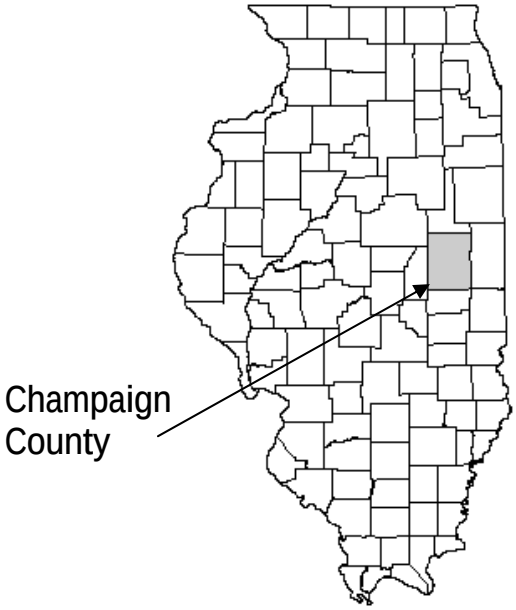
FLOOD INSURANCE STUDY

CHAMPAIGN COUNTY, ILLINOIS
AND INCORPORATED AREAS

COMMUNITY NAME	COMMUNITY NUMBER
* ALLERTON, VILLAGE OF	170660
BONDVILLE, VILLAGE OF	170909
BROADLANDS, VILLAGE OF	170025
CHAMPAIGN, CITY OF	170026
CHAMPAIGN COUNTY (UNINCORPORATED AREAS)	170894
FISHER, VILLAGE OF	170027
* FOOSLAND, VILLAGE OF	170028
* GIFFORD, VILLAGE OF	170921
* HOMER, VILLAGE OF	170854
IVESDALE, VILLAGE OF	170907
* LONGVIEW, VILLAGE OF	170918
* LUDLOW, VILLAGE OF	170979
MAHOMET, VILLAGE OF	170029
* OGDEN, VILLAGE OF	170030
* PESOTUM, VILLAGE OF	170980
* PHILO, VILLAGE OF	170981
RANTOUL, VILLAGE OF	170031
ROYAL, VILLAGE OF	170982
SADORUS, VILLAGE OF	170855
* SAVOY, VILLAGE OF	170983
SIDNEY, VILLAGE OF	170033
ST. JOSEPH, VILLAGE OF	170032
* THOMASBORO, VILLAGE OF	170034
* TOLONO, VILLAGE OF	170984
URBANA, CITY OF	170035

* NO SPECIAL FLOOD HAZARD AREAS IDENTIFIED



PRELIMINARY

JUNE 27, 2012

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER

17019CV000A

NOTICE TO
FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program have established repositories of flood hazard data for floodplain management and flood insurance purposes. This Flood Insurance Study (FIS) may not contain all data available within the Community Map Repository. It is advisable to contact the Community Map Repository for any additional data.

The Federal Emergency Management Agency (FEMA) may revise and republish part or all of this FIS report at any time. In addition, FEMA may revise part of this FIS by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS. It is, therefore, the responsibility of the user to consult with community officials and to check the Community Map Repository to obtain the most current FIS components.

Selected Flood Insurance Rate Map panels for this community contain information that was previously shown separately on the corresponding Flood Boundary and Floodway Map panels (e.g., floodways, cross sections). In addition, former flood hazard zone designations have been changed as follows:

Old Zone(s)	New Zone
A1 through A30	AE
B	X (shaded)
C	X

Initial Countywide FIS Effective Date: To be determined

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FLOOD INSURANCE STUDY
CHAMPAIGN COUNTY, ILLINOIS AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) revises and supersedes the FIS reports and/or Flood Insurance Rate Maps (FIRMs) and/or Flood Hazard Boundary Maps (FHBMs) in the geographic area of Champaign County, Illinois and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the county that will be used to establish actuarial flood insurance rates. This information will also be used by Champaign County to update existing floodplain regulations as part of the Regular Phase of the National Flood Insurance Program (NFIP), and by local and regional planners to further promote sound land use and floodplain development. Minimum floodplain management requirements for participation in the NFIP are set forth in the Code of Federal Regulations at 44 C.F.R § 60.3.

The jurisdictions included in this countywide FIS are shown in Table 1. Note is made of jurisdictions having no identified Special Flood Hazard Areas (SFHAs) as of the effective date of this study. Jurisdictions for which SFHAs have been identified for the first time in this countywide FIS are also noted.

Table 1 - Listing of Communities

Community	CID	Community	CID
Allerton, Village of [1]	170660	Mahomet, Village of	170029
Bondville, Village of [2]	170909	Ogden, Village of [1]	170030
Broadlands, Village of	170025	Pesotum, Village of [1]	170980
Champaign, City of	170026	Philo, Village of [1]	170981
Champaign County (Unincorporated Areas)	170894	Rantoul, Village of [2]	170031
		Royal, Village of [2]	170982
Fisher, Village of	170027	Sadorus, Village of [2]	170855
Foosland, Village of [1]	170028	Savoy, Village of [1]	170983
Gifford, Village of [1]	170921	Sidney, Village of	170033
Homer, Village of [1]	170854	St. Joseph, Village of	170032
Ivesdale, Village of [3]	170907	Thomasboro, Village of [1]	170034
Longview, Village of [1]	170918	Tolono, Village of [1]	170984
Ludlow, Village of [1]	170979	Urbana, Village of	170035

[1]No SFHAs identified
[2]Initial identification of SFHAs were made as part of this countywide study
[3]Initial identification of SFHAs were made as part of this countywide study for the Champaign County portion of this multi-county community; SFHAs were previously identified for the Piatt County portion

For this countywide FIS and FIRM, flood hazard information is shown only for the portions of the villages of Allerton and Ivesdale that lie within Champaign County. The remaining portions of these communities lie within other counties as indicated in Table 2. Please see separately published FIS reports and FIRMs for the portions of the communities that do not lie in Champaign County.

Table 2 - Multi-County Communities

Community	Adjacent Counties
Allerton, Village of	Vermilion County
Ivesdale, Village of	Piatt County

In some states or communities floodplain management criteria or regulations may exist that are more restrictive or comprehensive than the minimum Federal requirements. In such cases, the more restrictive criteria take precedence and the State (or other jurisdictional agency) will be able to explain them.

1.2 Authority and Acknowledgements

The sources of authority for this FIS are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The FIS includes the unincorporated areas of, and incorporated communities within, Champaign County. Information on the authority and acknowledgments for each jurisdiction included in this FIS, as compiled from their previously printed FIS reports, is shown below.

Pre-Countywide FISs

Champaign County (Unincorporated Areas):

For the original FIS dated September 1, 1983 (Reference 1), and the corresponding FIRM dated March 1, 1984 (Reference 2), the hydrologic and hydraulic analyses were obtained from the following reports: the City of Urbana, Illinois FIS dated July 16, 1980 (Reference 3); the City of Champaign, Illinois FIS dated July 16, 1980 (Reference 4); *Inventory and Analysis of Urban Water Damage Problems, Village of St. Joseph, Champaign County, Illinois* (Reference 5); and the *Flood Hazard Reconnaissance Study Report* for the Village of Mahomet, Champaign County, Illinois (Reference 6).

For the revised FIS and FIRM dated January 2, 2003 (Reference 7, 8), the hydrologic and

hydraulic analyses of the Sangamon River were prepared by Berns, Clancy and Associates, P.C. This work was completed on December 8, 1997.

City of Champaign: For the FIS dated July 16, 1980 (Reference 4), the hydrologic and hydraulic analyses were performed by the Illinois State Water Survey (ISWS) for the Federal Insurance Administration (FIA), under Contract No. H-4522. This study was completed in October 1978.

Village of Fisher: For the FIS dated February 1, 1984 (Reference 9), the hydrologic and hydraulic analyses were obtained from the *Village of Fisher Drainage Study* (Reference 10).

Village of Mahomet: For the original FIS dated April 18, 1983 (Reference 11), and the FIRM dated June 15, 1983 (Reference 12), the hydrologic and hydraulic analyses were performed by the U.S. Department of Agriculture, Soil Conservation Service (SCS) as reported in the *Flood Hazard Reconnaissance Study Report* for the Village of Mahomet, Illinois (Reference 6).

For the revised FIS and FIRM dated January 2, 2003 (Reference 13, 14), the hydrologic and hydraulic analyses were prepared by Berns, Clancy and Associates, P.C. This work was completed in December 8, 1997.

Village of Sidney: For the FIS dated January 17, 1986 (Reference 15), the hydrologic and hydraulic analyses were obtained from the *Flood Plain Information (Floodway Delineation), Salt Fork River, Sidney, Illinois* (Reference 16).

Village of St. Joseph: For the FIS dated May 16, 1983 (Reference 17), the hydrologic and hydraulic analyses were taken from a report entitled *Inventory and Analysis of Urban Water Drainage Problems, Village of St. Joseph, Champaign County, Illinois* (Reference 5).

City of Urbana:	For the FIS dated July 16, 1980 (Reference 3), the hydrologic and hydraulic analyses were performed by the ISWS for the FIA, under Contract No. H-4522. This study was completed in October 1978.

The authority and acknowledgements for the villages of Allerton, Bondville, Broadlands, Foosland, Gifford, Homer, Ivesdale, Longview, Ludlow, Ogden, Pesotum, Philo, Rantoul, Royal, Sadorus, Savoy, Thomasboro, and Tolono are not included because there were no previously printed FISs for those communities.

To be determined
Countywide FIS

The hydrologic and hydraulic analyses for the Boneyard Creek were performed by the U.S. Geological Survey (USGS) Illinois Water Science Center (Reference 18). This work was completed in 2007 and is now included in this countywide FIS and FIRM.

Planimetric base map information was derived from 2008 digital orthophotos provided by the Champaign County GIS Consortium, a program of the Champaign County Regional Planning Commission, and the USGS (Reference 19). Color digital orthophotos with 2-foot pixel resolution were photogrammatically compiled from aerial photography obtained in 2008.

The coordinate system used for the production of the digital FIRMs is Universal Transverse Mercator (UTM) North American Datum of 1983 (NAD 83) Geodetic Reference System 1980 (GRS80) spheroid.

This countywide FIS was performed under the Cooperating Technical Partners (CTP) Partnership Agreement dated July 18, 2008 between the Illinois State Water Survey (ISWS) and FEMA, per the Mapping Activity Statement (MAS) No. ISWS09-10.

1.3 Coordination

Coordination and outreach activities were performed to create a climate of understanding and ownership of the mapping process at the state and local levels. These activities were ongoing throughout the entirety of the project.

The purpose of an initial consultation coordination officer (CCO) meeting, or project team meeting, is to discuss the scope of the project. An intermediate CCO meeting, or scoping meeting, is meant to continue outreach and create a climate of understanding throughout the process. A final CCO meeting, or open house, is held with public officials and the general public to review the results of the study.

Pre-Countywide FISs

The dates of the initial and final CCO meetings held for the pre-countywide studies for Champaign County's incorporated communities and unincorporated areas are shown in Table 3, "CCO Meeting Dates for Pre-Countywide Studies."

Table 3 - CCO Meeting Dates for Pre-Countywide Studies

Community	Initial CCO Date	Final CCO Date
Champaign, City of	*	November 19, 1979
Champaign County	*	July 17, 2001
Fisher, Village of	*	September 13, 1983
Mahomet, Village of	*	
St. Joseph, Village of	*	November 16, 1982
Sidney, Village of	*	February 19, 1985
Urbana, City of	*	November 19, 1979

To be determined
Countywide FIS

The initial CCO meeting was held on April 6, 2005 in Urbana, Illinois, and was attended by representatives of Champaign County, the cities of Champaign and Urbana, Illinois Department of Natural Resources (IDNR), and ISWS. This meeting was intended to discuss various issues and concerns for the study area. An intermediate meeting was held on April 25, 2005 in Champaign, Illinois, and was attended by representatives of Champaign County, the cities of Champaign and Urbana, the villages of Savoy, Sidney, and Philo, ISWS, and IDNR.

Meetings were resumed on January 19, 2012 in Urbana, Illinois with a meeting hosted by the USGS to discuss issues specific to Boneyard Creek. In attendance were representatives of the cities of Champaign and Urbana, the University of Illinois, FEMA, ISWS, and the USGS. On February 15, 2012, a pre-flood risk review meeting was held in Urbana, Illinois and was attended by representatives of Champaign County, the cities of Champaign and Urbana, the villages of Fisher, Rantoul, Savoy, Sidney, St. Joseph, the University of Illinois, ISWS, and USGS. A flood risk review meeting was held on March 6, 2012 in Champaign, Illinois and was attended by representatives of Champaign County, the cities of Champaign and Urbana, the villages of Broadlands, Mahomet, Rantoul, Royal, Sadorus, Sidney, and St. Joseph, the University of Illinois, and ISWS. These meetings were held for discussion of the mapping process and presentation of draft maps.

The results of the study were reviewed at the open house held on _____, in _____, Illinois, and attended by representatives of _____. All problems raised at that meeting have been addressed in this study.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Champaign County, Illinois including the incorporated areas listed in Section 1.1.

The flooding information for the entire county, including both incorporated and unincorporated areas is shown. The vertical datum was converted from the National Geodetic Vertical Datum of 1929 (NGVD 29) to the North American Vertical Datum of 1988 (NAVD 88).

Typically, areas studied by detailed methods are selected with priority given to all known flood hazards and areas of projected development or proposed construction. Approximate analyses are used to study those areas having low development potential or minimal flood hazards.

Table 4 lists streams that have names in this countywide FIS other than those used in previously printed FISs.

Table 4 - Stream Name Corrections

Community	Previous Name	Corrected Name
City of Urbana, Champaign County (Unincorporated Areas)	Saline Branch	Saline Branch Drainage Ditch
Village of Sidney	Salt Fork River	Salt Fork
Champaign County (Unincorporated Areas)	Phinney Branch	Copper Slough (downstream of the Phinney Branch confluence)

The streams, or portions of streams, listed in Table 5 have new or revised hydrologic and hydraulic analyses for this countywide FIS.

Table 5 - Limits of Revised or New Detailed Study

Flooding Source	Limits of Revised or New Detailed Study
Boneyard Creek	From the confluence with Saline Branch Drainage Ditch to approximately 20,550 feet upstream of the confluence with Saline Branch Drainage Ditch, approximately 30 feet upstream of Hickory Street

The streams, or portions of streams, listed in Table 6, "Limits of Detailed Study," were studied in detail and are included in this report. The limits of detailed study are also indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

Table 6 - Limits of Detailed Study

Flooding Source	Limits of Detailed Study
Boneyard Creek	From the confluence with Saline Branch Drainage Ditch to approximately 20,550 feet upstream of the confluence with Saline Branch Drainage Ditch, approximately 30 feet upstream of Hickory Street
Copper Slough	From the upstream side of I-57 northbound to approximately 17,250 feet upstream of I-57 northbound, approximately 250 feet upstream of the railroad
John Street Copper Slough Tributary	From the confluence with Copper Slough to approximately 1,010 feet upstream of the confluence with Copper Slough, approximately 150 feet downstream of Springfield Avenue (State Route10)
Left Branch of Right Bank Tributary of Salt Fork	From the confluence with Right Bank Tributary of Salt Fork to approximately 2,150 feet upstream of the confluence with Right Bank Tributary of Salt Fork, the downstream side of the railroad
McCullough Creek	From the upstream side of Race Street to approximately 3,575 feet upstream of Race Street, the downstream side of Windsor Road
Owl Creek	From the upstream side of U.S. Route 136 to approximately 9,440 feet upstream of U.S. Route 136, the downstream side of Hamilton Street
Phinney Branch	From the upstream side of I-57 northbound to approximately 11,869 feet upstream of I-57 northbound, the upstream side of Windsor Road
Right Bank Tributary of Salt Fork	From the confluence with Salt Fork to approximately 7,700 feet upstream of the confluence with Salt Fork, the downstream side of Brian Street (CR 2100 E)
Saline Branch Drainage Ditch	From approximately 1,600 feet downstream of I-74 to approximately 21,100 feet upstream of I-74, approximately 1,425 feet upstream of Lincoln Avenue

Table 6 - Limits of Detailed Study (continued)

Flooding Source	Limits of Detailed Study
Salt Fork	Downstream Reach: From approximately 35.55 miles upstream of the confluence with Vermilion River, approximately 1,350 feet upstream of CR 2125 E; to approximately 36.92 miles upstream of the confluence with Vermilion River, approximately 1,450 feet downstream of CR 1100 N **AND** Upstream Reach: From approximately 42.9 miles upstream of the confluence with Vermilion River, approximately 1,150 feet downstream of Evergreen Drive extended; to approximately 44.12 miles upstream of the confluence with Vermilion River, the downstream side of Interstate 74 eastbound
Sangamon River	From approximately 1,000 feet downstream of Township Road 2000 N (Shivley Bridge) to approximately 37,700 feet upstream of Township Road 2000 N, approximately 10 feet upstream of Lake of the Woods Covered Bridge
Upper Boneyard Creek	From the upstream side of Neil Street to approximately 3,670 feet upstream of Neil Street, the downstream side of Bloomington Road

Previous maps and reports for Champaign County are community-based. The maps and reports for adjacent communities may not reflect the same data. The conversion from community-based mapping to countywide mapping includes resolution and consolidation of data within the countywide FIS, as well as showing the full extent of the floodplains and floodways through mapped reaches on the countywide FIRM. This may include re-delineation of SFHAs for edge mapping purposes at county and community boundaries.

The conversion to countywide mapping may result in new or revised base flood elevations (BFEs) and floodway data for communities. The countywide FIRM may show detailed studies where previously approximate studies were shown, and/or may show flood hazard areas where previously no flood hazard areas were shown.

For this Countywide FIS

A detailed study of Boneyard Creek performed by the USGS (Reference 18) was incorporated in this countywide FIS and supersedes the previous detailed study. This study includes the Boneyard Creek Phase I channel and basin improvements (see Section 2.4 for discussion of Phase I improvements).

This FIS also incorporates determination letters issued by FEMA that have resulted in map changes (Letter of Map Revision [LOMR]). The LOMR incorporation in this FIS is summarized in Table 7.

Table 7 – Incorporated Letters of Map Change

LOMC Type	Case Number	Effective Date	Community	Flooding Source	Project Identifier
LOMR	915049	07/25/1991	Champaign County (Unincorporated Areas)	Copper Slough	Lincolnshire Fields Northwest III development
LOMR-F	95-05-170A	01/04/1995	Champaign County (Unincorporated Areas)	Copper Slough	Lot 110-133, and 118-135 of Ironwood I Subdivision
LOMR	03-05-3387P	07/08/2003	Village of Mahomet	Sangamon River	FEMA Initiated Map Correction to Restudy of Mahomet
LOMR	06-05-B018P	03/07/2007	Champaign County (Unincorporated Areas)	Kaskaskia Ditch & Unnamed Tributary to Kaskaskia Ditch	Jacob's/Hallbeck Homes/ Gillian

2.2 Community Description

Champaign County is located in east-central Illinois and is bordered by Vermilion County on the east, Douglas County on the south, Piatt and McLean Counties on the west, and Ford County on the north. It is the fifth largest county in the state by total area, with 638,860 acres (Reference 20). In 2010, the county had a population of 201,081. This number represents an 11.9 percent increase since the 2000 U.S. Census. Urbana, the county seat, had a 13.3 percent increase in population since 2000, with a recorded 2010 population of 41,250 (Reference 21).

Agriculture is the dominant land use in the county with cropland comprising approximately 83 percent of the county's land cover. The remainder of the county is covered by grassland (10.1 percent), urban areas (3.9 percent), forest/woodland (1.0 percent), open water (1.0 percent), and wetland (0.8 percent). Of the 102 Illinois counties, Champaign County ranks fourth in the state both for total acres covered by cropland (530,326) and acres of perennial streams (5,750 acres) (Reference 22).

Although agriculture is the mainstay of the county's economy, the University of Illinois in the Champaign-Urbana area has been a major influence in the economic and cultural development of the county. The university was first established as a land grant college in 1867 and has become one of the largest state universities in the United States (Reference 23).

Champaign County's transportation system includes federal and state highways, with Interstate Highways 57, 72, and 74 and U.S. Highways 45, 136, and 150 crossing the county. There are also several county roads. Railroads provide both passenger and freight service, and several rail lines pass through the Champaign-Urbana area. A major airport south of Savoy provides commercial air service, and several smaller airports are found throughout the county (Reference 20).

The county has a gently rolling topography, which is distinguished by its glacial features. Several end moraines separated by wide, nearly level ground moraines and outwash plains dissect the county. The highest elevation in the county is the Champaign Moraine, reaching an elevation of 860 feet above sea level north of Rising. The lowest elevation is approximately 630 feet above sea level and can be found in the area where the Salt Fork leaves the county (Reference 20).

Champaign County is the only Illinois county with five different watersheds included within its borders: Kaskaskia River, Vermilion River (Wabash Basin), Wabash River, Embarras River, Sangamon River (Reference 24). Large expansive areas of floodplain exist in the county, which include those of the Sangamon River, Copper Slough, Saline Branch Drainage Ditch, Salt Fork, as well as the Phinney Branch.

The Phinney Branch drainage basin encompasses a rapidly urbanizing section of the City of Champaign, with the creek flowing through the southwest segment of the city to its receiving stream, the Copper Slough. The Copper Slough watershed drains a significant portion of the west side of Champaign and the surrounding undeveloped area, flowing southwesterly before discharging into the Kaskaskia River (Reference 25, 26, 27).

Also draining through the City of Champaign as well as the City of Urbana is the Boneyard Creek, which is a minor tributary of the Saline Branch Drainage Ditch. Together with the Upper Boneyard Creek, the watershed drains 7.45 square miles. The lower 6.33 square miles of the watershed, which drains through the Champaign-Urbana area and a large portion of the university, is 100 percent urbanized (Reference 28).

The Salt Fork originates in Champaign County near Rantoul and flows south through the Village of St. Joseph, to near Sidney, then east through Champaign and Vermilion Counties to enter the Vermilion River. The river has a fairly wide floodplain and forms the entire western border of the community of St. Joseph (Reference 5, 29). The Salt Fork is joined near the Village of Sidney by the Right Bank Tributary of Salt Fork and Left Branch of Right Bank Tributary of Salt Fork, which flow from south to north through Sidney, creating extensive areas of floodplain within the community (Reference 30).

The Sangamon River flows east into Champaign County before turning southwest toward the Village of Mahomet. With its numerous oxbows, the river is

entrenched in the Mahomet area. Segments of the river form the southeast corporate limit of the village (Reference 6, 13).

Champaign County has a typical mid-western continental climate characterized by cold winters and hot summers. According to records from the weather station located in Urbana, Illinois (station 118740), the average annual temperature for Champaign County is 51.4 degrees Fahrenheit (°F). The average annual total precipitation at the Urbana station, from 1971 to 2010, is 40.8 inches. The record one-day snowfall for this time period is 20.4 inches, recorded in December 2010. The daily maximum precipitation was recorded at 5.32 inches on August 12, 1993 (Reference 31).

2.3 Principal Flood Problems

Flooding has been exacerbated in Champaign County by frequent development along the county's remaining floodplains (Reference 27). Large scale flooding in 1994 led to a Federal Disaster Declaration for the county, with heavy rains falling over a two-day period in April of that year and resulting in excess of $50 million in damages to homes, businesses and property. In 2002, another Federal Disaster Declaration for Champaign County resulted from severe storms that occurred between April 21-May 3, 2002, producing tornados and flooding that caused widespread damage in the county. Between 1993 and 2007, there were a total of 21 separate flood events occurring in ten different years in Champaign County. In this same time period, there were six different years in which there were more than one flood event in the county (Reference 24).

Copper Slough and Phinney Branch are two of the three main drainage systems within the City of Champaign along with Boneyard Creek. Of these three systems, Boneyard Creek has represented the main flood hazard. Problems associated with the creek date back to the initial development of the Champaign/Urbana area (Reference 28).

The Boneyard Creek basin is 100 percent urbanized and includes a large percentage of the University of Illinois campus as well as the downtown areas of Champaign and Urbana. Historically, flooding occurred on all reaches of the Boneyard Creek during major storm events. Upper Boneyard Creek has also experienced overbank flooding typically due to short, intense thunderstorms. (Reference 28).

Copper Slough and Phinney Branch lie within the heavily developing southwestern portion of the City of Champaign. Currently, the lower two-thirds of the Phinney Branch drainage basin are urban. Half of the 2,400 acres in the Phinney Branch watershed had been converted from farmland to residential developments by 1991, with flooding along the branch increasing with development (Reference 25).

Likewise, approximately two-thirds of the Copper Slough watershed are fully urbanized, and intense rainfall results in flooding problems along some reaches of the channel. In addition, there are numerous industrial sites in the northern half of the watershed that have little to no stormwater detention, causing increased peak flows to Copper Slough (Reference 26).

The Village of St. Joseph is subject to flooding from the Salt Fork, with development pressures and encroachment into the Salt Fork floodplain adding to flooding concerns (Reference 29). Backwater from Salt Fork causes flooding on both the Right Bank Tributary of Salt Fork and Left Branch of Right Bank Tributary of Salt Fork within the community of Sidney. Most of Sidney's flood hazard areas include residential structures and some downtown businesses, with flooding having occurred as often as three times per year (Reference 30).

The Salt Fork flood of record at the gage near St. Joseph (USGS 03336900) is reported for February 6, 2008, with a gage height of 19.06 feet and discharge of 5,600 cfs (Reference 32, 33). However, a gap in gage data exists between 1991 and 2004. During this gap in reporting, FEMA communications dated April 25, 1994 and August 16, 2002 indicate that the Village of Sidney sustained flood damage at the time of both the 1994 and the 2002 Federal Disaster Declarations.

Saline Branch Drainage Ditch flows through portions of Champaign County and the City of Urbana. The stream lies primarily outside of Urbana's developed city limits, running through a golf course, agricultural areas, and a few industrial areas. Flooding of the Saline Branch Drainage Ditch usually occurs during spring thaws, when runoff is accelerated by intense rainfalls (Reference 8, 34).

McCullough Creek, which flows through southern Urbana before joining the Embarras River, experiences overbank flooding typically due to short, intense thunderstorms (Reference 3).

Flooding from the Sangamon River has occurred within the Village of Mahomet, a community that has experienced above-average growth and development in recent years. Much of the development has taken place in the Sangamon River watershed, increasing the river's flow (Reference 6, 13). The Sangamon River flood of record occurred in 1994, with a gage height of 21.58 feet and discharge of 13,000 cfs (USGS 05570910). The second and third ranked floods were recorded in 2008 and 2005, with gage heights/discharges of 20.26 feet/9,030 cfs and 20.11 feet/ 9,850 cfs, respectively (Reference 32, 33).

Owl Creek forms the main floodplain area of the Village of Fisher, which flows through the middle of the community from west to east. The creek is completely lined with existing development (Reference 35). FEMA communication dated April 25, 1994 and IDNR communication dated May 14, 2002 indicate that Fisher sustained flood damage at the time of Federal Disaster Declarations in both 1994 and 2002.

2.4 Flood Protection Measures

Flood protection measures within the county have included projects such as stream channel and storm sewer improvements (Reference 13, 25, 26).

In the Boneyard Creek Watershed, flood control projects began in the late 1950s and have included the Northwest Diversion Structure, which diverts the upper 1.12 mi^2 of the watershed directly into the Saline Branch, and three stormwater detention facilities constructed between 1980 and 1997. In 1998, Phase I of a planned five-phase project began and was completed in 2003. The Phase I improvements include: construction of the Healey Street detention basin, burial and enlargement of approximately 2,700 feet of Boneyard Creek through Campustown (ending at Wright Street), flow restrictor installation at Wright Street, and lowering and widening of 2,600 feet of channel through the University of Illinois campus from Wright Street to Lincoln Avenue. Phase II of the project began in 2008 (Reference 36, 37).

3.0 ENGINEERING METHODS

For the flooding sources studied by detailed methods in Champaign County, standard hydrologic and hydraulic study methods were used to determine the flood hazard data required for this study. Flood events of a magnitude that are expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10-, 2-, 1-, and 0.2-percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long term, average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood which equals or exceeds the 1-percent-annual-chance flood in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potential based on conditions existing in Champaign County at the time of completion of this study. Maps and flood elevations will be amended periodically to reflect future changes.

3.1 Hydrologic Analyses

Hydrologic analyses were carried out to establish peak discharge-frequency relationships for each flooding source studied by detailed methods affecting the county.

Pre-Countywide FISs

For each jurisdiction within Champaign County that has a previously printed FIS report, the hydrologic analyses described in those reports that have not been superseded by new study information have been compiled and are summarized below.

Peak flows on Copper Slough and John Street Copper Slough Tributary were computed using the regional flood frequency equations developed for Illinois (Reference 38). These equations were adjusted with peak flows determined from a log-Pearson Type III (Reference 39) distribution of gage data at the USGS gaging station (No. 55900), with a period of record from 1924 to 1978.

Flood flows on McCullough Creek, Phinney Branch, and Upper Boneyard Creek were computed using the flood frequency equations for Illinois (Reference 38). The Upper Boneyard Creek enters a diversion channel at Neil Street. The flow is contained in the channel and flows into the Saline Branch Drainage Ditch in Urbana.

Peak discharges for Owl Creek were determined by following the procedures outlined in the U.S. Geological Survey (USGS) publication *Measurement of Peak Discharge at Culverts by Indirect Methods* (Reference 40).

Peak flows on Saline Branch Drainage Ditch were computed using the regional flood frequency equations developed for Illinois (Reference 38). These equations were adjusted with peak flows determined from a log-Pearson Type III distribution (Reference 39) of gage data at the USGS gaging station (No. 33375) which has a period of record from 1937 to 1978. The discharge for the 500-year flood was determined by straight-line extrapolation of a log-probability graph of flood discharges computed for frequencies up to 100 years.

Peak flows on Salt Fork were determined from flood-frequency elevations at the USGS gaging station (No. 3336900, 25 years of record) at river mile 46.75. The results of the gage analysis for the observed data are published in *Techniques for Estimating Magnitude and Frequency of Floods in Illinois* (Reference 41). This publication also has the peak discharges for Right Bank Tributary of Salt Fork River and Left Branch of Right Bank Tributary of Salt Fork River.

Discharges on the Sangamon River were obtained by a log-Pearson analysis weighted for the peak discharges at the USGS gage in Mahomet in conjunction with the USGS regional frequency analysis (Reference 42). The gage (No. 05571000) was non-recording prior to December 1948, was recording from December 1948 through September 1978, and was discontinued after September 1978.

To be determined
Countywide FIS

For this countywide FIS, a hydrologic study performed by the USGS Illinois Water Science Center has been included for Boneyard Creek (Reference 18), which incorporates the Phase I channel and basin improvements.

The hydrologic analysis of Boneyard Creek was performed using the Storm Water Management Model, Version 5 (SWMM5) (Reference 43, 44). Dynamic wave modeling was used, allowing for backwater effects from the main channel on the tributary pipes.

Design storms for 1-, 2-, 3-, 6-, 12-, 24- and 48-hour durations were constructed using the methodology recommended in ISWS Bulletin 70 (Reference 45) and ISWS Circular 173 (Reference 46). The quartile of the temporal rainfall pattern was chosen as a function of duration, and each quartile was assigned as recommended in Circular 173. The depths were obtained from updated rainfall frequency analyses by the National Oceanic and Atmospheric Administration (NOAA) (Reference 47). Potential evapotranspiration estimates were obtained from the Illinois State Water Survey for the Champaign station of the Illinois Climate Network from 1989 through 2004 (Reference 48).

The downstream boundary condition at the confluence with the Saline Branch was taken to be normal depth because of the expectation that the timing of flood peaks between Boneyard Creek and the Saline Branch would be quite different, given the differences in the watershed sizes and land uses.

A critical duration analysis was performed using the design storms to determine peak flows. From this analysis it was found that 2- and 12-hour storms provided maximum depths over most of Boneyard Creek for the 1-percent-annual-chance event, and 2- and 6-hour storms provided maximum depths over most of the creek for the 0.2-percent-annual-chance event.

A summary of the drainage area-peak discharge relationships for all the streams studied by detailed methods is shown in Table 8, “Summary of Discharges.”

Table 8 - Summary of Discharges

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second) 10-Percent-Annual-Chance	2-Percent-Annual-Chance	1-Percent-Annual-Chance	0.2-Percent-Annual-Chance
BONEYARD CREEK					
Just upstream of confluence with Saline Branch Drainage Ditch	6.3	1,439	1,760	1,835	1,986
Main Street (downstream)	5.1	1,111	1,416	1,746	2,349
Lincoln Avenue (USGS Gage 03337100)	3.8	709	912	1,068	1,401
Kingshighway Bridge (USGS Gage 03337000)	3.3	602	696	788	998
Wright Street (downstream)	3.3	602	672	752	981
Healey Street (upstream)	1.8	326	429	525	821
Stoughton Street (downstream)	1.2	142	206	230	450
Oak-Ash Basin Outflow	0.9	103	151	205	348
North/South Railroad	0.7	204	194	163	239
COPPER SLOUGH	7.5	611	931	1,216	1,530
Interstate Highway 57	4.8	462	707	925	1,090
John Street Interstate Highway 72 Westbound	4.3	411	629	822	940
Bradley Avenue	2.7	315	483	633	750
Railroad	2.0	279	431	565	675
JOHN STREET COPPER SLOUGH TRIBUTARY					
Just upstream of confluence with Copper Slough	1.8	198	304	397	460
Interstate Highway 72	1.3	164	252	330	390
LEFT BRANCH OF RIGHT BANK TRIBUTARY OF SALT FORK					
Just upstream of confluence with Right Bank Tributary of Salt Fork	6.0	796	1,212	1,389	N/A
MC CULLOUGH CREEK					
Race Street	1.3	319	492	567	680
OWL CREEK					
First Street	7.6	750	N/A	1,280	N/A
PHINNEY BRANCH					
Interstate Highway 57	5.8	757	1,153	1,322	1,600
Duncan Road	5.3	700	1,060	1,220	1,470
Crescent Road	2.9	447	683	784	990

N/A – Not applicable

Table 8 - Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (square miles)	Peak Discharges (cubic feet per second) 10-Percent-Annual-Chance	2-Percent-Annual-Chance	1-Percent-Annual-Chance	0.2-Percent-Annual-Chance
RIGHT BANK TRIBUTARY OF SALT FORK					
Just upstream of confluence with Salt Fork	9.5	1,200	1,825	2,093	N/A
SALINE BRANCH DRAINAGE DITCH					
At USGS Gage 03337500 (inactive) 0.5 miles downstream of Cunningham Avenue/ US Route 45	68.1	2,500	3,560	4,000	4,900
SALT FORK					
Interstate Highway 74	142	5,050	7,120	8,000	N/A
SANGAMON RIVER					
At Mahomet Shively Bridge	372	9,680	15,050	17,550	22,600
At U.S. Route 150 Bridge	362	9,060	14,100	16,400	22,600
UPPER BONEYARD CREEK					
Neil Street	1.1	333	517	597	700

N/A – Not applicable

The stillwater elevations have been determined for the 10-, 2-, 1-, and 0.2-percent-annual-chance floods for the flooding sources studied by detailed methods and are summarized in Table 9.

Table 9 - Summary of Stillwater Elevations

Flooding Source and Location	Elevation (feet NAVD 88) 10-Percent-Annual-Chance	2-Percent-Annual-Chance	1-Percent-Annual-Chance	0.2-Percent-Annual-Chance
Healey Street Detention Basin	*	*	723.4	*

*Data not available

3.2 Hydraulic Analyses

Analyses of the hydraulic characteristics of flooding from the sources studied were carried out to provide estimates of the elevations of floods of the selected recurrence intervals. Users should be aware that flood elevations shown on the FIRM represent rounded whole-foot elevations and may not exactly reflect the elevations shown on the flood profiles or in the floodway data tables in the FIS report. Flood elevations shown on the FIRM are primarily intended for flood insurance rating purposes. For construction and/or floodplain management purposes, users are encouraged to use the flood elevation data presented in this FIS in conjunction with the data shown on the FIRM.

Pre-Countywide FISs

For each jurisdiction within Champaign County that has a previously printed FIS report, the hydraulic analyses described in those reports that have not been superseded by new study information have been compiled and are summarized below.

Cross sections for the backwater analysis for Copper Slough, John Street Copper Slough Tributary, McCullough Creek, Phinney Branch, Saline Branch Drainage Ditch, and Upper Boneyard Creek were obtained from aerial photographs taken in April 1977, at a scale of 1:1,200, with 2-foot contours superimposed (Reference 49). The channel portion of cross-sections were obtained by field surveys.

For the Sangamon River, cross-sectional data required to describe the channels, floodplains and bridges, were obtained from field surveys, photogrammetric topographic mapping techniques, or USGS topographic quadrangle maps (Reference 50).

Water-surface elevations of floods of the selected recurrence intervals on Copper Slough, McCullough Creek, Phinney Branch, Saline Branch Drainage Ditch, and Upper Boneyard Creek were developed using the USACE HEC-2 step-backwater computer program (Reference 51). Starting water-surface elevations for Copper Slough, McCullough Creek, Phinney Branch, and Saline Branch Drainage Ditch were calculated using the normal depth method. For John Street Copper Slough and Upper Boneyard Creek, starting water-surface elevations were calculated by use of critical depth.

For Salt Fork, the 10-, 2-, and 1-percent-annual-chance flood profiles were determined using a depth-discharge rating curve computed at the USGS gaging station at river mile 46.75. Water depths were computed at the gage and at various points along the river to develop the water-surface profiles. Minimal flow restrictions by bridges were assumed and confirmed by several backwater computations (Reference 41).

The 10-, 2-, and 1-percent-annual-chance flood profiles for Right Bank of Salt Fork and for Left Branch of Right Bank of Salt Fork were computed through use of the U.S. Army Corps of Engineers HEC-2 step-backwater computer program (Reference 52). Starting water-surface elevations were determined using the slope-area method.

For the Sangamon River, water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 computer program (Reference 53). Starting water-surface elevations were based on normal flow analysis.

For Owl Creek, cross sections were field surveyed and water-surface elevations were determined using the USGS method of culvert analysis (Reference 40). Between structures, water-surface elevations were interpolated based on channel bed slope.

To be determined
Countywide FIS

For this countywide FIS, a hydraulic study performed by the USGS Illinois Water Science Center is included for Boneyard Creek (Reference 18), which incorporates the Phase I channel and basin improvements.

Cross-sections for Boneyard Creek in the Phase I improvement area were developed from design plans and field survey. Outside the Phase I improvement area, cross sections were obtained from 1977 aerial photography with 2-foot contour intervals (Reference 49) and field survey. For extending cross-sections, 2-foot 2005 Digital Elevation Model (DEM) was used (Reference 54). Water-surface elevations of floods of the selected recurrence intervals were computed using the SWMM5 (Reference 43, 44) computer program.

Locations of selected cross sections used in the hydraulic analyses are shown on the Flood Profiles (Exhibit 1). For stream segments for which a floodway was computed (Section 4.2), selected cross section locations are also shown on the FIRM (Exhibit 2).

Channel and overbank roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment and were based on field observations of the stream and floodplain areas. The range of the Manning's "n" coefficients for each stream is shown in Table 10, "Roughness Coefficients (Manning's 'n' Values)."

Table 10 - Roughness Coefficients (Manning's "n" Values)

Stream	Channel "n"	Overbank "n"
Boneyard Creek	0.015 - 0.035	0.030 - 0.100
Copper Slough	0.012 - 0.040	0.060
John Street Copper Slough Tributary	0.060	0.060
Left Branch of Right Bank Tributary of Salt Fork	0.035 - 0.04	0.040
McCullough Creek	0.012 - 0.040	0.060
Owl Creek	*	*
Phinney Branch	0.012 - 0.040	0.060
Right Bank Tributary of Salt Fork	0.02 - 0.05	0.045
Saline Branch Drainage Ditch	0.012 - 0.040	0.080
Salt Fork	*	*
Sangamon River	0.045 - 0.055	0.060 - 0.120
Upper Boneyard Creek	0.012 - 0.040	0.060

*Data not available

The hydraulic analyses for this study were based on unobstructed flow. The flood elevations shown on the Flood Profiles (Exhibit 1) are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

3.3 Vertical Datum

All FISs and FIRMs are referenced to a specific vertical datum. The vertical datum provides a starting point against which flood, ground, and structure elevations can be referenced and compared. Until recently, the standard vertical datum in use for newly created or revised FISs and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD 29). With the finalization of the North American Vertical Datum of 1988 (NAVD 88), many FISs and FIRMs are being prepared using NAVD 88 as the referenced vertical datum.

All flood elevations shown in this FIS and on the FIRM are referenced to NAVD 88. Structure and ground elevations in the community must, therefore, be referenced to NAVD 88. It is important to note that adjacent counties may be referenced to NGVD 29. This may result in differences in base flood elevations (BFEs) across the county boundary.

Effective information for this FIS was converted from NGVD 29 to NAVD 88 based on data presented in Figure 1 and Table 11. Computations show a single average conversion factor of -0.171 feet (NGVD 29 – 0.171 = NAVD 88) for the

county. The conversion factor was applied uniformly across the county and used to prepare the Floodway Data Tables, Flood Profiles, and FIRMs.

For more information on NAVD 88, see *Guidelines and Specifications for Flood Hazard Mapping Partners Appendix B: Guidance for Converting to the North American Vertical Datum of 1988* (Reference 55) available at http://www.fema.gov/plan/prevent/fhm/dl_cgs.shtm or contact the Vertical Network Branch, National Geodetic Survey, Coast and Geodetic Survey, National Oceanic and Atmospheric Administration, Rockville, Maryland 20910 (Internet address http://www.ngs.noaa.gov).

Temporary vertical monuments are often established during the preparation of a flood hazard analysis for the purpose of establishing local vertical control. Although these monuments are not shown on the FIRM, they may be found in the Technical Support Data Notebook associated with the FIS report and FIRM for this county. Interested individuals may contact FEMA to access these data.

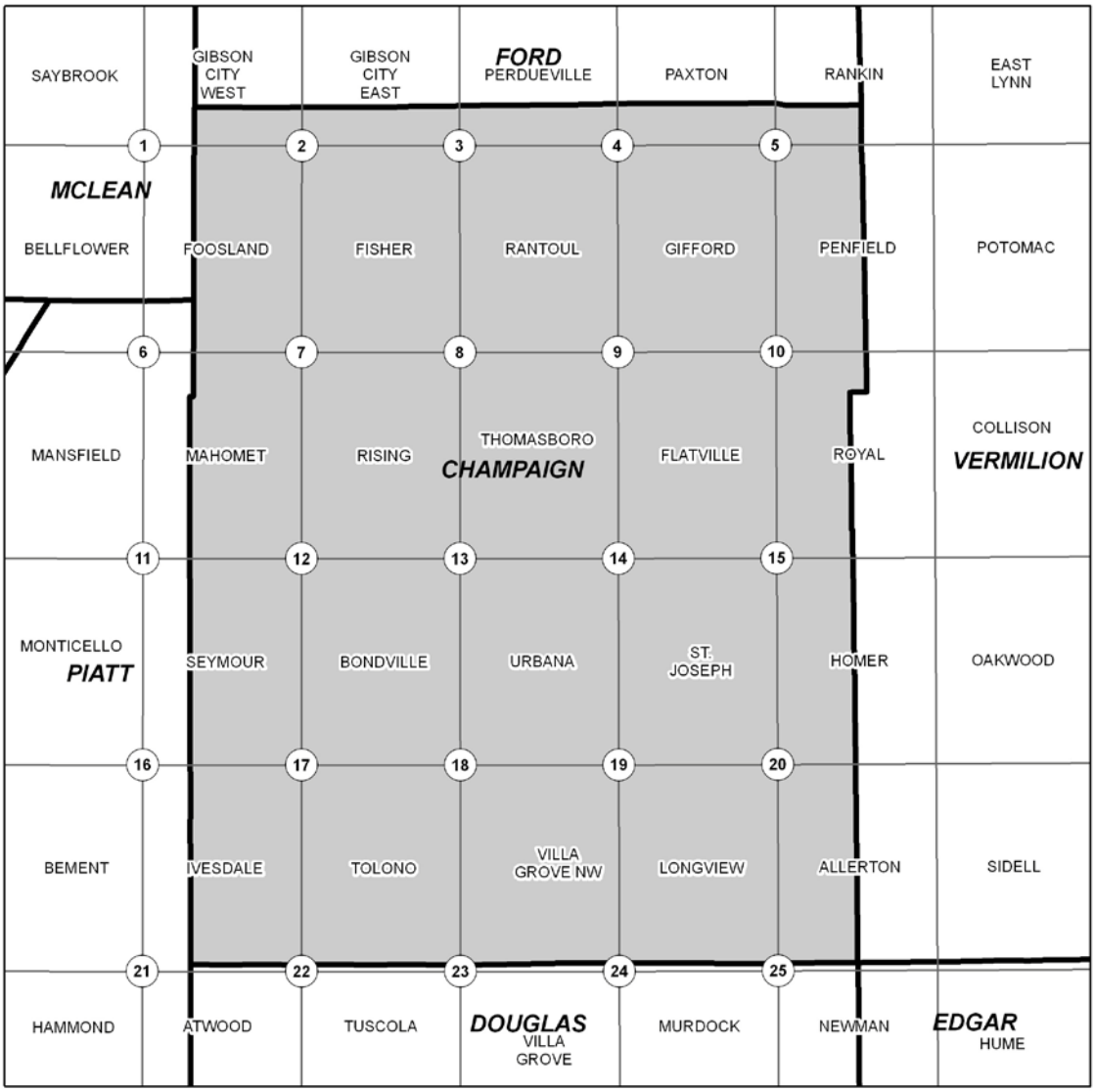

Figure 1 – Vertical Datum Conversion

The change in elevation for each Point ID is listed in Table 11.

Table 11 - Vertical Datum Conversions
Datum Conversions – Champaign County

Point ID #	Quadrangle Name	Corner	NAD83 Latitude (dec. deg.)	NAD83 Longitude (dec. deg.)	NGVD 29 to NAVD 88 Elevation Change (feet)
1	Foosland	NW	40.375	88.500	-0.177
2	Fisher	NW	40.375	88.375	-0.167
3	Rantoul	NW	40.375	88.250	-0.171
4	Gifford	NW	40.375	88.125	-0.167
5	Penfield	NW	40.375	88.000	-0.184
6	Mahomet	NW	40.250	88.500	-0.141
7	Rising	NW	40.250	88.375	-0.151
8	Thomasboro	NW	40.250	88.250	-0.131
9	Flatville	NW	40.250	88.125	-0.148
10	Royal	NW	40.250	88.000	-0.161
11	Seymour	NW	40.125	88.500	-0.200
12	Bondville	NW	40.125	88.375	-0.161
13	Urbana	NW	40.125	88.250	-0.118
14	St. Joseph	NW	40.125	88.125	-0.135
15	Homer	NW	40.125	88.000	-0.161
16	Ivesdale	NW	40.000	88.500	-0.213
17	Tolono	NW	40.000	88.375	-0.187
18	Villa Grove NW	NW	40.000	88.250	-0.151
19	Longview	NW	40.000	88.125	-0.148
20	Allerton	NW	40.000	88.000	-0.167
21	Atwood	NW	39.875	88.500	-0.226
22	Tuscola	NW	39.875	88.375	-0.210
23	Villa Grove	NW	39.875	88.250	-0.197
24	Murdock	NW	39.875	88.125	-0.207
25	Newman	NW	39.875	88.000	-0.207
Range of conversion values					-0.226 through -0.118
Average conversion factor					**-0.171**
Maximum variance from the average conversion					0.055
Maximum variance from a no-conversion value					0.226

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages state and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 1-percent-annual-chance flood elevations and delineations of the 1- and 0.2-percent-annual-chance floodplain boundaries and 1-percent-annual-chance floodway to assist communities in developing floodplain management measures. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data tables, and Summary of Stillwater Elevation tables. Users should reference the data presented in the FIS as well as additional information that may be available at the local community map repository before making flood elevation and/or floodplain boundary determinations.

4.1 Floodplain Boundaries

To provide a national standard without regional discrimination, the 1-percent-annual-chance flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2-percent-annual-chance flood is employed to indicate additional areas of flood risk in the community. For the flooding sources studied by detailed methods, the 1- and 0.2-percent-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, the boundaries were interpolated on the basis of available topography.

Pre-Countywide FISs

Between cross sections, the boundaries of the 1-percent-annual-chance floodplain for the Sangamon River were delineated using topographic maps at a scale of 1:24,000 with a contour interval of 5 feet (Reference 50).

For this Countywide FIS

For Boneyard Creek, the 1- and 0.2-percent-annual-chance floodplain boundaries were delineated by the USGS using the 2005 2-foot DEM (Reference 54).

For the Healey Street Detention Basin, the 1-percent-annual-chance stillwater elevation was used in conjunction with topographic data derived from the 2008 countywide LiDAR dataset to delineate Zone AE floodplain and floodway (Reference 56).

In addition, all other flooding sources studied by detailed methods, with the exception of the Sangamon River (see above, “Pre-Countywide FISs”) and areas mapped through the LOMR process (see Table 6), were re-delineated using the 2008 DEM (Reference 56).

The 2008 topographic data were also used to re-delineate areas of Zone A for portions of the following flooding sources: Embarras River, East Branch

Embarras River, Black Slough, McCullough Creek, Salt Fork, Right Bank Tributary of Salt Fork, Left Branch of Right Bank Tributary of Salt Fork, Upper Salt Fork Drainage Ditch, Union Drainage Ditch No. 1, Spoon River, Flatville Drainage Ditch and tributaries, Saline Branch Drainage Ditch, Lone Tree Creek, East Lake Fork, Kaskaskia River, Homer Lake, and Lake of the Woods.

Additional study data were incorporated for the first time in this countywide FIS creating new areas of Zone A floodplain for portions of the Embarras River Watershed (Reference 57) and the Salt Fork Watershed (Reference 58). Additional study data were also incorporated for the re-delineation of Zone A for a portion of Lone Tree Creek (Reference 59) as well as for Homer Lake (Reference 60) and Lake of the Woods (Reference 61).

Zone A floodplain has also been delineated to its full extents for East Lake Fork, Upper Salt Fork Drainage Ditch, and Kaskaskia River creating areas of Zone A floodplain within the previously unmapped communities of Ivesdale, Rantoul, and Sadorus, respectively. Zone A floodplain is also shown on this countywide study for the previously unmapped communities of Bondville and Royal due to corporate boundary expansion.

For the following streams, the source study data were used for floodplain delineations as indicated:

Zone AE floodplain was delineated to its full extents on the St. Joseph reach of Salt Fork and its tributaries in and around the community of St. Joseph using source study data (Reference 5). It should be noted that the tributaries through this reach are subject to backwater from Salt Fork and therefore are shown as Zone AE through the backwater areas.

Zone AE floodplain and floodway was delineated to its full extents in and around the community of Sidney for portions of the Salt Fork, the Right Bank Tributary of Salt Fork, and the Left Branch of Right Bank Tributary of Salt Fork, using source study data (Reference 16). In addition, the study was used to delineate Zone A for portions of the Right Bank Tributary of Salt Fork, the Left Branch of Right Bank Tributary, and an unnamed tributary to Left Branch of Right Bank Tributary of Salt Fork located upstream of the Sidney corporate limits. It should be noted that the lower reach of the unnamed tributary to Left Branch of Right Bank Tributary of Salt Fork is subject to backwater from Left Branch of Right Bank Tributary of Salt Fork and therefore is shown as Zone AE through the backwater.

Zone AE floodplain was delineated to its full extents for Owl Creek using source study data (Reference 10). This replaces an area of Zone A floodplain previously depicted in unincorporated Champaign County, an area now included within the expanded corporate boundaries of Fisher.

The 1- and 0.2-percent floodplain boundaries are shown on the FIRM (Exhibit 2). On this map, the 1-percent-annual-chance floodplain boundary corresponds to the boundary of the areas of special flood hazards (Zones A, AH, AO, and AE); and the 0.2-percent-annual-chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 1- and 0.2-percent-annual-chance floodplain boundaries are close together or collinear, only the 1-percent-annual-chance floodplain boundary has been shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown due to limitations of the map scale and/or lack of detailed topographic data.
For the streams studied by approximate methods, only the 1-percent-annual-chance floodplain boundary is shown on the FIRM (Exhibit 2).

4.2 Floodways

Encroachment on floodplains, such as structures and fill, has the potential to reduce flood-carrying capacity, increase flood heights and velocities, and increase flood hazards in areas beyond the encroachment itself. For purposes of the NFIP, a floodway is used as a tool to assist local communities in floodplain management. Under this concept, the area of the 1-percent-annual-chance floodplain is divided into a floodway and a floodway fringe.

The floodway is the channel of a stream, plus any adjacent floodplain areas (see Figure 2, “Floodway Schematic”) that must be kept free of encroachment so that the 1-percent-annual-chance flood can be carried without substantial increases in flood heights. Minimum federal standards limit such increases to 1.0 foot, provided that hazardous velocities are not produced. In Illinois, however, under the *Rivers, Lakes and Streams Act* (615 ILCS 5/23, 29 & 30 and 615 ILCS 5/18), encroachment in the floodplain is limited to that which will cause only an insignificant increase in flood heights (Reference 62). The State of Illinois has adopted this more stringent criterion which limits the increase in flood heights to 0.1 foot, no more than a 10 percent reduction in floodplain volume, and no more than a 10 percent increase in average velocity. This has generally been interpreted as the least surcharge measurable, consistent with the encroachment option of the computer program utilized for the floodway determination. The floodways in this FIS are presented to local agencies as a minimum standard that can be adopted directly or that can be used as a basis for additional floodway studies.

The area between the floodway and the 1-percent-annual-chance floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water-surface elevation of the 1-percent-annual-chance flood by more than 0.1 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 2, “Floodway Schematic.”

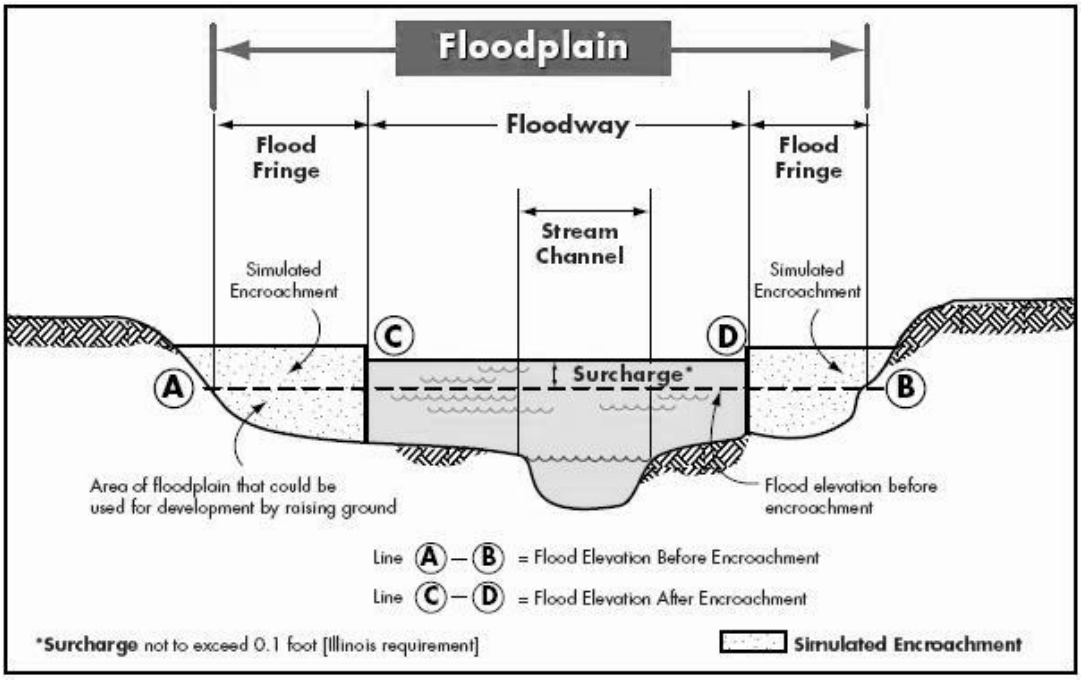

Figure 2 - Floodway Schematic

The floodway presented in this FIS report and on the FIRM was computed for certain stream segments on the basis of equal conveyance reduction from each side of the floodplain. Floodway widths were computed at cross sections. Between cross sections, the floodway boundaries were interpolated. The results of the floodway computations have been tabulated for selected cross sections (see Table 12, "Floodway Data"). The computed floodways are shown on the FIRM (Exhibit 2). In cases where the floodway and 1-percent-annual-chance floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

For this Countywide FIS

Due to the limitation of the SWMM5 model (discussed in Sections 3.1 and 3.2) with floodway encroachment modeling, floodway calculations for the Boneyard Creek were performed using a steady state HEC-RAS model calibrated to the SWMM 100-year flows. An equal conveyance reduction floodway was computed within HEC-RAS.

As a result of this approach, the floodway data tables for the Boneyard Creek are a special case. Floodway section areas, floodway mean velocities, and 1-percent-annual-chance floodwater surface elevations with floodways are not reported from the steady state hydraulic model. However, regulatory 1-percent-annual-chance floodwater surface elevations are reported from the SWMM model.

In the State of Illinois, any portion of a stream or watercourse that lies within the floodway fringe of a studied (AE) stream may have a state regulated floodway. The FIRM may not depict these state regulated floodways.

Floodways restricted by anthropogenic features such as bridges and culverts are drawn to reflect natural conditions and may not agree with the widths listed in the floodway data table in the Flood Insurance Study. The floodway as shown on the FIRM should be used for regulatory purposes.

In Illinois, along streams where floodways have not been computed, the community must obtain state permit approval (when applicable) for development. This ensures that the cumulative effect of development in the floodplain will not cause an increase in the base flood elevations that creates a potential for flood damages.

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Boneyard Creek								
A	735	51.1	N/A	N/A	703.1	699.9 [2]	N/A	N/A
B	1,370	61.2	N/A	N/A	703.1	702.1 [2]	N/A	N/A
C	2,140	65.7	N/A	N/A	703.9	703.9	N/A	N/A
D	2,535	59.9	N/A	N/A	704.5	704.5	N/A	N/A
E	2,920	104.1	N/A	N/A	705.6	705.6	N/A	N/A
F	3,280	39.0	N/A	N/A	707.4	707.4	N/A	N/A
G	3,740	20.2	N/A	N/A	708.4	708.4	N/A	N/A
H	4,315	177.0	N/A	N/A	709.2	709.2	N/A	N/A
I	4,965	194.0	N/A	N/A	710.9	710.9	N/A	N/A
J	5,925	264.2	N/A	N/A	712.1	712.1	N/A	N/A
K	6,790	147.8	N/A	N/A	712.8	712.8	N/A	N/A
L	7,800	38.3	N/A	N/A	713.4	713.4	N/A	N/A
M	8,992	49.5	N/A	N/A	714.0	714.0	N/A	N/A
N	9,263	72.9	N/A	N/A	714.0	714.0	N/A	N/A
O	9,467	40.0	N/A	N/A	714.1	714.1	N/A	N/A
P	9,995	20.9	N/A	N/A	717.4	717.4	N/A	N/A
Q	10,520	*	N/A	N/A	718.5	718.5	N/A	N/A
R	11,345	*	N/A	N/A	718.7	718.7	N/A	N/A
S	11,803	*	N/A	N/A	718.9	718.9	N/A	N/A
T	12,190	48.0	N/A	N/A	720.1	720.1	N/A	N/A
U	12,585	23.2	N/A	N/A	721.0	721.0	N/A	N/A

[1]Feet above confluence with Saline Branch Drainage Ditch
[2]Elevation computed without consideration of backwater effect from Saline Branch Drainage Ditch
*Flow contained in underground conduits - no floodway defined
N/A – Not applicable

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

FLOODWAY DATA

BONEYARD CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Boneyard Creek (continued)								
V	12,970	27.9	N/A	N/A	722.8	722.8	N/A	N/A
W	13,287	15.7	N/A	N/A	724.3	724.3	N/A	N/A
X	13,660	16.2	N/A	N/A	725.5	725.5	N/A	N/A
Y	14,200	114.7	N/A	N/A	727.7	727.7	N/A	N/A
Z	14,575	310.0	N/A	N/A	728.2	728.2	N/A	N/A
AA	15,260	333.0	N/A	N/A	728.7	728.7	N/A	N/A
AB	15,765	129.2	N/A	N/A	729.1	729.1	N/A	N/A
AC	16,109	*	N/A	N/A	732.0	732.0	N/A	N/A
AD	17,140	32.8	N/A	N/A	733.3	733.3	N/A	N/A
AE	18,195	22.9	N/A	N/A	733.3	733.3	N/A	N/A
AF	18,620	145.0	N/A	N/A	733.3	733.3	N/A	N/A
AG	19,135	15.9	N/A	N/A	733.7	733.7	N/A	N/A
AH	19,673	18.2	N/A	N/A	734.2	734.2	N/A	N/A
AI	20,016	12.2	N/A	N/A	734.7	734.7	N/A	N/A
AJ	20,300	18.1	N/A	N/A	734.9	734.9	N/A	N/A

[1]Feet above confluence with Saline Branch Drainage Ditch
*Oak-Ash detention basin - no encroachments
N/A – Not applicable

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

FLOODWAY DATA

BONEYARD CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Copper Slough								
A	0 [1]	58	283	4.3	712.0	712.0	712.1	0.1
B	1,332 [1]	44	221	5.5	714.3	714.3	714.4	0.1
C	2,772 [1]	43	255	4.8	717.7	717.7	717.7	0.0
D	4,077 [1]	70	373	3.3	719.8	719.8	719.8	0.0
E	5,825 [1]	37	175	5.3	721.3	721.3	721.4	0.1
F	6,791 [1]	39	206	4.5	723.3	723.3	723.3	0.0
G	8,145 [1]	34	141	5.8	724.6	724.6	724.6	0.0
H	9,505 [1]	33	142	5.8	728.8	728.8	728.8	0.0
I	10,480 [1]	125	340	2.4	733.4	733.4	733.5	0.1
J	11,640 [1]	113	255	2.5	735.2	735.2	735.3	0.1
K	13,340 [1]	126	328	1.9	738.0	738.0	738.1	0.1
L	14,005 [1]	61	146	4.3	738.0	738.0	738.1	0.1
M	15,785 [1]	53	147	3.8	743.3	743.3	743.4	0.1
N	16,708 [1]	57	183	3.1	747.7	747.7	747.8	0.1
O	17,243 [1]	273	1,003	0.6	750.0	750.0	750.1	0.1
John Street Copper Slough Tributary								
A	200 [2]	40	61	6.5	722.1	722.1	722.2	0.1
B	530 [2]	50	126	3.2	724.3	724.3	724.3	0.0
C	1,010 [2]	40	126	3.1	725.2	725.2	725.3	0.1

[1]Feet above Interstate 57
[2]Feet above confluence with Copper Slough

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

FLOODWAY DATA

COPPER SLOUGH – JOHN STREET COPPER SLOUGH TRIBUTARY

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Left Branch of Right Bank Tributary of Salt Fork								
A	300 [1]	104	416	2.5	658.8	650.8 [2]	650.9	0.1
B	675 [1]	131	400	2.6	658.8	651.1 [2]	651.2	0.1
C	1,228 [1]	171	580	1.8	658.8	652.9 [2]	653.0	0.1
D	1,637 [1]	150	486	2.1	658.8	653.2 [2]	653.3	0.1
E	2,006 [1]	75	221	4.6	658.8	653.8 [2]	653.9	0.1
McCullough Creek								
A	50 [3]	386	1,488	0.4	717.7	717.7	717.8	0.1
B	1,570 [3]	116	134	4.2	718.1	718.1	718.1	0.0
C	2,300 [3]	173	254	2.2	722.8	722.8	722.9	0.1
D	3,320 [3]	211	207	2.7	726.3	726.3	726.4	0.1
Owl Creek								
*	*	*	*	*	*	*	*	*

[1] Feet above confluence with Right Bank Tributary of Salt Fork
[2] Elevations computed without consideration of backwater effect from Salt Fork
[3] Feet above Race Street
*Data not available

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

FLOODWAY DATA

LEFT BRANCH OF RIGHT BANK TRIBUTARY OF SALT FORK – MCCULLOUGH CREEK – OWL CREEK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Phinney Branch								
A	0 [1]	34	176	7.5	708.8	708.8	708.9	0.1
B	1,286 [1]	108	508	2.6	713.1	713.1	713.2	0.1
C	2,556 [1]	77	414	2.9	713.8	713.8	713.9	0.1
D	4,156 [1]	81	464	2.6	715.5	715.5	715.6	0.1
E	5,564 [1]	86	442	2.8	716.1	716.1	716.2	0.1
F	7,655 [1]	30	150	5.2	718.2	718.2	718.2	0.0
G	8,085 [1]	29	128	6.1	719.6	719.6	719.6	0.0
H	8,550 [1]	85	240	3.3	721.1	721.1	721.2	0.1
I	9,460 [1]	123	304	2.6	722.3	722.3	722.4	0.1
J	10,649 [1]	48	176	4.0	723.3	723.3	723.4	0.1
K	11,869 [1]	308	292	2.4	726.1	726.1	726.2	0.1
Right Bank Tributary of Salt Fork								
A	3,080 [2]	235	654	3.2	658.8	649.6 [3]	649.7	0.1
B	3,667 [2]	131	377	3.7	658.8	651.4 [3]	651.5	0.1
C	3,907 [2]	139	428	3.2	658.8	652.5 [3]	652.6	0.1
D	4,087 [2]	121	316	4.4	658.8	652.8 [3]	652.9	0.1
E	4,322 [2]	29	154	9.0	658.8	654.2 [3]	654.3	0.1
F	4,539 [2]	35	218	6.4	658.8	655.8 [3]	655.9	0.1
G	4,885 [2]	41	325	4.3	658.8	658.4 [3]	658.5	0.1
H	5,243 [2]	118	698	2.0	658.8	658.8	658.9	0.1
I	5,527 [2]	120	729	1.9	659.0	659.0	659.1	0.1
J	5,918 [2]	178	860	1.6	659.2	659.2	659.3	0.1
K	7,286	58	260	5.3	660.3	660.3	660.4	0.1

[1]Feet above Interstate 57
[2]Feet above confluence with Salt Fork
[3]Elevations computed without consideration of backwater effect from Salt Fork

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

FLOODWAY DATA

PHINNEY BRANCH – RIGHT BANK TRIBUTARY OF SALT FORK

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE [1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Saline Branch Drainage Ditch								
A	0	71	711	5.6	693.5	693.5	693.6	0.1
B	1,250	185	1,129	3.5	695.6	695.6	695.7	0.1
C	1,775	216	1,254	3.2	696.0	696.0	696.1	0.1
D	4,085	87	886	4.5	699.3	699.3	699.4	0.1
E	6,240	171	857	4.7	700.1	700.1	700.2	0.1
F	7,290	118	979	4.1	702.3	702.3	702.4	0.1
G	8,490	138	1,051	3.8	704.2	704.2	704.3	0.1
H	10,915	82	773	5.2	706.5	706.5	706.6	0.1
I	12,065	524	2,629	1.5	708.0	708.0	708.1	0.1
J	13,010	87	857	4.7	708.4	708.4	708.5	0.1
K	13,530	82	796	5.0	709.4	709.4	709.5	0.1
L	14,015	100	2,789	1.4	710.2	710.2	710.3	0.1
M	14,894	516	1,075	3.7	710.2	710.2	710.3	0.1
N	15,509	358	1,990	2.0	711.6	711.6	711.7	0.1
O	16,259	407	2,755	0.2	712.0	712.0	712.1	0.1
P	17,006	90	930	4.3	712.0	712.0	712.1	0.1
Q	18,236	574	2,534	1.6	713.1	713.1	713.2	0.1
R	19,436	913	3,645	1.1	713.6	713.6	713.7	0.1
S	21,165	73	753	5.3	714.5	714.5	714.6	0.1
T	22,701	262	1,615	2.5	716.7	716.7	716.8	0.1

[1]Feet above limit of detailed study, approximately 1,600 feet downstream from Interstate 74

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

FLOODWAY DATA

SALINE BRANCH DRAINAGE DITCH

FLOODING SOURCE		FLOODWAY			1-PERCENT-ANNUAL-CHANCE FLOOD WATER SURFACE ELEVATION (FEET NAVD88)			
CROSS SECTION	DISTANCE	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
Salt Fork								
A	35.55 [1]	489	6,148	2.3	658.8	658.8	658.9	0.1
B	36.92 [1]	817	9,602	1.4	659.4	659.4	659.5	0.1
Sangamon River								
A	1,900 [2]	1,190	11,710	1.6	676.7	676.7	676.8	0.1
B	7,070 [2]	940	9,484	3.3	677.3	677.3	677.4	0.1
C	12,040 [2]	2,150	16,200	2.1	678.5	678.5	678.6	0.1
D	16,320 [2]	900	8,196	3.0	680.3	680.3	680.4	0.1
E	19,930 [2]	520	5,710	6.0	682.1	682.1	682.1	0.0
F	23,700 [2]	850	9,328	4.6	684.4	684.4	684.4	0.0
G	31,250 [2]	1,020	10,985	3.2	687.8	687.8	687.9	0.1
H	36,700 [2]	1,030	12,806	2.4	688.9	688.9	689.0	0.1
Upper Boneyard Creek								
A	0 [3]	21	63	9.5	735.9	735.9	735.9	0.0
B	1,118 [3]	158	304	2.0	740.0	740.0	740.1	0.1
C	2,563 [3]	350	558	1.1	744.4	744.4	744.5	0.1
D	3,163 [3]	216	304	2.0	745.0	745.0	745.1	0.1
E	3,663 [3]	30	88	6.8	747.1	747.1	747.2	0.1

[1]Miles above confluence with Vermilion River
[2]Feet above limit of detailed study, approximately 1,000 feet downstream of Township Road 2000 North (Shively Bridge)
[3]Feet above Neil Street

TABLE 12

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

FLOODWAY DATA

SALT FORK – SANGAMON RIVER – UPPER BONEYARD CREEK

5.0 INSURANCE APPLICATIONS

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. The zones are as follows:

Zone A

Zone A is the flood insurance rate zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no base flood elevations or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 1-percent-annual-chance floodplains that are determined in the FIS by detailed methods. In most instances, whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at the selected intervals within this zone.

Zone AH

Zone AH is the flood insurance rate zone that corresponds to the areas of 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are between 1 and 3 feet. Whole-foot base flood elevations derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AO

Zone AO is the flood insurance rate zone that corresponds to the areas of 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet. Average whole-foot depths derived from the detailed hydraulic analyses are shown within this zone.

Zone X

Zone X is the flood insurance rate zone that corresponds to areas outside the 0.2-percent-annual-chance floodplain, areas within the 0.2-percent-annual-chance floodplain, and to areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by levees. No base flood elevations or depths are shown within this zone.

6.0 FLOOD INSURANCE RATE MAP

The FIRM is designed for flood insurance and floodplain management applications.

For flood insurance applications, the map designates flood insurance rate zones as described in Section 5.0 and, in the 1-percent-annual-chance floodplains that were studied by detailed methods, shows selected whole-foot base flood elevations or average depths. Insurance agents use the zones and base flood elevations in conjunction with information on structures and their contents to assign premium rates for flood insurance policies.

For floodplain management applications, the map shows by tints, screens, and symbols, the 1- and 0.2-percent-annual-chance floodplains. Floodways and the locations of selected cross sections used in the hydraulic analyses and floodway computations are shown where applicable

The current FIRM presents flooding information for the entire geographic area of Champaign County. Previously, separate Flood Hazard Boundary Maps and/or FIRMs were prepared for each incorporated community and the unincorporated areas of the county identified as having special flood hazard areas. The countywide FIRM also includes flood hazard information that was presented separately on Flood Boundary and Floodway Maps (FBFM), where applicable. Historical data relating to the community maps prepared is presented in Table 13, “Community Map History.”

7.0 OTHER STUDIES

Flood Insurance Studies have been prepared for Douglas, McLean, Piatt, and Vermilion Counties, Illinois. Flood Insurance Rate Maps only, no FIS, were prepared for Ford County (Reference 63).

Information pertaining to revised and unrevised flood hazards for each jurisdiction, or the portions of each jurisdiction, within Champaign County has been compiled into this FIS. Therefore, this FIS supersedes all previously printed FISs, FHBMs, FBFMs, and FIRMs for all of the incorporated and unincorporated jurisdictions in Champaign County.

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this FIS can be obtained by contacting FEMA, Federal Insurance and Mitigation Division, 536 South Clark Street, Sixth Floor, Chicago, Illinois 60605.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FLOOD INSURANCE RATE MAP EFFECTIVE DATE	FLOOD INSURANCE RATE MAP REVISION DATE(S)
Allerton, Village of [1]	N/A	None	N/A	None
Bondville, Village of	TBD	None	TBD	None
Broadlands, Village of	August 30, 1974	June 11, 1976	March 9, 1984	None
Champaign, City of	May 3, 1974	December 26, 1975	January 16, 1981	None
Champaign County (Unincorporated Areas)	December 30, 1977	None	March 1, 1984	January 2, 2003
Fisher, Village of	March 22, 1974	October 24, 1975	April 3, 1984	None
Foosland, Village of [1]	N/A	None	N/A	None
Gifford, Village of [1]	N/A	None	N/A	None
Homer, Village of [1]	N/A	None	N/A	None
Ivesdale, Village of	June 16, 2011 [2]	None	June 16, 2011 [2]	None
Longview, Village of [1]	N/A	None	N/A	None
Ludlow, Village of [1]	N/A	None	N/A	None
Mahomet, Village of	November 23, 1973	February 27, 1976	June 15, 1983	January 2, 2003

[1] No special flood hazard areas identified
[2] Date from Piatt County Unincorporated and Incorporated Areas Flood Insurance Rate Map
TBD – To be determined
N/A – Not applicable

TABLE 13

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISION DATE(S)	FLOOD INSURANCE RATE MAP EFFECTIVE DATE	FLOOD INSURANCE RATE MAP REVISION DATE(S)
Ogden, Village of [1]	N/A	None	N/A	None
Pesotum, Village of [1]	N/A	None	N/A	None
Philo, Village of [1]	N/A	None	N/A	None
Rantoul, Village of	TBD	None	TBD	None
Royal, Village of	TBD	None	TBD	None
Sadorus, Village of	TBD	None	TBD	None
Savoy, Village of [1]	N/A	None	N/A	None
Sidney, Village of	January 16, 1974	October 10, 1975	January 17, 1986	None
St. Joseph, Village of	November 23, 1973	March 5, 1976	November 16, 1983	None
Thomasboro, Village of [1]	N/A	None	N/A	None
Tolono, Village of [1]	N/A	None	N/A	None
Urbana, City of	May 3, 1974	March 26, 1976	January 16, 1981	None

[1] No Special Flood Hazard Areas Identified
TBD – To be determined
N/A – Not applicable

TABLE 13

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

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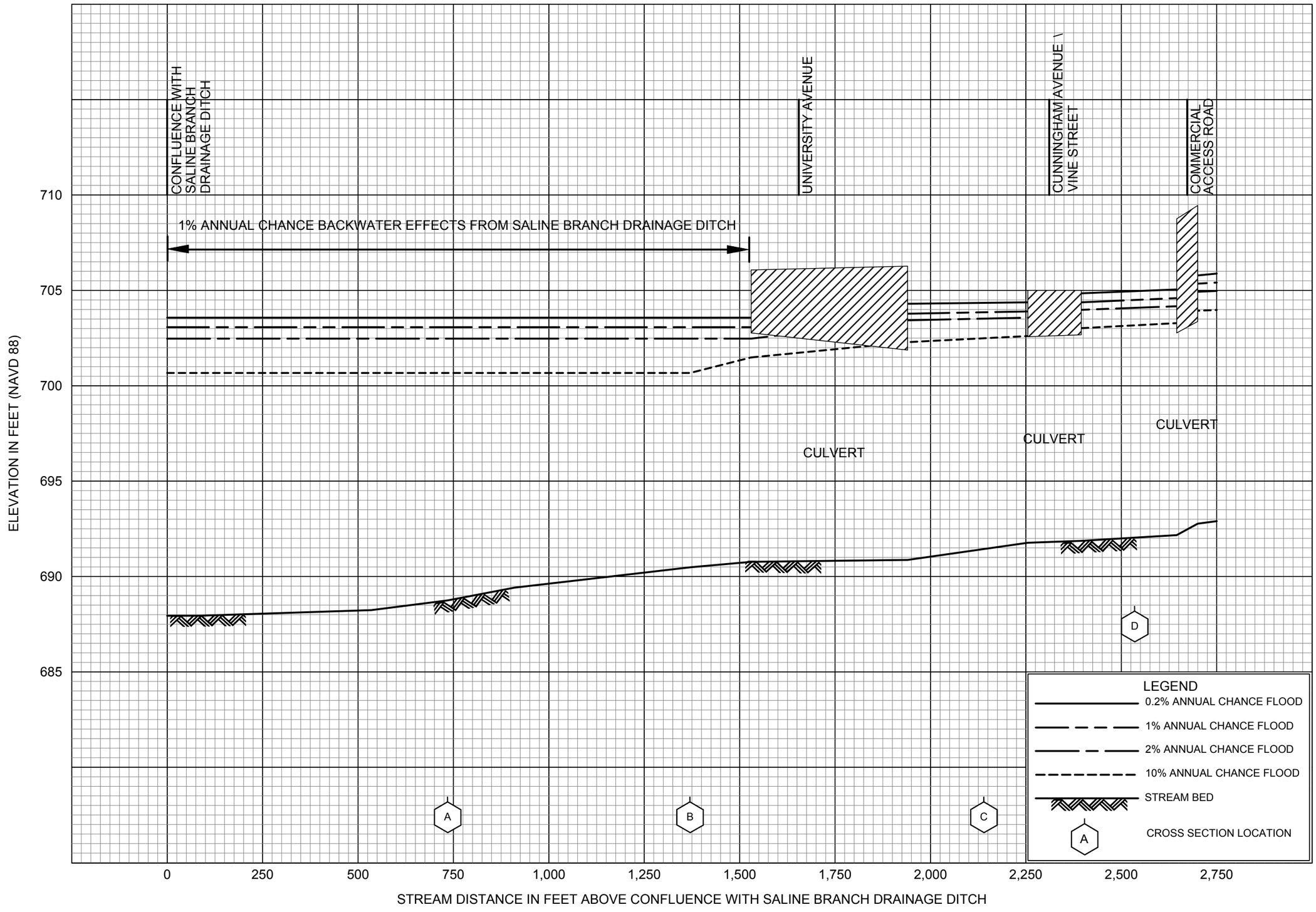


FLOOD PROFILES

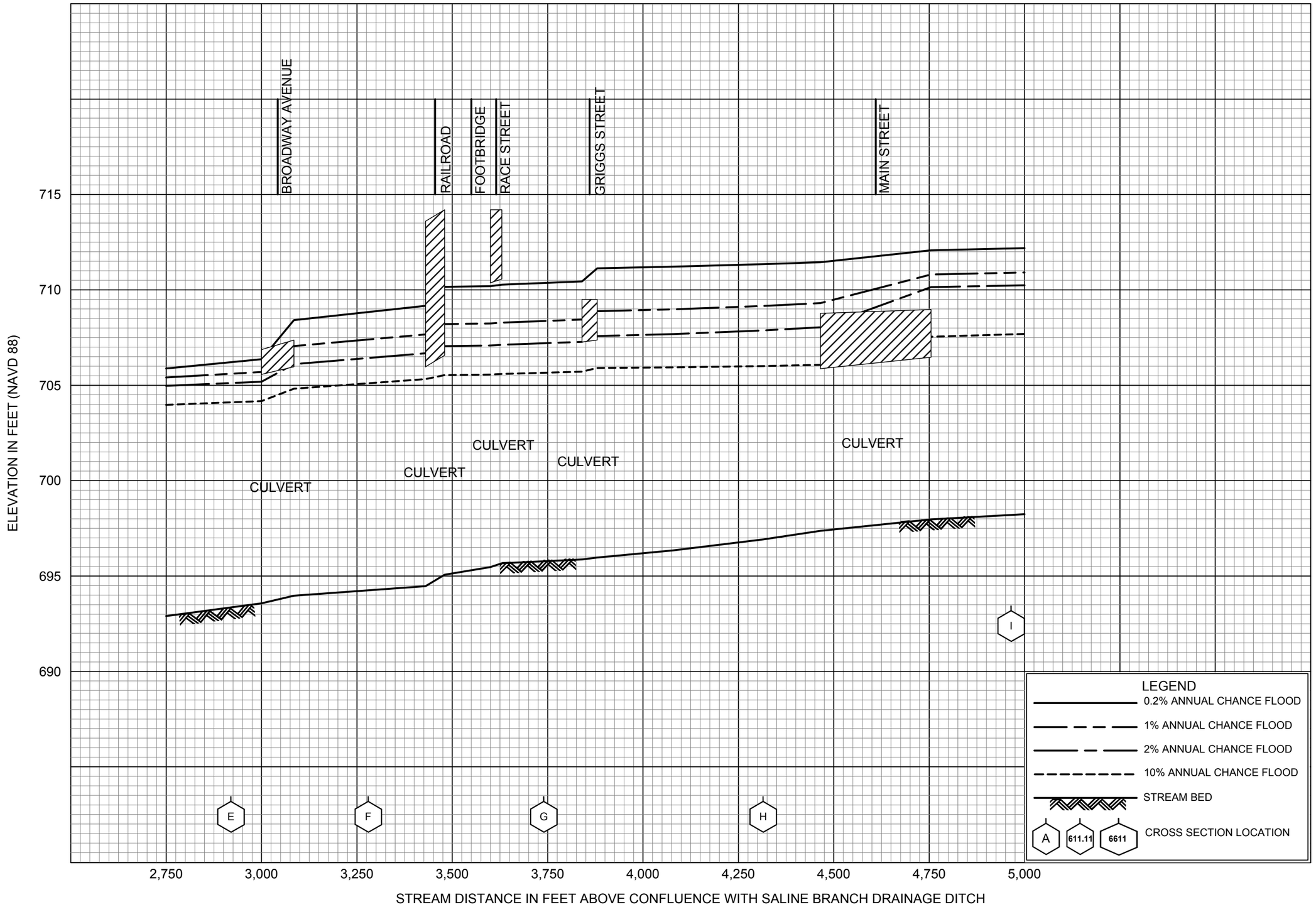
BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY , IL

AND INCORPORATED AREAS

01P



FLOOD PROFILES

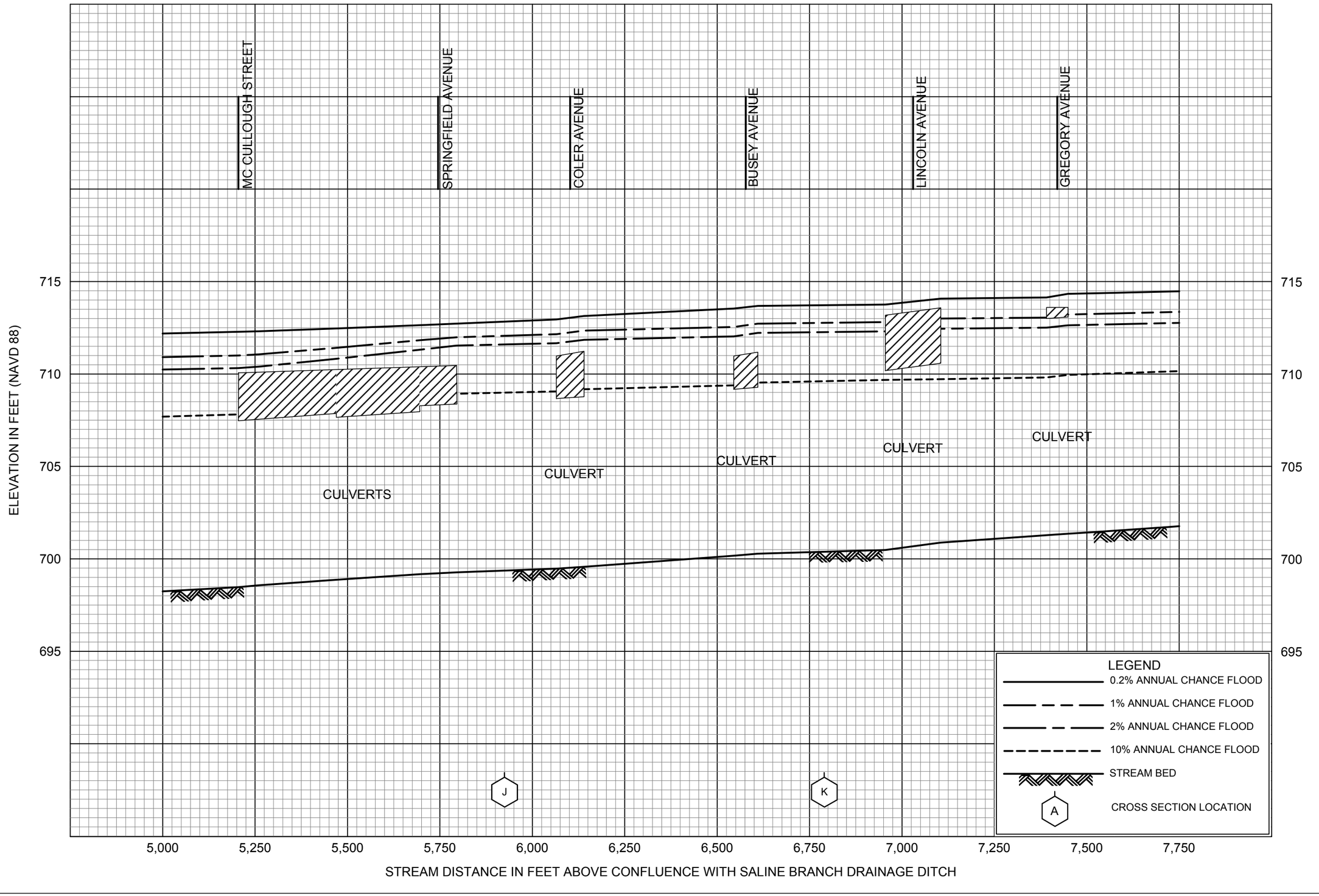
BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY ,IL

AND INCORPORATED AREAS

02P



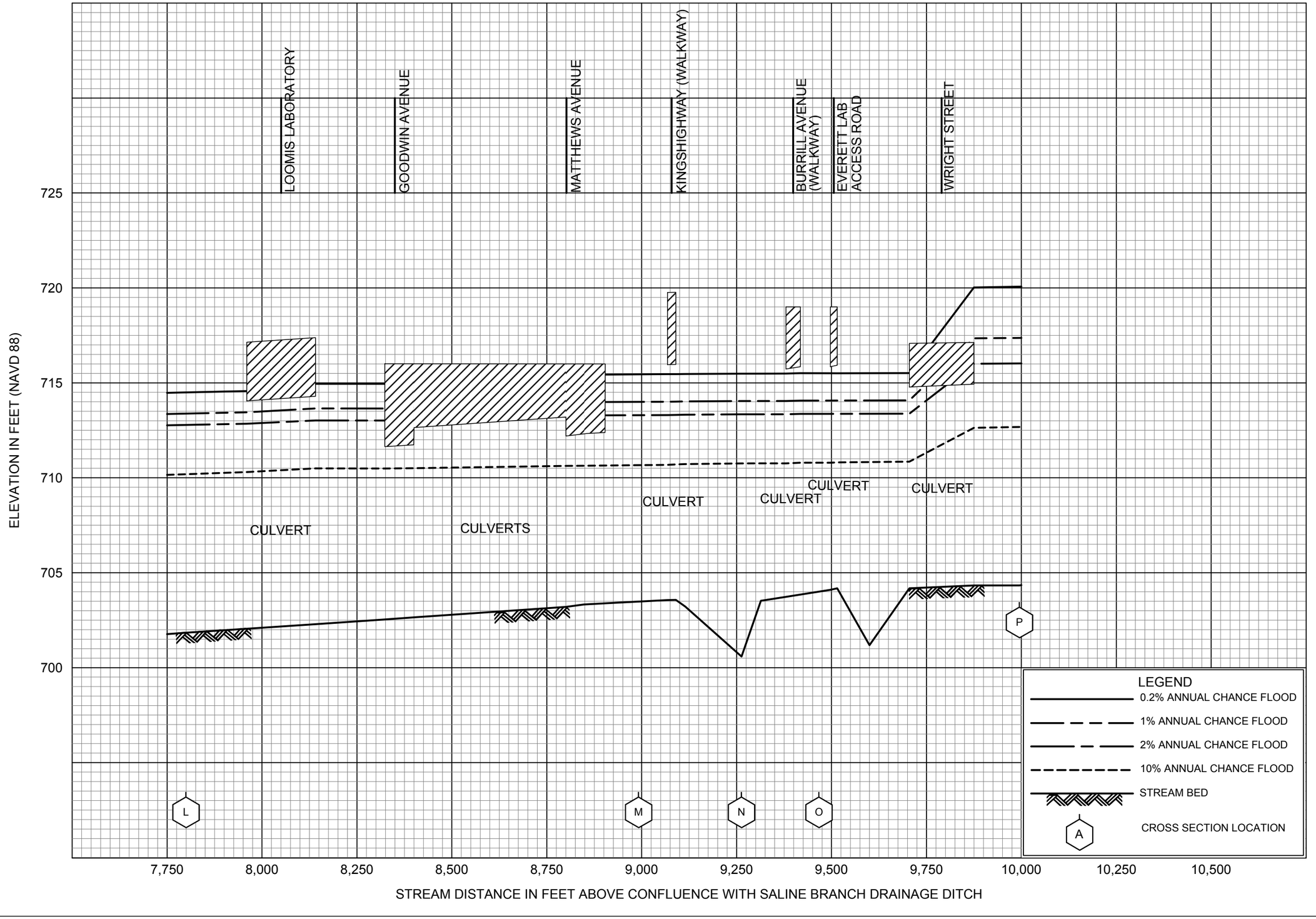
FLOOD PROFILES

BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY , IL

AND INCORPORATED AREAS



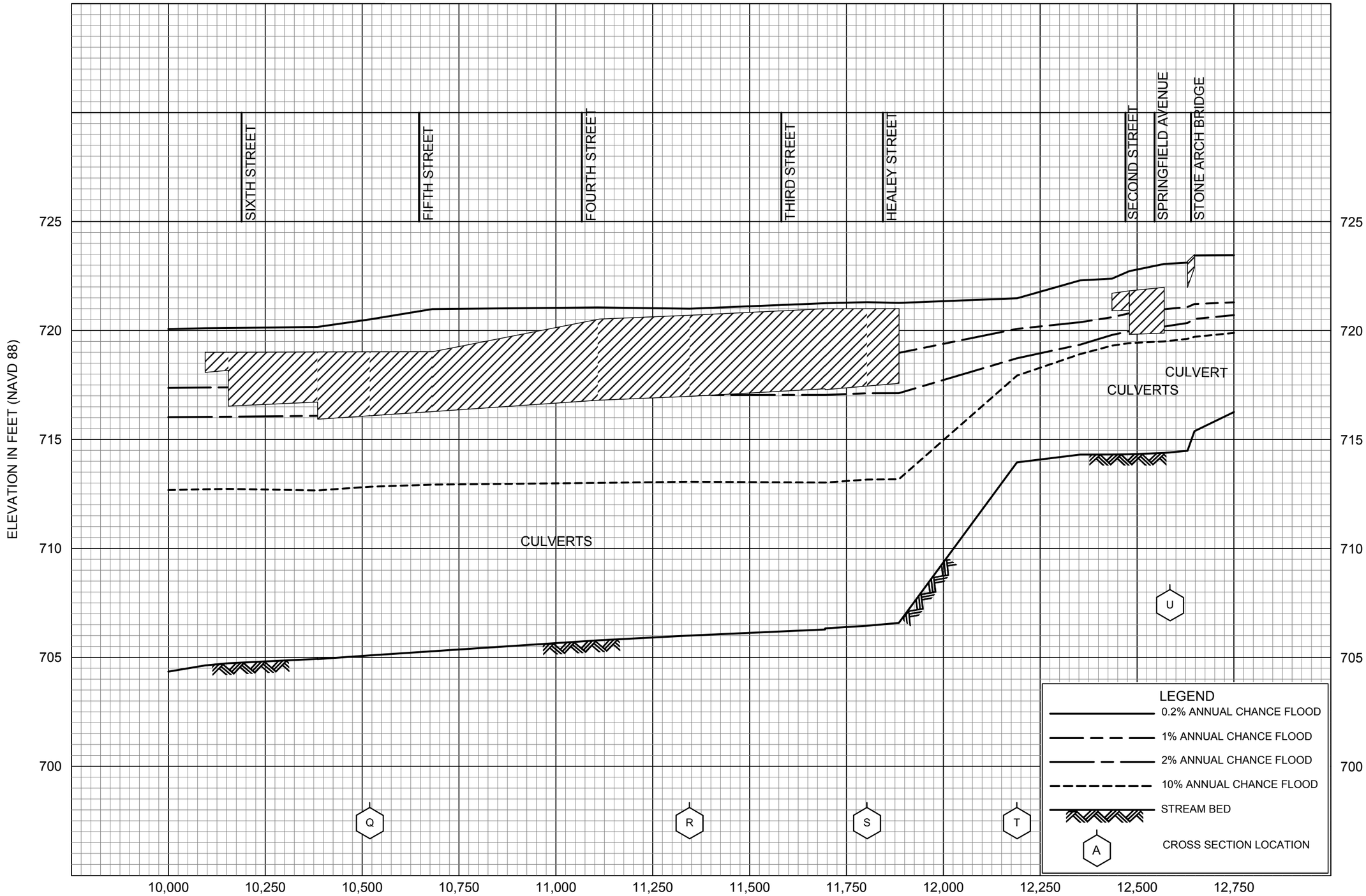
FLOOD PROFILES

BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



FLOOD PROFILES

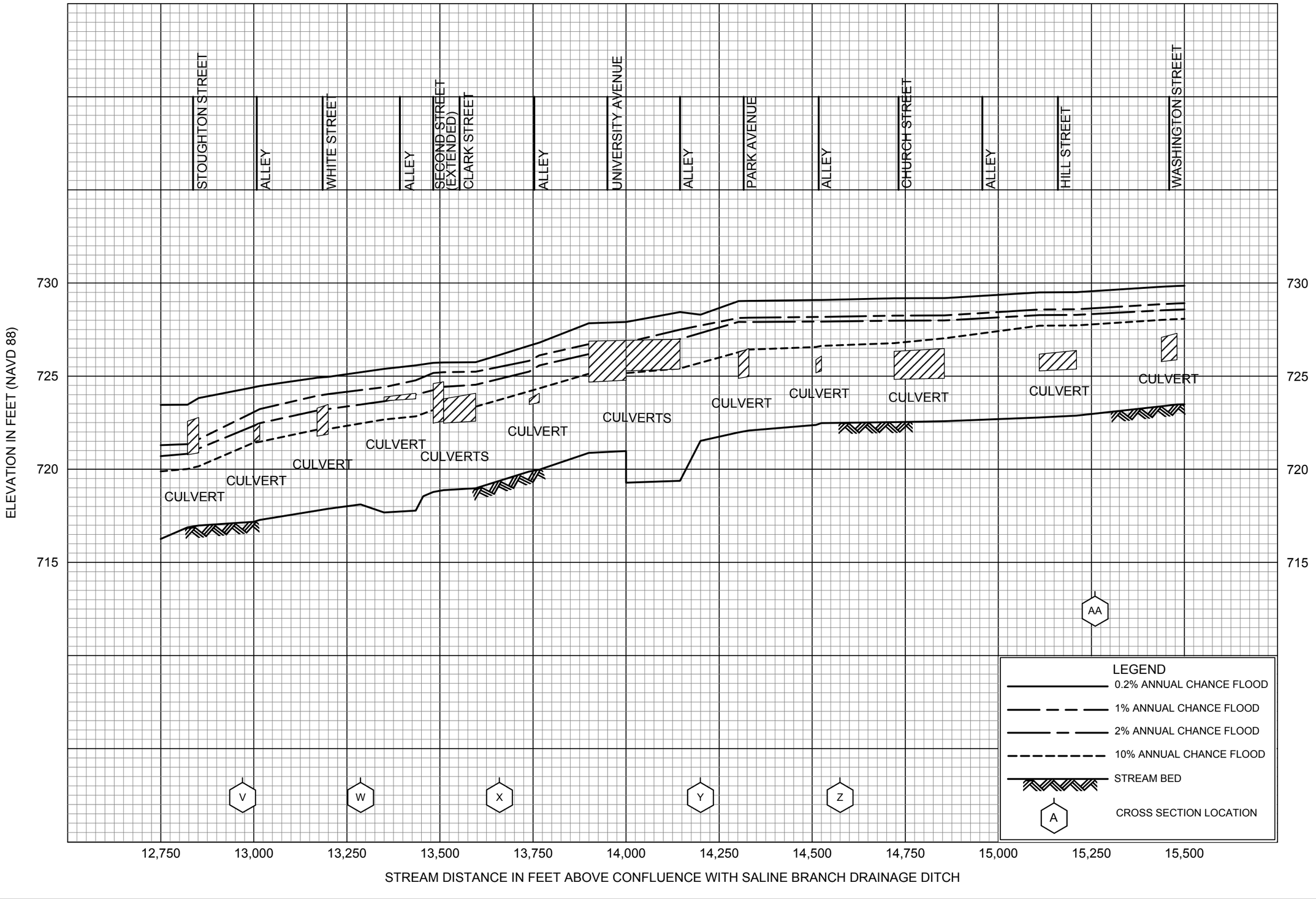
BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY ,IL

AND INCORPORATED AREAS

05P



FLOOD PROFILES

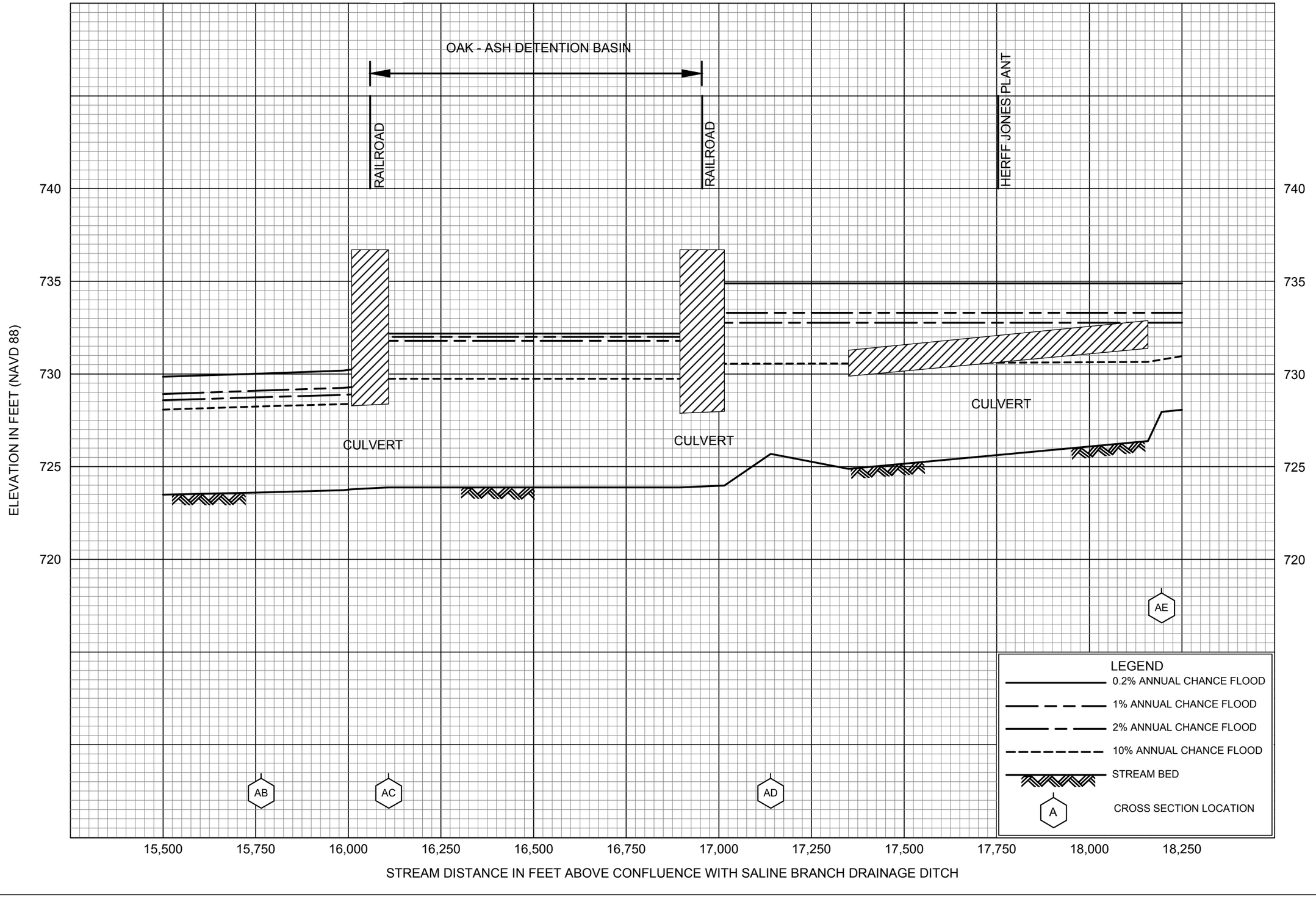
BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY , IL

AND INCORPORATED AREAS

06P



FLOOD PROFILES

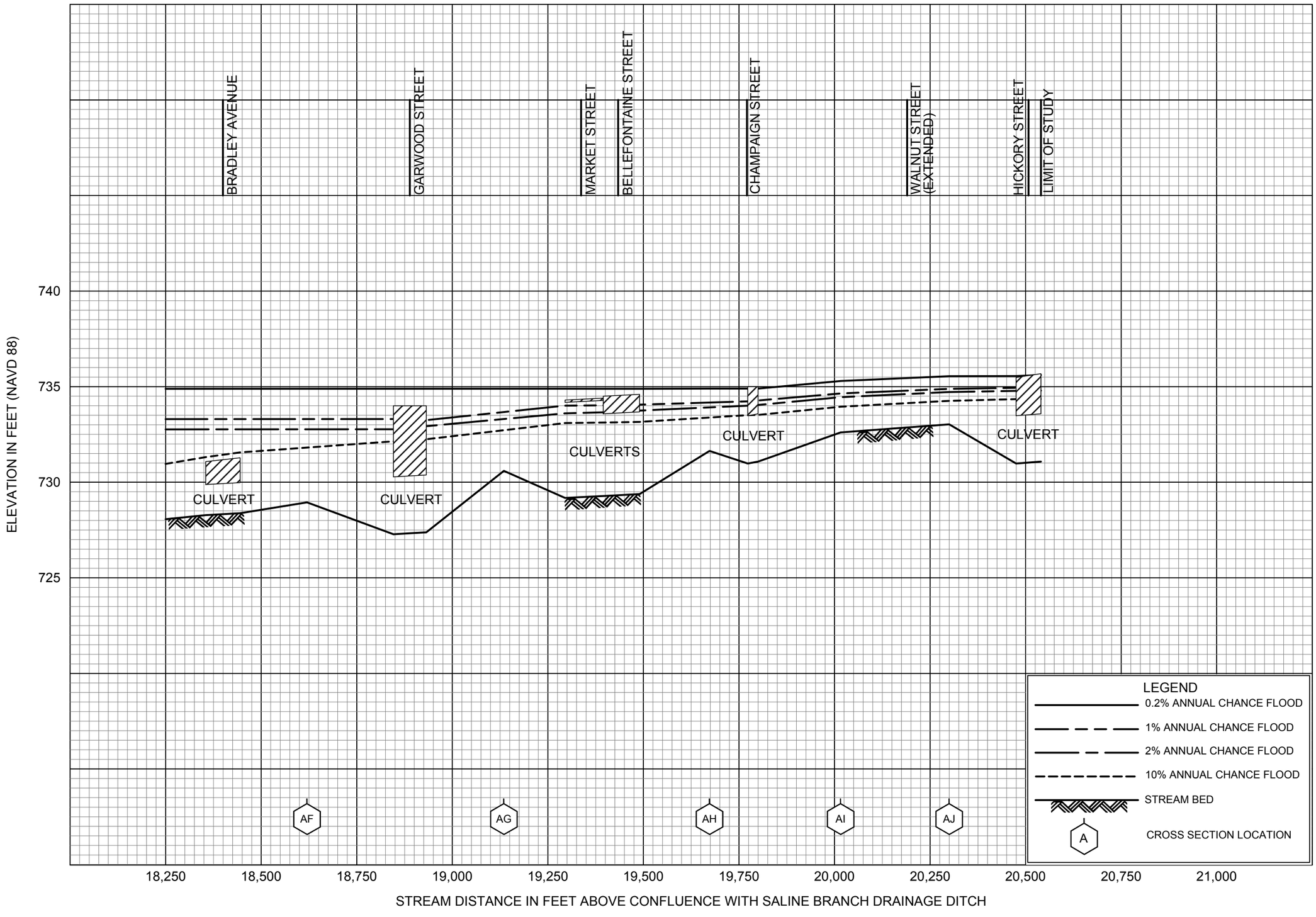
BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY , IL

AND INCORPORATED AREAS

07P



FLOOD PROFILES

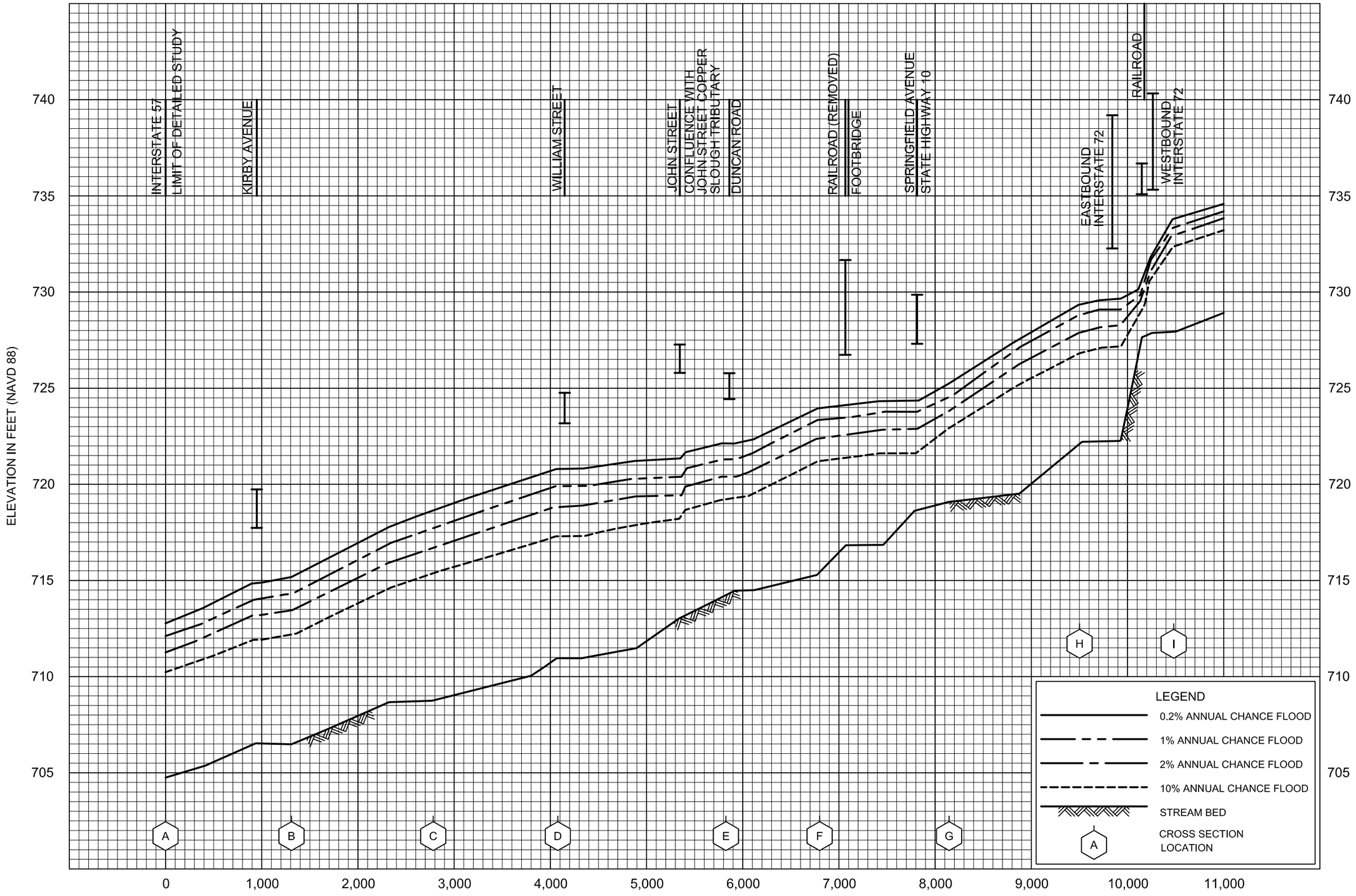
BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY , IL

AND INCORPORATED AREAS

08P



FLOOD PROFILES

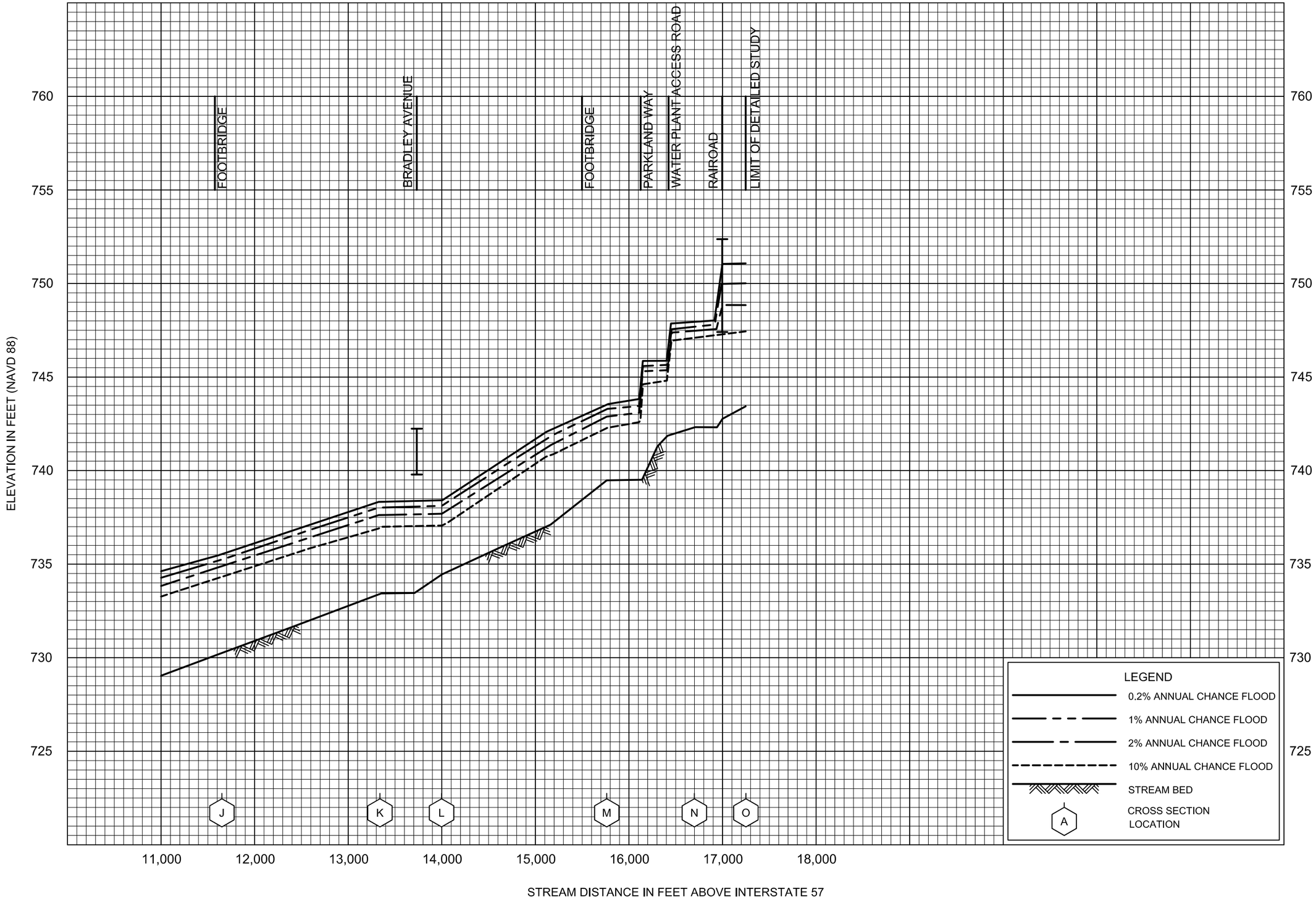
COPPER SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

09P



FLOOD PROFILES

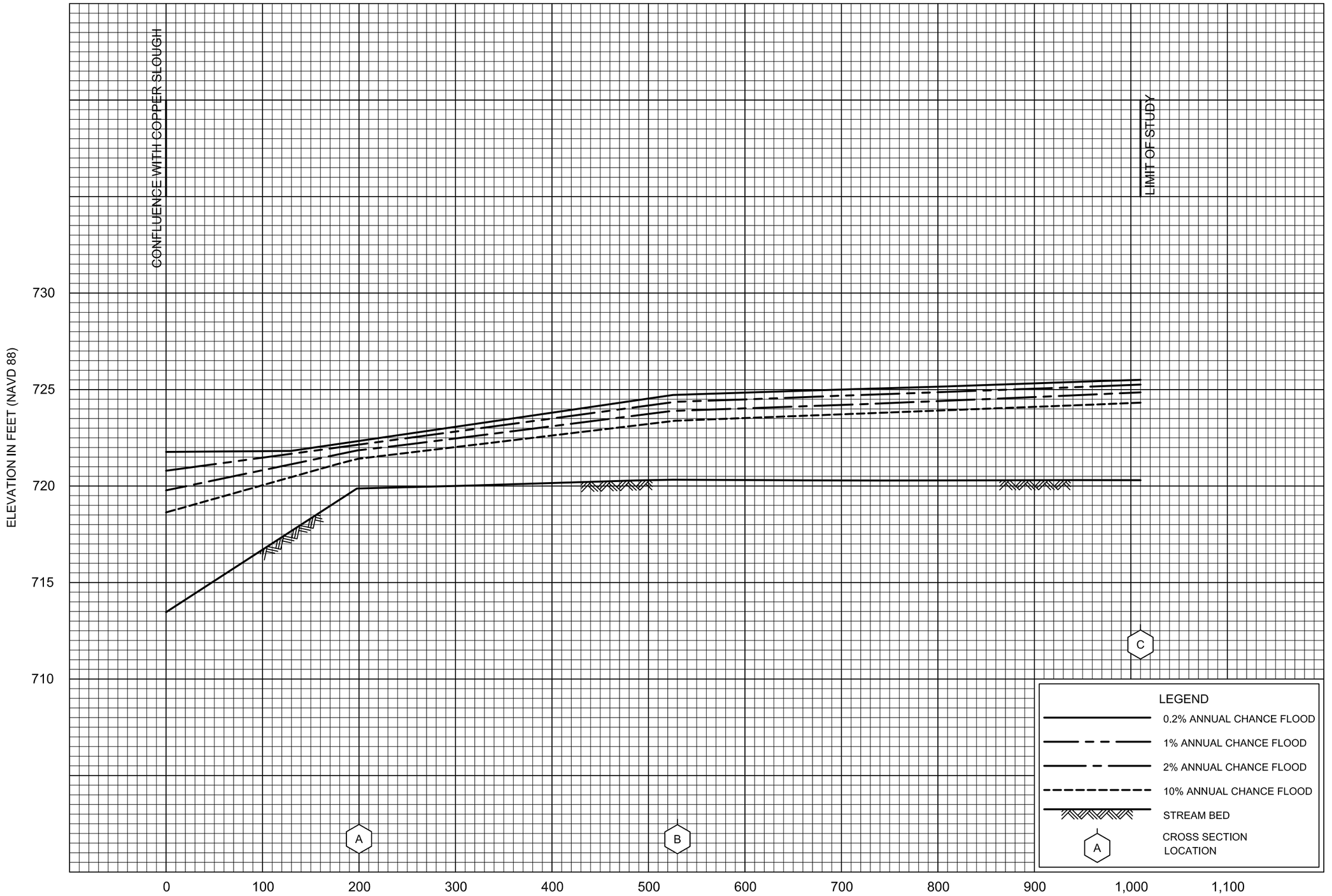
COPPER SLOUGH

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

10P



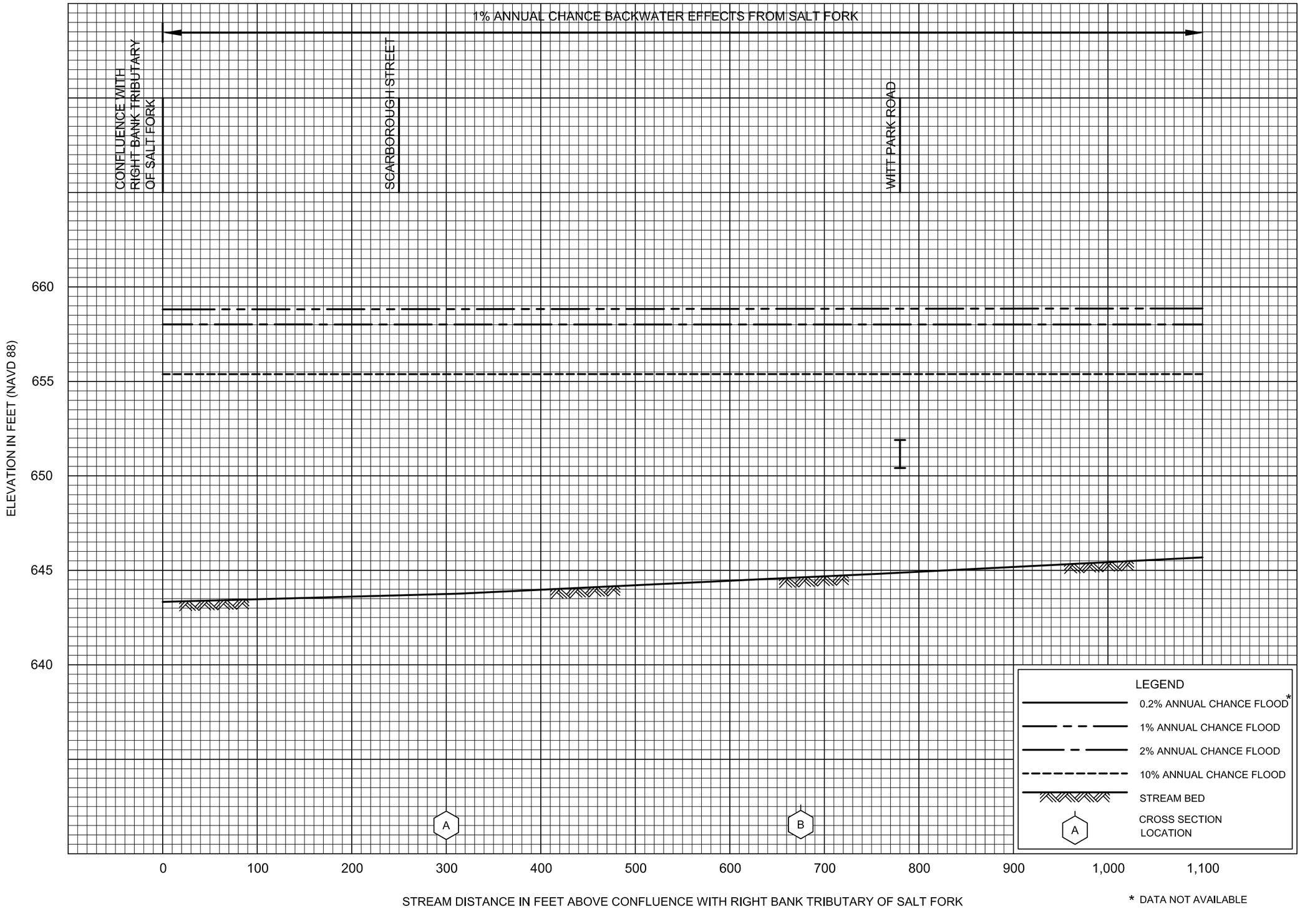
FLOOD PROFILES

JOHN STREET COPPER SLOUGH TRIBUTARY

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



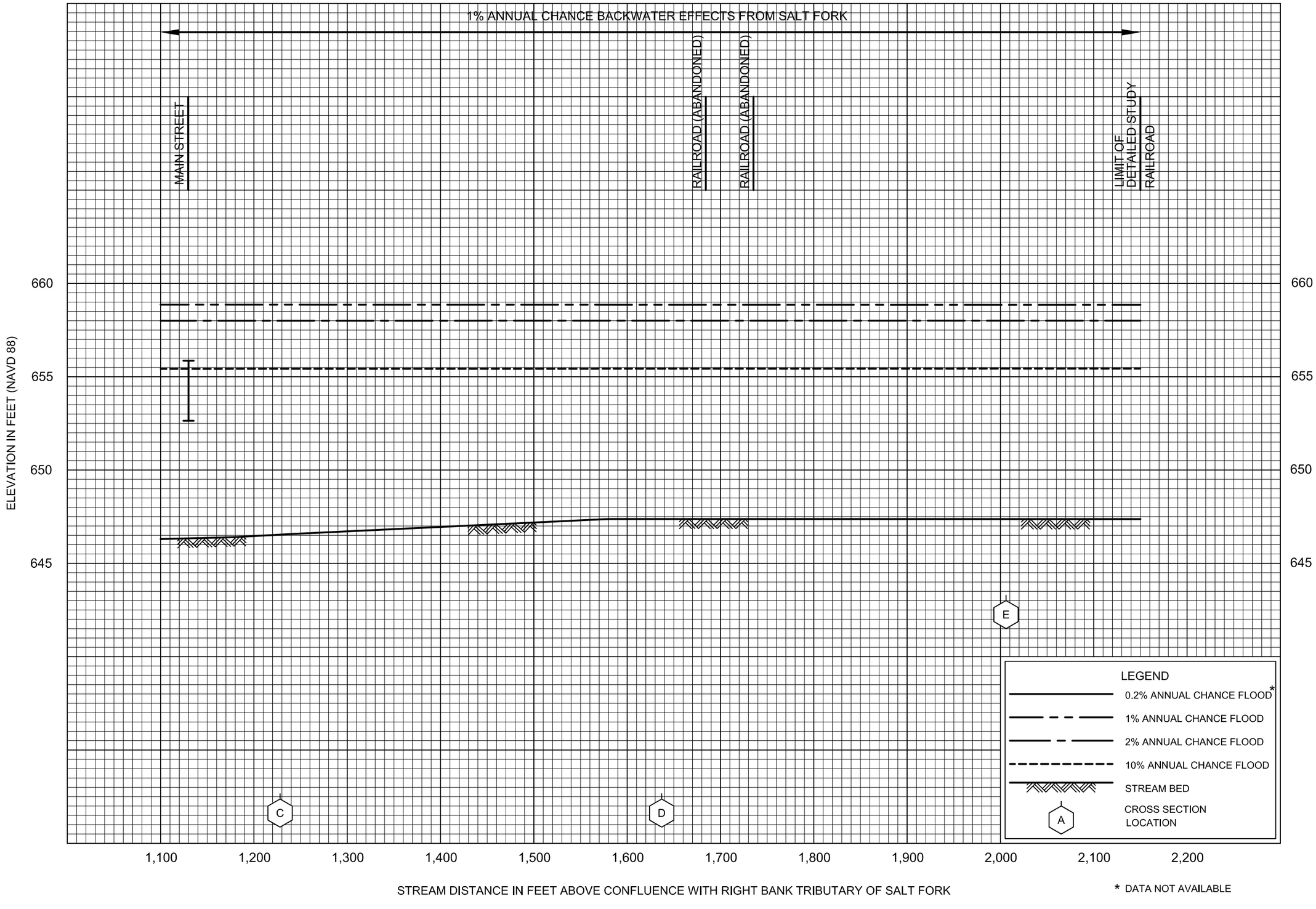
FLOOD PROFILES

LEFT BRANCH OF RIGHT BANK TRIBUTARY OF SALT FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



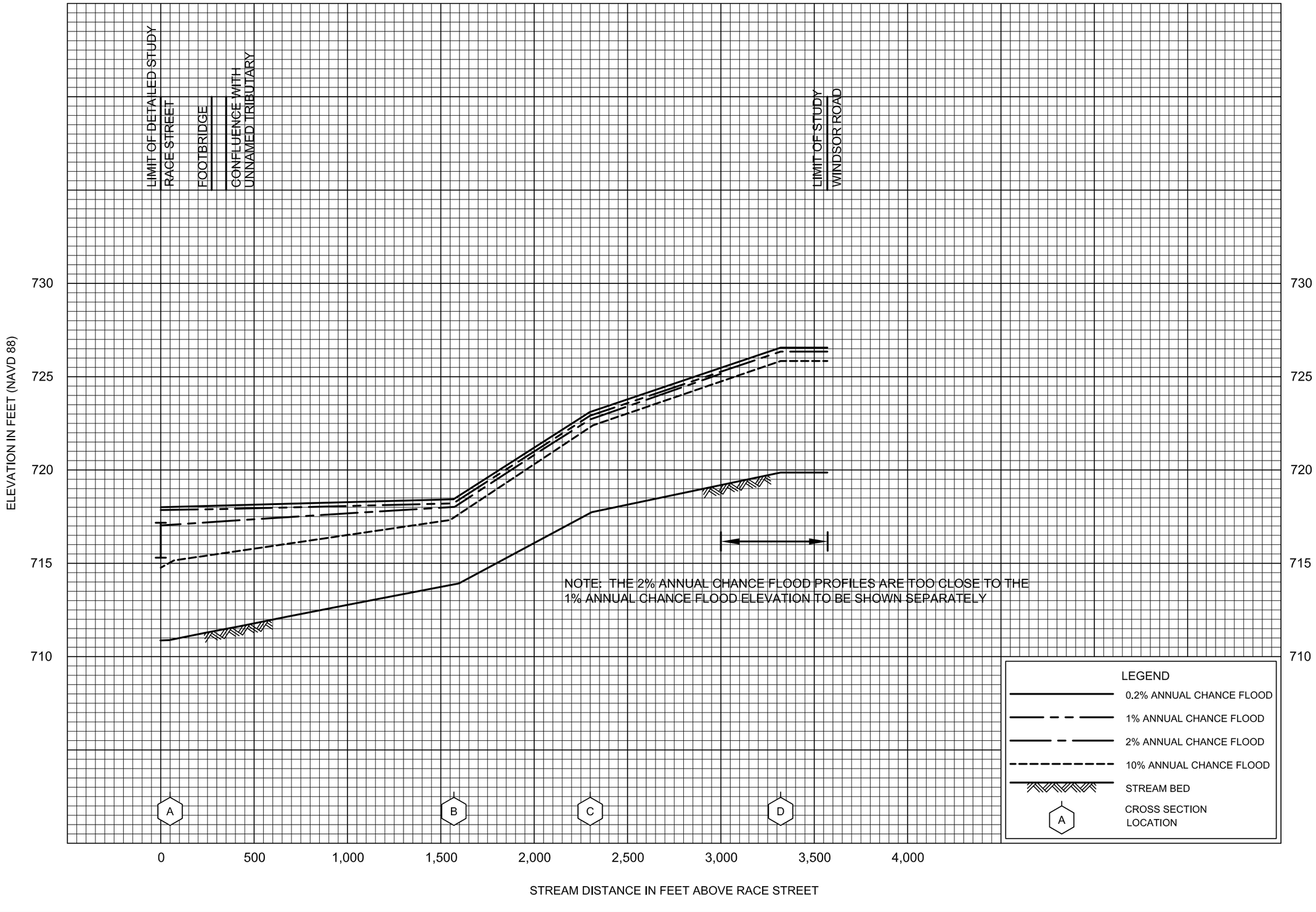
FLOOD PROFILES

LEFT BRANCH OF RIGHT BANK TRIBUTARY OF SALT FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



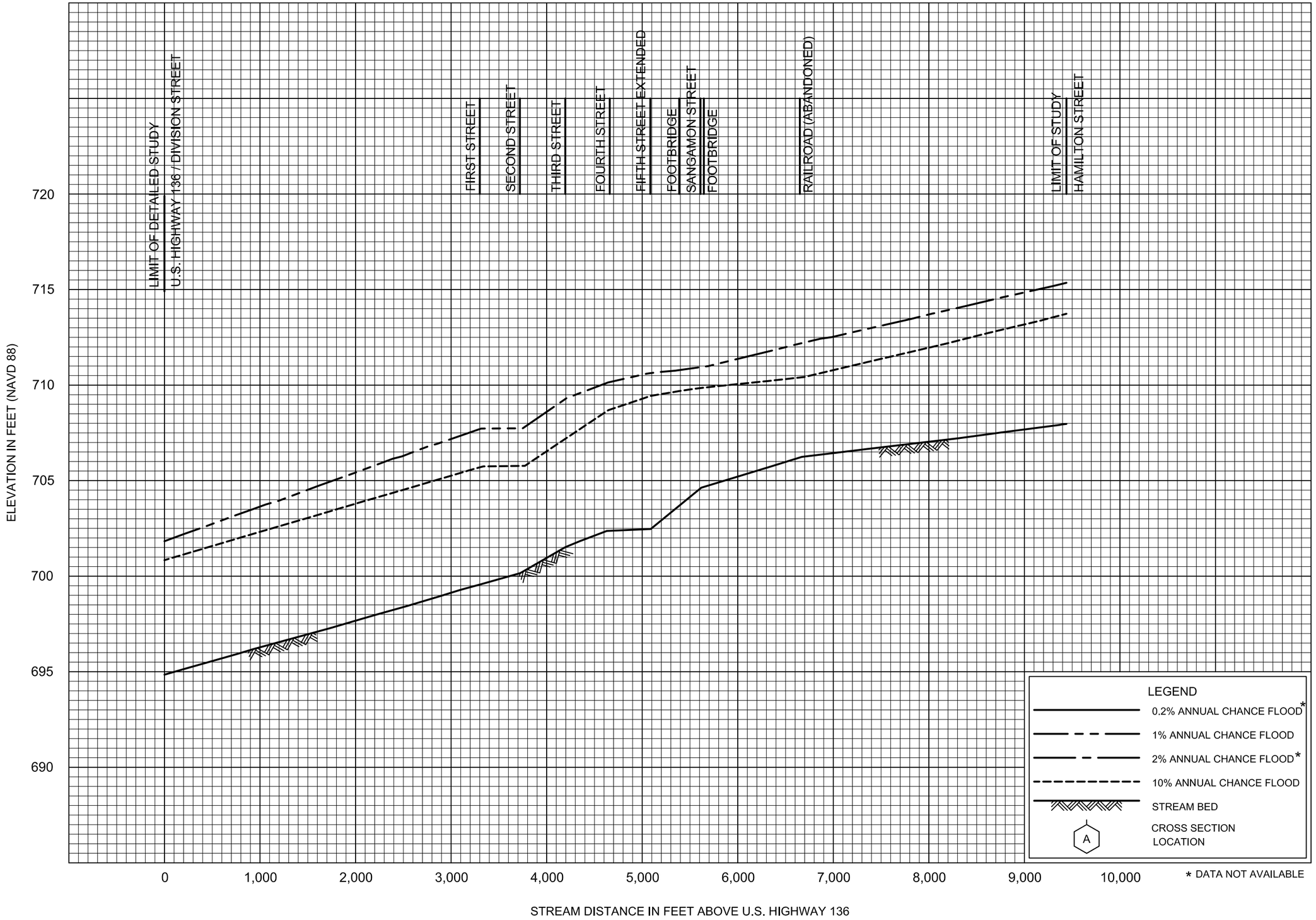
FLOOD PROFILES

MC CULLOUGH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



FLOOD PROFILES

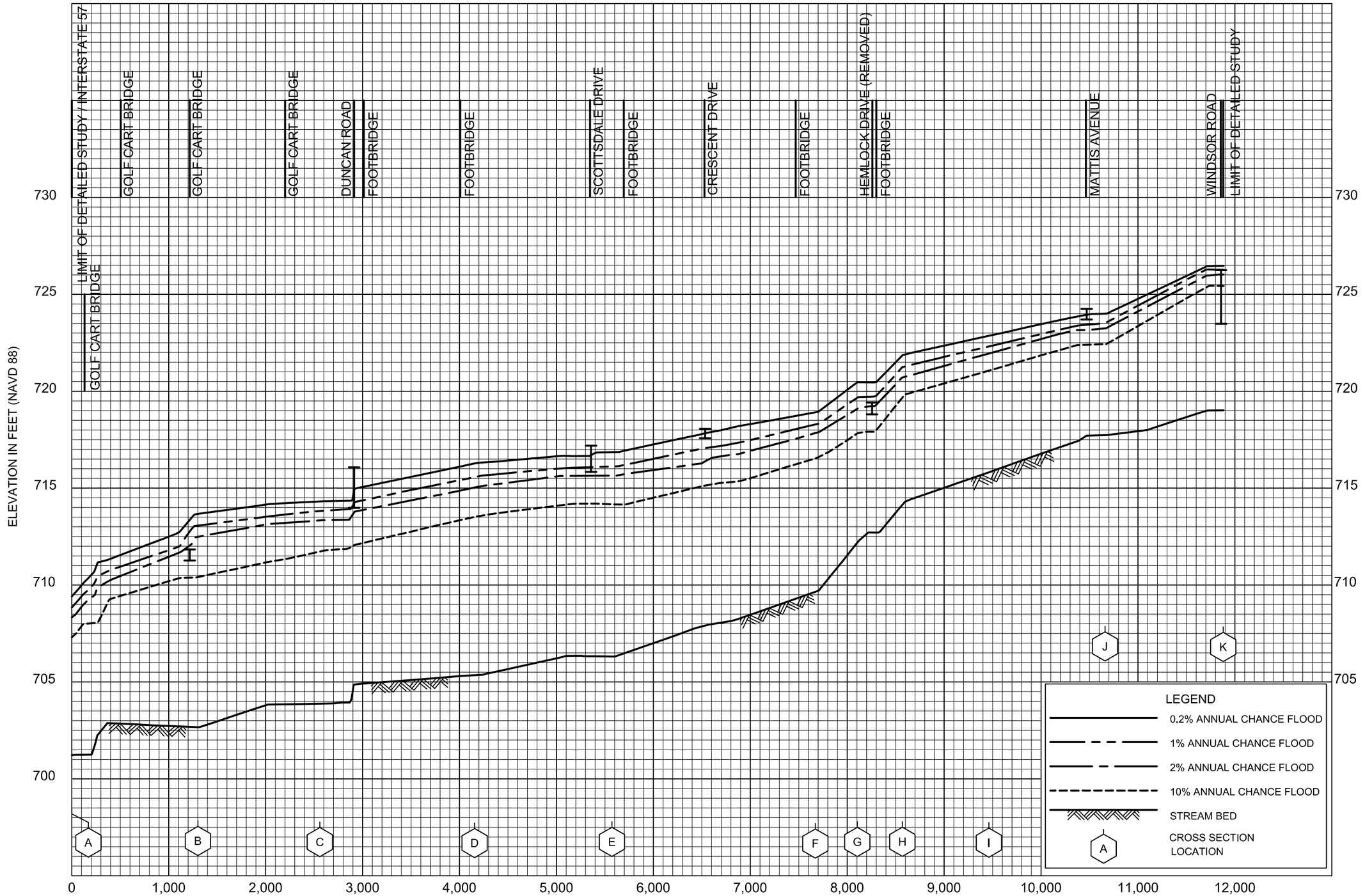
OWL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

15P



FLOOD PROFILES

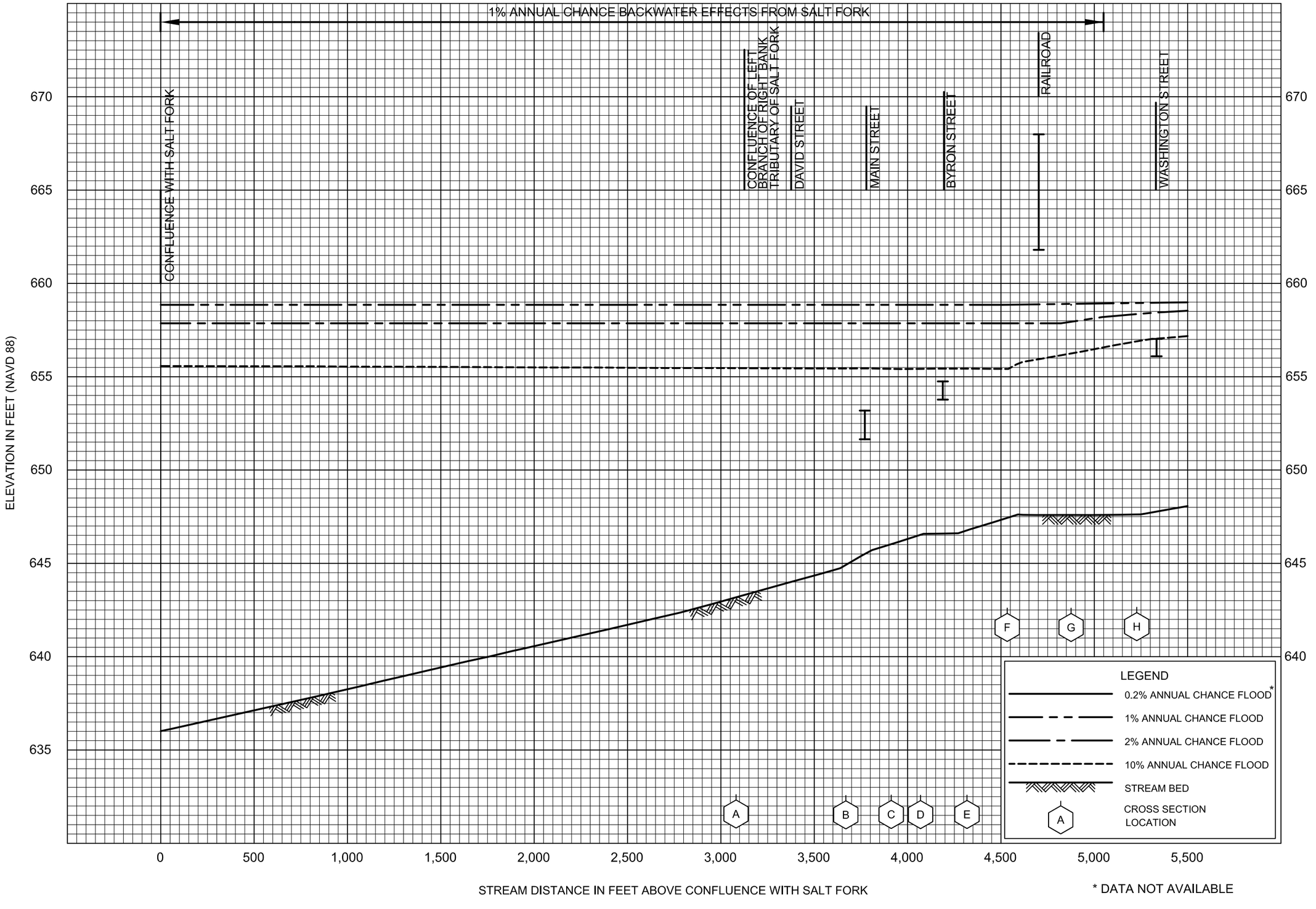
PHINNEY BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

16P



FLOOD PROFILES

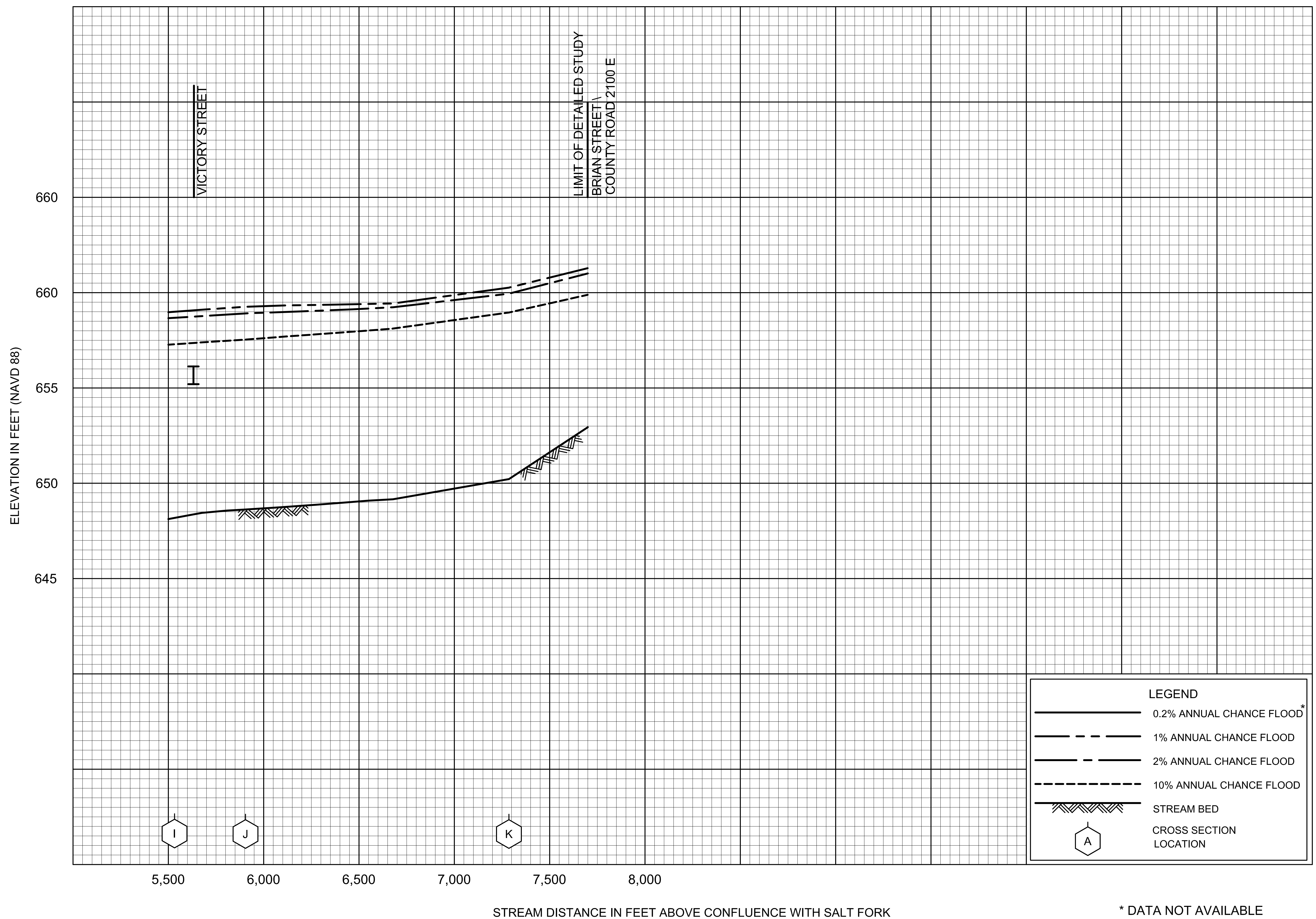
RIGHT BANK TRIBUTARY OF SALT FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

17P



* DATA NOT AVAILABLE

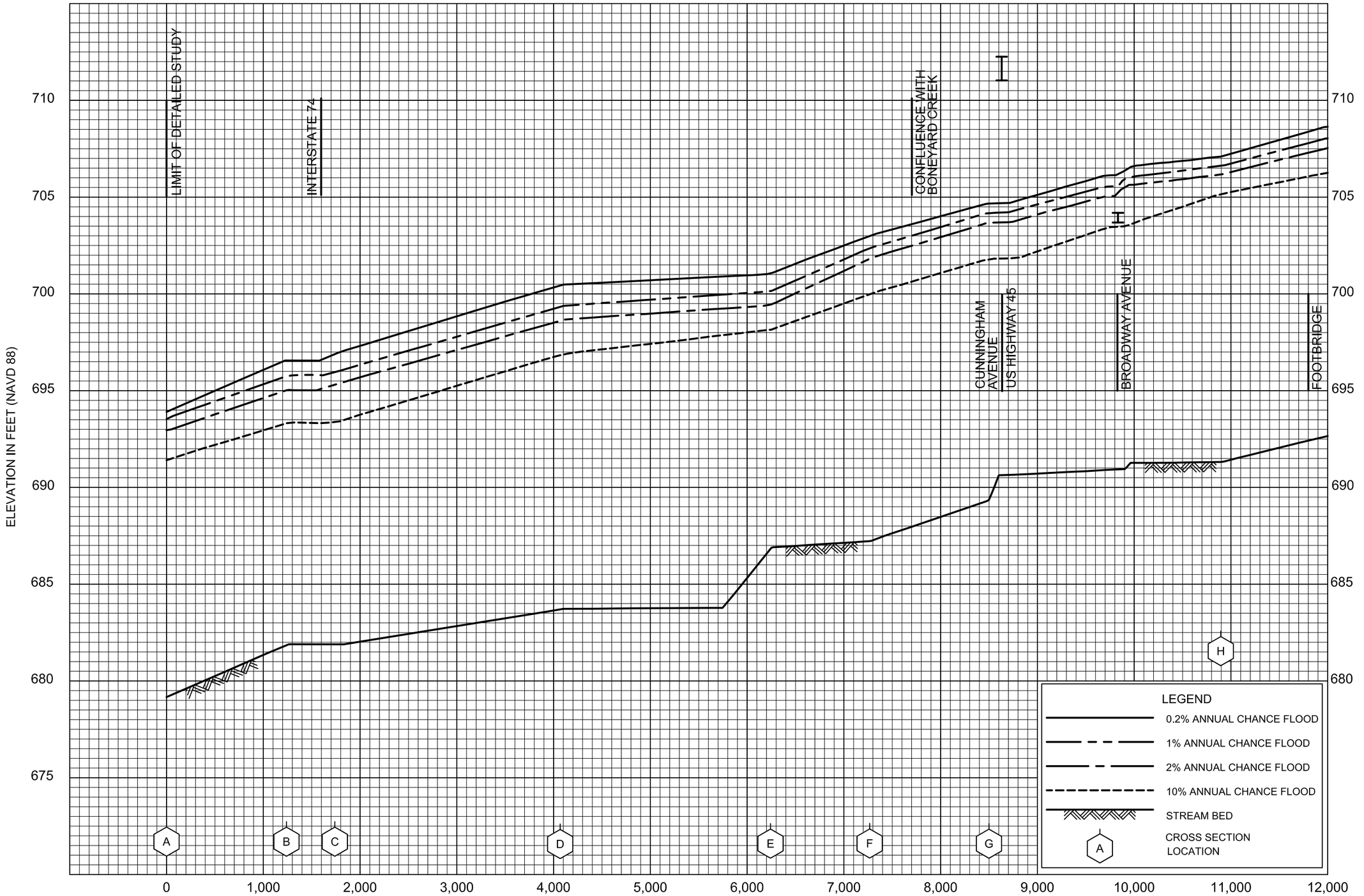
FLOOD PROFILES

RIGHT BANK TRIBUTARY OF SALT FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



*LIMIT OF DETAILED STUDY IS APPROXIMATELY 1,600 FEET DOWNSTREAM FROM INTERSTATE 74

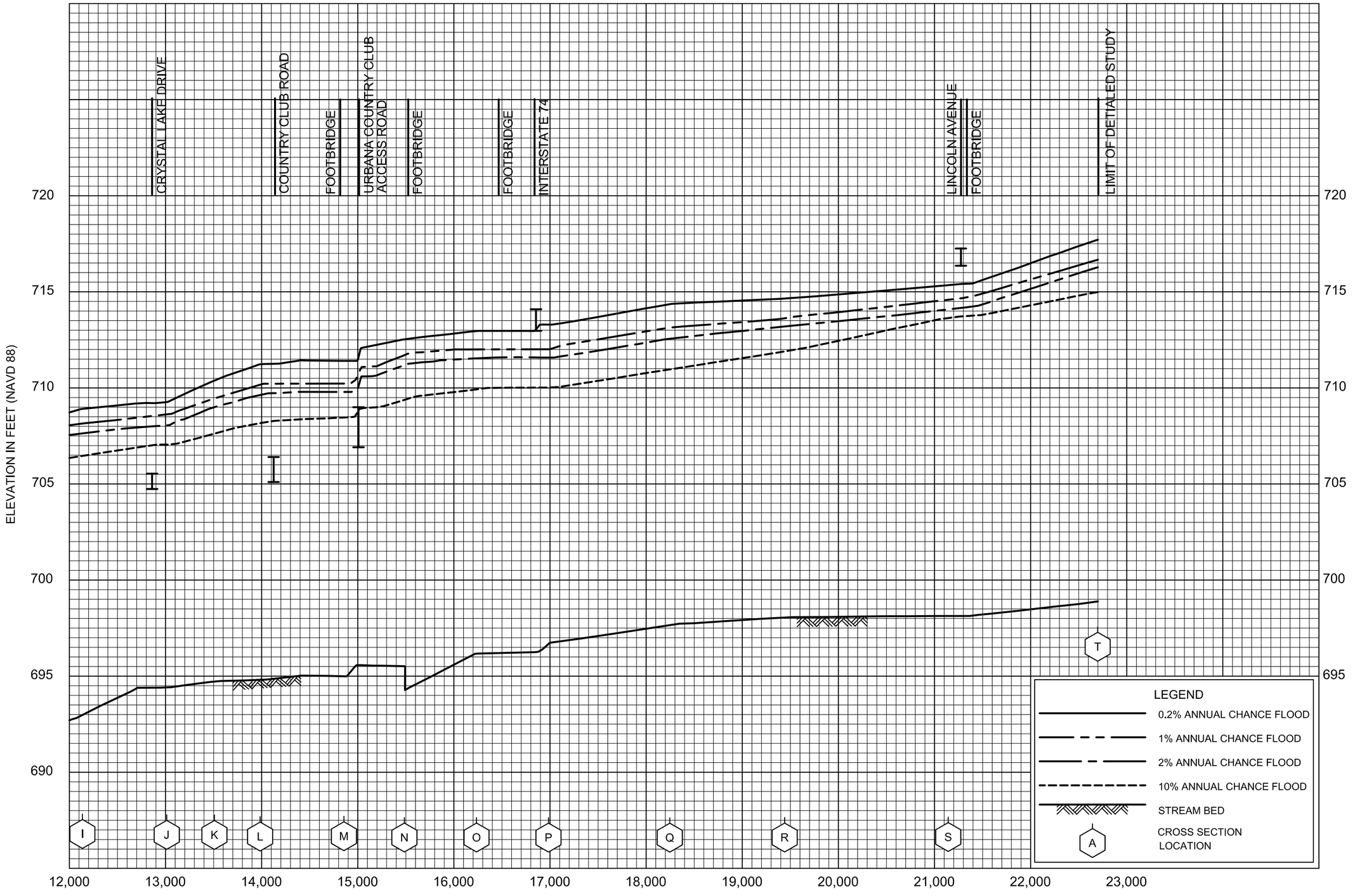
FLOOD PROFILES

SALINE BRANCH DRAINAGE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



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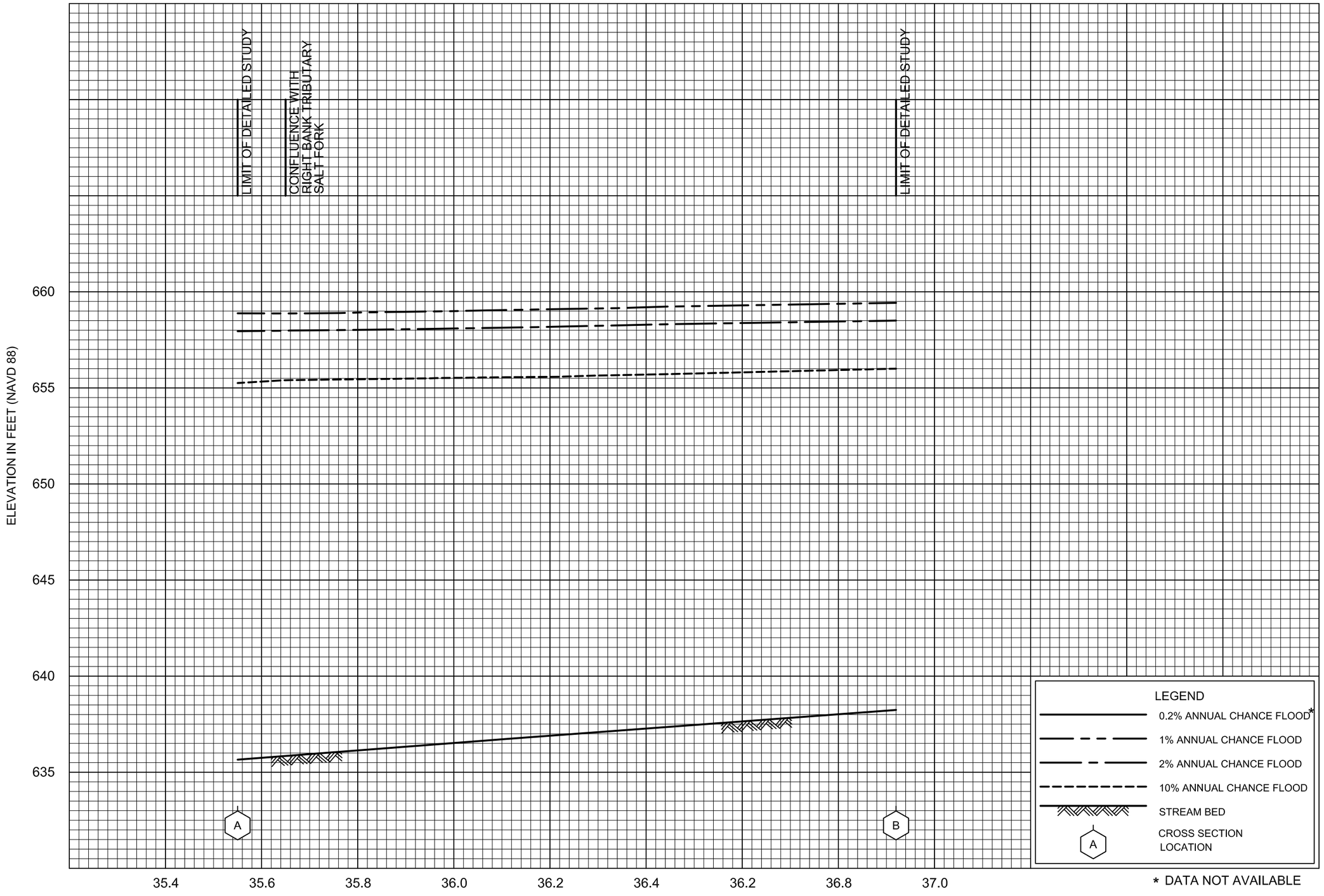
FLOOD PROFILES

SALINE BRANCH DRAINAGE DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



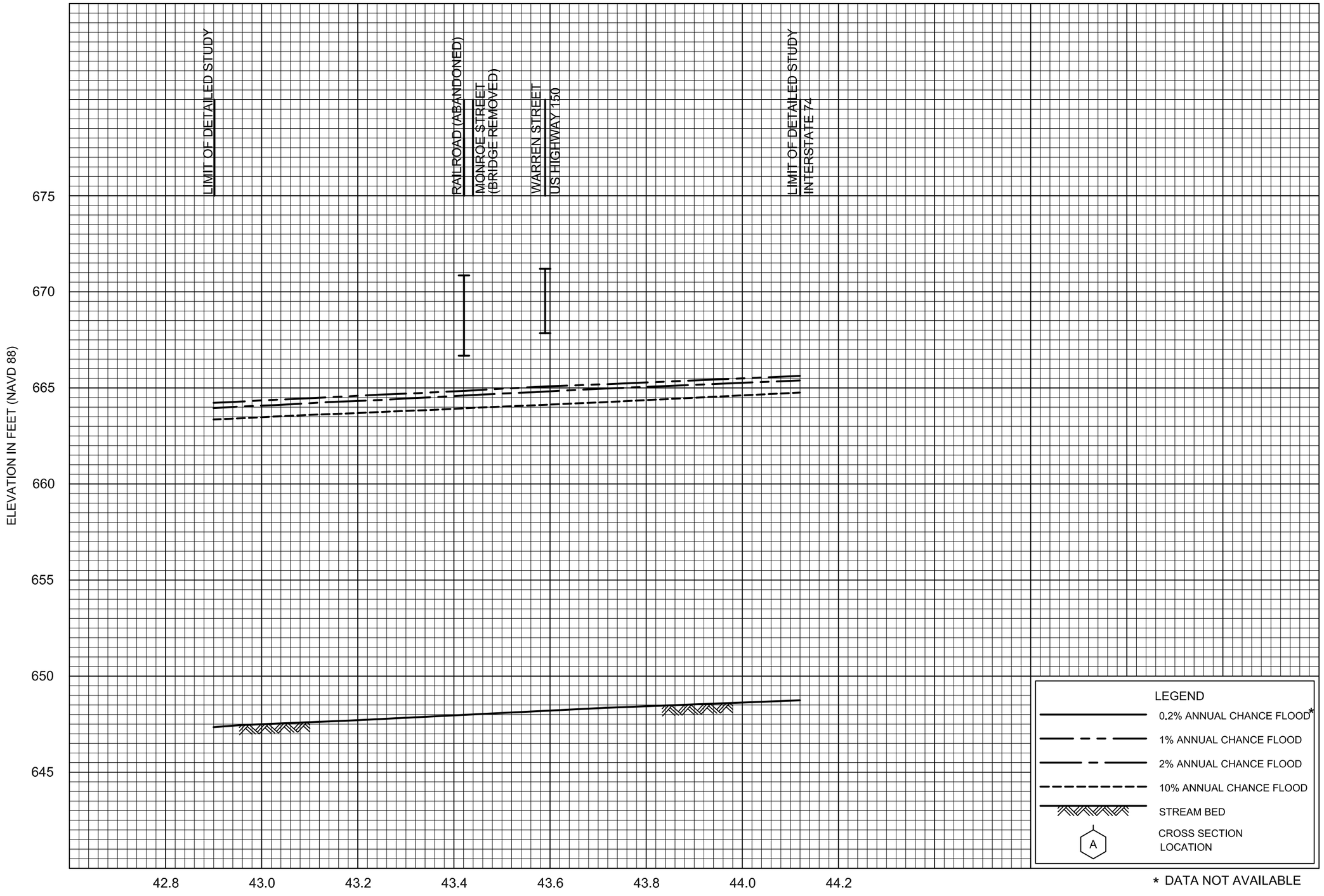
FLOOD PROFILES

SALT FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS



FLOOD PROFILES

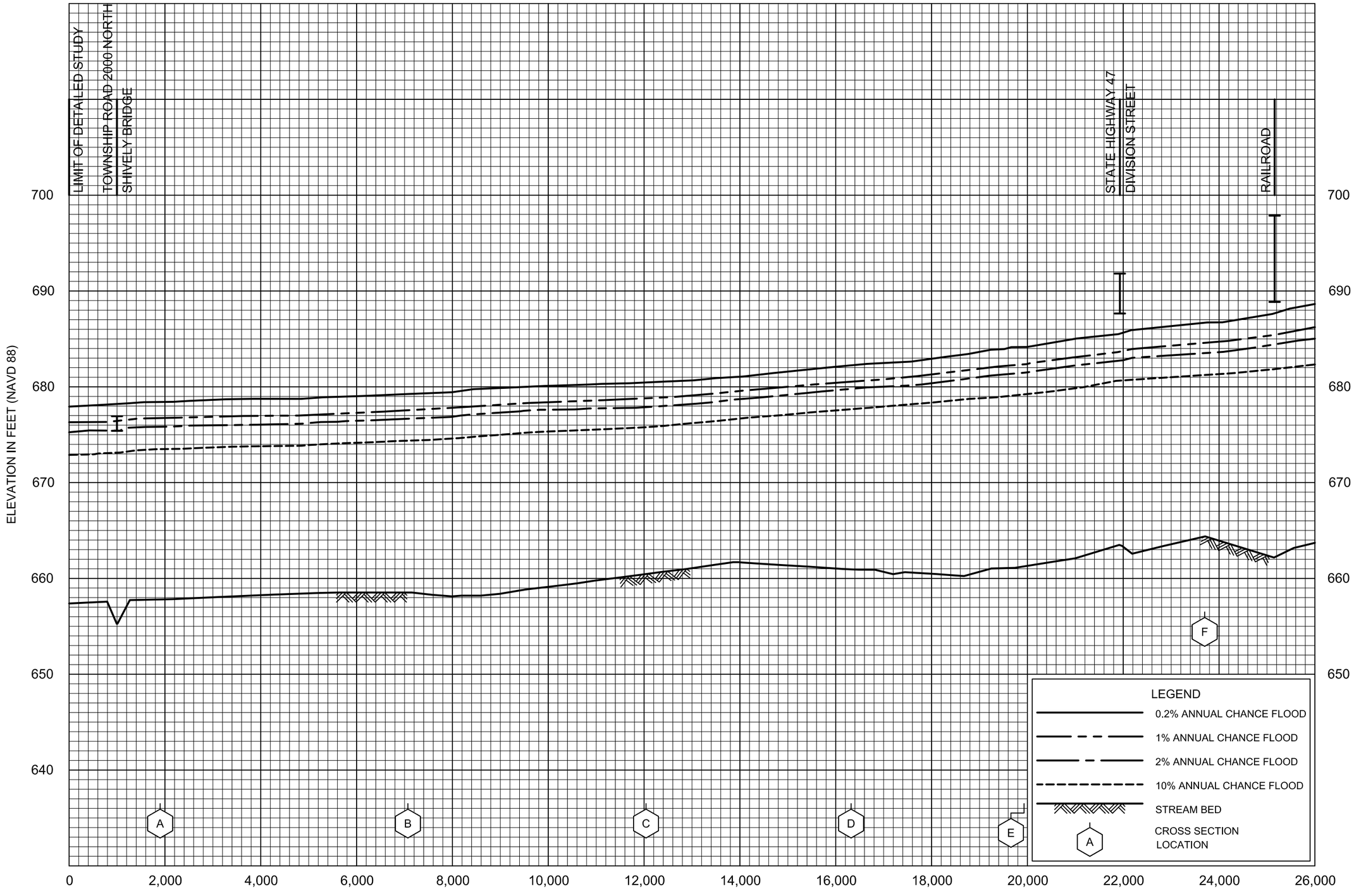
SALT FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

22P



* LIMIT OF DETAILED STUDY IS LOCATED APPROXIMATELY 1,000 FEET DOWNSTREAM OF TOWNSHIP ROAD 2000 NORTH (SHIVELY BRIDGE)

FLOOD PROFILES

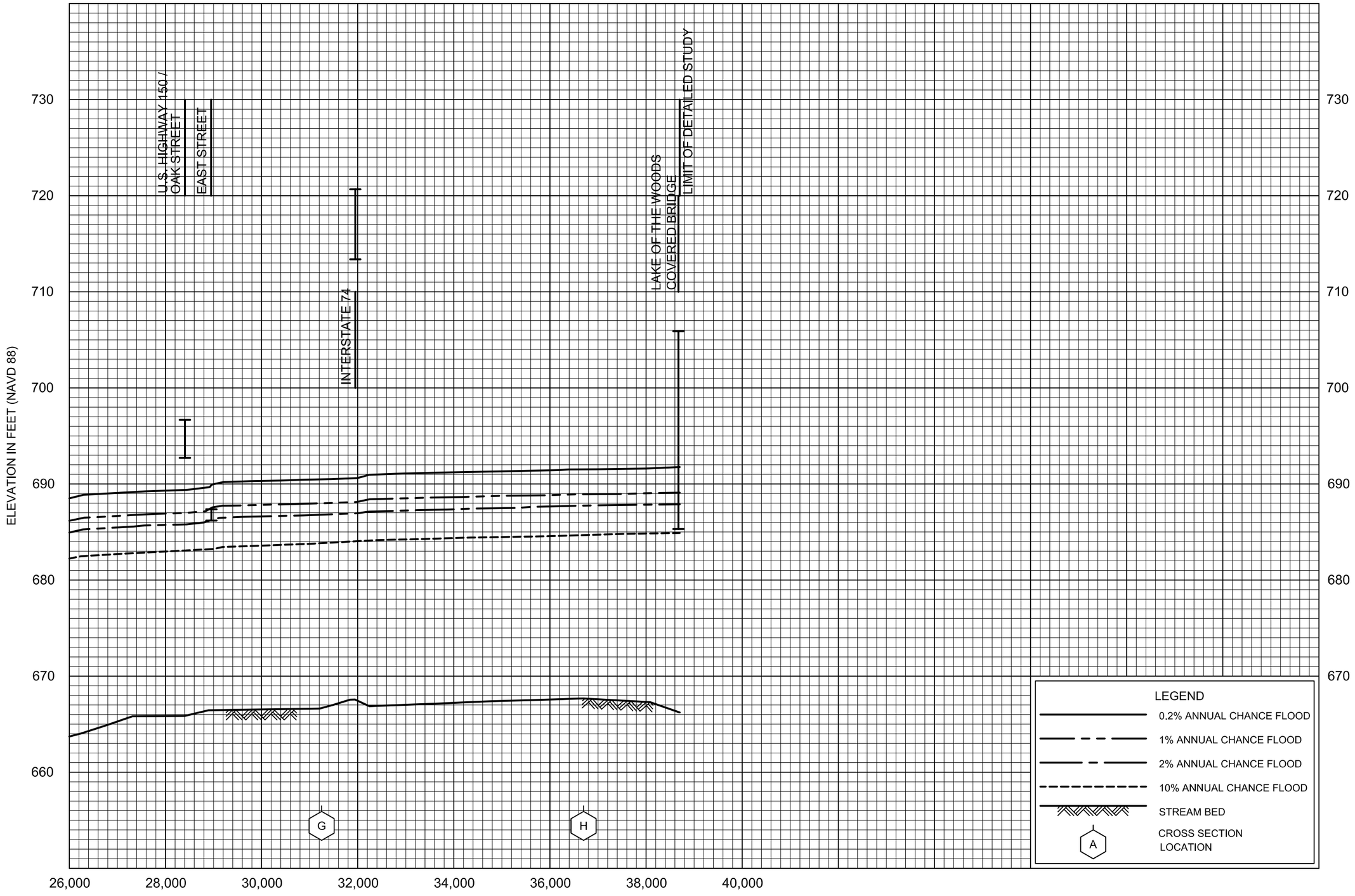
SANGAMON RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

23P



* LIMIT OF DETAILED STUDY IS LOCATED APPROXIMATELY 1,000 FEET DOWNSTREAM OF TOWNSHIP ROAD 2000 NORTH (SHIVELY BRIDGE)

FLOOD PROFILES

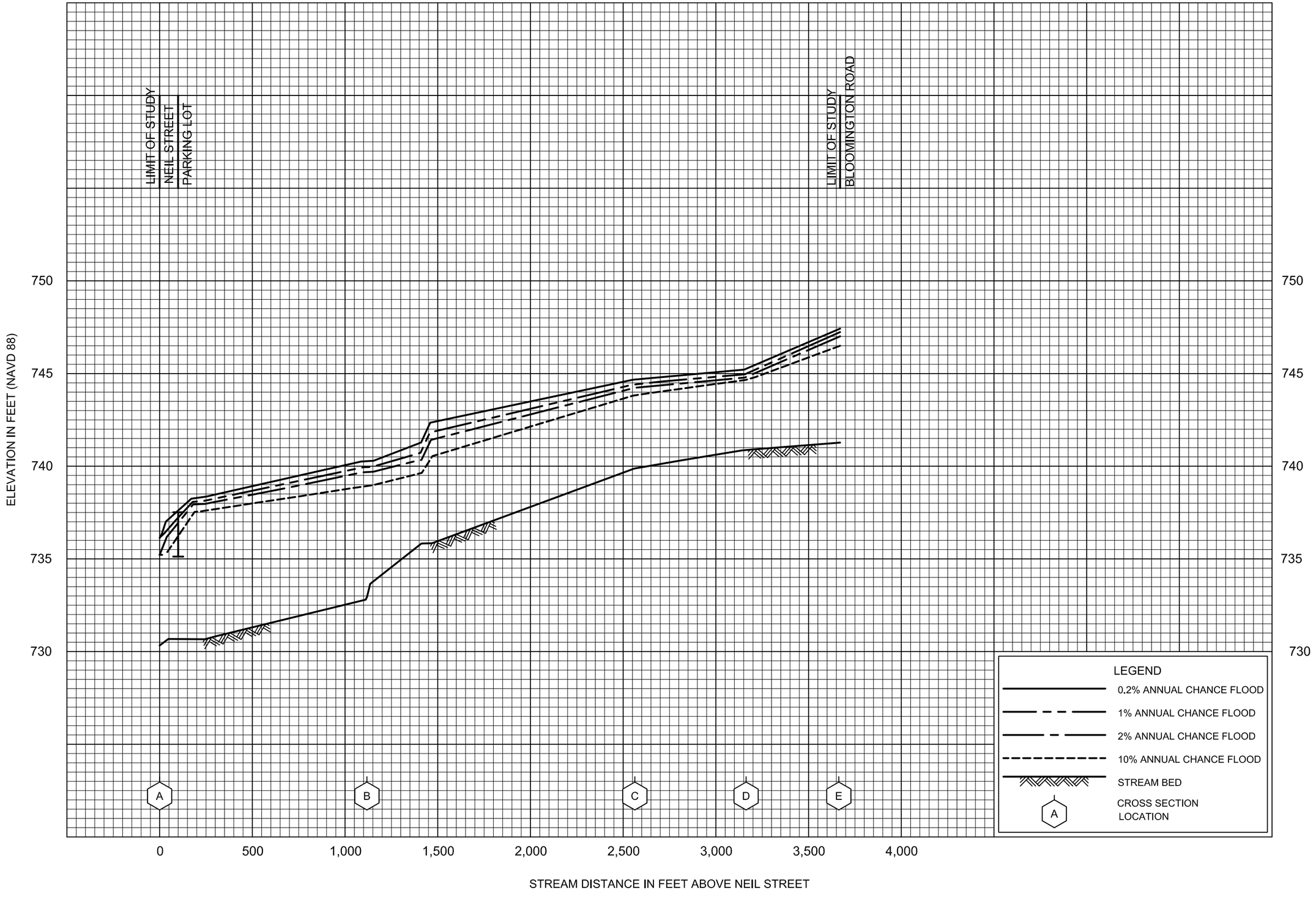
SANGAMON RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

24P



FLOOD PROFILES

UPPER BONEYARD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

CHAMPAIGN COUNTY, IL

AND INCORPORATED AREAS

25P