website at www.ncfloodmaps.com or contact the FEMA Map Service Center at 1-800-358-9918 for information on all related products associated with this FIRM. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at www.fema.gov.

MAP REPOSITORY

Refer to listing of Map Repositories on Map Index or visit www.floodmaps.com

EFFECTIVE DATE OF FLOOD INSURANCE RATE MAP PANEL

JUNE 2, 2006

EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to statewide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent, the North Carolina Division of Emergency Management, or the National Flood Insurance Program at the following phone numbers or websites.

NC Division of Emergency Management
(919) 715-6000 www.ncemergency.org

National Flood Insurance Program
1-800-438-6620 www.fema.gov

PANEL 0182J

FIRM

FLOOD INSURANCE RATE MAP

NORTH CAROLINA

PANEL 0182

(SEE LOCATOR DIAGRAM OR MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY

CD No.

PANEL

SUFFIX

COLUMBUS COUNTY

370305

0182

J

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown above should be used on insurance applications for the subject community.

EFFECTIVE DATE

JUNE 2, 2006

MAP NUMBER

3720018200J



State of North Carolina
Federal Emergency Management Agency



This digital Flood Insurance Rate Map (FIRM) was produced through a unique cooperative partnership between the State of North Carolina and the Federal Emergency Management Agency (FEMA). The State of North Carolina has implemented a long term approach of floodplain management to decrease the costs associated with flooding. This is demonstrated by the State's commitment to map floodplain areas at the local level. As a part of this effort, the State of North Carolina has joined in a Cooperative Technical State agreement with FEMA to produce and maintain this digital FIRM.

www.ncfloodmaps.com

