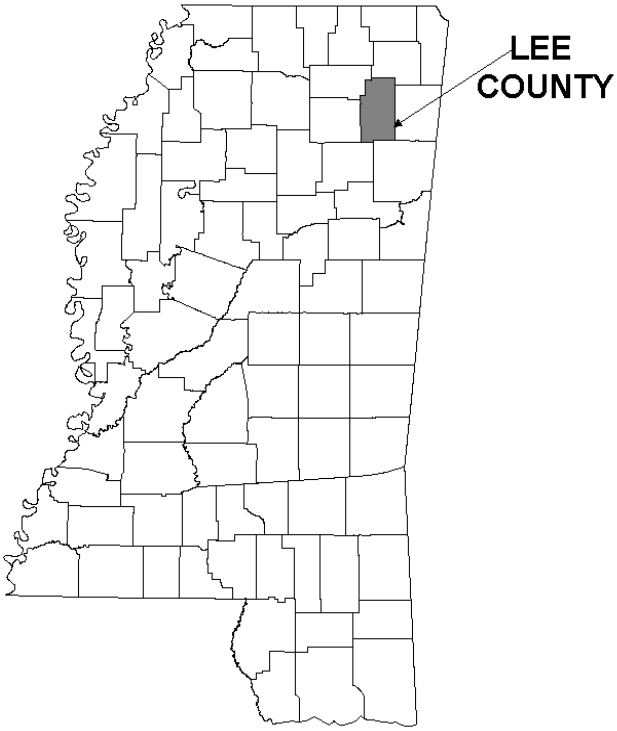
FLOOD INSURANCE STUDY

LEE COUNTY, MISSISSIPPI
AND INCORPORATED AREAS

VOLUME 1

COMMUNITY NAME	COMMUNITY NUMBER
BALDWYN, CITY OF	280134
GUNTOWN, TOWN OF	280345
LEE COUNTY, (UNINCORPORATED AREAS)	280227
NETTLETON, TOWN OF	280344
PLANTERSVILLE, VILLAGE OF	280099
SALTILLO, TOWN OF	280261
SHANNON, TOWN OF	280343
TUPELO, CITY OF	280100
VERONA, TOWN OF	280262



REVISED:

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
28081CV001E

NOTICE TO

FLOOD INSURANCE STUDY USERS

Communities participating in the National Flood Insurance Program (NFIP) 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 repository. It is advisable to contact the community repository for any additional data.

Part or all of this FIS may be revised and republished at any time. In addition, part of this FIS may be revised by the Letter of Map Revision process, which does not involve republication or redistribution of the FIS report. It is, therefore, the responsibility of the user to consult with community officials and to check the community repository to obtain the most current FIS components.

Initial Countywide FIS Effective Date: October 20, 1999

Revised Countywide FIS Dates:

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FLOOD INSURANCE STUDY
LEE COUNTY, MISSISSIPPI 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) in the geographic area of Lee County, Mississippi, including the City of Baldwyn, City of Tupelo, Town of Guntown, Town of Nettleton, Town of Saltillo, Town of Shannon, Town of Verona, the Village of Plantersville, and the unincorporated areas of Lee County (hereinafter referred to collectively as Lee County). The City of Baldwyn is included in its entirety in Lee County. The City of Sherman is not included in this FIS and is shown on the FIRM panels as Area Not Included.

This FIS 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 community that will be used to establish actuarial flood insurance rates. This information will also be used by Lee 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 CFR, 60.3.

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 Acknowledgments

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

This FIS was prepared to include the unincorporated area of and incorporated communities within Lee County in a countywide format. Information on the authority and acknowledgements for each jurisdiction included in this countywide FIS, as compiled from their previous printed FIS reports, is shown below.

Lee County (Unincorporated Areas):	The hydrologic and hydraulic analyses for the FIS report dated March 5, 1990, were prepared by Allen and Hoshall, Ltd., for FEMA, under Contract No. EMA-86-C0108. That work was completed in September 1987. Additional information was incorporated from the April 1978 FIS for the City of Tupelo (Reference 1).
Tupelo, City of:	The hydrologic and hydraulic analyses for the FIS report dated April 1978 were prepared by

Michael Baker, Jr., Inc., for the Federal Insurance Administration (FIA), under Contract No. H-3800. That work was completed in February 1977. For the FIS report dated August 18, 1992, the hydrologic and hydraulic analyses were prepared by the U.S. Army Corps of Engineers (USACE), Mobile District, for the Federal Emergency Management Agency (FEMA), under Inter-Agency Agreement No. IA-EMW-89-E-2994, Project Order No. 2, Task Order No. 2-MOB.

The authority and acknowledgements for the City of Baldwyn and the Towns of Guntown, Nettleton, Saltillo, Shannon, and Verona, and the Village of Plantersville are not included because there were no previously printed FIS reports for those communities.

For the October 20, 1999 FIS, the updated hydrologic and hydraulic analyses were prepared for FEMA by the USACE, Mobile District, under Inter-Agency Agreement No. EMW-93-E-4115. This work was completed in June 1994. FEMA contracted Dewberry & Davis to revise the hydrologic and hydraulic analyses along Kings Creek, Little Coonewah Creek, Mud Creek, Town Creek, Tulip Creek, and West Tulip Creek to represent existing conditions. This work was completed in March 1998.

The hydrologic and hydraulic analyses for this countywide FIS were performed by the State of Mississippi for FEMA, this study was completed in March 2008 under Contract No. EMA-2005-CA-5215.

Base map information shown on the FIRM was provided in digital format by the State of Mississippi. The digital orthoimagery was photogrammetrically compiled at a scale of 1:400 from aerial photography dated March 2006.

The digital FIRM was produced using the State Plane Coordinate System, Mississippi East, FIPSZONE 2301. The horizontal datum was the North American Datum of 1983, GRS 80 spheroid. Distance units were measured in U.S. feet.

1.3 Coordination

An initial Consultation Coordination Officer's (CCO) meeting is held with representatives from FEMA, the community, and the study contractor to explain the nature and purpose of a FIS, and to identify the streams to be studied by detailed methods. A final CCO meeting is held with the same representatives to review the results of the study.

The dates of the initial and final CCO meetings held for the communities within the boundaries of Lee County are shown in Table 1, “CCO Meeting Dates”.

TABLE 1. CCO MEETING DATES

Community Name	Initial CCO Date	Final CCO Date
Lee County (Unincorporated Areas)	January 29, 1986	September 3, 1998
Tupelo, City of	September 24, 1975	April 28, 1977

For this FIS, an initial Pre-Scoping Meeting was held on July 18, 2005. A Project Scoping Meeting was held on August 15, 2005. Attendees for these meetings included representatives from the Mississippi Department of Environmental Quality, Mississippi Emergency Management Agency, FEMA National Service Provider, Lee County and the incorporated communities within Lee County, and Mississippi Geographic Information, LLC, the State study contractor. Coordination with county officials and Federal, State, and regional agencies produced a variety of information pertaining to floodplain regulations, available community maps, flood history, and other hydrologic data. All problems raised in the meetings have been addressed.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Lee County, Mississippi, including the incorporated communities listed in Section 1.1.

In the October 20, 1999 FIS, all or portions of the flooding sources listed in Table 2, "Streams Studied by Detailed Methods," were studied by detailed methods. Limits of detailed study are indicated on the Flood Profiles (Exhibit 1) and on the FIRM (Exhibit 2).

TABLE 2. STREAMS STUDIED BY DETAILED METHODS

Coonwah Creek	Mud Creek
Tributary No.1 to Coonewah Creek	Tributary No. 1 to Mud Creek
Tributary No. 2 to Coonewah Creek	Tributary No. 2 to Mud Creek
Kings Creek	Russell Creek
Kings Creek Tributary No. 1	Sand Creek
Kings Creek Tributary No. 2	Town Creek
Kings Creek Tributary No. 3	Town Creek Tributary No. 1
Kings Creek Tributary No. 4	Town Creek Tributary No. 2
Little Coonewah Creek	Tulip Creek
Tributary to Little Coonewah Creek	West Tulip Creek

In this FIS, some streams have names other than those used in previously printed FISs. Details of these name changes are listed in the following tabulation:

Community	Old Name	New Name
City of Baldwyn	Town Creek	Town Creek North
Lee County	Sand Creek	Sand Creek East
	Tributary to Little Coonewah Creek	Little Coonewah Creek Tributary 1
	Tributary No. 1 to Coonewah Creek	Coonewah Creek Tributary 1
	Tributary No. 2 to Coonewah Creek	Coonewah Creek Tributary 2
	Tributary No. 1 to Mud Creek	Mud Creek Tributary 1
	Tributary No. 2 to Mud Creek	Mud Creek Tributary 2

For the October 20, 1999 countywide FIS, updated analyses were included for the flooding sources shown in Table 3, "Scope of Revision."

TABLE 3. SCOPE OF REVISION

Stream	Limits of New or Revised Detailed Study
Tributary No. 2 to Coonewah Creek	From a point approximately 1,400 feet downstream of Brooks Street to a point approximately 50 feet upstream of Cliff Gookin Boulevard
Kings Creek	From its confluence with Town Creek to a point approximately 100 feet upstream of Walsh Road
Little Coonewah Creek	From just upstream of Natchez Trace Parkway to a point approximately 3,100 feet upstream of Endville Road
Tributary to Little Coonewah Creek	From its confluence with Little Coonewah Creek to a point approximately 2,000 feet upstream of Dogwood Hills Circle
Mud Creek	From its confluence with Town Creek to a point approximately 3,100 feet upstream of Barnes Crossing Road
Tributary No. 1 to Mud Creek	From its confluence with Mud Creek to a point approximately 200 feet upstream of Fern Ridge Road
Tributary No. 2 to Mud Creek	From its confluence with Mud Creek to a point approximately 100 feet upstream of U.S. Route 45
Russell Creek	From its confluence with Little Coonewah Creek to a point approximately 100 feet upstream of Butler Drive
Town Creek	From approximately 100 feet downstream of confluence of Tulip Creek to just upstream Natchez Trace Parkway
Tulip Creek	From its confluence with Town Creek to a point approximately 100 feet upstream of U.S. Route 78
West Tulip Creek	From its confluence with Tulip Creek to just upstream of the Elvis Presley Lake Dam

The profile for Town Creek Tributary No. 1 from the previously printed FIS for the City of Tupelo has not been included in this FIS because flood elevations along Town Creek Tributary No. 1 are completely controlled by Town Creek.

This Countywide Analysis

The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development and proposed construction.

All or portions of numerous flooding sources in the county were studied by approximate methods. Approximate analyses were used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to, and agreed upon, by FEMA and Lee County.

Limited Detailed analyses were used to study those areas having a low development potential or minimal flood hazards. The scope and methods of study were proposed to, and agreed upon, by FEMA and the State of Mississippi. Table 4 lists the streams which were newly studied by Detailed and Limited Detailed methods:

TABLE 4. STREAMS STUDIED BY DETAILED AND LIMITED DETAILED METHODS

Stream	Limits of Revision/New Detailed Study
Mud Creek	From approximately 4,650 feet downstream of I-45 to approximately 3,000 feet upstream of Barnes Crossing Road.
Town Creek	From the confluence with Tulip Creek to 550 feet downstream of the confluence with Yonaba Creek.
Stream	**Limits of Revision/New Limited Detailed Study**
Campbelltown Creek	From 400 feet upstream of SR-145 to approximately 4,150 feet upstream of County Road 2790.
Chiwapa Creek	From approximately 750 feet downstream of Natchez Trace Parkway to the county boundary.
Coonewah Creek	From I-45 to approximately 3,000 feet downstream of County Road 590.
Coonewah Creek Tributary 3	From I-45 to I-45
Euclatubba Creek	From approximately 850 feet upstream of Natchez Trace Parkway to approximately 2,000 feet upstream of US Highway 145.
Mud Creek	From approximately 3,400 feet downstream of I-45 to approximately 200 feet upstream of County Road 681.

TABLE 4. STREAMS STUDIED BY DETAILED AND LIMITED DETAILED METHODS (continued)

Stream	Limits of Revision/New Limited Detailed Study
Reeds Branch	From approximately 1,500 feet downstream of Natchez Trace Parkway to approximately 1,800 feet upstream of County Road 900.
Sand Creek	From the confluence with Mud Creek to US HWY 363.
Sand Creek Tributary 1	From the confluence with Sand Creek to approximately 2,100 feet upstream of Fellowship Road.
Sand Creek Tributary 2	From the confluence with Sand Creek to approximately 300 feet downstream of Meg Lane.
Town Creek Downstream Reach	From approximately 250 feet upstream of Natchez Trace Parkway to approximately 1,270 feet upstream of Mount Vernon Road.
Town Creek Upstream Reach	From approximately 6,300 feet upstream of the confluence with Busfaloba Creek to the County Boundary.
Town Creek Tributary 1	From approximately 3,000 feet upstream of the County Boundary to approximately 1,000 feet upstream of the Railroad.

2.2 Community Description

Lee County is located in northeastern Mississippi. It is bordered by Prentiss County to the north, Itawamba County to the east, Monroe and Chickasaw Counties to the south, and Pontotoc and Union Counties to the west. The county is served by the U.S. Routes 45 and 78; State Routes 6, 145, 178, 348, 363, 370, and 371; and the Natchez Trace Parkway.

Most drainage basins in Lee County are wide, flat floodplains extending to moderately rolling and steep hills in the upper segments. The soils in these basins vary from somewhat poorly drained to well drained. Vegetative cover is mostly pine and hardwoods.

Lee County has a warm, humid climate and abundant rainfall that averages 53 inches annually. Temperatures range from a January average of 44 degrees Fahrenheit (°F) to a July average of 81 °F.

Lee County's economy is supported by agriculture, trade, and industry. A number of industrial developments are located within the floodplains of Town and Kings Creeks.

The major portion of this industrial development is less significant, with the majority of these dwellings lying along Mud Creek.

2.3 Principal Flood Problems

Principal flooding problems in Lee County arise from overflow of some streams in the county into relatively flat, developed overbanks.

Extensive damage to urban, residential, and industrial properties has occurred along Kings and Town Creeks. The storm of March 21 and 22, 1955, is the record storm for the Town Creek watershed, and was computed to have a recurrence interval of 100 years by the Natural Resources Conservation Services (NRCS). This storm resulted in $165,000 in damages (Reference 2).

In the city of Tupelo, the NRCS has estimated damages resulting from a flood on Kings Creek on April 11, 1962, to exceed $800,000. The maximum recorded flood on Coonewah Creek occurred in 1962. The NRCS used data in a published report to estimate that the channel only carries 17 percent of the 50-year discharge (Reference 3). Floodflows of Mud and Town Creeks presently merge on both sides of the Southrail Railroad due to the floodplain being relatively flat. The channel is fairly small and carries only a small percentage of floodflows (Reference 4).

The most recent flood of significance in Lee County occurred on March 16 and 17, 1973. This storm was determined by statistical analysis if rainfall-frequency curves of historical data to have a reoccurrence interval of approximately 30 years (Reference 5).

2.4 Flood Protection Measures

Flood protection measures completed by the NRCS and private individuals consist of channel improvements, channel relocation, and installation of floodwater-retarding structures. Other measures include periodic debris removal from culverts and bridges on streams within the City of Tupelo corporate limits.

In 1963, the Town Creek Master Water Management District planned to build 26 flood-retarding structures in the Town Creek watershed. Between 1968 and 1978, 15 flood-retarding structures were built, and between 1991 and 1995, 4 additional structures were completed. Floodwater-retarding structures on Mud Creek, 1 structure on Kings Creek, 1 structure on Tulip Creek, 1 structure on West Tulip Creek, 1 structure on Coonewah Creek and 1 structure on Little Coonewah Creek (Reference 2). The effect of these structures is considered in the hydrologic and hydraulic analyses for Kings Creek, Little Coonewah Creek, Mud Creek, Town Creek, Tulip Creek, and West Tulip Creek.

3.0 **ENGINEERING METHODS**

For the flooding sources studied by detailed methods in the community, 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-annual-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 that equals or exceeds the 1-percent-annual-chance flood in any 50-year period is approximately 40 percent (4 in 10); for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding potentials based on conditions existing in the community 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 community.

Pre-Countywide FIS Analyses

Only Lee County (Unincorporated Areas) and the City of Tupelo had previously printed FIS report narratives. The hydrologic analyses described in those reports have been compiled and are summarized below.

Peak discharge computations were based on a regional flood frequency report prepared by the USGS, applicable to unurbanized basins in Mississippi (Reference 6). Techniques for estimating future flood magnitudes were developed in the report, based on analyses for both recorded and synthetic streamflow data. Because the regional analysis is applicable only to unurbanized basins, adjustment factors were applied to include consideration for urbanization in many stream basins in the study area.

The effects of the Soil Conservation Service floodwater retarding structures on all streams were considered in a reservoir routing analysis, using the modified Puls Method included in the USACE HEC-1 flood hydrograph computer program (Reference 7).

Peak discharges were obtained for approximate study streams by the same methods described above (Reference 6).

October 20, 1999 FIS Analyses

Information on the methods used to determine peak discharge-frequency relationships for the flooding sources restudied as part of this countywide FIS is shown below.

For Tributary No. 2 to Coonewah Creek, Tributary to Little Coonewah Creek, Tributaries No. 1 and 2 to Mud Creek, and Russell Creek, peak discharges were based on a regional flood frequency report by the USGS (Reference 8). This report divided the state into three regions. The equations for the East region were used to compute the discharges for this countywide FIS and are listed below.

$$Q_{10} = 482\ (A)^{.85}\ (S)^{.09}\ (L)^{-.34}$$
$$Q_{50} = 648\ (A)^{.85}\ (S)^{.11}\ (L)^{-.31}$$
$$Q_{100} = 716\ (A)^{.85}\ (S)^{.11}\ (L)^{-.30}$$
$$Q_{500} = 874\ (A)^{.85}\ (S)^{.12}\ (L)^{-.28}$$

Where:

Q_T = the estimated peak discharge, in cubic feet per second (cfs), for an exceedance frequency of T percent.

A = the drainage area in square miles

S = the channel slope, in feet per mile, measured between the points 10 and 85 percent along the main channel

L = the main channel length, in miles, from the discharge point to the drainage divide

Peak discharges for Town Creek (from approximately 100 feet downstream of the confluence of Tulip Creek to Natchez Trace Parkway) and its tributaries, Mud Creek, Tulip Creek, West Tulip Creek, Little Coonewah Creek, and Kings Creek, were developed using the NRCS Technical Release No. 20 (TR-20) computer program (Reference 9). A TR-20 model of the Town Creek watershed upstream of the confluence of Smith Creek was developed on a mainframe computer by the NRCS in 1987 to show the effects of flood control structures existing at that time.

Dewberry & Davis converted the NRCS TR-20 model from a mainframe computer version to a personal computer version and updated the model to reflect the effects of 5 additional flood-control structures (Reference 9). No additional flood-control structures were constructed in the Kings Creek watershed between 1987 and 1997. Therefore, peak discharges for Kings Creek were taken from the mainframe TR-20 model of the Kings Creek watershed developed by the NRCS in 1987.

The Town Creek watershed TR-20 model was run for the 5-, 10-, 50, 100-, and 500- year events using 24-hour rainfall values from National Weather Service Technical Paper No. 40 and an NRCS Type II rainfall distribution (Reference 5). The rainfall loss for each subwatershed was computed using the NRCS curve number method and the runoff hydrographs were computed using the NRCS dimensionless unit hydrograph. The modified attenuation-kinematic method of channel flood routing was used and the stage, storage, and discharge relationships for the flood-control structures within the Town Creek watershed were taken from the mainframe NRCS TR-20 model.

A February 1998, Town Creek watershed TR-20 model was calibrated to the May 1991, and May 1982, historic storm events. In addition, the results of the Town Creek watershed TR-20 model were compared to gage data obtained from the USGS gage at Tupelo, Mississippi, to examine the credibility of the results. The simulated flows were favorable compared with the statistical discharge-frequency values derived from procedures in USGS Bulletin No. 17B (Reference 10). The resulting flood discharges were used in the USACE HEC-2 step-backwater model of Town Creek and Mud Creek to generate water-surface profiles (Reference 11).

The peak flow discharges for Tulip Creek, West Tulip Creek, and Little Coonewah Creek were taken from a November 1007 TR-20 model of the Town Creek watershed which used the same watershed parameters as the 1987 NRCS mainframe TR-20 model. This November 1997 TR-20 model used NRCS Type I rainfall distribution. The base (1-percent-annual-chance) flood elevations computed using results from this TR-20 model were not significantly different from those of the calibrated Town Creek watershed model.

This Countywide Analysis

Peak discharges for the streams studied by Limited detailed methods were calculated based on USGS regional regression equations.

For the discharges calculated based on regional regression equations, the rural regression values were updated to reflect urbanization as necessary.

A summary of the drainage area-peak discharge relationships for all the streams is shown in Table 5, "Summary of Discharges."

TABLE 5. SUMMARY OF DISCHARGES

Detailed Studied Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
COONEWAH CREEK					
At Brewer Road	57.78	8,800	14,500	16,787	21,300
COONEWAH CREEK TRIBUTARY 1					
Approximately 0.5 mile south of Green Tee Road	1.62	732	1.094	1,310	1,720
At Green Tee Road	1.40	657	973	1,178	1,550
Approximately 0.6 mile north of Green Tee Road	0.63	366	524	622	770
COONEWAH CREEK TRIBUTARY 2					
At confluence of Coonewah Creek	1.59	689	1,016	1,134	1,456
At Cliff Gookin Road	0.55	362	526	582	739
KINGS CREEK					
At confluence of Town Creek	15.84	6,133	7,488	7,992	9,045
Just downstream of confluence of Kings Creek Tributary 1	15.07	5,876	7,198	7,667	8,719
Just upstream of confluence of Kings Creek Tributary 4	7.59	1,565	2,052	2,267	2,748
At Natchez Trace Parkway	6.49	1,034	1,330	1,472	1,789

TABLE 5. SUMMARY OF DISCHARGES - continued

Detailed Studied Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq.mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
KINGS CREEK TRIBUTARY 1					
At Confluence with Kings Creek	1.29	1,203	1,624	1,855	2,606
At West Jackson Street	1.11	1,072	1,438	1,639	2,291
At Cross Section H	0.77	808	1,702	1,212	1,673
At Antler Drive	0.40	487	633	706	954
At Cross Section M	0.27	360	461	510	681
KINGS CREEK TRIBUTARY 2					
At Industrial Road	2.79	2,182	3,021	3,505	5,054
At Lawndale Drive (North)	2.61	2,073	2,863	3,318	4,772
At Cross Section D	1.71	1,496	2,037	2,341	3,320
At Cross Section F	0.91	1,119	1,524	1,751	2,483
At Lawndale Drive (South)	0.68	742	1,011	1,161	1,647
KINGS CREEK TRIBUTARY 3					
At confluence of Kings Creek	1.15	1,101	1,480	1,687	2,361
At Lumpkin Avenue	0.93	935	1,248	1,416	1,968
At North Foster Drive	0.63	692	912	1,027	1,409
At North Thomas Drive	0.57	641	841	946	1,293
KINGS CREEK TRIBUTARY 4	0.93	935	1,248	1,416	1,968
At confluence of Kings Creek					
At Lumpkin Avenue	0.85	872	1,161	1,315	1,822
At Robindale Drive	0.60	667	877	986	1,351
LITTLE COONEWAH CREEK					
At confluence of Coonewah Creek	10.87	1,911	2,695	3,053	3,873
Just downstream of confluence of Russell Creek	8.94	758	1,036	1,186	1,514
At Old Chesterville Road	5.04	1,481	2,206	2,475	3,204
Downstream of Endville Road	1.32	614	899	1,001	1,280
LITTLE COONEWAH CREEK TRIBUTARY 1					
At confluence of Little Coonewah Creek	0.95	495	727	809	1,036
MUD CREEK					
At confluence of Town Creek	90.22	9,695	14,080	16,331	21,871
Just downstream of Little Sand Creek	85.31	9,952	14,742	17,249	22,841

TABLE 5. SUMMARY OF DISCHARGES – continued

Detailed Studied Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
MUD CREEK TRIBUTARY 1					
At confluence of Mud Creek	0.73	459	679	754	967
Approximately 300 feet upstream Of Old Saltillo Road	0.30	277	408	450	574
MUD CREEK TRIBUTARY 2					
At confluence of Mud Creek	0.87	423	613	683	868
At Barnes Crossing Road	0.13	170	242	266	333
RUSSELL CREEK					
At confluence of Little Coonewah Creek	1.84	763	1,125	1,255	1,612
At Chesterfield Road	1.30	536	799	982	4,558
Approximately 0.5 mile downstream of Savannah Lane	0.53	334	486	539	687
At Butler Drive	0.35	216	305	359	455
SAND CREEK					
At Lake Lamar Bruce Road	7.60	3,442	5,464	6,420	8,100
At Pea Ridge Road	4.70	2,106	3,292	3,916	5,359
TOWN CREEK					
Just upstream of Smith Creek	382.02	25,954	40,123	45,194	55,286
Below confluence of Tulip Creek	269.75	20,001	29,210	34,137	48,001
Below confluence of Kings Creek	233.09	18,820	26,949	31,098	42,536
Below confluence of Mud Creek	217.25	18,155	26,096	30,143	41,241
TOWN CREEK TRIBUTARY 1	*	*	*	*	*
TOWN CREEK TRIBTUARY 2					
At confluence of Town Creek	0.93	345	516	757	878
At Brewer Road	0.67	280	463	566	819
TULIP CREEK					
At confluence of Town Creek	32.49	6,590	8,448	9,312	11,489
Below confluence with South Tulip Creek	26.87	6,712	9,272	10,467	13,659
Below confluence with West Tulip Creek	19.97	4,877	7,062	8,066	10,692

* Data not available

TABLE 5. SUMMARY OF DISCHARGES – continued

Detailed Studied Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
WEST TULIP CREEK					
At confluence of Tulip Creek	6.16	1,065	1,502	1,702	2,159
At Elvis Presley Lake Dam	4.37	66	101	118	128

Limited Detailed Studied Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
CAMPBELTOWN CREEK					
At US-45	10.42	*	*	3,817	*
At Lee County Road 2790	5.95	*	*	2,510	*
CHIWAPA CREEK					
At Natchez Trace Parkway	118.79	*	*	28,246	*
COONEWAH CREEK					
At Illinois Central Gulf Railroad	58.35	*	*	16,690	*
COONEWAH CREEK TRIBUTARY 3					
At Lee County Road 484	1.04	*	*	898	*
EUCLATUBBA CREEK					
At confluence with Euclatubba Creek Tributary 1	19.60	*	*	6,579	*
MUD CREEK					
At US-45	61.82	*	*	11,955	*
At Natchez Trace Parkway	40.31	*	*	8,393	*
At Lee County Road 681	34.70	*	*	7,608	*
REEDS BRANCH					
At Natchez Trace Parkway	4.77	*	*	2,130	*
At Palmetto Rd	3.82	*	*	1,867	*
At Lee County Road 900	1.24	*	*	1,457	*

* Data not available

TABLE 5. SUMMARY OF DISCHARGES – continued

Limited Detailed Studied Streams

FLOODING SOURCE AND LOCATION	DRAINAGE AREA (sq. mi.)	PEAK DISCHARGES (cfs) 10-percent	2-percent	1-percent	0.2-percent
SAND CREEK					
At confluence with Mud Creek	24.71	*	*	7,375	*
At confluence with Brock Creek	12.51	*	*	4,505	*
SAND CREEK TRIBUTARY 1					
At confluence with Sand Creek	0.15	*	*	217	*
SAND CREEK TRIBUTARY 2					
At confluence with Sand Creek	0.73	*	*	792	*
TOWN CREEK DOWNSTREAM REACH					
At MS SR-178	28.95	*	*	7,299	*
TOWN CREEK UPSTREAM REACH					
At confluence with Yonaba Creek	18.5	*	*	5,727	*
TOWN CREEK TRIBUTARY 1					
At the county boundary	1.52	*	*	1,100	*
At Burlington Northern Santa Fe Railroad	0.94	*	*	894	*

* 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 cautioned to use the flood elevation data presented in this FIS report in conjunction with the data shown on the FIRM.

Pre-Countywide Analyses

Only Lee County (Unincorporated Areas) and the City of Tupelo had previously printed FIS report narratives. The hydraulic analyses described in those reports have been compiled and are summarized below.

Cross sections of stream channels and bottom lands were field surveyed, and bridge culvert waterway openings were measured in the field. Several road profiles were obtained from the Mississippi State Highway Department and were correlated with field information. All bridges, dams, and culverts were field surveyed to obtain elevation data and structural geometry.

Water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 11).

Starting water-surface elevations were developed using the slope/area method.

Roughness coefficients (Manning's "n") used in the computation for the flooding sources studied by detailed methods were chosen by engineering judgment based on field observations of the stream and floodplain areas. The channel and overbank "n" values for the streams studied by detailed methods are shown in Table 4, "Summary of Roughness Coefficients."

For the flooding sources studied for the June 1977 FIS for the City of Tupelo, the March 1973 flood elevation contained in the USGS stream gage records for a station on Town Creek at Eason Boulevard compared favorably with profiles determined in that FIS (References 1 and 12).

For the approximate study areas, calculated peak discharges, stream characteristics based on field observations, and floodplain cross sections as determined from available contour mapping were used in Manning's equation to determine approximate flood elevations (Reference 13).

October 20, 1999 Revision

Information on the methods used to determine water-surface elevation data for the flooding sources revised or restudied as part of this countywide FIS is shown below.

Cross sections were obtained from field surveys. All bridges, dams, culverts, were field surveyed to obtain elevation data and structural geometry.

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).

Along certain portions of Little Coonewah Creek, a profile base line is shown on the maps to represent channel distances as indicated on the flood profiles and floodway data tables.

Water-surface elevations of floods of the selected recurrence intervals were computed using the USACE HEC-2 step-backwater computer program (Reference 11). Starting water-surface elevations were obtained from the slope/area method. Flood profiles were drawn showing computed water-surface elevations for floods of the selected recurrence intervals. A flood profile for Town Creek Tributary No. 1 is not included because flooding along its entire reach is controlled by Town Creek.

Roughness factors (Manning's "n") used in the hydraulic computations were chosen by engineering judgment based on field observation of the channel and floodplain areas.

Manning's "n" values used in the hydraulic computations of Town Creek, from approximately 100 feet downstream of the confluence of Tulip Creek to Natchez Trace Parkway, were calibrated based on rating curves provided by the USGS (Reference 14).

The hydraulic analyses for the October 20, 1999 FIS were based on obstructed flow. The flood elevations shown on the profiles are thus considered valid only if hydraulic structures remain unobstructed, operate properly, and do not fail.

All elevations are referenced to the National Geodetic Vertical Datum of 1929 (NGVD). Elevation reference marks used in the October 20, 1999 FIS, and their descriptions, are shown on the FIRM.

This Countywide Analysis

Detailed models were developed through a combination of effective HEC-2 model data and WISE by extracting cross section topographic data directly from the WISE terrain project and supplemented with field surveys. Structure data is based on Mississippi Department of Transportation (MDOT) as-built data where available and additional field surveys where it was not. Regional regression equations were used as a basis for the discharges in the HEC-RAS (Reference 15) models.

Downstream boundary conditions for the hydraulics models were set to normal depth using a starting slope calculated from values taken from topographic data, or where applicable, derived from the water-surface elevations of existing effective flood elevations or recalculated flood elevations. Water-surface profiles were computed through the use of USACE HEC-RAS version 3.1.2 computer program (Reference 15). The model was run for the 1-percent-annual-chance storm for the Limited detailed and approximate studies and for the 10-, 2-, 1-, and 0.2-percent-annual-chance-flood and floodway for Detailed studies.

Mannings "n" values used in the hydraulic computations for both channel and overbank areas were based on recent digital orthophotography and field investigations.

Table 6, "Summary of Roughness Coefficients," shows the ranges of the channel and overbank roughness factors used in the computations for all of the streams studied by Detailed and Limited detailed methods.

TABLE 6. SUMMARY OF ROUGHNESS COEFFICIENTS

Stream	Channel "n"	Overbank "n"
Campbelltown Creek	0.05	0.06
Chiwapa Creek	0.05	0.065
Coonewah Creek	0.030-0.060	0.070-0.230
Euclatubba Creek	0.05	0.600-0.150
Coonewah Creek Tributary 1	0.030-0.060	0.070-0.230

TABLE 6. SUMMARY OF ROUGHNESS COEFFICIENTS - continued

Stream	Channel "n"	Overbank "n"
Coonewah Creek Tributary 2	0.035-0.070	0.060-9.000
Coonewah Creek Tributary 3	0.035-0.070	0.060-9.000
Kings Creek	0.035-0.070	0.060-9.000
Kings Creek Tributary 1	0.030-0.060	0.070-0.230
Kings Creek Tributary 2	0.030-0.060	0.070-0.230
Kings Creek Tributary 3	0.030-0.060	0.070-0.230
Kings Creek Tributary 4	0.030-0.060	0.070-0.230
Little Coonewah Creek	0.035-0.070	0.060-9.000
Little Coonewah Creek Tributary 1	0.035-0.070	0.060-9.000
Mud Creek	0.035-0.070	0.060-9.000
Mud Creek Tributary 1	0.035-0.070	0.060-9.000
Mud Creek Tributary 2	0.035-0.070	0.060-9.000
Reeds Branch	0.035-0.070	0.060-9.000
Russell Creek	0.05	0.15
Sand Creek	0.035-0.070	0.060-9.000
Sand Creek Tributary 1	0.030-0.060	0.070-0.230
Sand Creek Tributary 2	0.05	0.15
Town Creek	0.035-0.070	0.060-9.000
Town Creek Tributary 1	0.05	0.15
Town Creek Tributary 2	0.030-0.060	0.070-0.230
Tulip Creek	0.030-0.060	0.070-0.230
West Tulip Creek	0.035-0.070	0.060-9.000

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).

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.

All elevations are referenced to North American Vertical Datum of 1988 (NAVD88).

3.3 Vertical Datum

All FIS reports 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 FIS reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD 29). With the finalization of the North American Vertical Datum of 1988, many FIS reports and FIRMs are being prepared using NAVD88 as the referenced vertical datum.

Qualifying bench marks within a given jurisdiction that are catalogued by the National Geodetic Survey (NGS) and entered into the National Spatial Reference System (NSRS) as First or Second Order Vertical and have a vertical stability classification of A, B, or C are shown and labeled on the FIRM with their 6-character NSRS permanent identifier.

Bench marks cataloged by the NGS and entered into the NSRS vary widely in vertical stability classification. NSRS vertical stability classifications are as follows:

> Stability A: Monuments of the most reliable nature, expected to hold position/elevation well (e.g., mounted in bedrock)
>
> Stability B: Monuments which generally hold their position/elevation well (e.g., concrete bridge abutment)
>
> Stability C: Monuments which may be affected by surface ground movements (e.g., concrete monuments below frost line)
>
> Stability D: Mark of questionable or unknown vertical stability (e.g., concrete monument above frost line, or steel witness post)

All flood elevations shown in this FIS report and on the FIRM are referenced to NAVD88. Structure and ground elevations in the community must, therefore, be referenced to NAVD88. It is important to note that adjacent communities may be referenced to NGVD29. This may result in differences in Base Flood Elevations (BFEs) across the corporate limits between the communities.

The elevations shown in the FIS report and on the FIRM for Lee County are referenced to NAVD88. Ground, structure, and flood elevations may be compared and/or referenced to NGVD29, add 0.19 feet to the NGVD29 elevation. The 0.19 feet value is an average for the entire county. The BFEs shown on the FIRM represent whole-foot rounded values. For example, a BFE of 12.4 feet will appear as 12 feet on the FIRM and 12.6 feet as 13 feet. Users who wish to convert the elevations in this FIS report to NGVD29 should apply the stated conversion factor to elevations shown on the Flood Profiles and supporting data tables in the FIS report, which are shown at a minimum to the nearest 0.1 foot.

To obtain current elevation, description, and/or location information for bench marks shown on the FIRM for this jurisdiction, or for information regarding conversion between the NGVD29 and NAVD88, see the FEMA publication entitled *Converting the National Flood Insurance Program to the North American Vertical Datum of 1998* (FEMA, June 1992), 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 community. Interested individuals may contact FEMA to access these data.

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. To assist in this endeavor, each FIS provides 1-percent-annual-chance floodplain data, which may include a combination of the following: 10-, 2-, 1-, and 0.2-percent-annual chance flood elevations; delineations of the 1-percent and 0.2-percent-annual-chance floodplains; and 1-percent-annual-chance floodway. This information is presented on the FIRM and in many components of the FIS report, including Flood Profiles, Floodway Data Table, and Summary of Stillwater Elevations Table. Users should reference the data presented in the FIS report 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 each stream 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.

For this study the 1- and 0.2-percent-annual-chance 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 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, 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 Limited Detailed and 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, reduces flood-carrying capacity, increases flood heights and velocities, and increases flood hazards in areas beyond the encroachment itself. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposes of the NFIP, a floodway is used as a tool to assist local communities in this aspect of 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, 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. The floodways in this FIS are presented to local agencies as minimum standards that can be adopted directly or that can be used as a basis for additional floodway studies.

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 of detailed study streams in Table 5. 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.

Floodways were not computed for Coonewah Creek, Tributary No. 1 to Coonewah Creek, Town Creek Tributary No. 2, and Sand Creek. The floodway shown for a portion of Town Creek Tributary No. 1 was computed in the previously published FIS for the City of Tupelo. The results of floodway computations for Town Creek Tributary No. 1 are not available. Therefore, this information is not shown in Table 5.

Near the mouths of streams studied in detail, floodway computations are made without regard to flood elevations on the receiving water body. Therefore, "Without Floodway" elevations presented in Table 5 for certain downstream cross sections of Kings Creek, Tributary to Little Coonewah Creek, Tributary No. 2 to Mud Creek, Tulip Creek, and West Tulip Creek are lower than the regulatory flood elevations in that area, which must make into the account the 1-percent-annual-chance flooding due to backwater from other sources.

Encroachment into areas subject to inundation by floodwaters having hazardous velocities aggravates the risk of flood damage, and heightens potential flood hazards by further increasing velocities. A listing of stream velocities at selected cross sections is provided in Table 5. In order to reduce the risk of property damage in areas where the stream velocities are high, the county may wish to restrict development in areas outside the floodway.

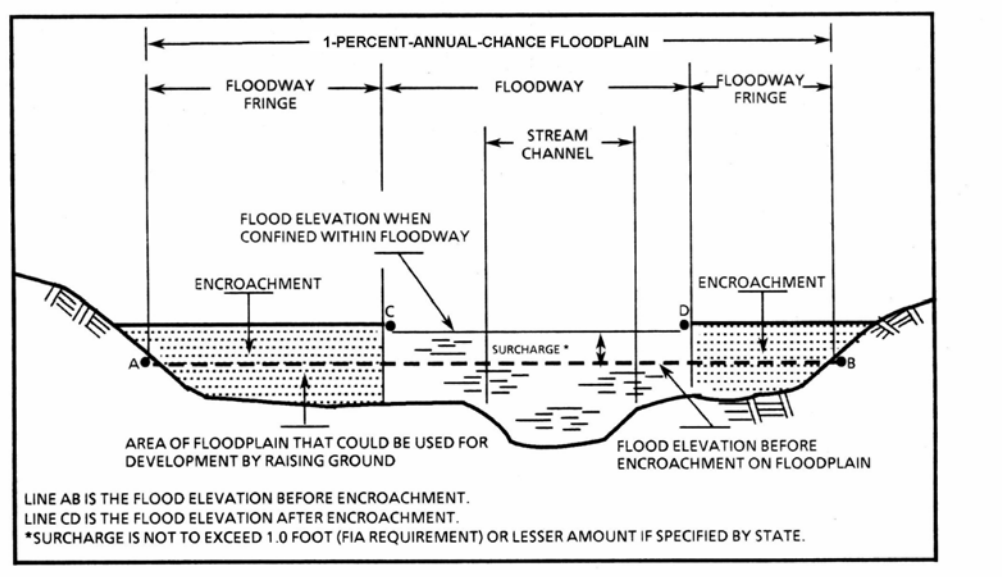

FIGURE 1. FLOODWAY SCHEMATIC

The area between the floodway and 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 more than 1.0 foot at any point. Typical relationships between the floodway and the floodway fringe and their significance to floodplain development are shown in Figure 1.

FLOODING SOURCE		FLOODWAY			BASE 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
Coonewah Creek Tributary 2								
A	3,900[1]	33	195	5.8	278.7	278.7	279.5	0.8
B	4,204[1]	154	544	2.1	279.8	279.8	280.7	0.9
C	7,610[1]	60	80	7.3	295.2	295.2	295.2	0.0
D	8,900[1]	19	109	5.3	302.2	302.2	303.2	1.0
Kings Creek								
A	1,375[2]	90	950	8.4	258.5	249.0[3]	249.1	0.1
B	3,700[2]	91	946	8.1	260.1	255.4[3]	255.6	0.2
C	5,700[2]	80	1,194	6.4	261.7	261.7	261.8	0.1
D	6,060[2]	112	1,187	6.5	262.3	262.3	262.5	0.2
E	6,268[2]	115	1,291	5.9	262.8	262.8	263.3	0.5
F	9,625[2]	100	1,158	6.6	266.6	266.6	267.2	0.6
G	10,160[2]	219	1,380	5.6	267.8	267.8	268.1	0.3
H	11,490[2]	104	1,105	2.8	269.8	269.8	270.6	0.8
I	13,125[2]	516	2,200	1.4	271.0	271.0	271.4	0.4
J	13,464[2]	805	3,434	0.9	271.1	271.1	271.6	0.5
K	15,780[2]	277	818	2.8	271.9	271.9	272.5	0.6
L	18,450[2]	596	1,536	1.5	275.0	275.0	275.9	0.9

[1] Feet above confluence with Coonewah Creek
[2] Feet above confluence with Town Creek
[3] Elevation computed without consideration of backwater effects from Town Creek

FLOODING SOURCE		FLOODWAY			BASE 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
Kings Creek								
M	20,460[1]	218	573	2.6	278.4	278.4	278.8	0.4
N	21,200[1]	275	844	1.7	279.5	279.5	279.7	0.2
O	24,585[1]	991	2,204	0.7	282.3	282.3	282.9	0.6
P	28,300[1]	760	6,452	0.2	296.7	296.7	296.7	0.0
Q	35,200[1]	353	2,173	0.7	312.0	312.0	312.0	0.0
R	38,800[1]	300	187	4.3	317.2	317.2	317.2	0.0
S	42,050[1]	111	271	3.0	335.9	335.9	336.0	0.1
Kings Creek Tributary 1								
A	1,300[2]	125	1,101	1.7	272.9	272.9	273.3	0.4
B	2,022[2]	158	1,114	1.7	273.2	273.2	273.8	0.6
C	2,474[2]	276	1,453	1.3	274.1	274.1	275.0	0.9
D	3,258[2]	302	1,612	1.2	275.8	275.8	276.7	0.9
E	3,753[2]	84	553	3.4	276.5	276.5	277.4	0.9
F	4,413[2]	98	592	2.8	279.5	279.5	280.2	0.7
G	5,413[2]	178	1,119	1.5	280.2	280.2	281.0	0.8
H	6,413[2]	103	435	2.8	280.8	280.8	281.7	0.9
I	7,373[2]	75	331	3.7	283.8	283.8	284.7	0.9
J	8,692[2]	25	195	3.6	290.1	290.1	290.8	0.7
K	9,232[2]	78	375	1.9	290.8	290.8	291.8	1.0
L	9,832[2]	60	241	2.9	291.6	291.6	292.5	0.9
M	10,807[2]	60	80	6.4	301.4	301.4	301.5	0.1

[1] Feet above confluence with Town Creek
[2] Feet above confluence with Kings Creek

FLOODING SOURCE		FLOODWAY			BASE 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
Kings Creek Tributary 2								
A	430	229	1,472	2.4	271.4	271.4	272.3	0.9
B	2,750	580	2,232	1.5	273.8	273.8	274.7	0.9
C	4,080	100	679	4.9	277.2	277.2	278.1	0.9
D	5,460	237	1,021	2.3	279.0	279.0	279.8	0.8
E	6,330	265	1,004	2.3	281.2	281.2	282.2	1.0
F	7,482	243	553	2.1	284.7	284.7	285.4	0.7
G	8,672	46	220	3.6	289.4	289.4	290.3	0.9
H	9,562	69	145	5.4	294.3	294.3	294.3	0.0
I	10,597	21	94	5.1	297.6	297.6	298.5	0.9
J	11,657	70	155	2.3	303.3	303.3	304.2	0.9
K	12,953	32	85	2.8	311.0	311.0	311.7	0.7
Kings Creek Tributary 3								
A	1,140	213	419	4.0	273.0	273.0	273.4	0.4
B	2,525	133	430	3.3	280.8	280.8	280.8	0.0
C	3,325	144	507	2.4	281.4	281.4	282.3	0.9
D	4,294	33	205	5.0	285.1	285.1	285.9	0.8
E	5,414	50	354	2.7	291.1	291.1	291.9	0.8
F	6,514	33	185	4.3	292.3	292.3	292.9	0.6
G	8,504	54	146	4.8	313.7	313.7	314.1	0.4

[1] Feet above confluence with Kings Creek

FLOODING SOURCE		FLOODWAY			BASE 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
Kings Creek Tributary 4								
A	1,210[1]	88	317	4.5	277.5	277.5	278.3	0.8
B	2,210[1]	160	632	2.1	284.3	284.3	284.7	0.4
C	4,820[1]	140	569	2.2	292.9	292.9	293.6	0.7
D	6,060[1]	75	651	1.8	303.3	303.3	304.0	0.7
E	6,220[1]	69	732	1.5	306.0	306.0	306.7	0.7
F	7,384[1]	39	219	4.5	309.4	309.4	310.3	0.9
Little Coonewah Creek								
A	3,250[2]	119	829	3.7	291.9	291.9	292.1	0.2
B	4,650[2]	534	1,696	1.8	292.5	292.5	293.3	0.8
C	9,573[2]	100	499	2.4	299.3	299.3	300.3	1.0
D	13,850[2]	405	933	1.3	306.1	306.1	306.7	0.6
E	17,850[2]	322	693	0.2	312.1	312.1	312.4	0.3
F	20,155[2]	33	147	1.0	312.2	312.2	312.5	0.3
G	24,650[2]	623	6,125	0.4	335.8	335.8	335.8	0.0
H	27,770[2]	680	3,466	0.7	336.0	336.0	336.1	0.1
I	30,100[2]	206	896	2.8	338.3	338.3	339.2	0.9
J	32,900[2]	305	1,071	2.3	346.8	346.8	347.4	0.6
K	35,776[2]	111	414	2.4	354.4	354.4	355.2	0.8
L	39,000[2]	49	181	5.5	361.8	361.8	362.5	0.7

[1] Feet above confluence with Kings Creek
[2] Feet above confluence with Coonewah Creek

FLOODING SOURCE		FLOODWAY			BASE 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
Little Coonewah Creek Tributary 1								
A	3,250[1]	39	162	5.0	335.8	334.9[5]	335.4	0.5
B	5,490[1]	56	124	4.4	348.5	348.5	349.0	0.5
C	7,600[1]	67	64	5.6	359.1	359.1	359.1	0.0
Mud Creek								
A	1,768[2]	1,770[3]	15,642	1.9	259.5	259.5[6]	260.0	0.5
B	5,611[2]	2,126[3]	19,776	1.5	260.3	260.3[6]	260.9	0.6
C	10,003[2]	2,525[3]	22,865	1.3	264.7	264.7[6]	265.5	0.8
D	12,355[2]	3,636[3]	31,893	0.9	265.0	265.0[6]	265.7	0.7
E	14,796[2]	4,020	27,282	1.1	265.7	265.7[6]	266.3	0.6
F	18,110[2]	2,746	16,380	1.0	266.5	266.5	267.2	0.7
G	19,202[2]	795	5,155	3.6	267.6	267.6	268.2	0.6
H	22,301[2]	2,437[4]	13,806	1.2	269.6	269.6	270.4	0.8
I	27,616[2]	158	2,590	6.7	274.8	274.8	275.7	0.9
J	30,157[2]	285	3,759	4.6	277.6	277.6	278.6	1.0
K	33,214[2]	2,323	18,982	0.9	279.2	279.2	279.7	0.5

[1] Feet above confluence with Little Coonewah Creek
[2] Feet above confluence with Town Creek
[3] Combined Mud Creek/Town Creek floodway
[4] Combined Mud Creek/Mud Creek Tributary 2 floodway
[5] Elevation computed without consideration of backwater effects from Little Coonewah Creek
[6] Elevation extracted from Town Creek model; no independent analysis done for Mud Creek at these cross sections

FLOODING SOURCE		FLOODWAY			BASE 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
Mud Creek Tributary 1								
A	3,062[1]	190	347	2.2	274.8	274.8	275.8	1.0
B	4,840[1]	221	80	5.6	290.8	290.8	290.8	0.0
C	6,007[1]	42	146	3.1	303.1	303.1	303.5	0.4
D	6,763[1]	97	123	3.7	308.8	308.8	308.8	0.0
E	7,090[1]	59	297	1.5	316.5	316.5	317.0	0.5
Mud Creek Tributary 2								
A	3,100[1]	66	374	1.8	272.3	267.2[2]	267.6	0.4
B	4,350[1]	108	481	1.4	273.0	267.8[2]	268.1	0.3
C	6,200[1]	141	513	0.5	273.1	270.9[2]	270.9	0.0
D	8,610[1]	85	335	0.2	273.1	271.0[2]	271.1	0.1
Russell Creek								
A	3,325[3]	168	469	2.7	311.9	311.9	312.6	0.7
B	5,625[3]	27	171	4.2	317.2	317.2	317.8	0.6
C	8,710[3]	37	158	3.4	323.9	323.9	324.2	0.3
D	11,175[3]	231	1,523	0.2	339.7	339.7	339.8	0.1

[1] Feet above confluence with Mud Creek
[2] Elevation computed without consideration of backwater effects from Mud Creek
[3] Feet above confluence with Little Coonewah Creek

FLOODING SOURCE		FLOODWAY			BASE 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
Town Creek								
A	8,800	*	*	*	229.2	*	*	*
B	11,900	*	*	*	232.0	*	*	*
C	20,250	*	*	*	237.7	*	*	*
D	23,270	*	*	*	240.8	*	*	*
E	24,400	*	*	*	241.4	*	*	*
F	25,690	*	*	*	243.0	*	*	*
G	47,137	2697	11,334	3.0	249.6	249.6	250.4	0.8
H	52,376	1215	7,973	3.9	253.2	253.2	254.0	0.8
I	56,431	1240	9,604	3.2	255.8	255.8	256.6	0.8
J	61,051	1,770[2]	15,642	1.9	259.7	259.7	260.0	0.3
K	64,198	2,126[2]	19,776	1.5	260.3	260.3	260.9	0.6
L	68,454	2,525[2]	22,865	1.3	265.3	265.3	265.9	0.6
M	70,895	3,636[2]	31,893	0.9	265.5	265.5	266.1	0.6
N	72,617	4,062[2]	27,357	1.1	265.7	265.7	266.3	0.6
O	78,229	3,257	18,751	1.6	270.1	270.1	270.3	0.2
P	81,251	1,183	8,737	2.0	271.2	271.2	271.5	0.3
Q	85,751	1,704	13,593	1.3	273.4	273.4	273.9	0.4
R	87,838	179	3,305	5.3	274.3	274.3	274.9	0.6

[1] Feet above county boundary
[2] Combined Town Creek/Mud Creek floodway
*Data not computed

FLOODING SOURCE		FLOODWAY			BASE 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
Tulip Creek								
A	6,391[1]	300	1,790	5.2	255.2	254.5[3]	255.4	0.9
B	9,900[1]	1,565	7,339	1.3	260.3	260.3	261.1	0.8
C	12,095[1]	362	2,422	3.8	265.9	265.9	266.1	0.2
D	15,850[1]	508	2,604	4.0	271.0	271.0	271.7	0.7
E	19,485[1]	1,146	6,115	1.7	275.0	275.0	276.0	1.0
F	22,130[1]	2,060	6,618	1.6	277.2	277.2	278.2	1.0
G	24,468[1]	179	2,306	3.5	279.1	279.1	280.0	0.9
H	27,550[1]	*	*	*	283.4	283.4	*	*
I	30,000[1]	*	*	*	287.1	287.1	*	*
West Tulip Creek								
A	1,022[2]	45	195	8.7	279.5	278.5[4]	278.5	0.0
B	2,600[2]	55	367	4.6	284.1	284.1	284.1	0.0
C	4,277[2]	57	400	3.6	286.3	286.3	286.5	0.2
D	6,865[2]	41	253	4.6	292.6	292.6	292.6	0.0
E	10,500[2]	30	148	5.9	300.8	300.8	300.9	0.1
F	13,076[2]	40	194	3.0	310.5	310.5	310.5	0.0
G	13,830[2]	84	491	0.2	310.9	310.9	310.9	0.0

[1] Feet above confluence with Town Creek
[2] Feet above confluence with Tulip Creek
[3] Elevation computed without consideration of backwater effects from Town Creek
[4] Elevation computed without consideration of backwater effects from Tulip Creek
*Data not computed

5.0 INSURANCE APPLICATION

For flood insurance rating purposes, flood insurance zone designations are assigned to a community based on the results of the engineering analyses. These 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 BFEs, or flood 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 BFEs derived from the detailed hydraulic analyses are shown at 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 BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone.

Zone AO

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

Zone V

Zone V is the flood insurance risk zone that corresponds to the 1-percent-annual-chance coastal floodplains that have additional hazards associated with storm waves. Because approximate hydraulic analyses are performed for such areas, no BFEs are shown within this zone.

Zone VE

Zone VE is the flood insurance risk zone that corresponds to the 1-percent-annual-chance coastal floodplains that have additional hazards associated with storm waves. Whole-foot BFEs derived from the detailed hydraulic analyses are shown at selected intervals 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, 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 base flood by levees. No BFEs or depths are shown within this zone.

Zone D

Zone D is the flood insurance rate zone that corresponds to unstudied areas where flood hazards are undetermined, but possible.

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 BFEs or average depths. Insurance agents use the zones and BFEs 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.

The countywide FIRM presents flooding information for the entire geographic area of Lee County. Historical data relating to the maps prepared for each community are presented in Table 8., "Community Map History".

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Baldwyn, City of	June 7, 1974	August 20,1976	September 18, 1987	October 20, 1999
Guntown, Town of	October 20, 1999	None	October 20, 1999	
Lee County (Unincorporated Areas)	September 3, 1976	None	March 5, 1990	October 20, 1999
Nettleton, Town of	October 20, 1999	None	October 20, 1999	
Plantersville, Village of	June 14, 1974	June 25, 1976	October 1, 1986	October 20, 1999
Saltillo, Town of	February 14, 1975	March 10, 1978	September 18, 1987	October 20, 1999
Shannon, Town of	October 20, 1999	None	October 20, 1999	
Tupelo, City of	June 14, 1974	August 27, 1976	April 3, 1978	October 20, 1999
Verona, Town of	December 13, 1974	None	June 4, 1987	October 20, 1999

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

Studies have been prepared for the City of Tupelo and the unincorporated areas of Lee County; and FIRMs for the City of Baldwyn, the Village of Plantersville, the Towns of Saltillo, Verona, and Sherman, and Pontotoc County (References 16, 18, 19, 20, 21, 22, and 23).

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

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting Federal Insurance and Mitigation Division, FEMA Region IV, Koger-Center — Rutgers Building, 3003 Chamblee Tucker Road, Atlanta, GA 30341.

9.0 BIBLIOGRAPHY AND REFERENCES

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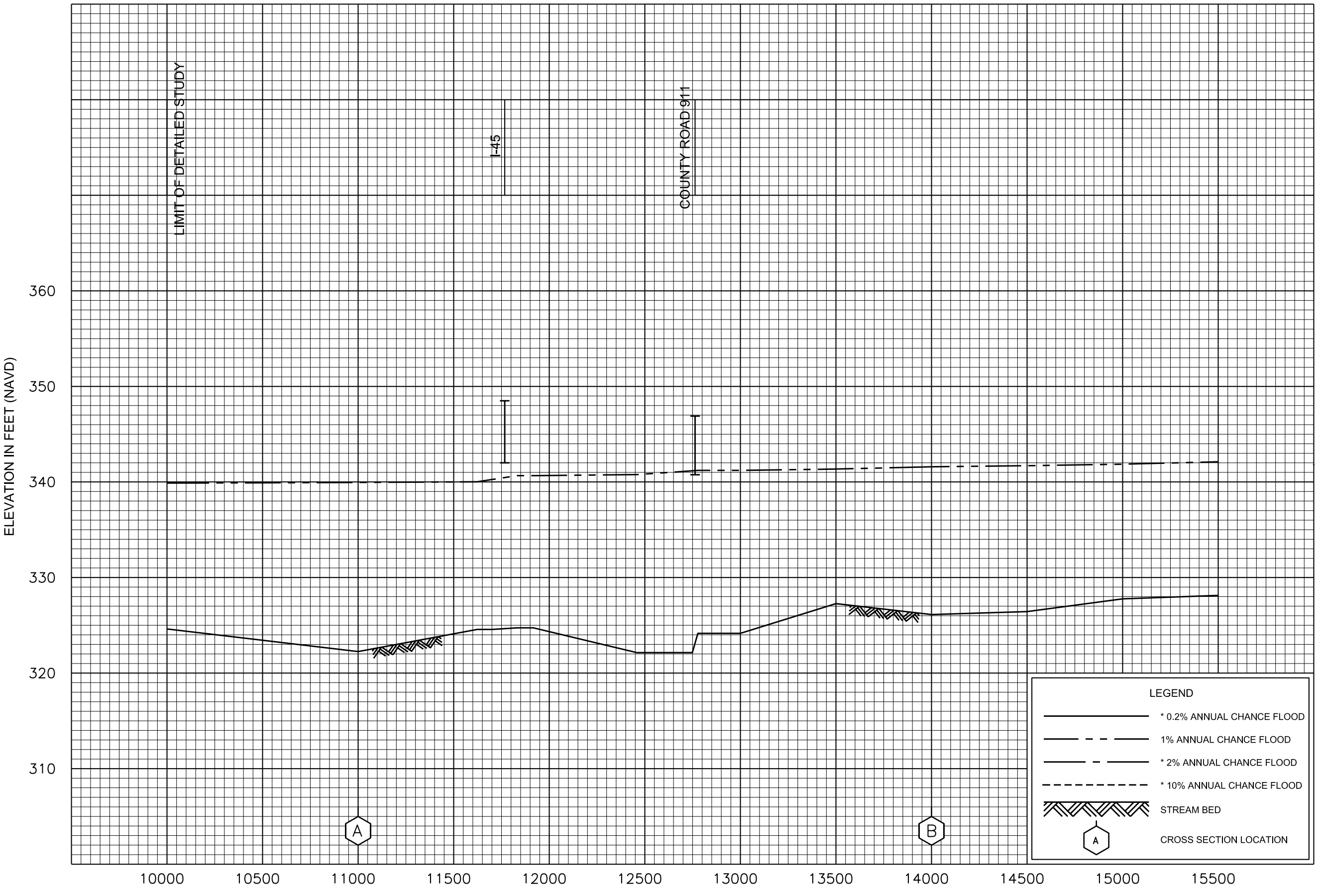


FLOOD PROFILES

CAMPBELLTOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

01P

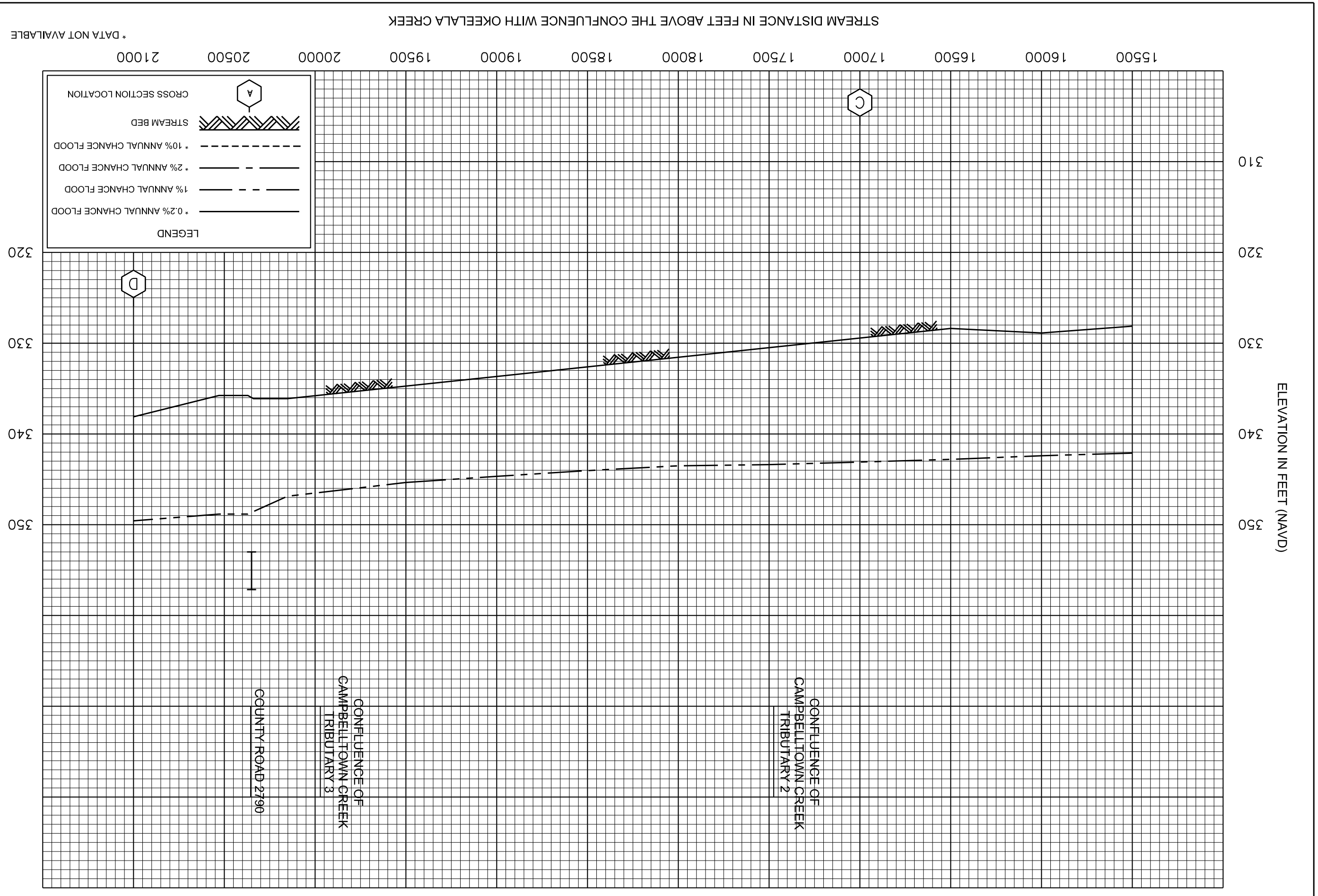
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

FLOOD PROFILES

CAMPBELLTOWN CREEK

02P



ELEVATION IN FEET (NAVD)

360
350
340
330
320

LIMIT OF DETAILED STUDY

D

21000 21500 22000 22500 23000 23500 24000 24500

STREAM DISTANCE IN FEET ABOVE THE CONFLUENCE WITH OKEELALA CREEK

LEGEND

- * 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- * 2% ANNUAL CHANCE FLOOD
- * 10% ANNUAL CHANCE FLOOD
- STREAM BED
- A — CROSS SECTION LOCATION

* DATA NOT AVAILABLE

FLOOD PROFILES

CAMPBELLTOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

03P

ELEVATION IN FEET (NAVD)

230 240 250 260 270 280

56500 57000 57500 58000 58500 59000 59500 60000 60500

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH TOWN CREEK

LIMIT OF DETAILED STUDY

NATCHIEZ TRACE PARKWAY

CONFLUENCE OF
CHIWAPA CREEK
TRIBUTARY 16

A

LEGEND

* 0.2% ANNUAL CHANCE FLOOD

1% ANNUAL CHANCE FLOOD

* 2% ANNUAL CHANCE FLOOD

* 10% ANNUAL CHANCE FLOOD

STREAM BED

A CROSS SECTION LOCATION

* DATA NOT AVAILABLE

240 250 260 270 280

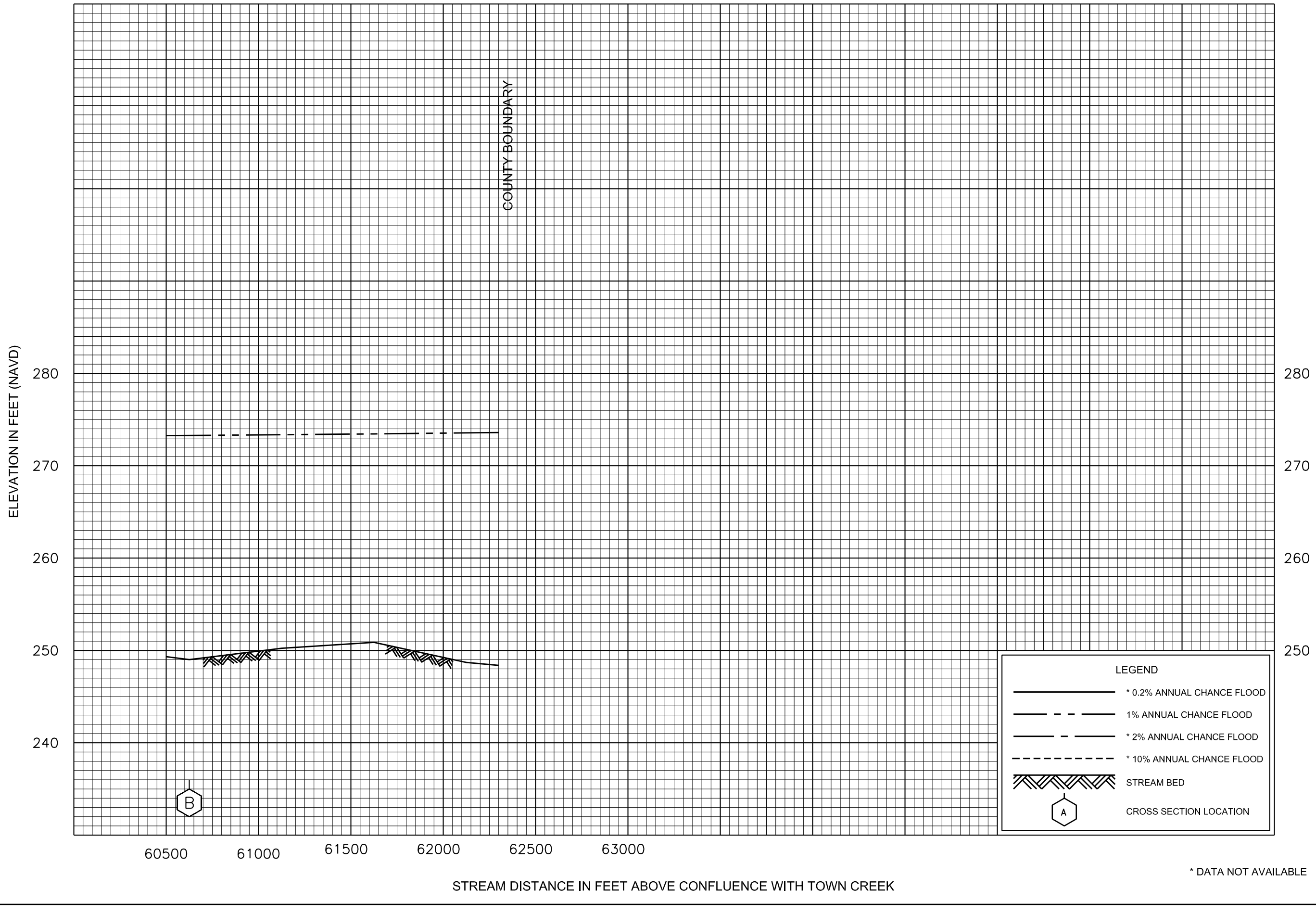
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

FLOOD PROFILES

CHIWAPA CREEK

04P



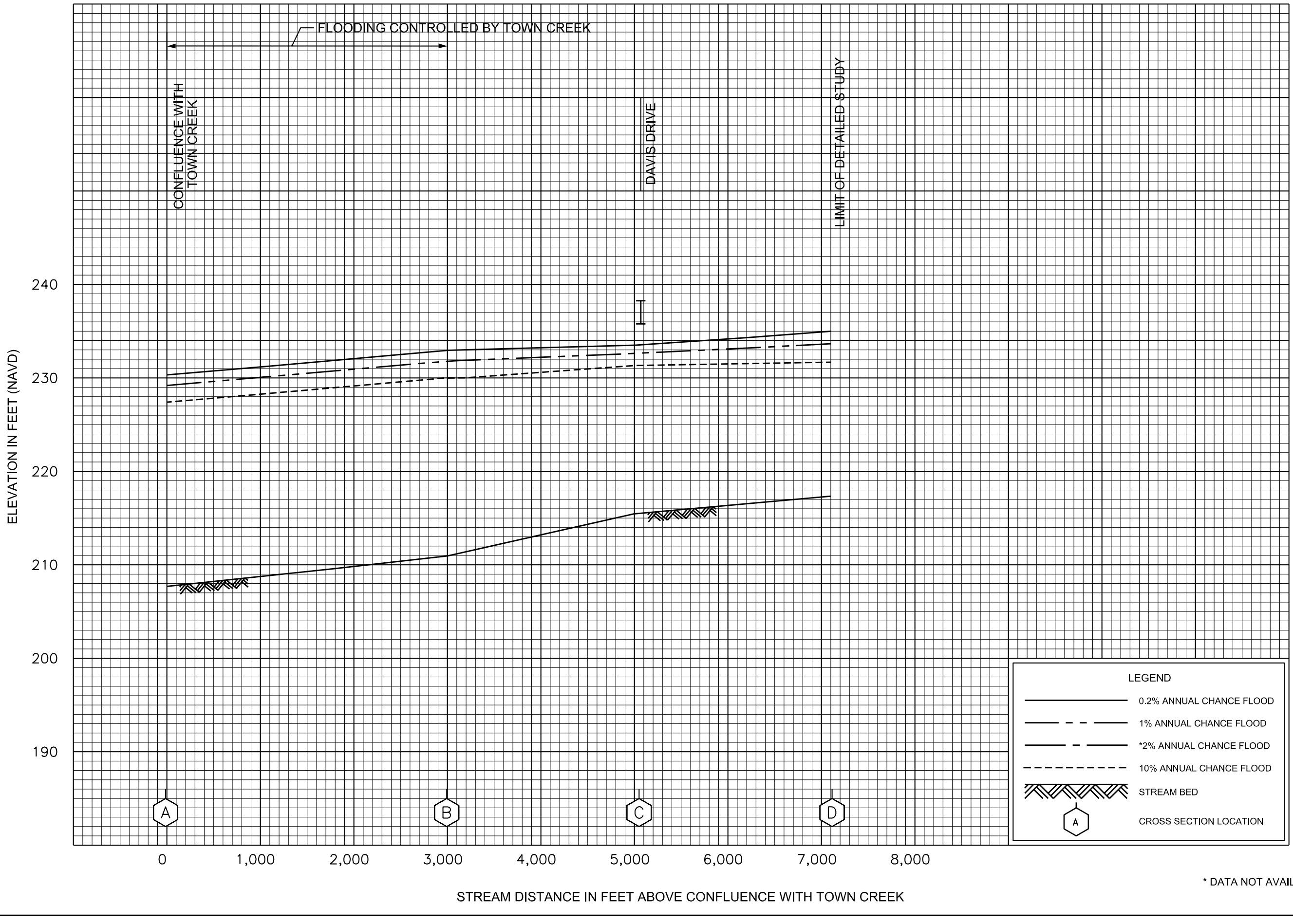
FLOOD PROFILES

CHIWAPA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

05P



* DATA NOT AVAILABLE

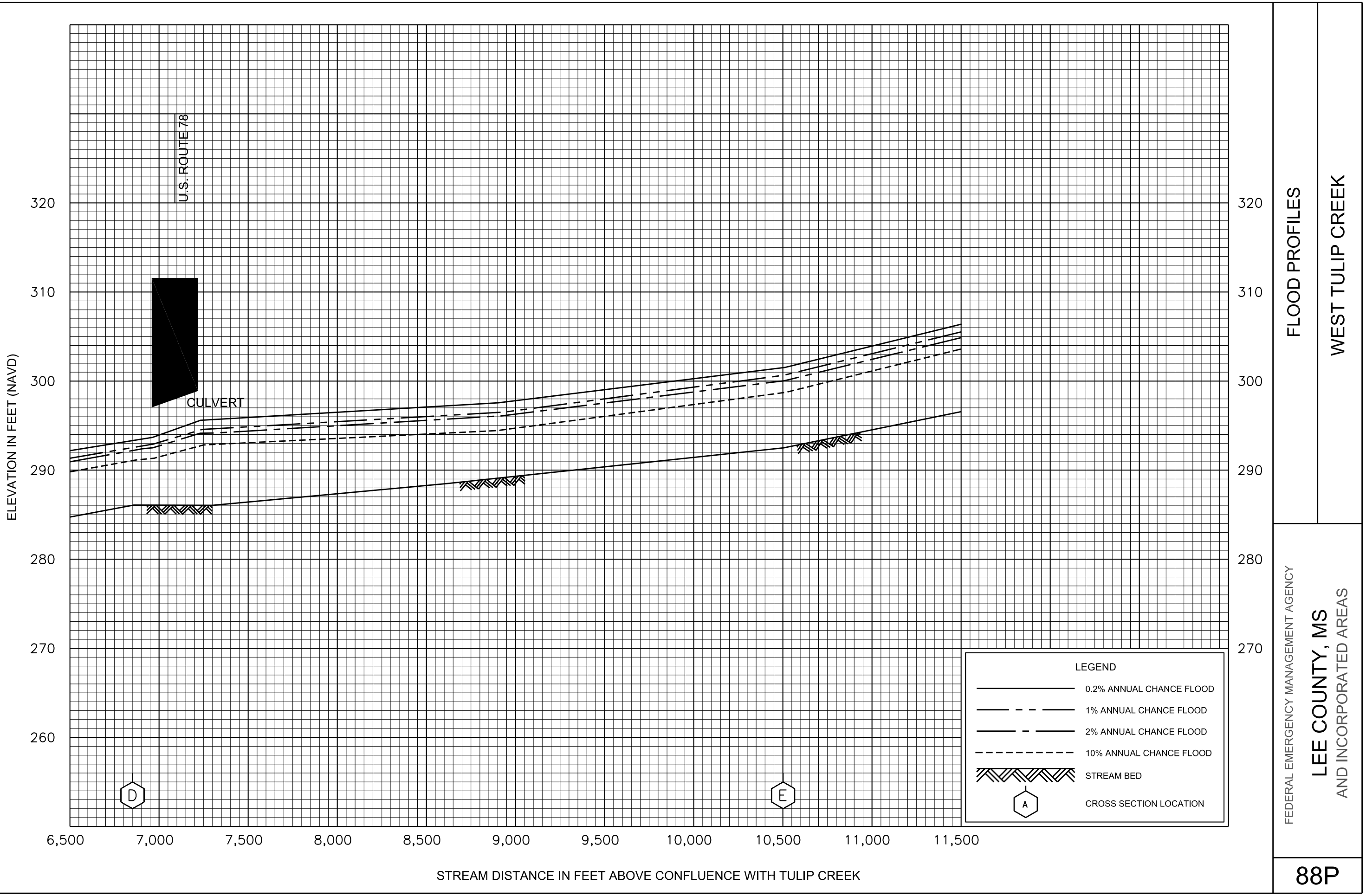
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

06P



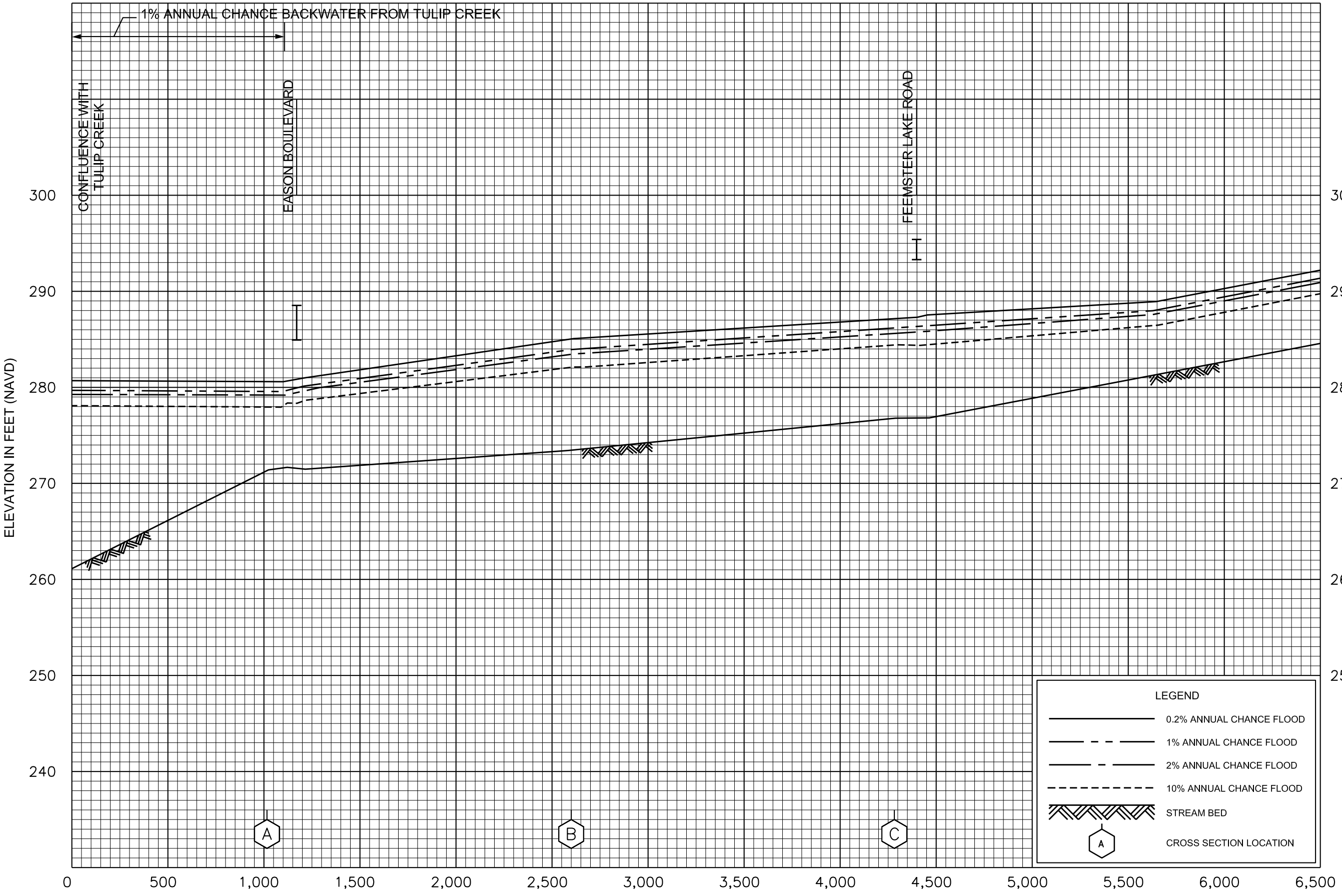
FLOOD PROFILES

WEST TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

88P



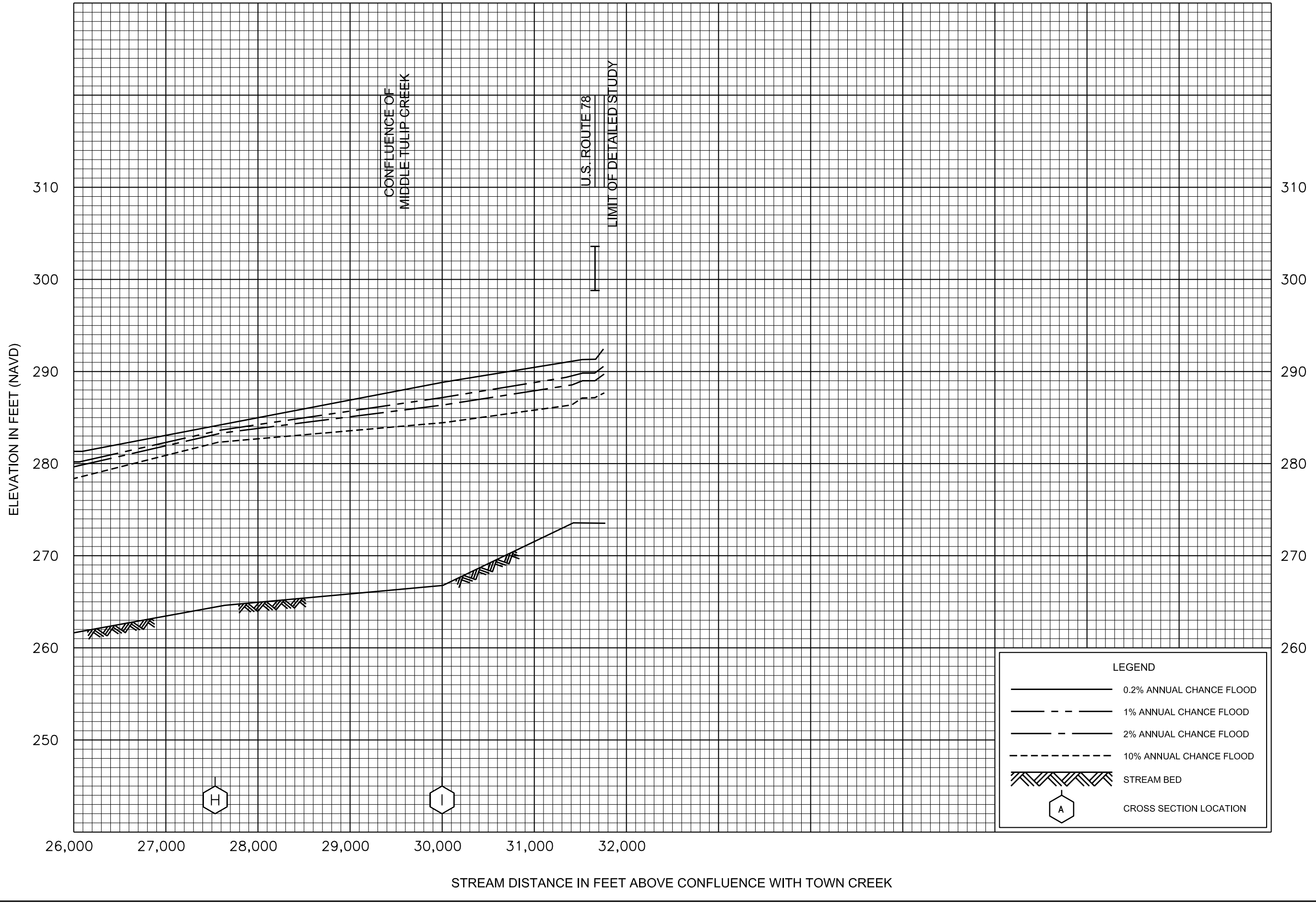
FLOOD PROFILES

WEST TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

87P

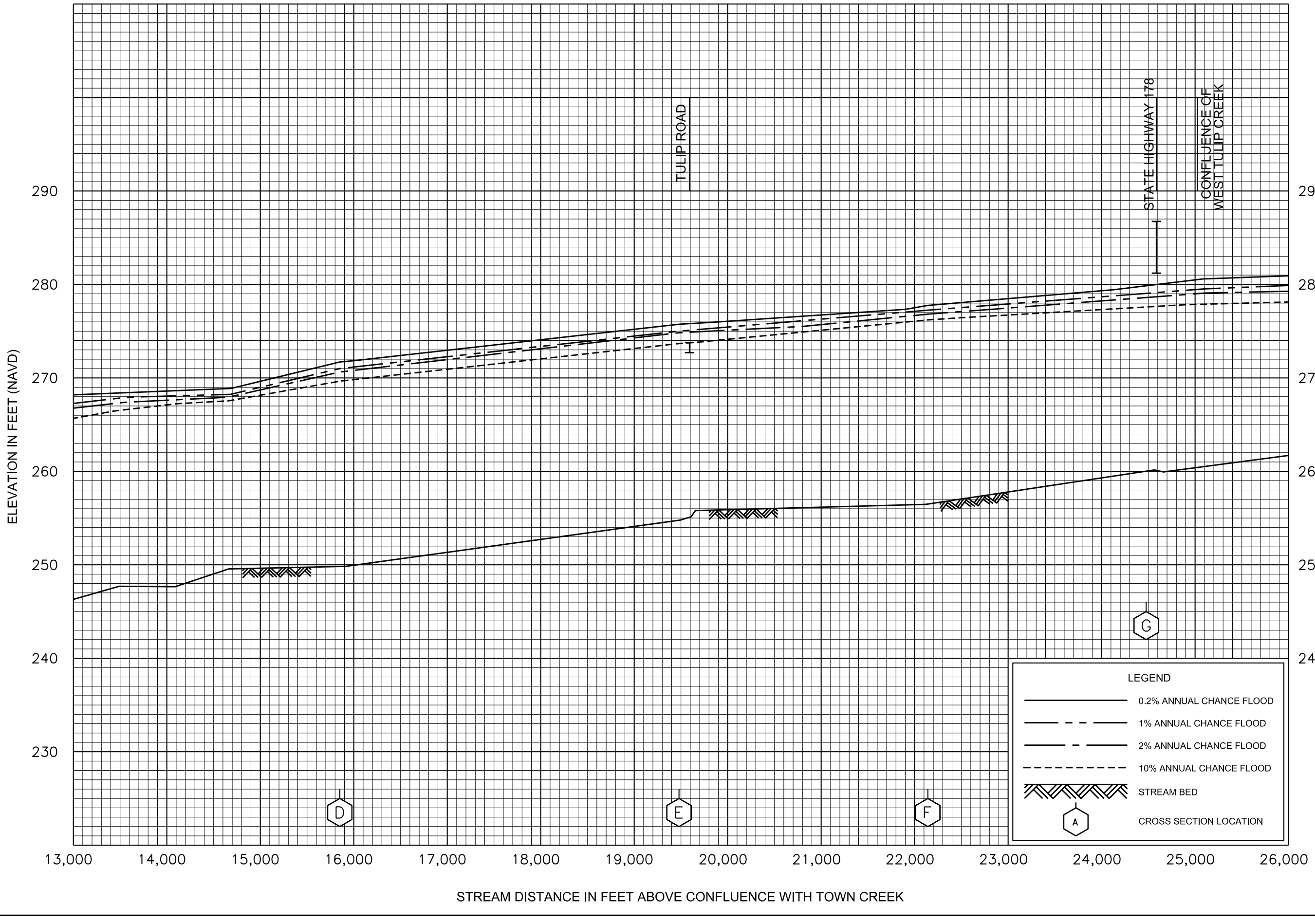


FLOOD PROFILES

TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



FLOOD PROFILES

TULIP CREEK

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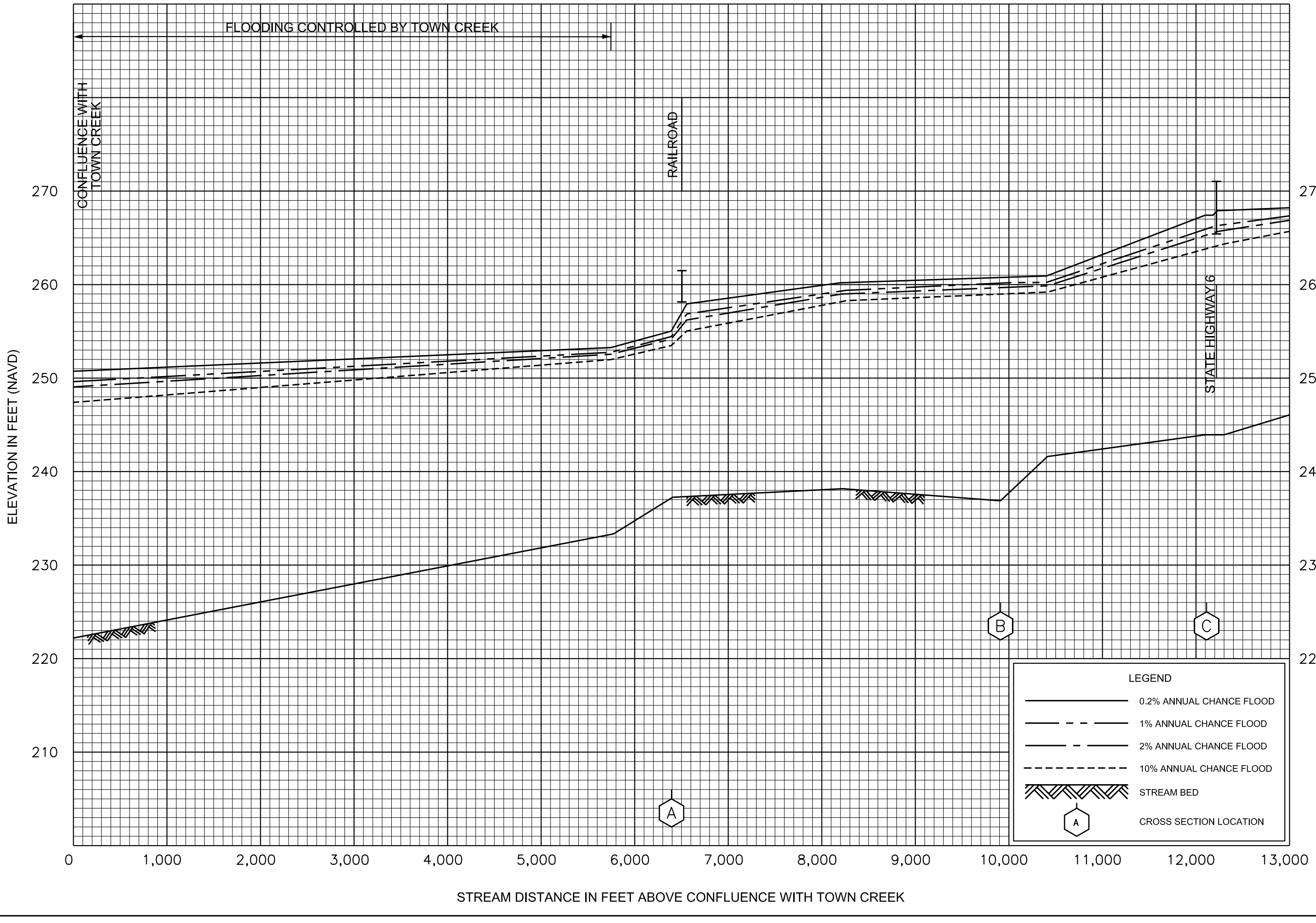
LEE COUNTY, MS
AND INCORPORATED AREAS

85P



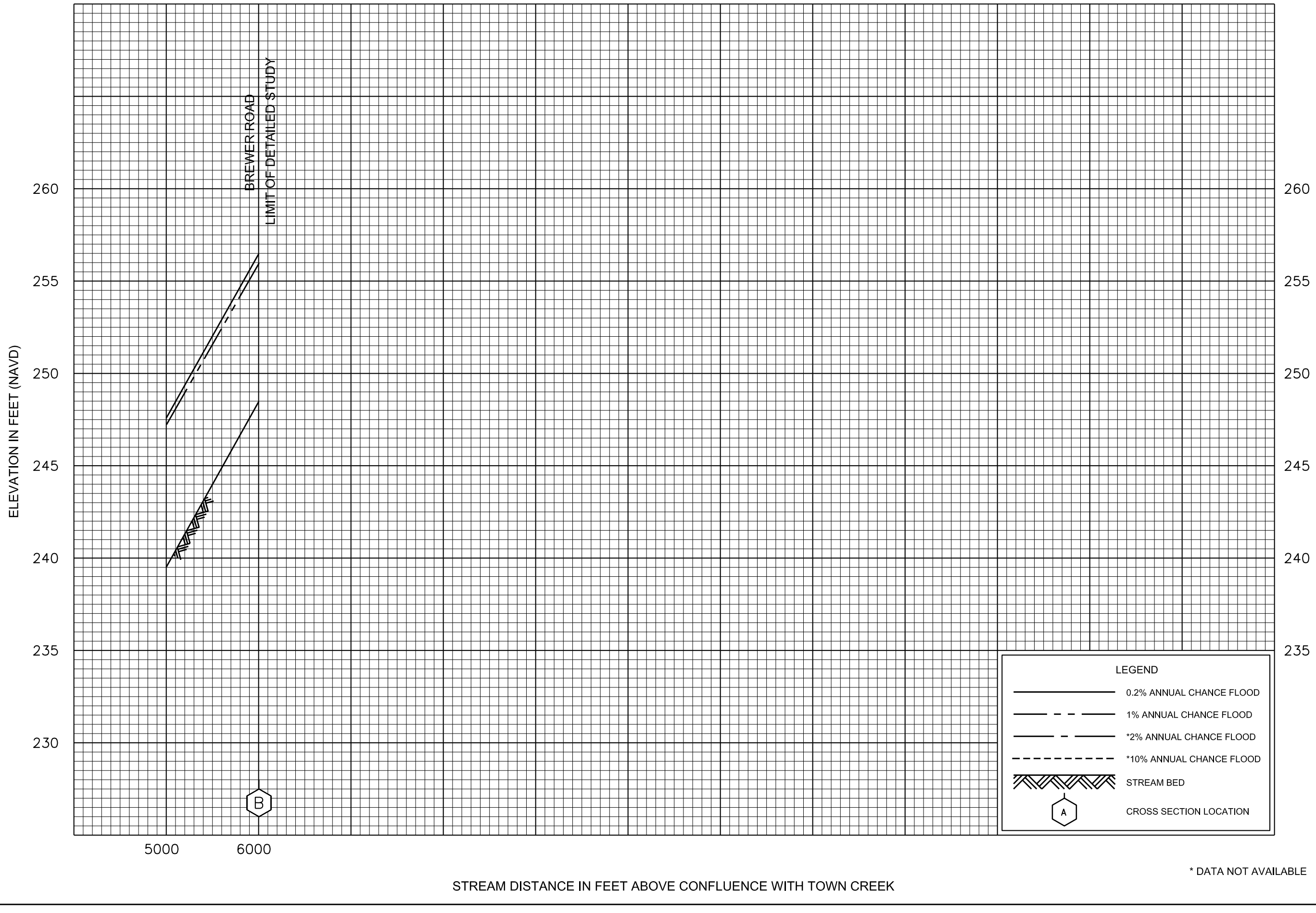
FLOOD PROFILES

TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

84P



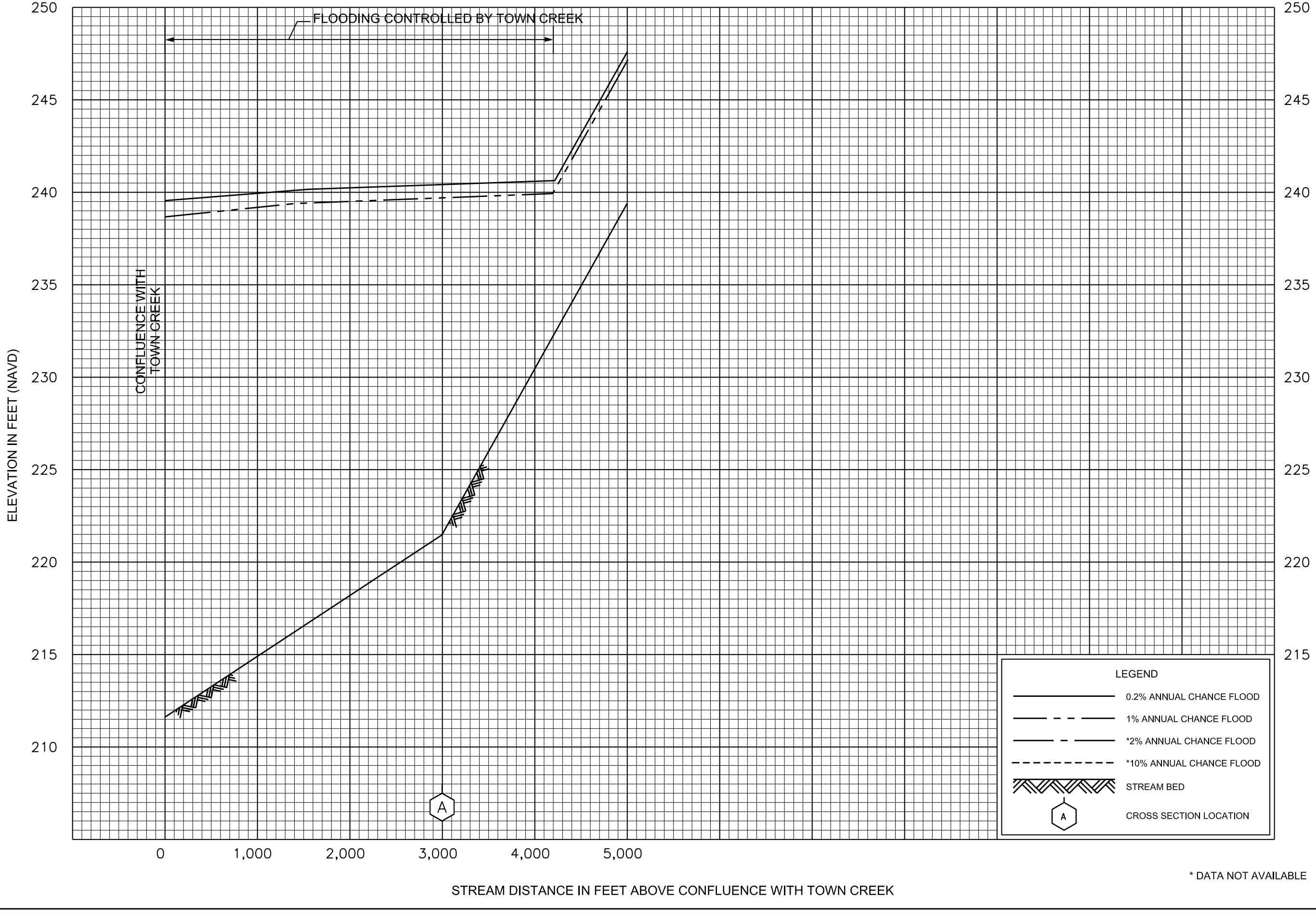
FLOOD PROFILES

TOWN CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

83P



* DATA NOT AVAILABLE

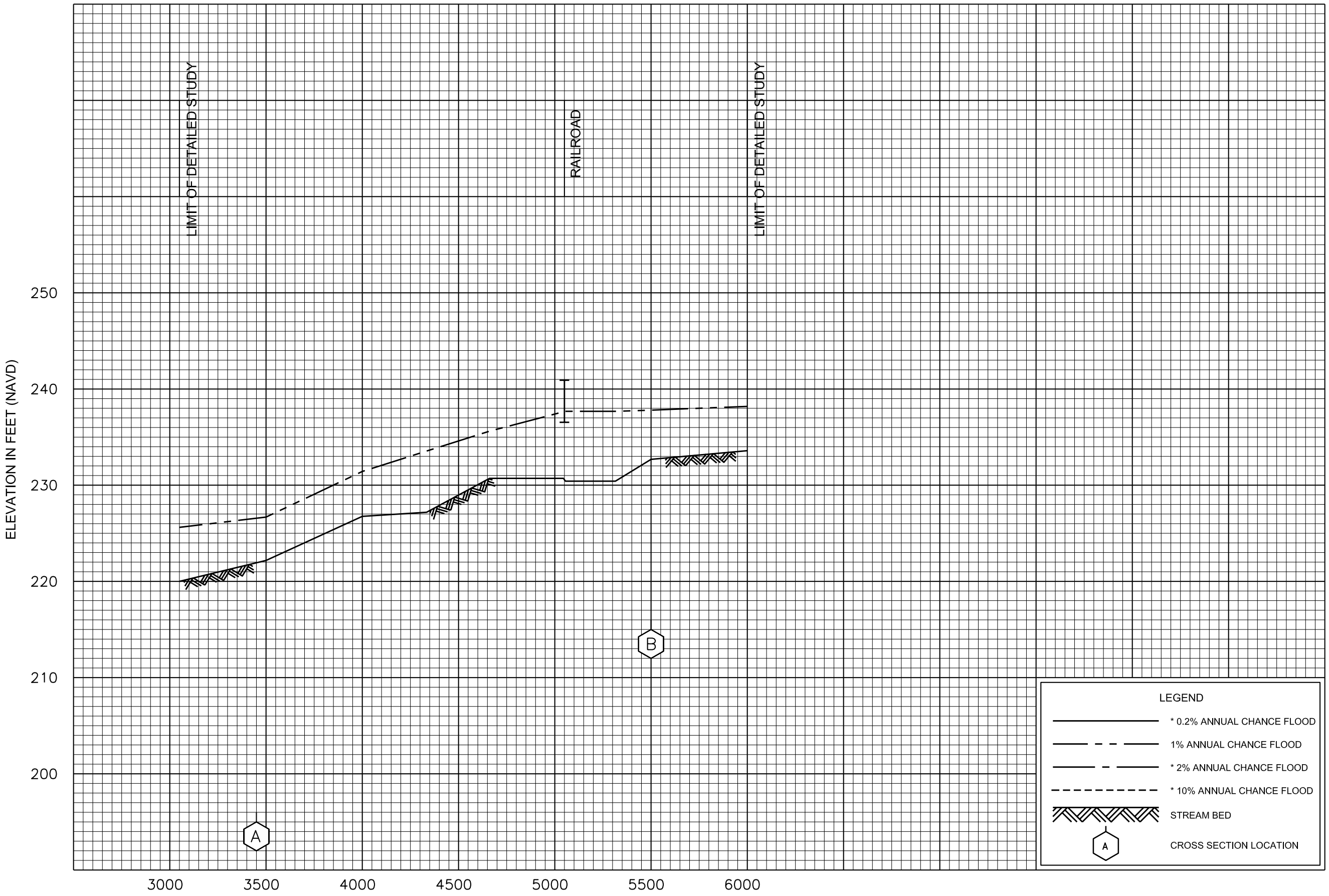
FLOOD PROFILES

TOWN CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

82P



FLOOD PROFILES

TOWN CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, NC
AND INCORPORATED AREAS

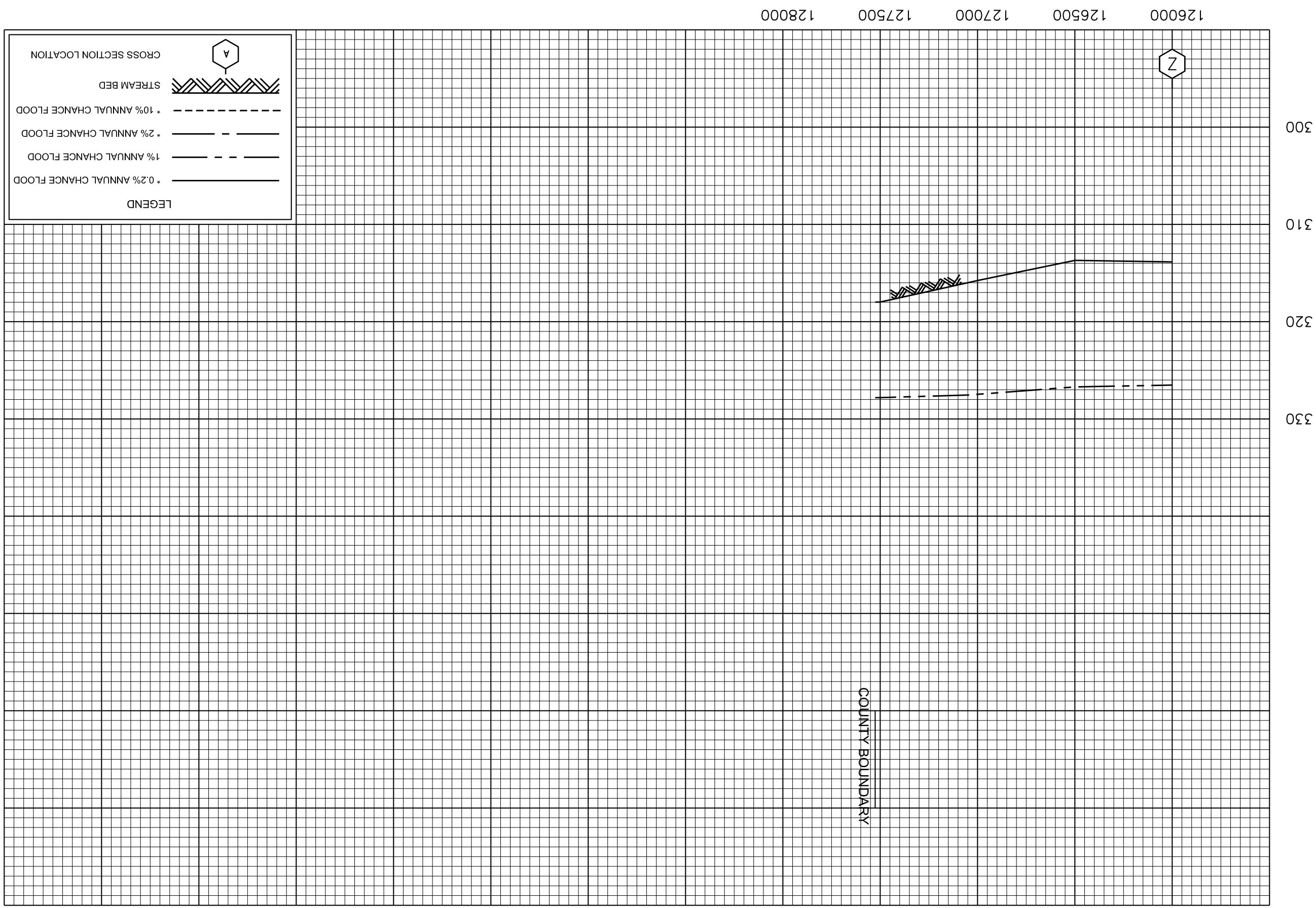
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK



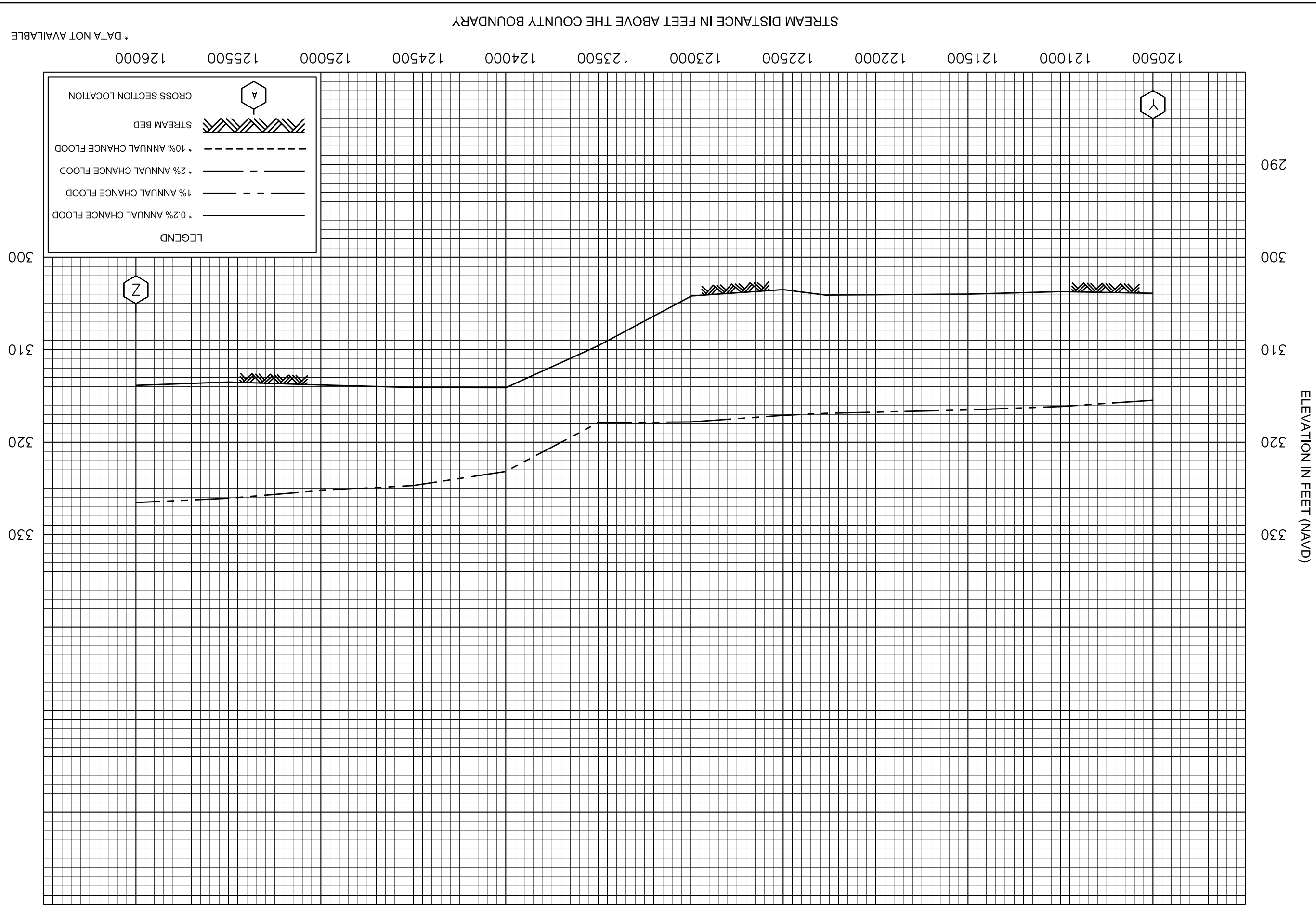
FEDERAL EMERGENCY MANAGEMENT AGENCY

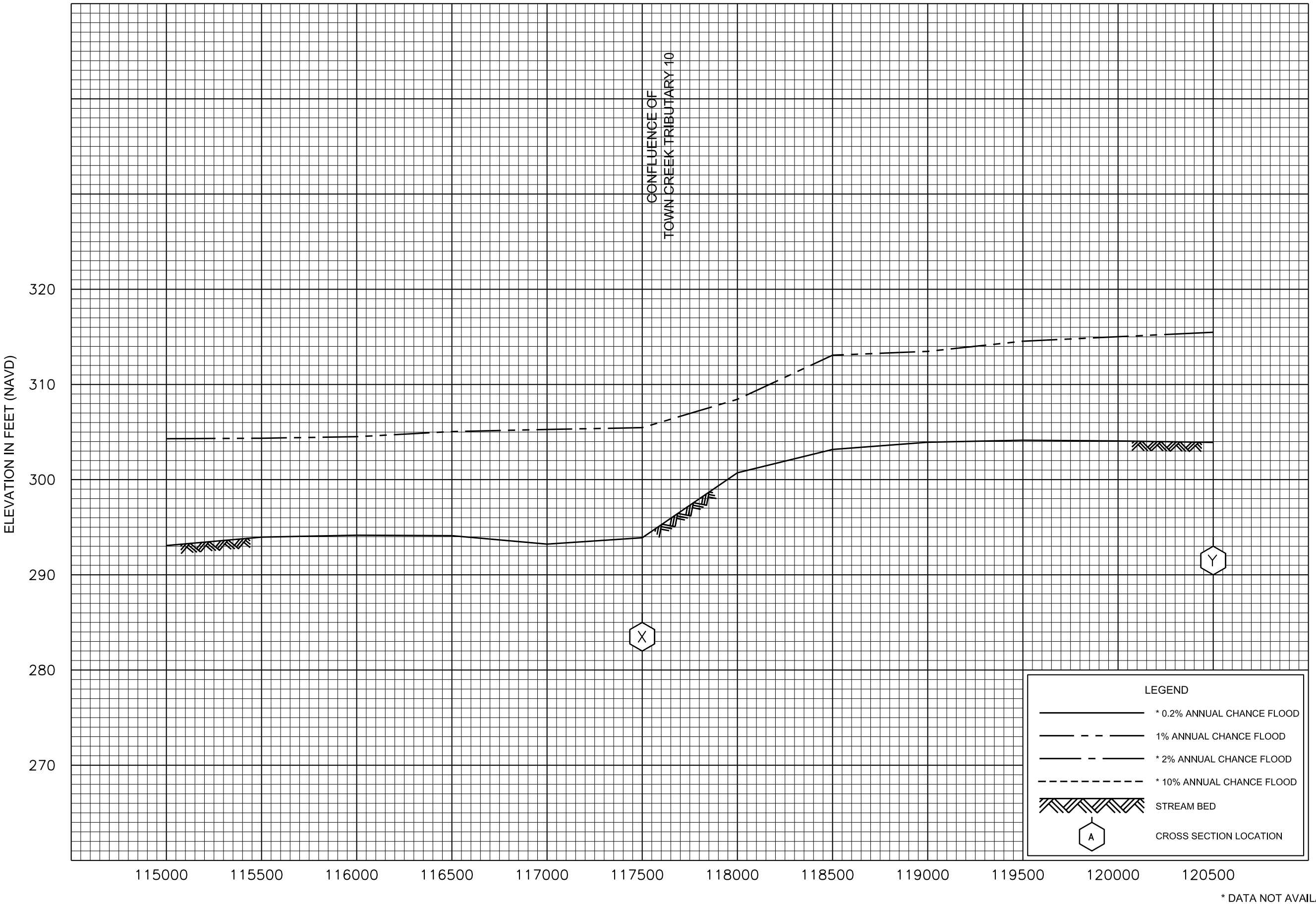
LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK





FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

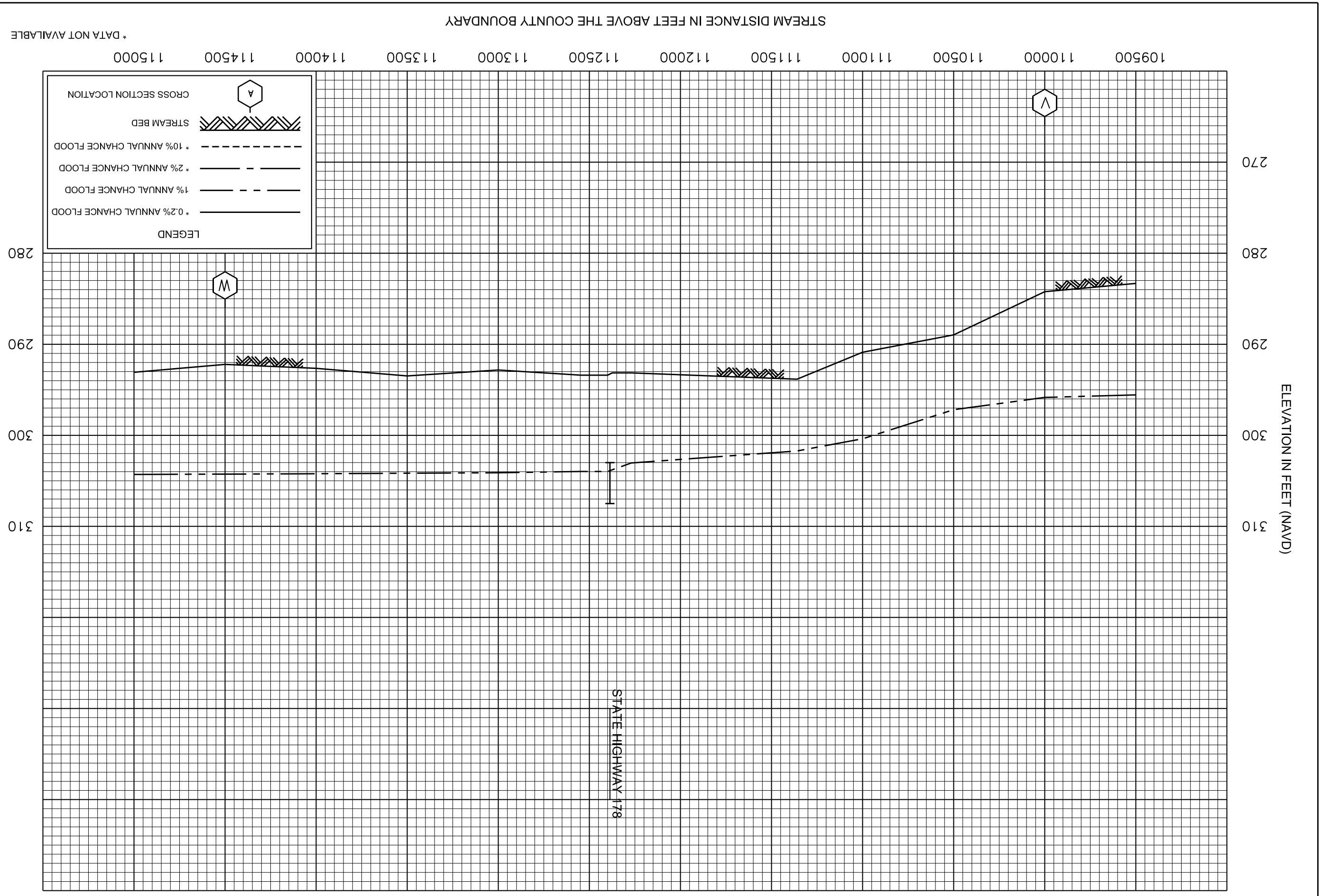
LEE COUNTY, MS
AND INCORPORATED AREAS

78P

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS



FLOOD PROFILES

TOWN CREEK

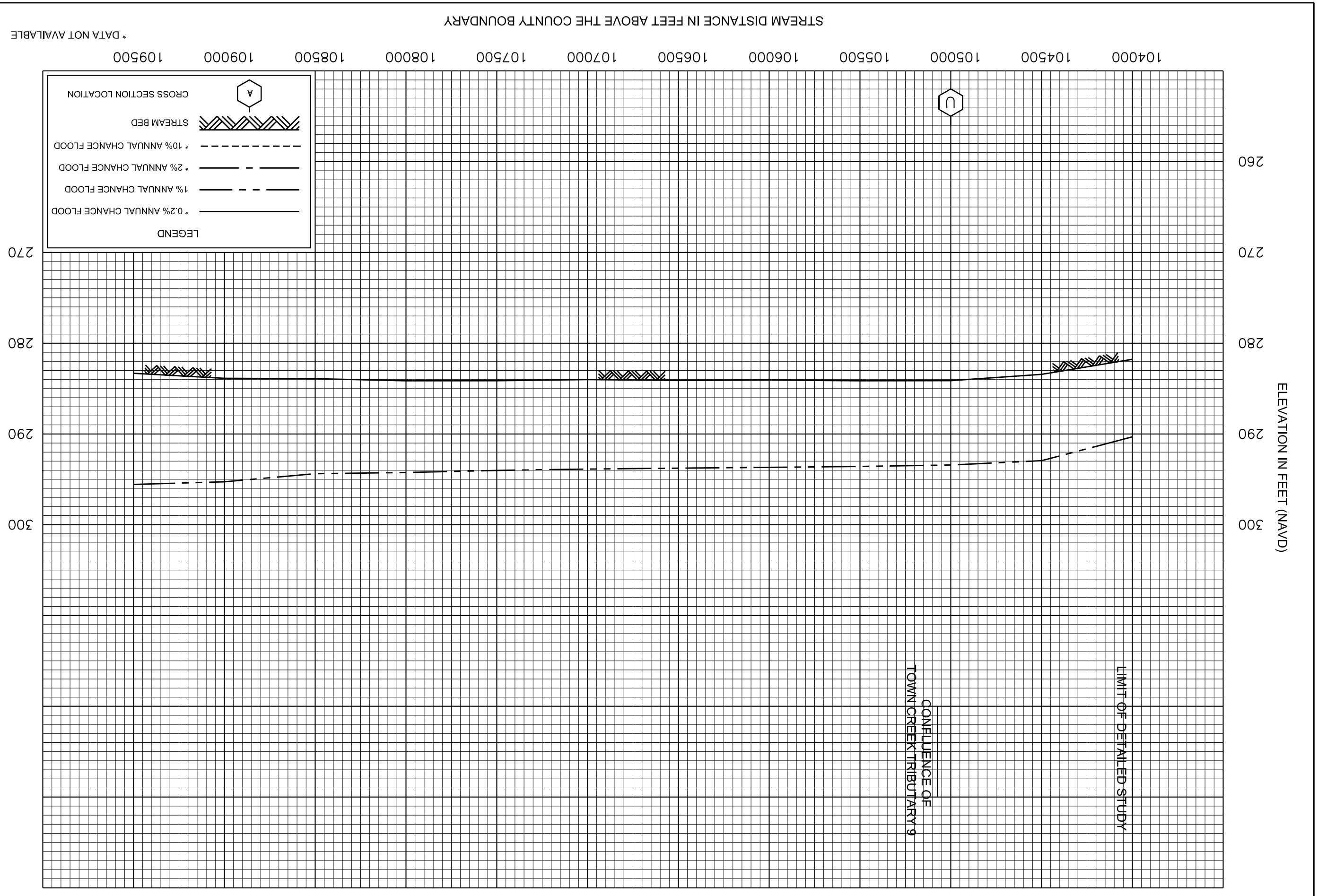
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK



MT. VERNON ROAD

LIMIT OF DETAILED STUDY

ELEVATION IN FEET (NAVD)

290
280
270
260
250
240

93500
94000
94500
95000

STREAM DISTANCE IN FEET ABOVE THE COUNTY BOUNDARY

LEGEND

* 0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
* 2% ANNUAL CHANCE FLOOD
* 10% ANNUAL CHANCE FLOOD
STREAM BED
CROSS SECTION LOCATION

* DATA NOT AVAILABLE

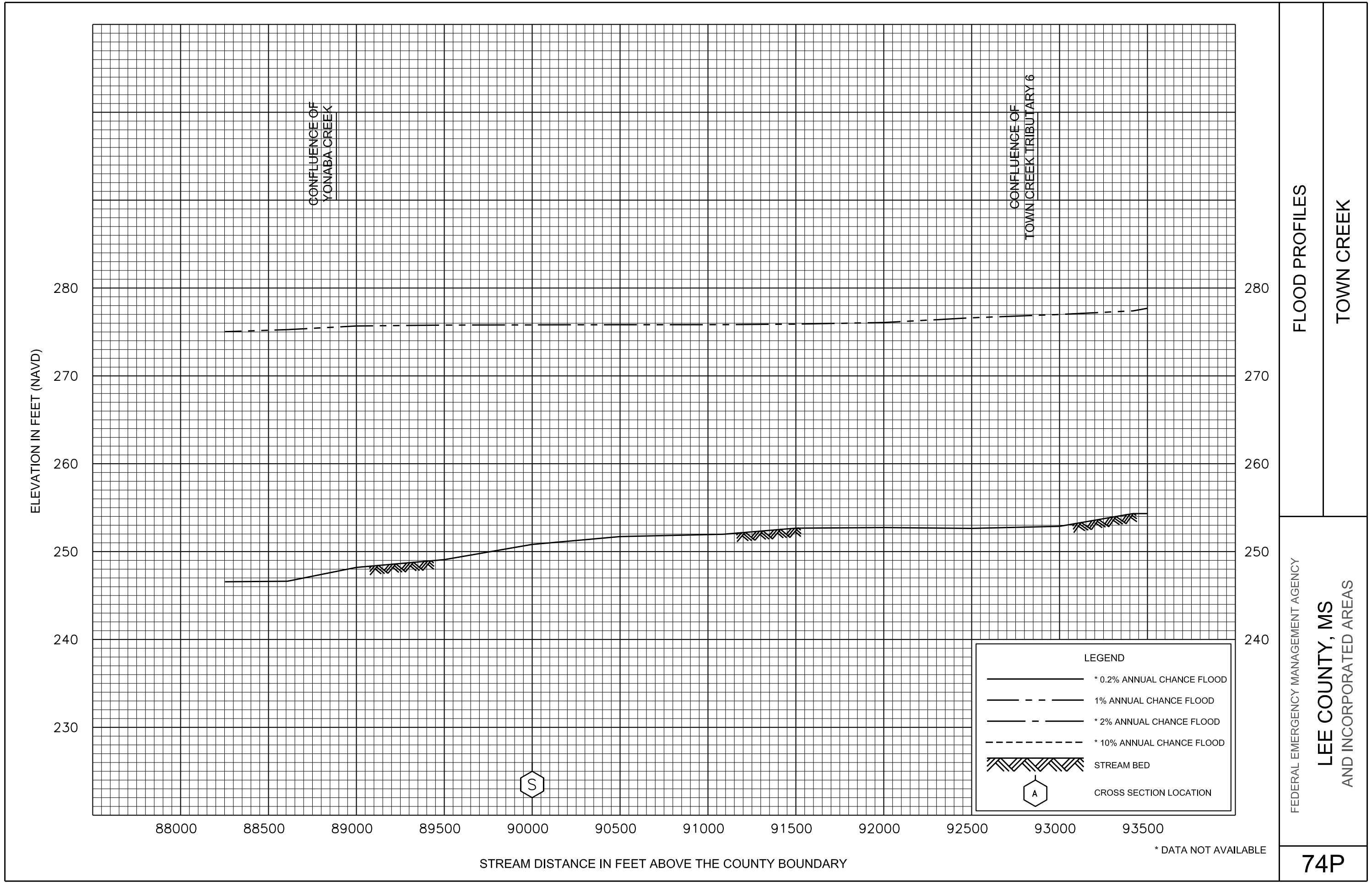
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

75P



* DATA NOT AVAILABLE

FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

74P

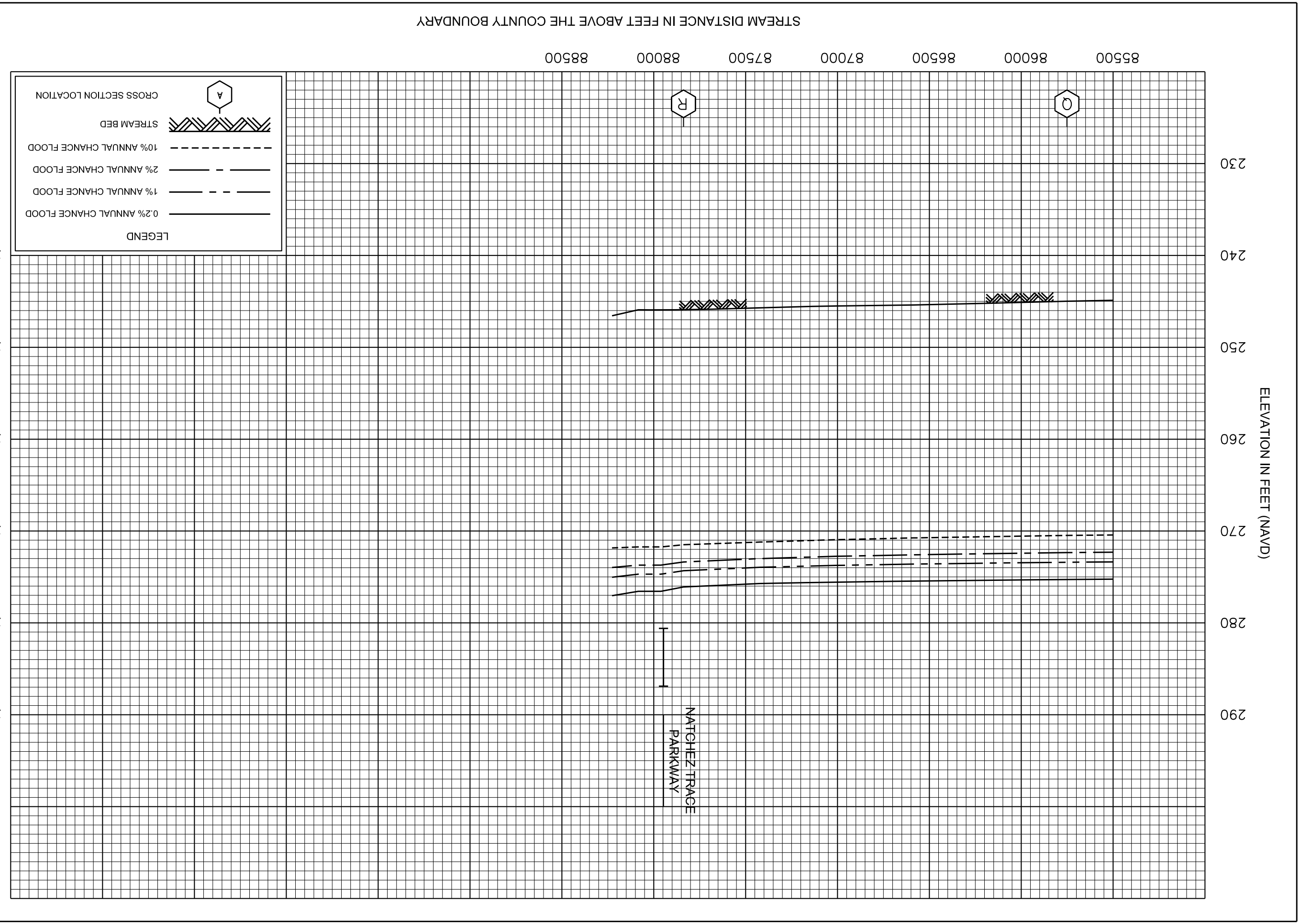
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK



73P

ELEVATION IN FEET (NAVD)

230 240 250 260 270 280 290 300

80000 80500 81000 81500 82000 82500 83000 83500 84000 84500 85000 85500

STREAM DISTANCE IN FEET ABOVE THE COUNTY BOUNDARY

P

N GLOSTER STREET

I-78

LEGEND

0.2% ANNUAL CHANCE FLOOD

1% ANNUAL CHANCE FLOOD

2% ANNUAL CHANCE FLOOD

10% ANNUAL CHANCE FLOOD

STREAM BED

A

CROSS SECTION LOCATION

240 250 260 270 280 290 300

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK

72P

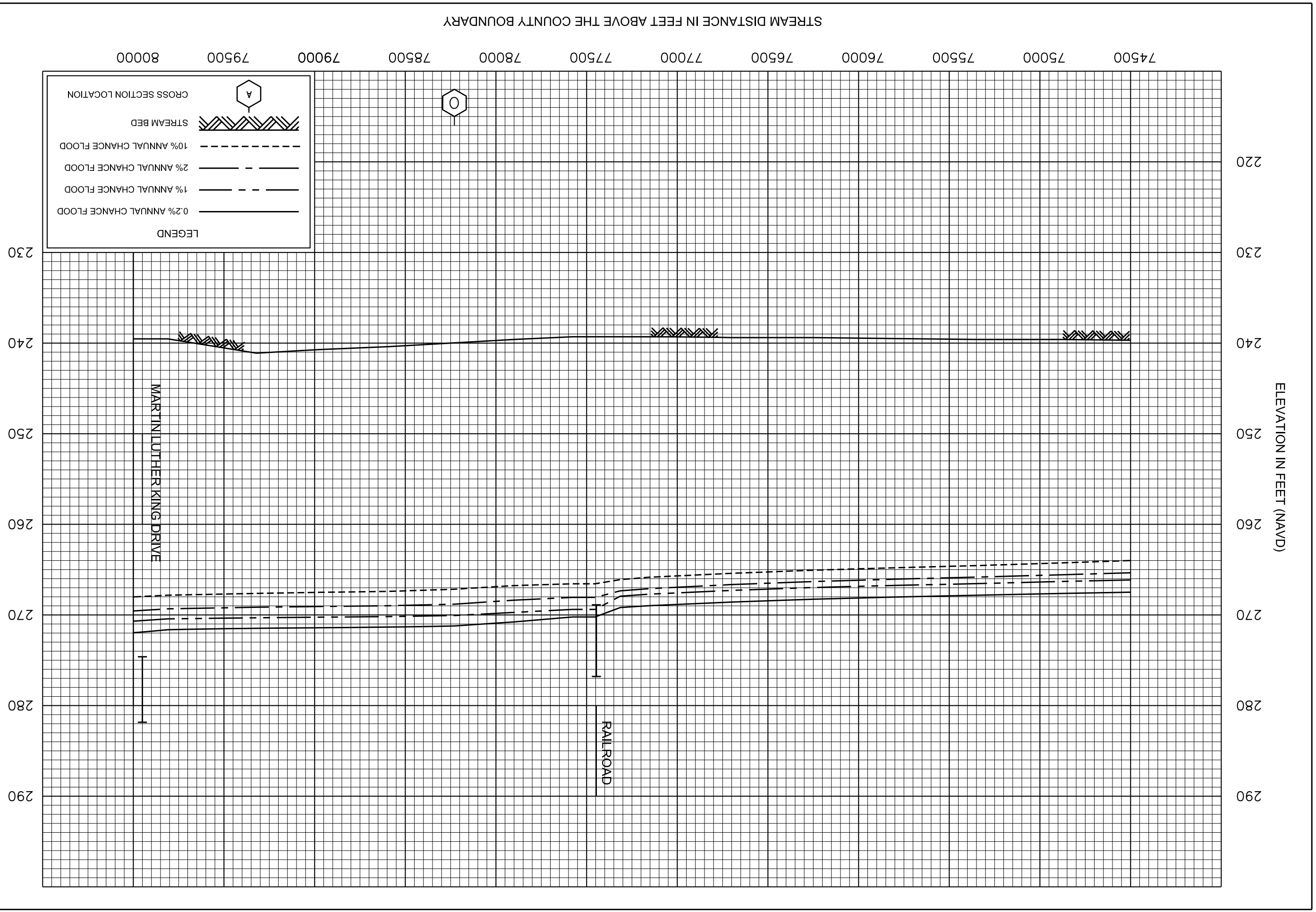
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK



70P

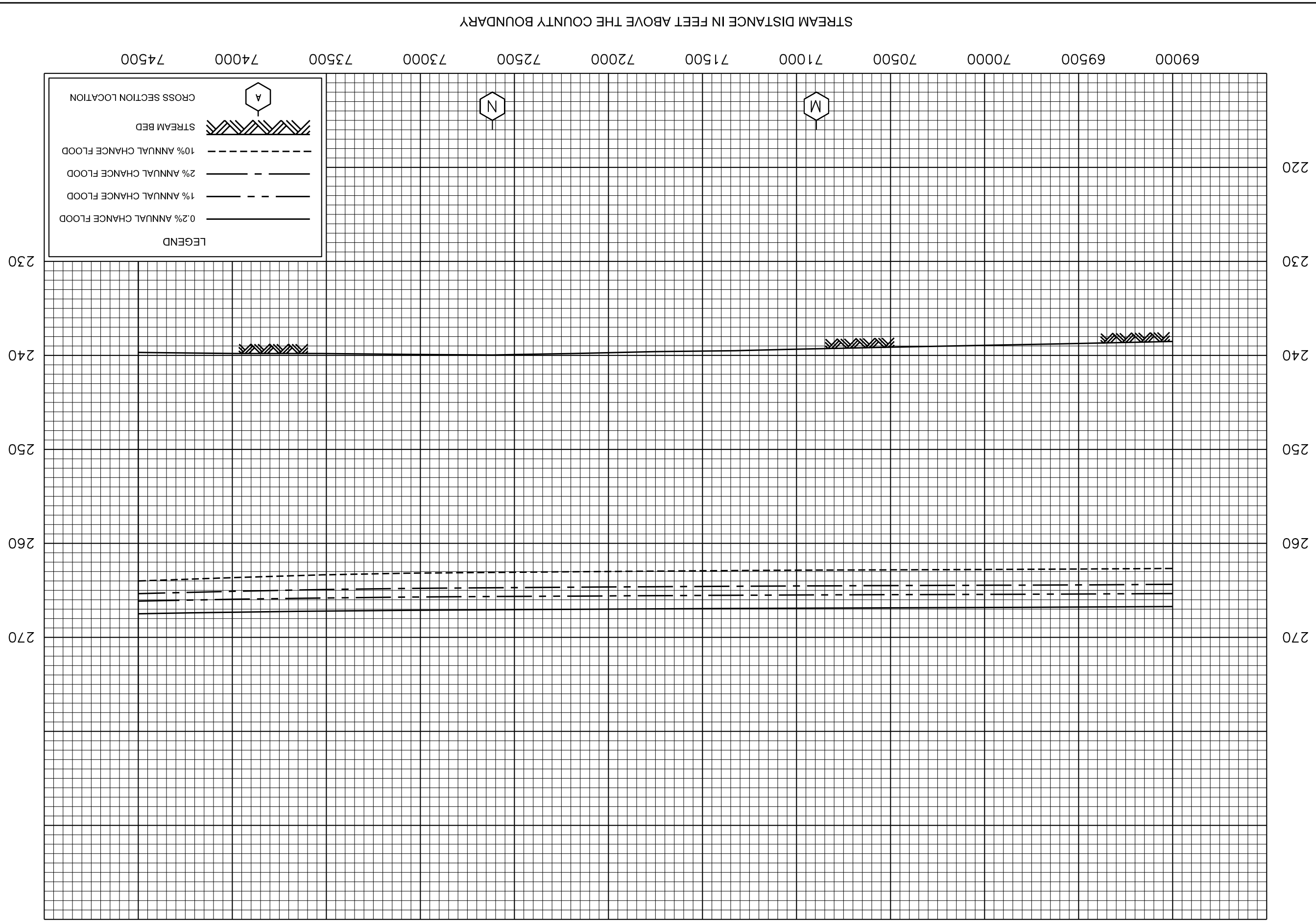
FEDERAL EMERGENCY MANAGEMENT AGENCY

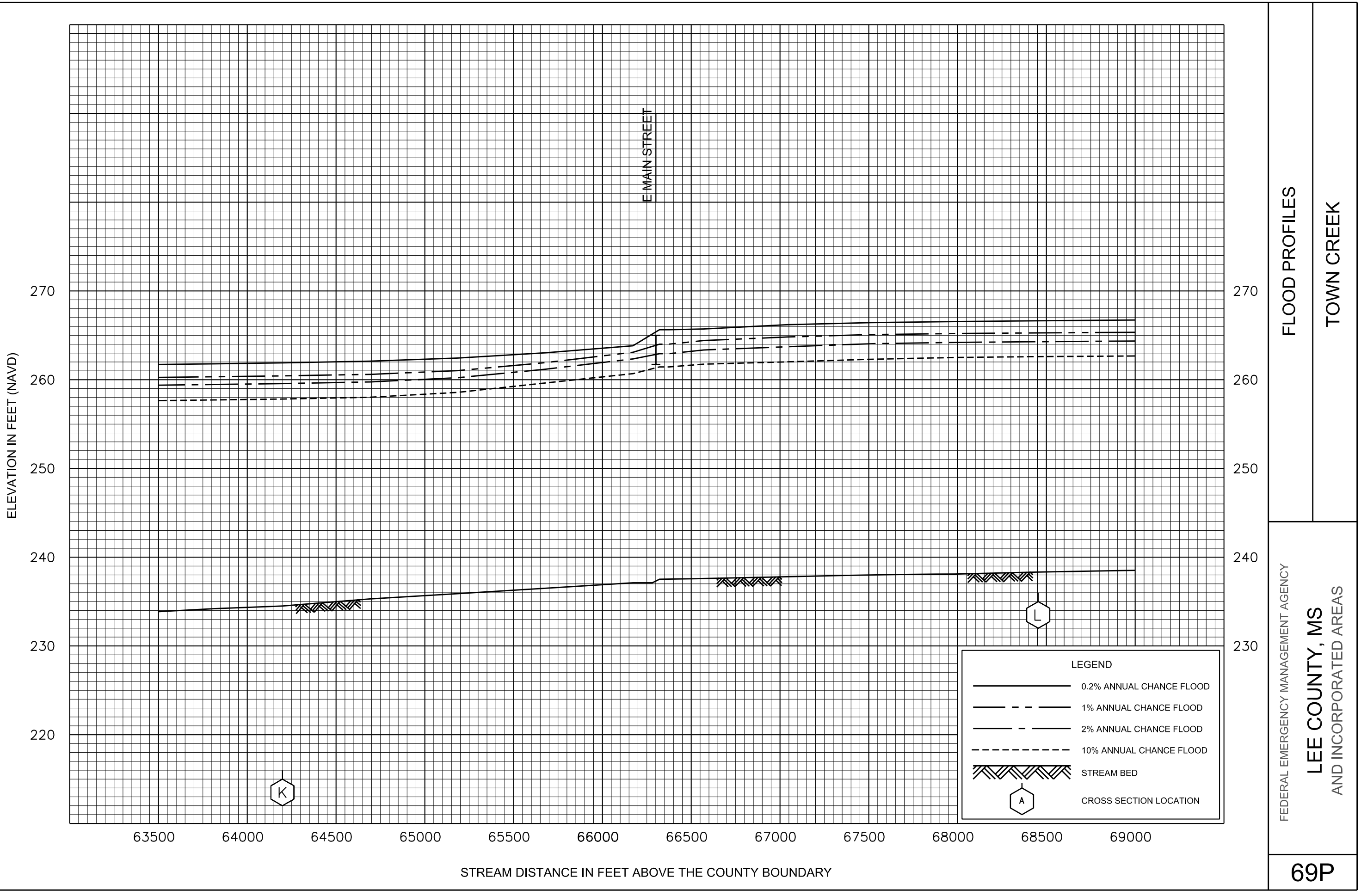
LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK





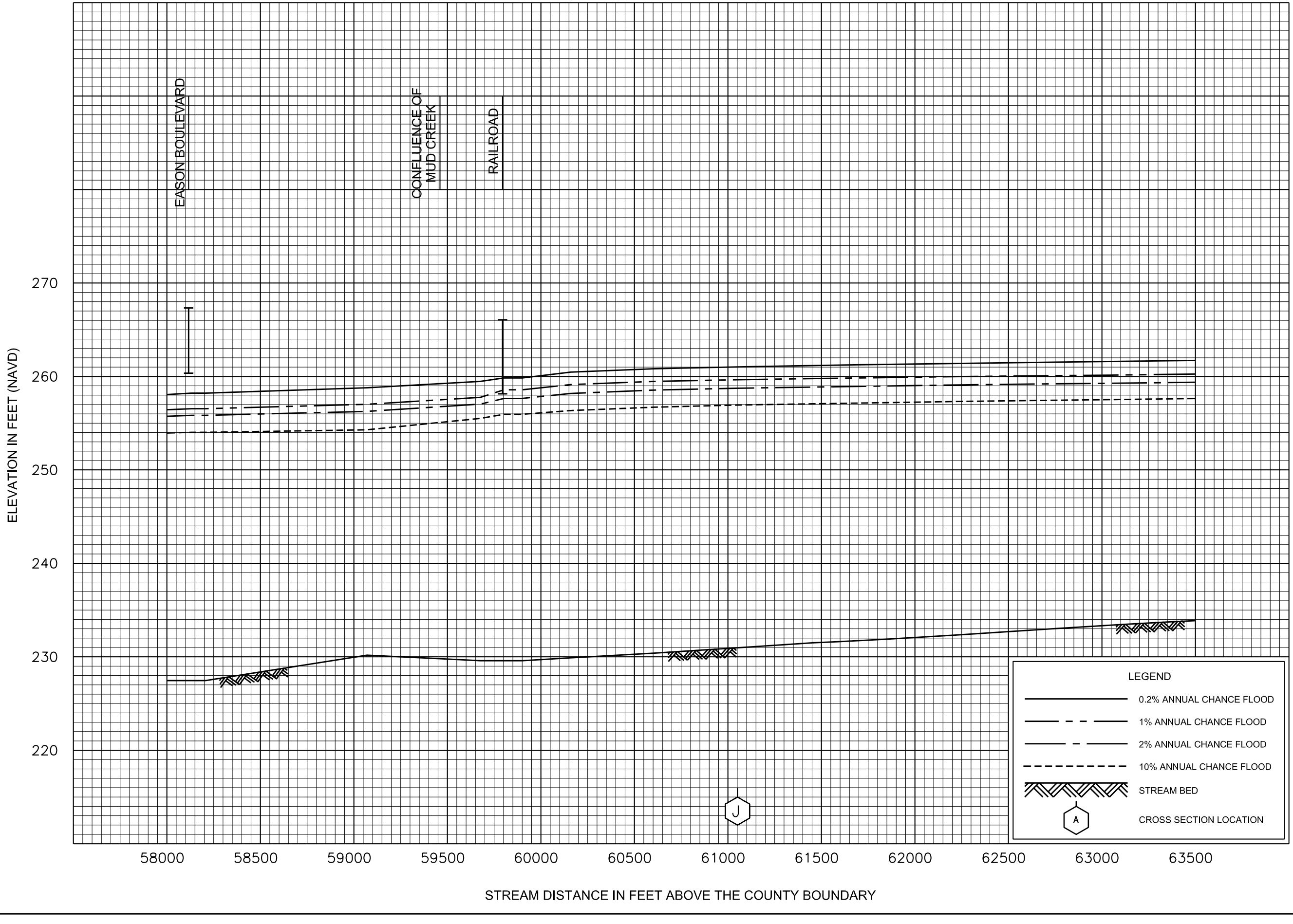
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

69P



FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

68P

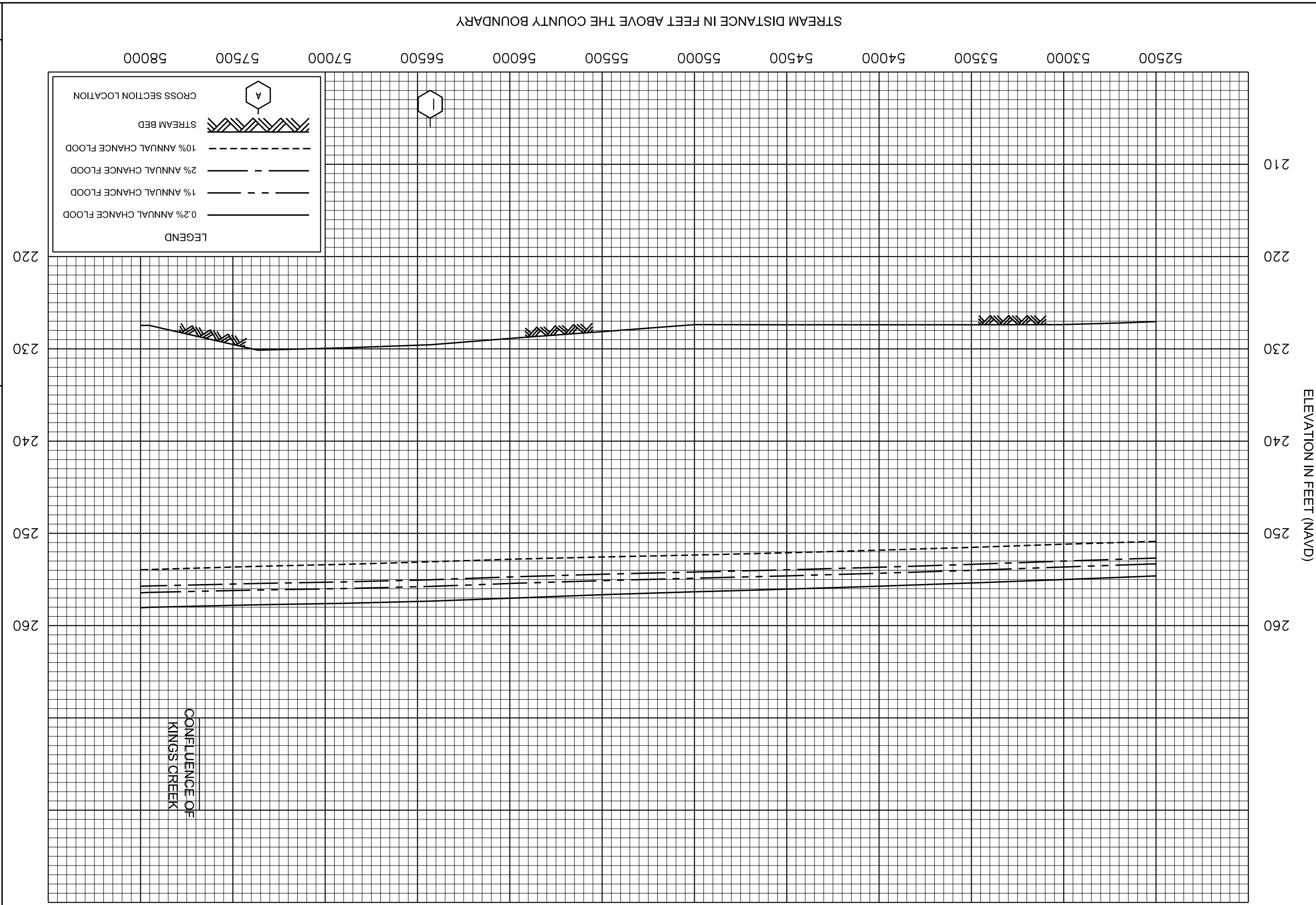
FEDERAL EMERGENCY MANAGEMENT AGENCY

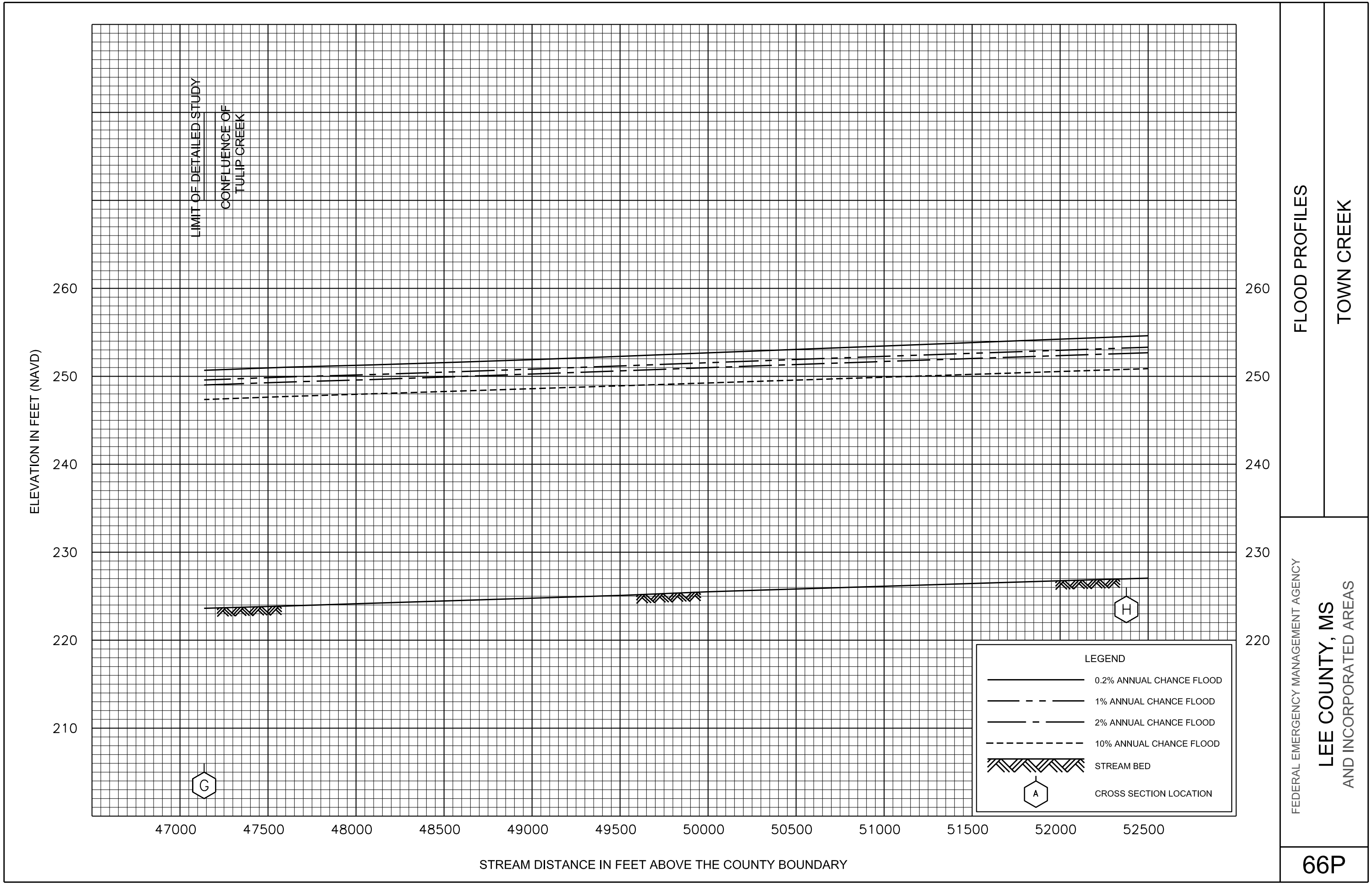
LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

TOWN CREEK





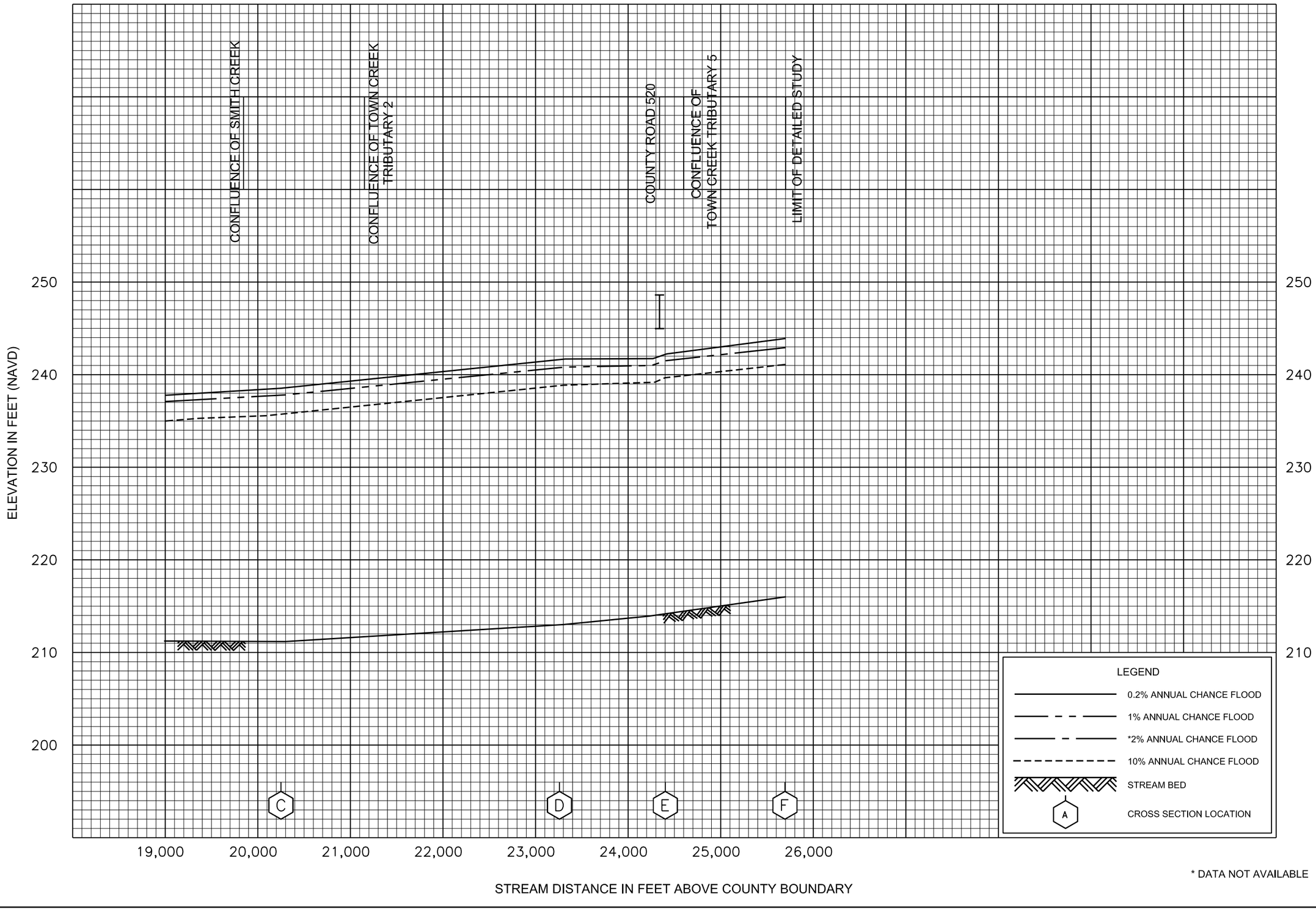
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

66P



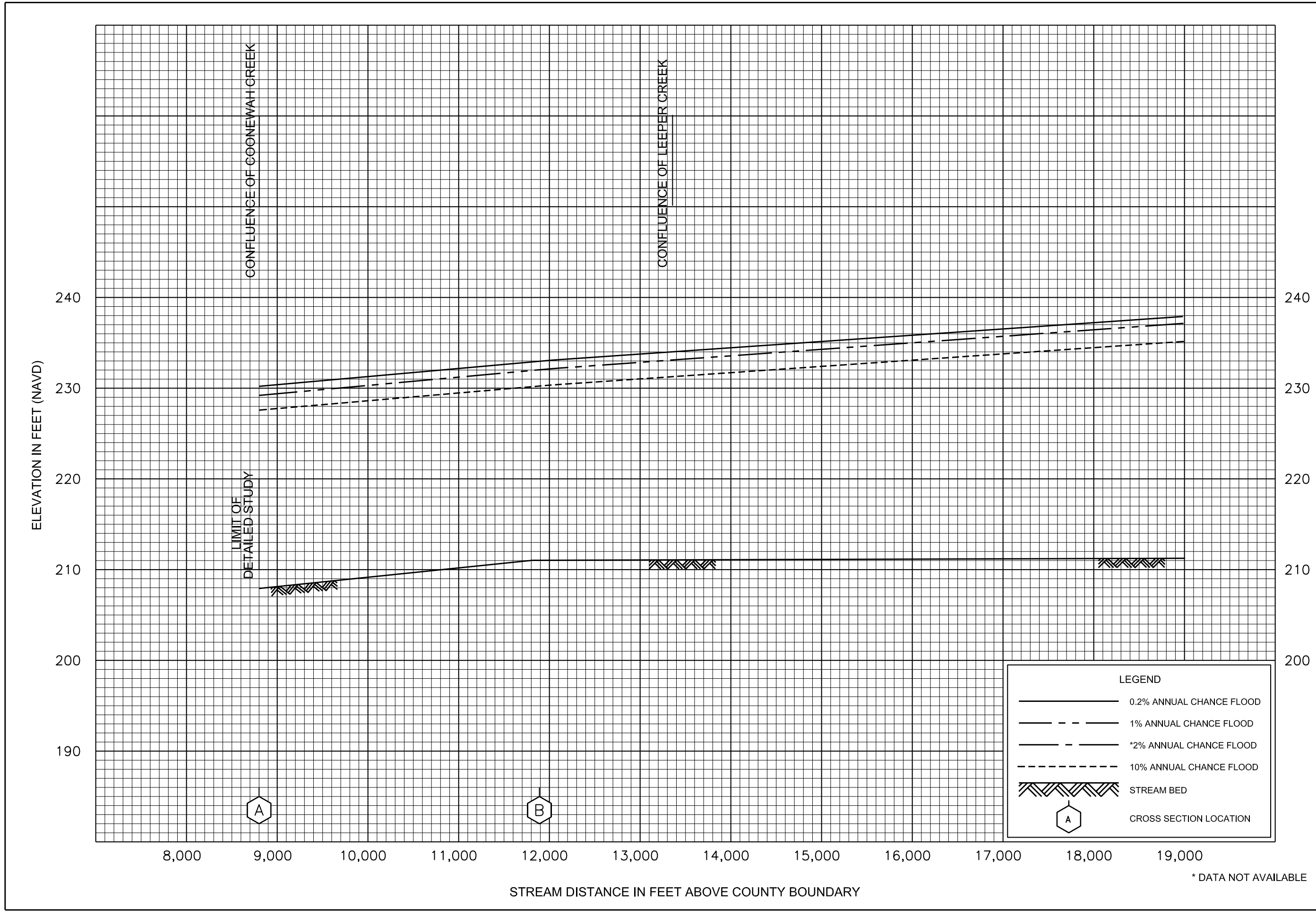
FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

65P



FLOOD PROFILES

TOWN CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD)

350
340
330
320

DRIVEWAY

LIMIT OF DETAILED STUDY

CULVERT

C

5500
6000
6500
7000

LEGEND

* 0.2% ANNUAL CHANCE FLOOD
1% ANNUAL CHANCE FLOOD
* 2% ANNUAL CHANCE FLOOD
* 10% ANNUAL CHANCE FLOOD
STREAM BED
A CROSS SECTION LOCATION

* DATA NOT AVAILABLE

STREAM DISTANCE IN FEET ABOVE THE CONFLUENCE WITH SAND CREEK

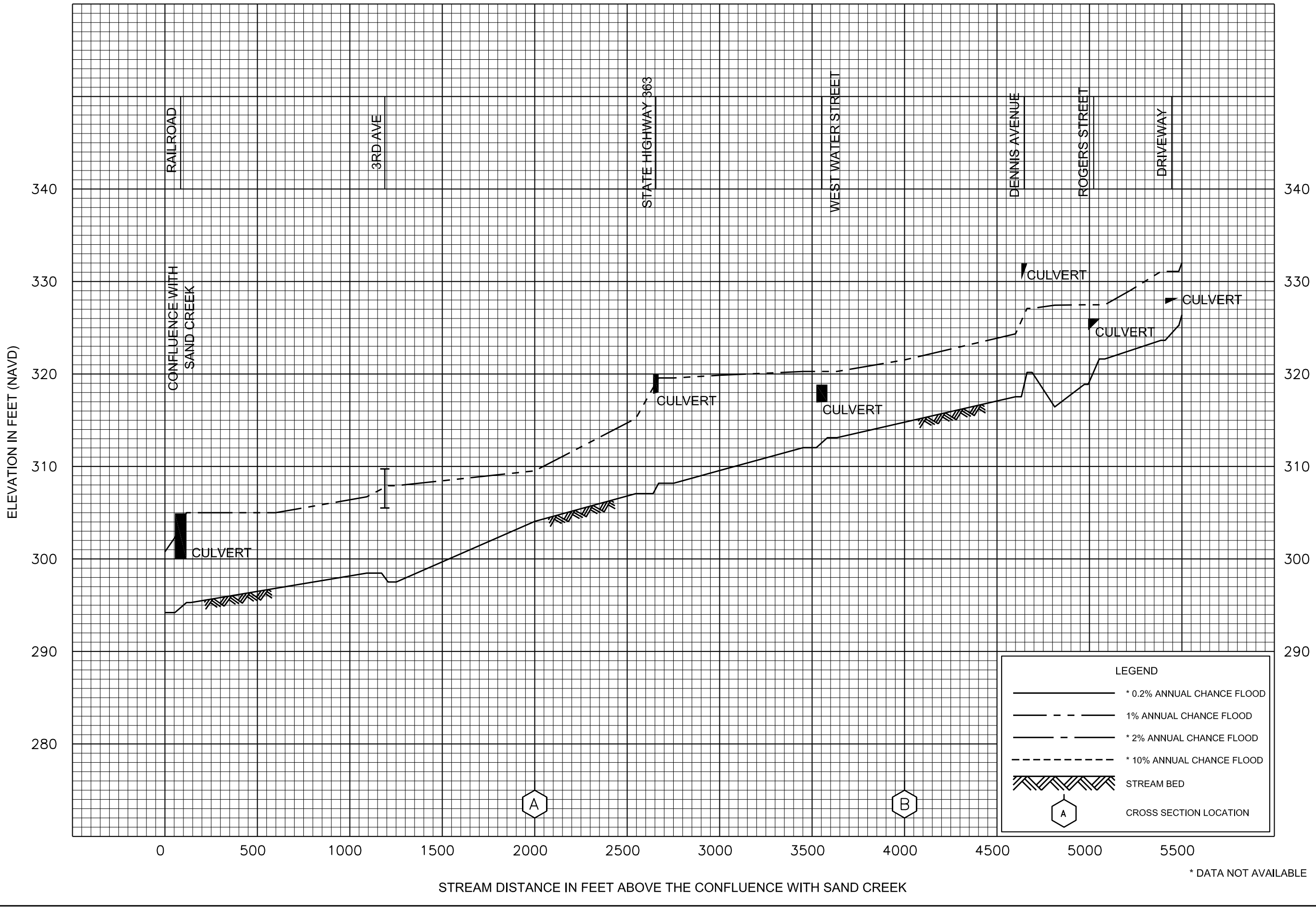
FLOOD PROFILES

SAND CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

63P



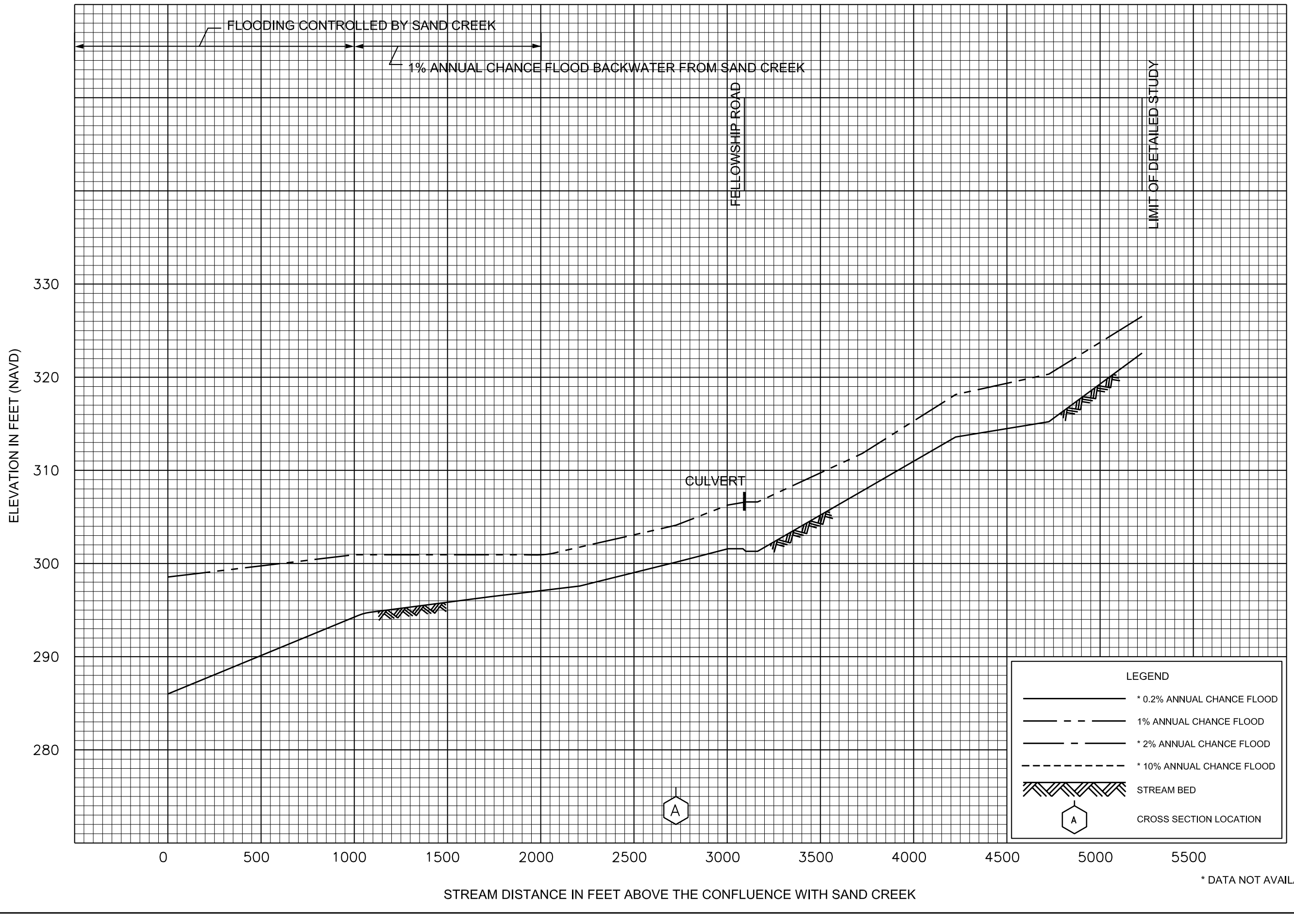
FLOOD PROFILES

SAND CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

62P



FLOOD PROFILES

SAND CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

61P

ELEVATION IN FEET (NAVD)

320
315
310
305
300

LIMIT OF DETAILED STUDY

J

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- A — CROSS SECTION LOCATION

5,500
6,000
6,500
7,000

STREAM DISTANCE IN FEET ABOVE STATE HIGHWAY 363

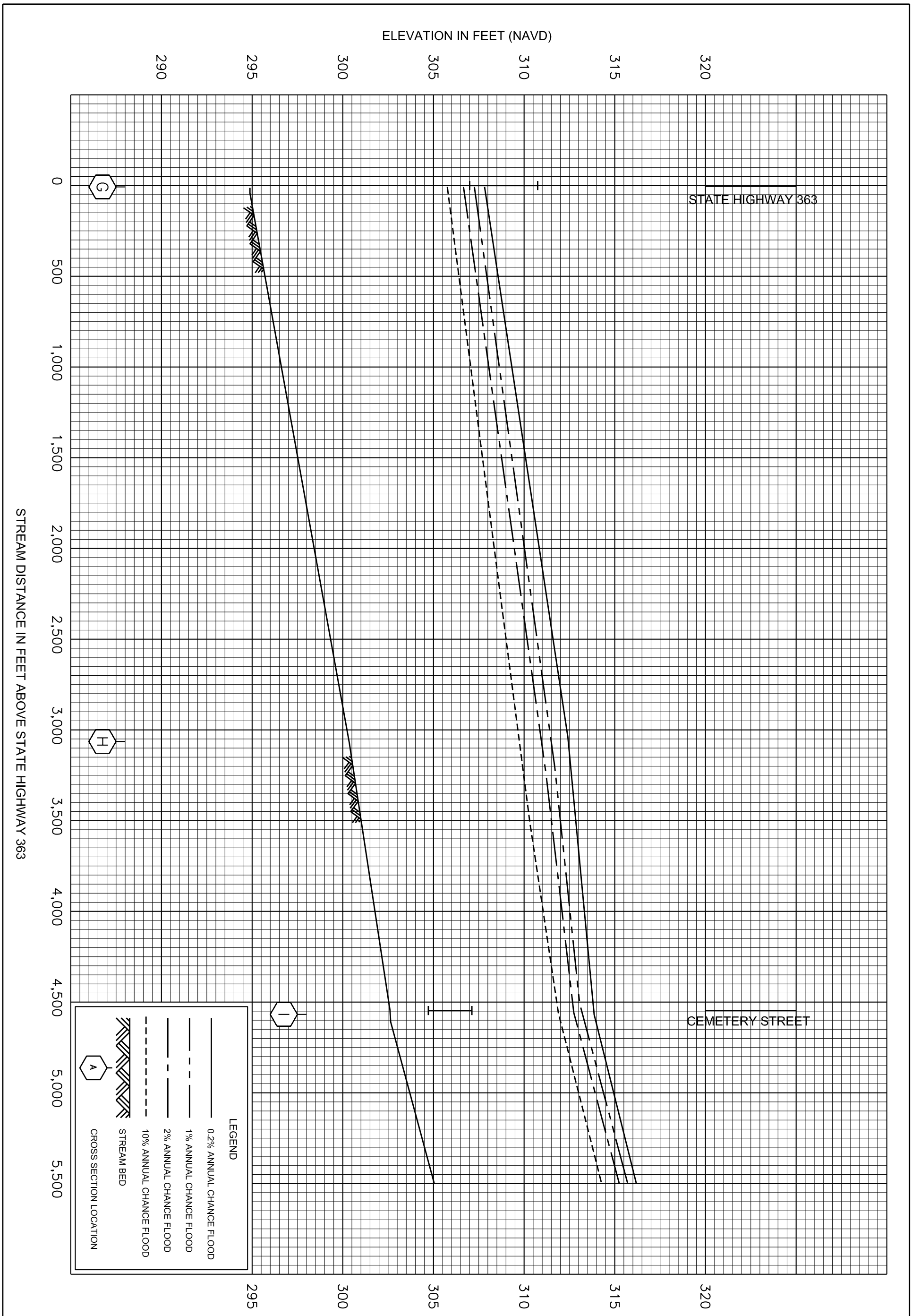
FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

60P



59P

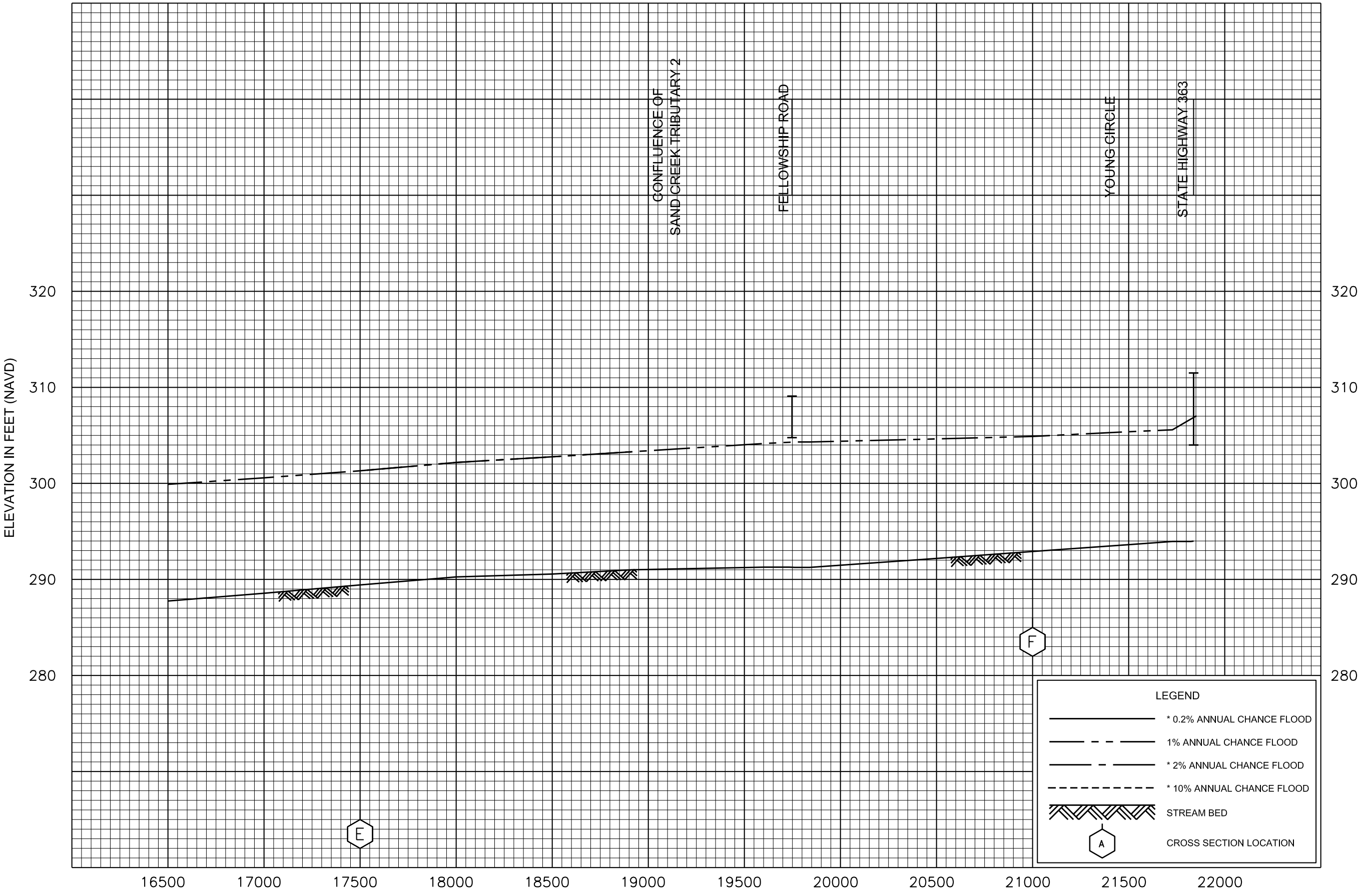
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

SAND CREEK



FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD)

270 280 290 300 310

11000 11500 12000 12500 13000 13500 14000 14500 15000 15500 16000 16500

STREAM DISTANCE IN FEET ABOVE THE CONFLUENCE WITH MUD CREEK

OLD SATILLO ROAD

CONFLUENCE OF
SAND CREEK TRIBUTARY 1

D

LEGEND

* 0.2% ANNUAL CHANCE FLOOD

1% ANNUAL CHANCE FLOOD

* 2% ANNUAL CHANCE FLOOD

* 10% ANNUAL CHANCE FLOOD

STREAM BED

A
CROSS SECTION LOCATION

* DATA NOT AVAILABLE

280 290 300 310

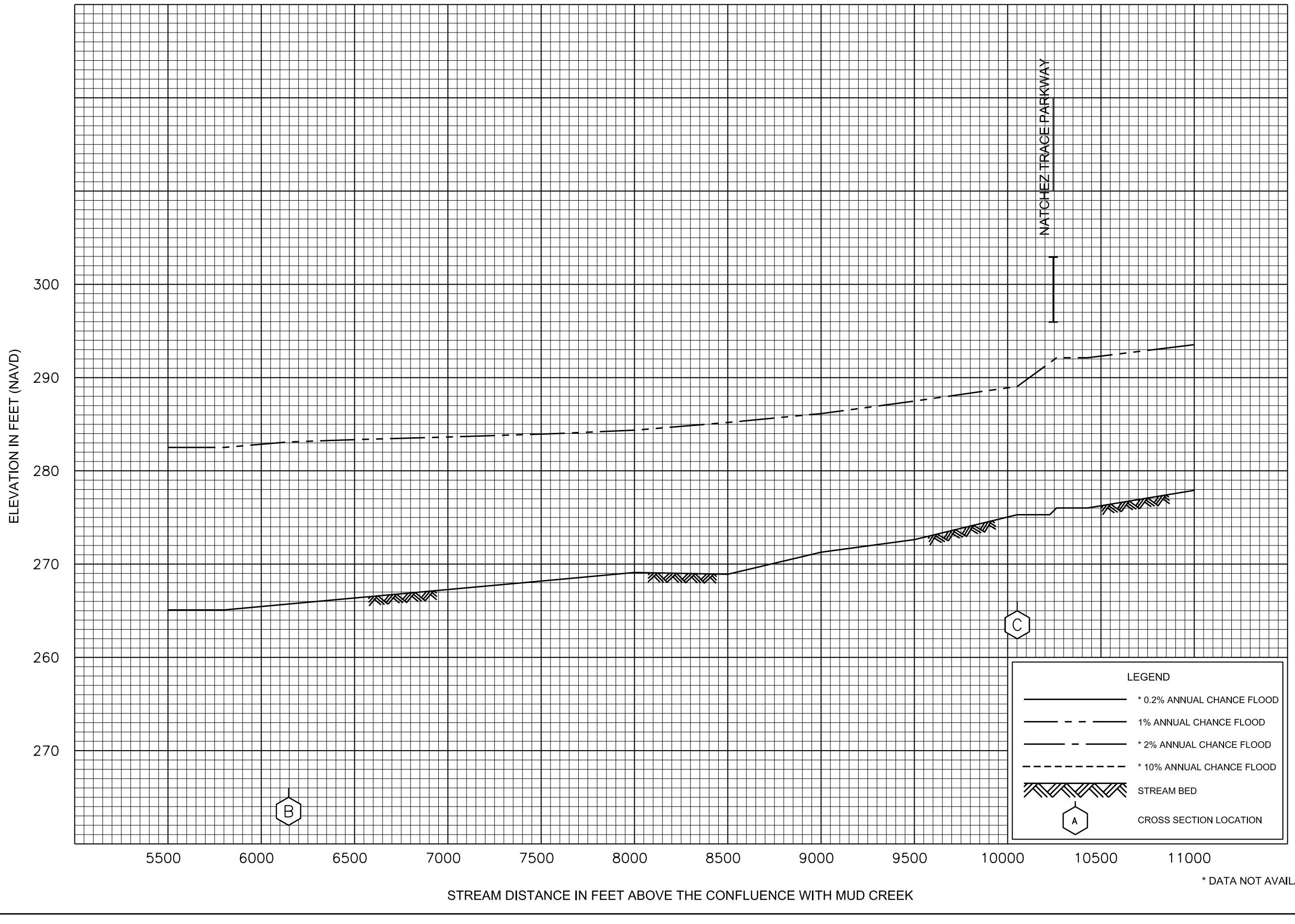
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

FLOOD PROFILES

SAND CREEK

57P

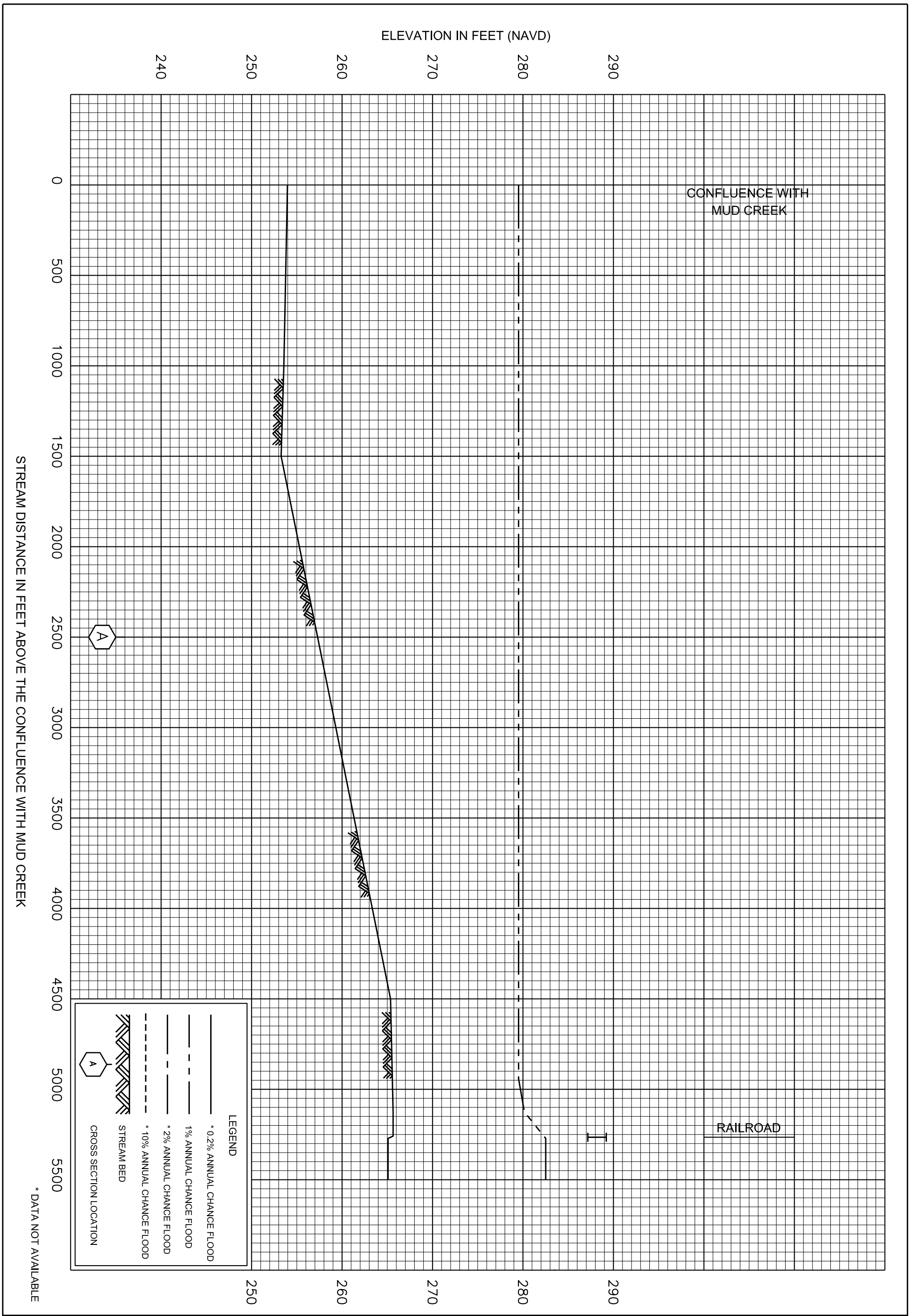


FLOOD PROFILES

SAND CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



55P

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

SAND CREEK

THE 2% AND 0.2% ANNUAL CHANCE FLOOD PROFILES ARE TOO CLOSE TO THE 1% ANNUAL CHANCE ELEVATION TO BE SHOWN SEPARATELY

ELEVATION IN FEET (NAVD)

345
340
335
330
325
320
315
310

DRIVEWAY

CULVERT

CULVERT

SAVANNAH LANE

BUTLER DRIVE

LIMIT OF DETAILED STUDY

C

D

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- A — CROSS SECTION LOCATION

6,500 7,000 7,500 8,000 8,500 9,000 9,500 10,000 10,500 11,000 11,500

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH LITTLE COONEWAH CREEK

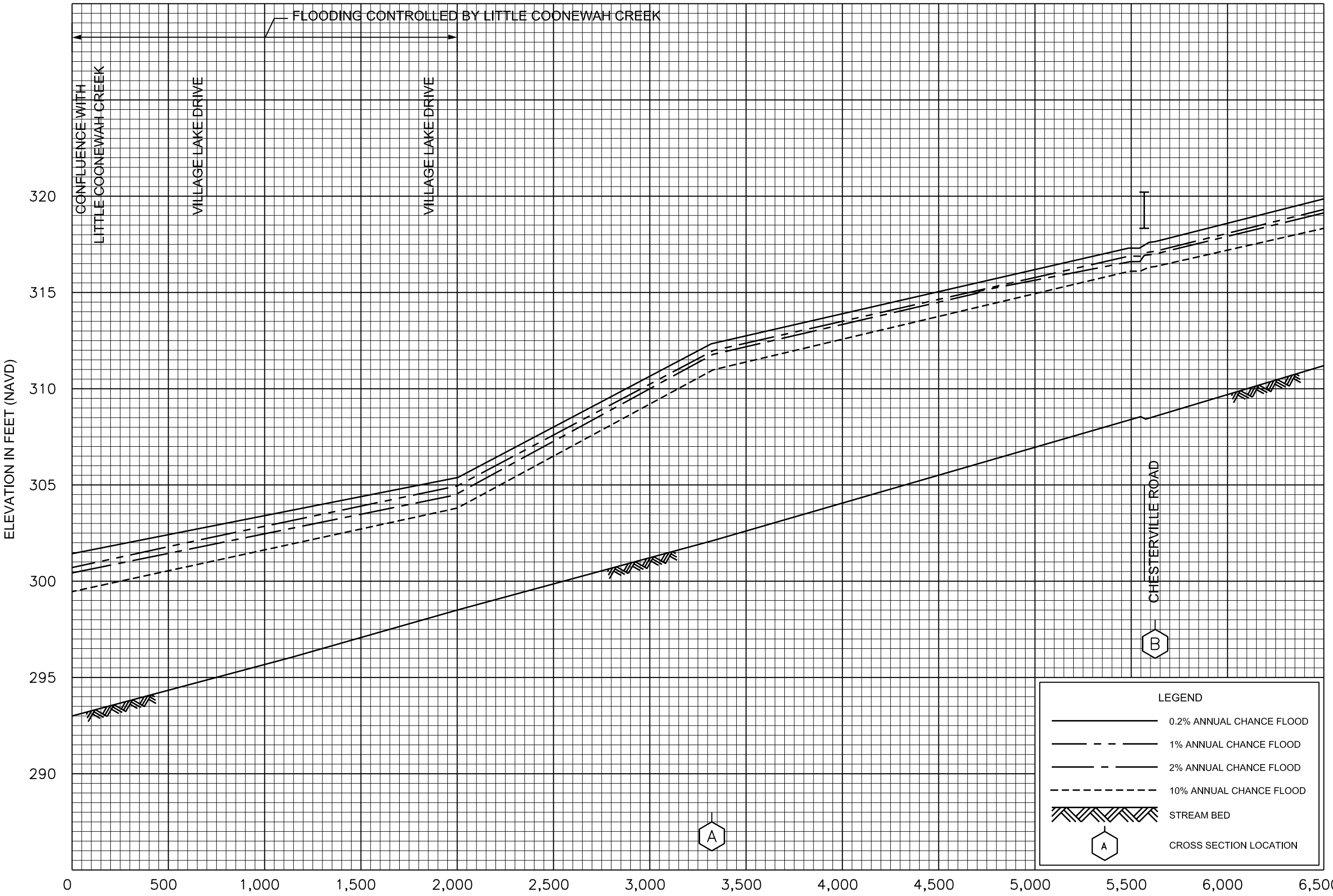
FLOOD PROFILES

RUSSELL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

54P



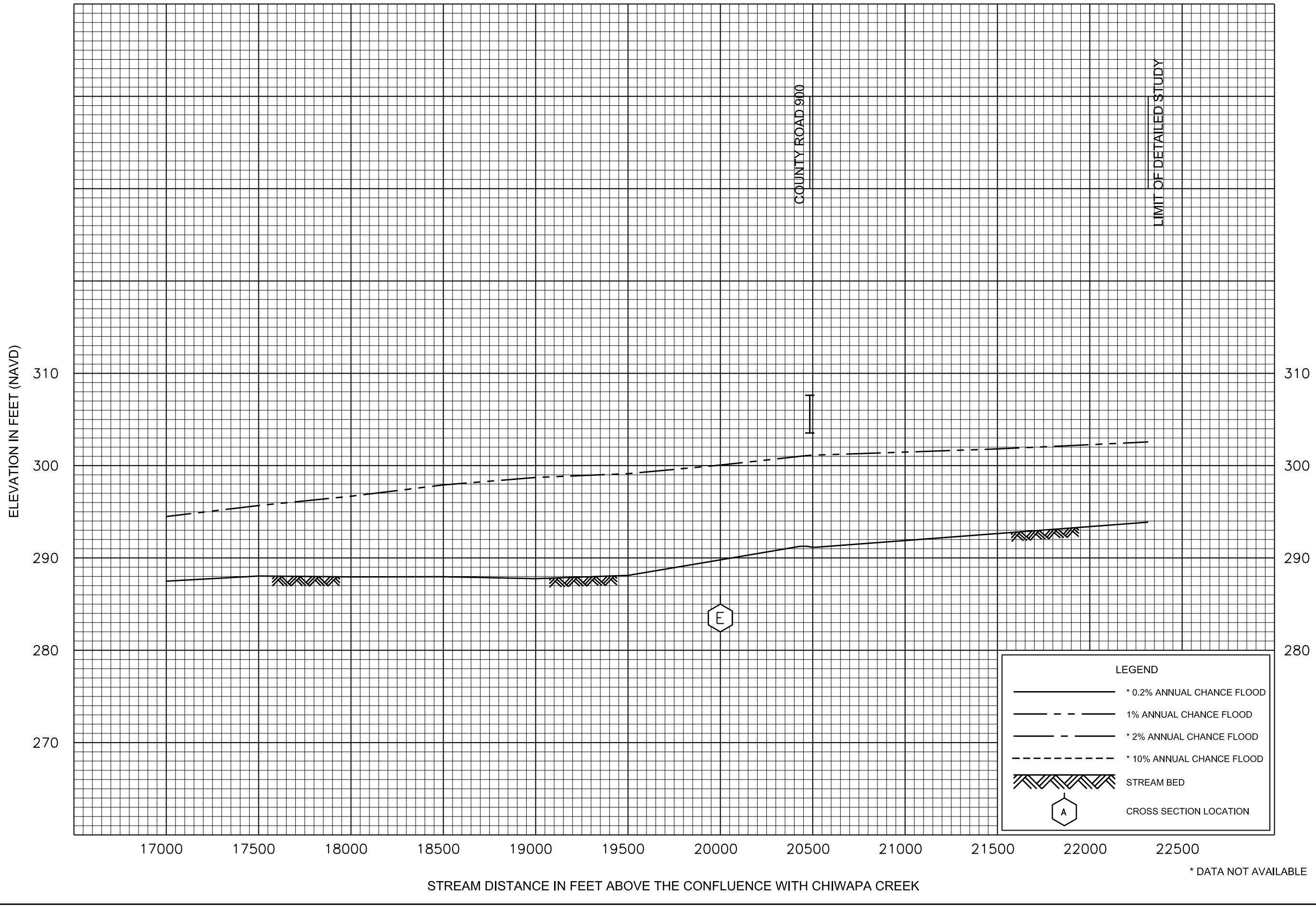
FLOOD PROFILES

RUSSELL CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

53P

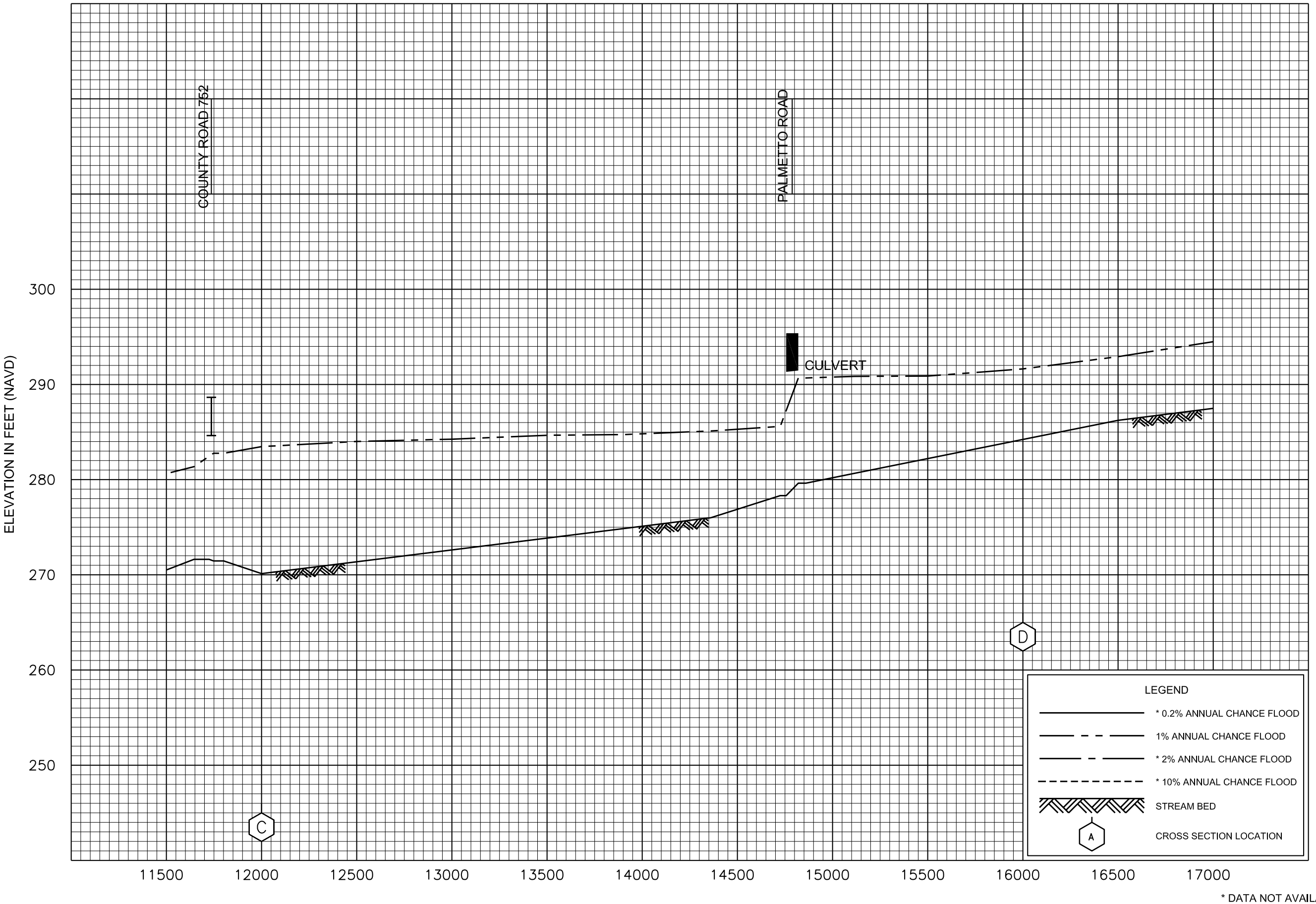


FLOOD PROFILES

REEDS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



FLOOD PROFILES

REEDS BRANCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

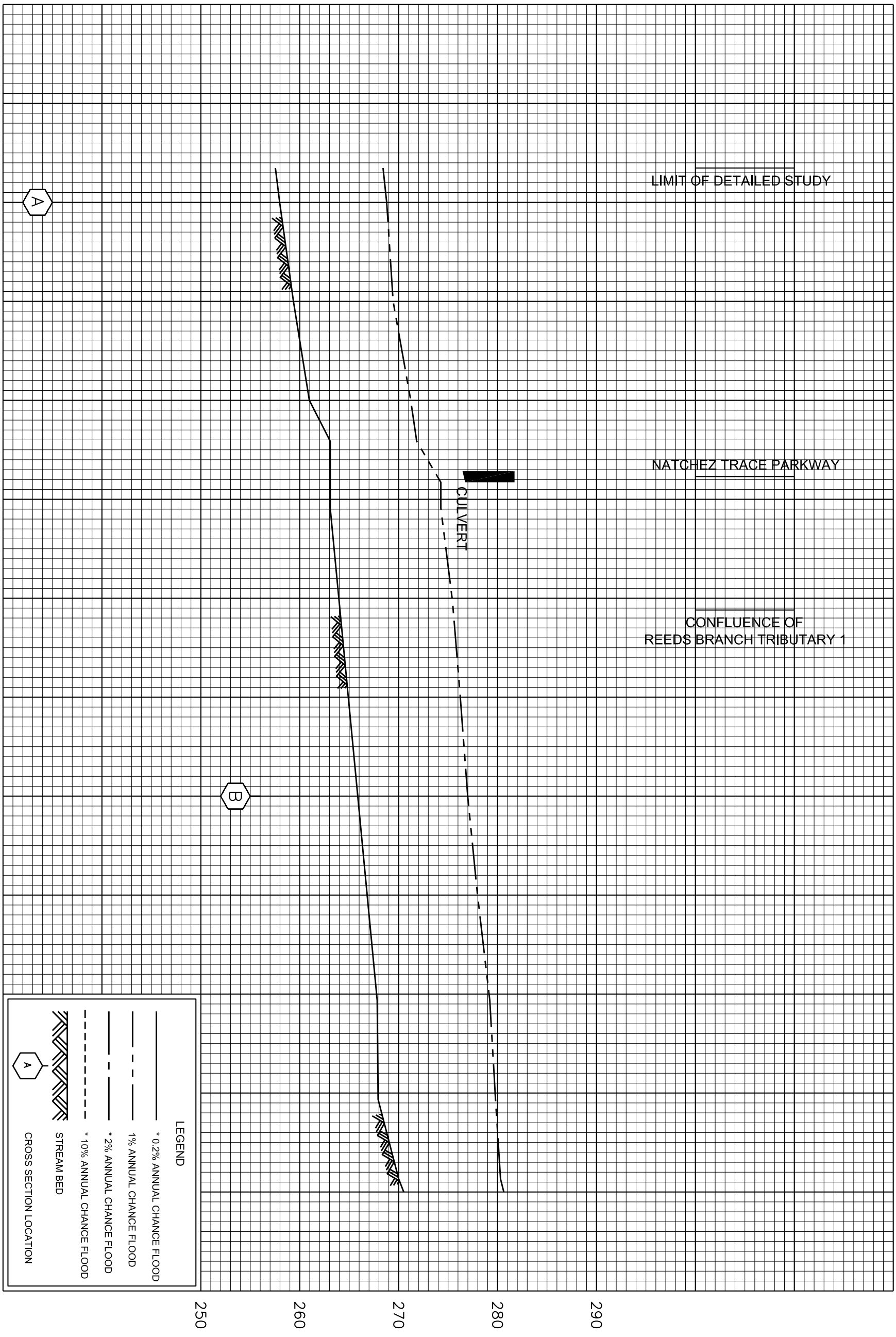
LEE COUNTY, MS
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD)

240 250 260 270 280 290

6000 6500 7000 7500 8000 8500 9000 9500 10000 10500 11000 11500

STREAM DISTANCE IN FEET ABOVE THE CONFLUENCE WITH CHIWAPA CREEK



* DATA NOT AVAILABLE

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

REEDS BRANCH

50P

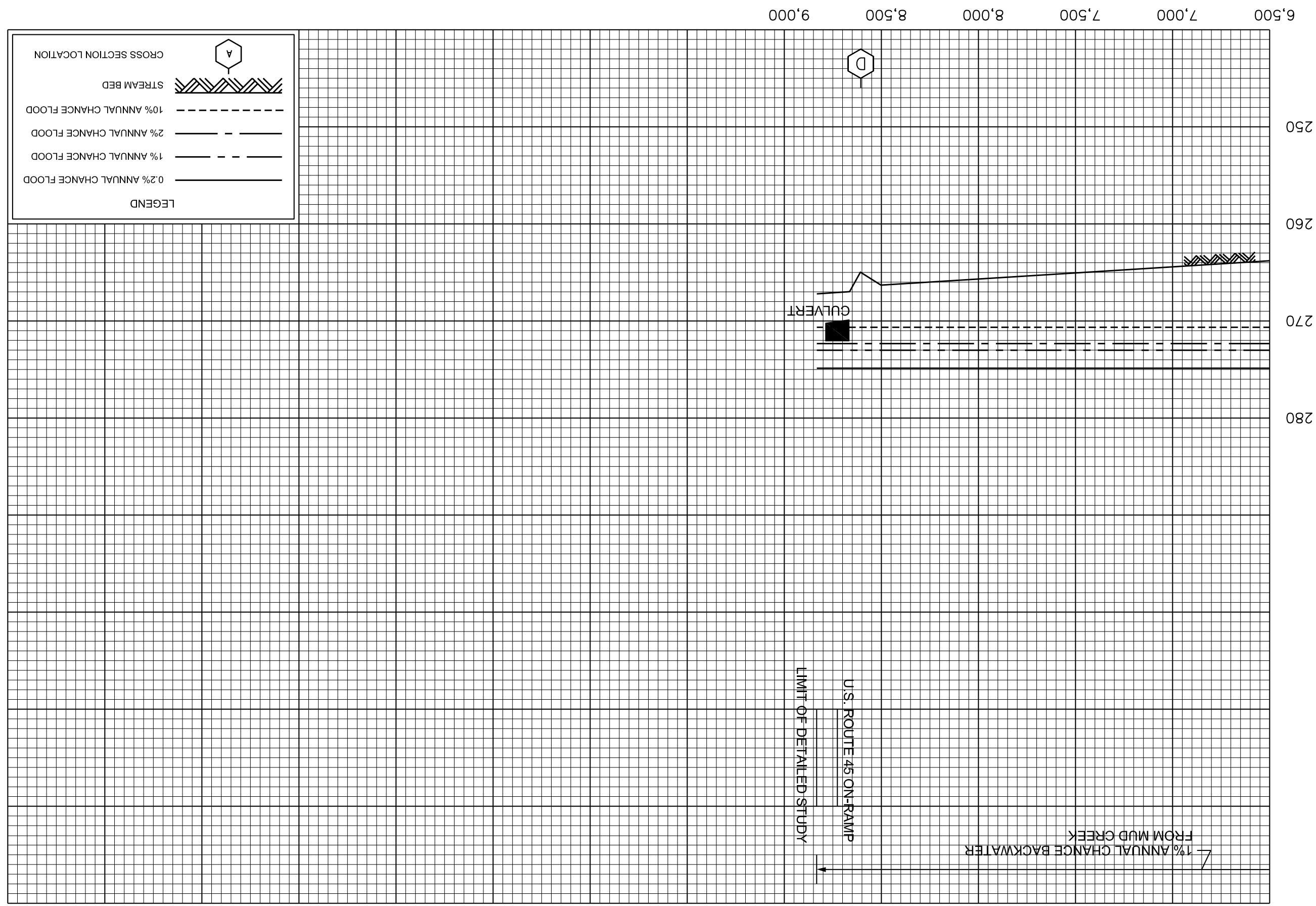
FEDERAL EMERGENCY MANAGEMENT AGENCY

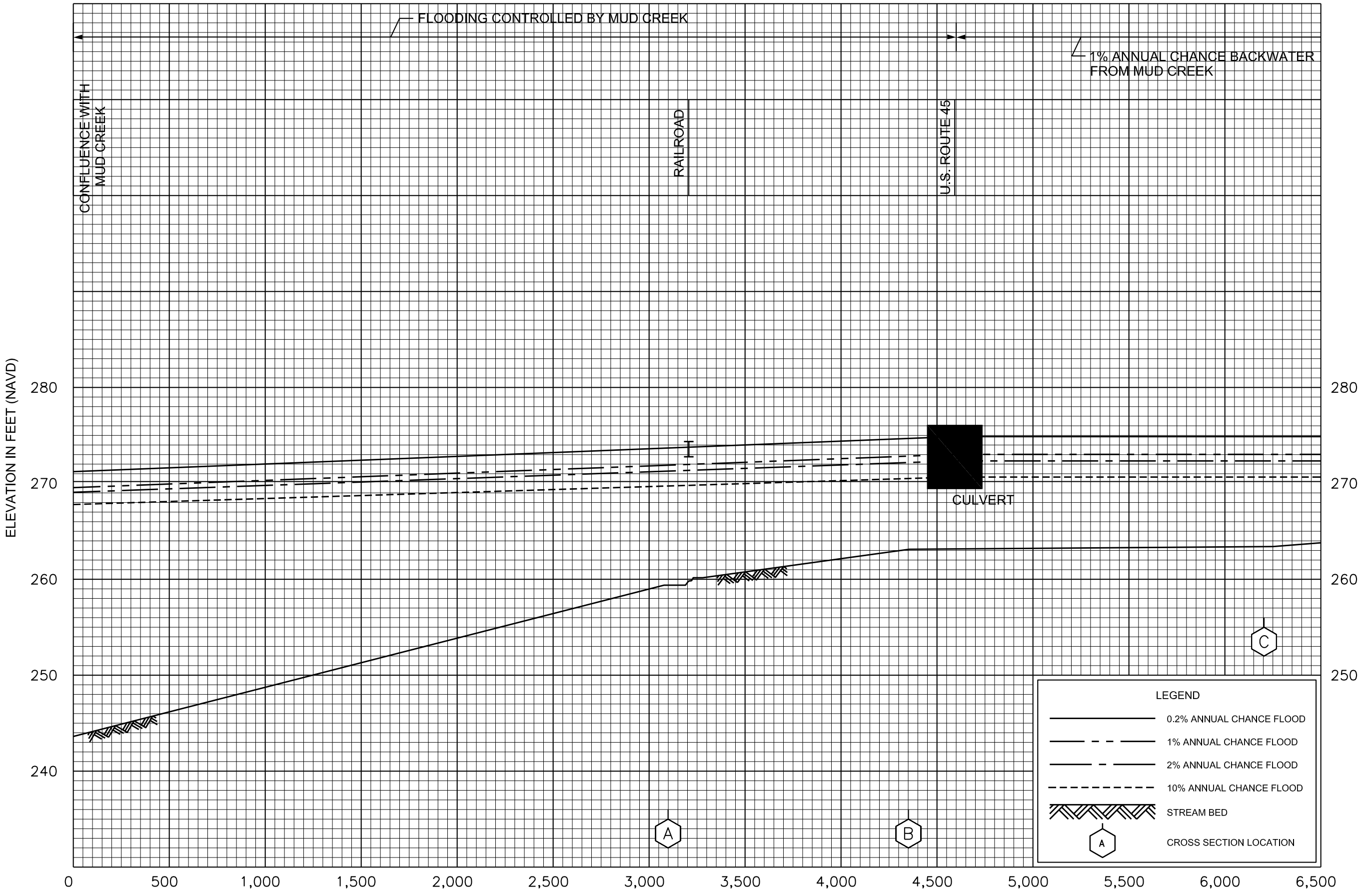
LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

MUD CREEK TRIBUTARY 2



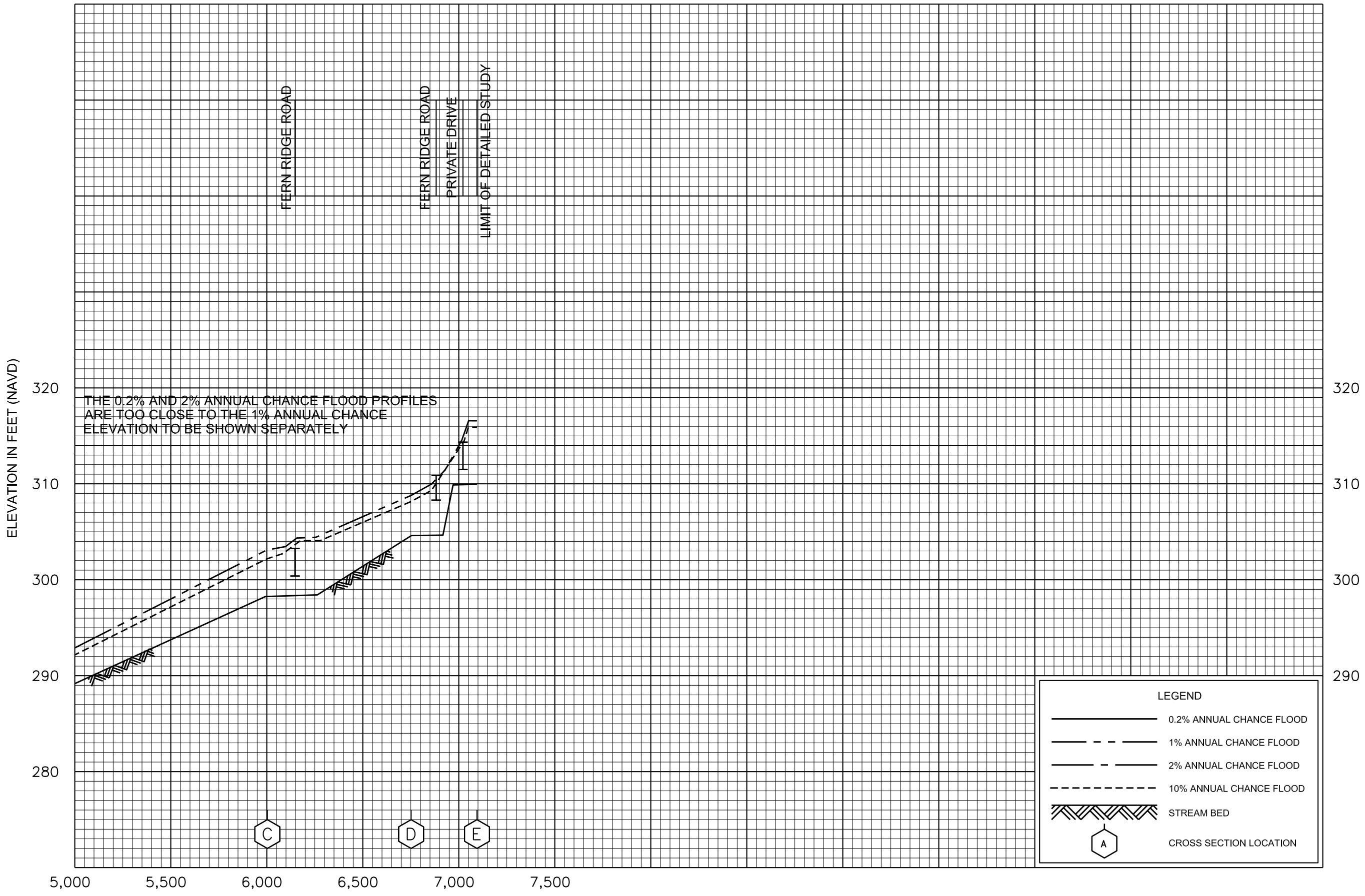


FLOOD PROFILES

MUD CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



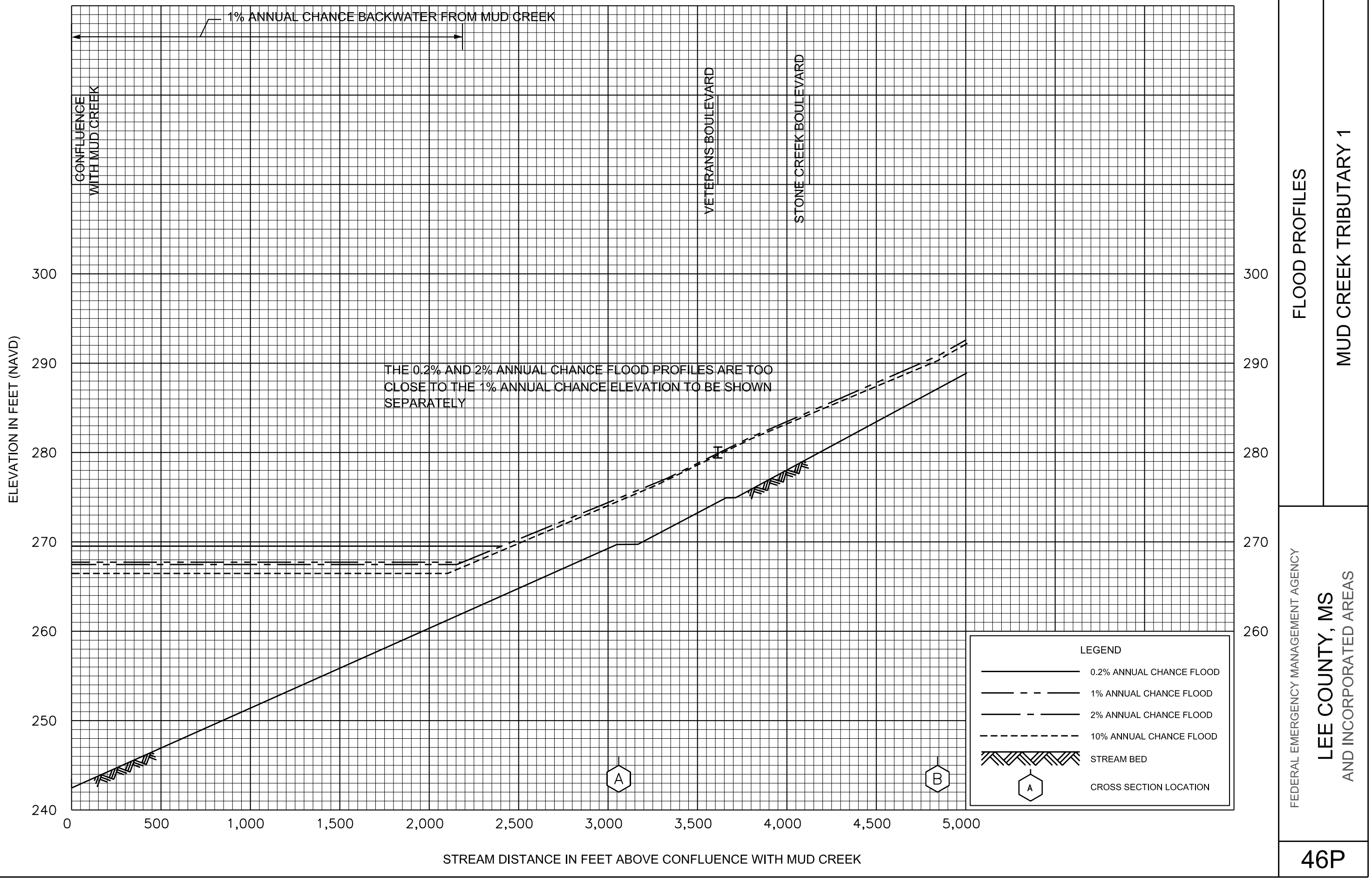
FLOOD PROFILES

MUD CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

47P



FLOOD PROFILES

MUD CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

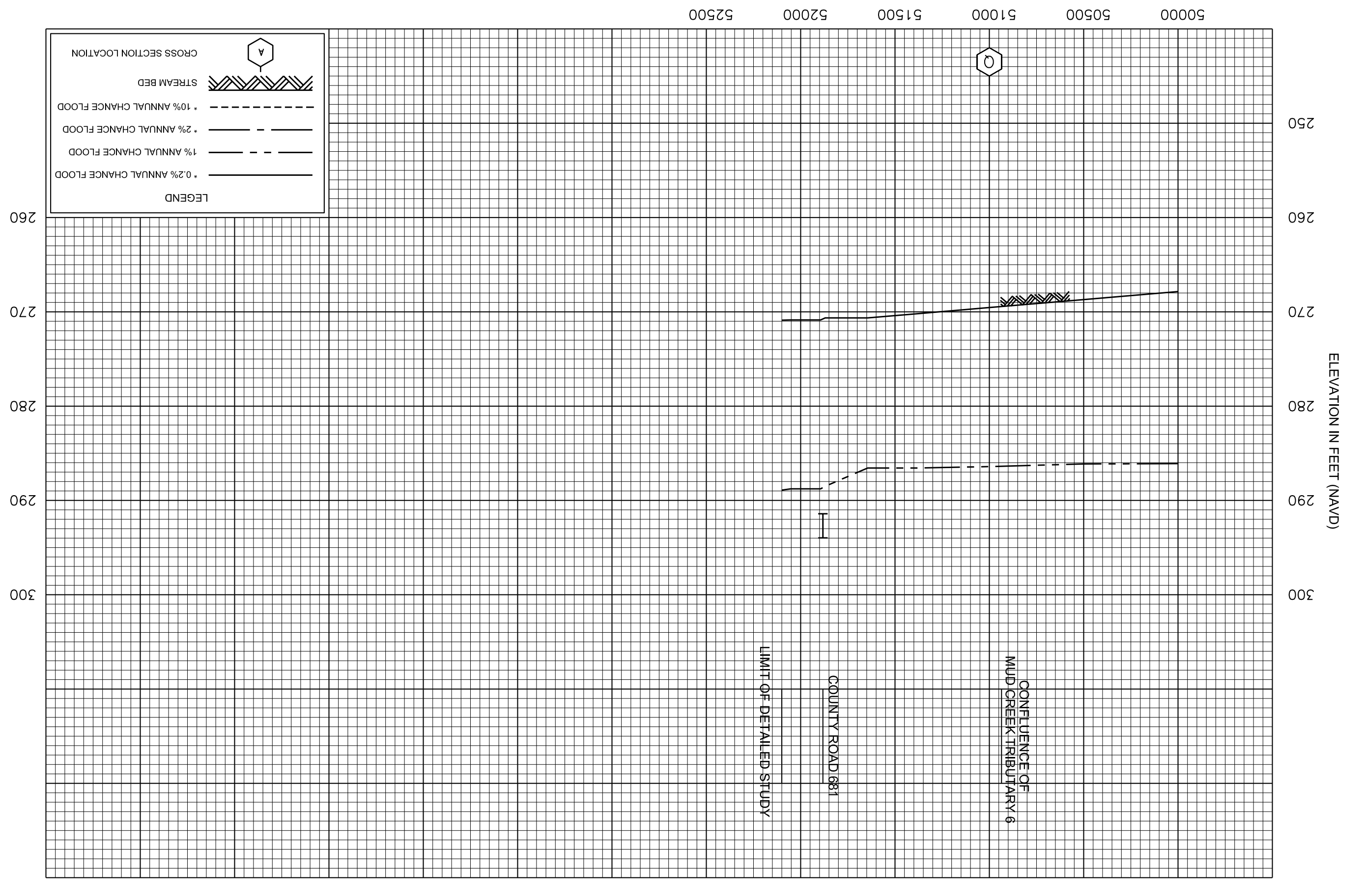
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

MUD CREEK

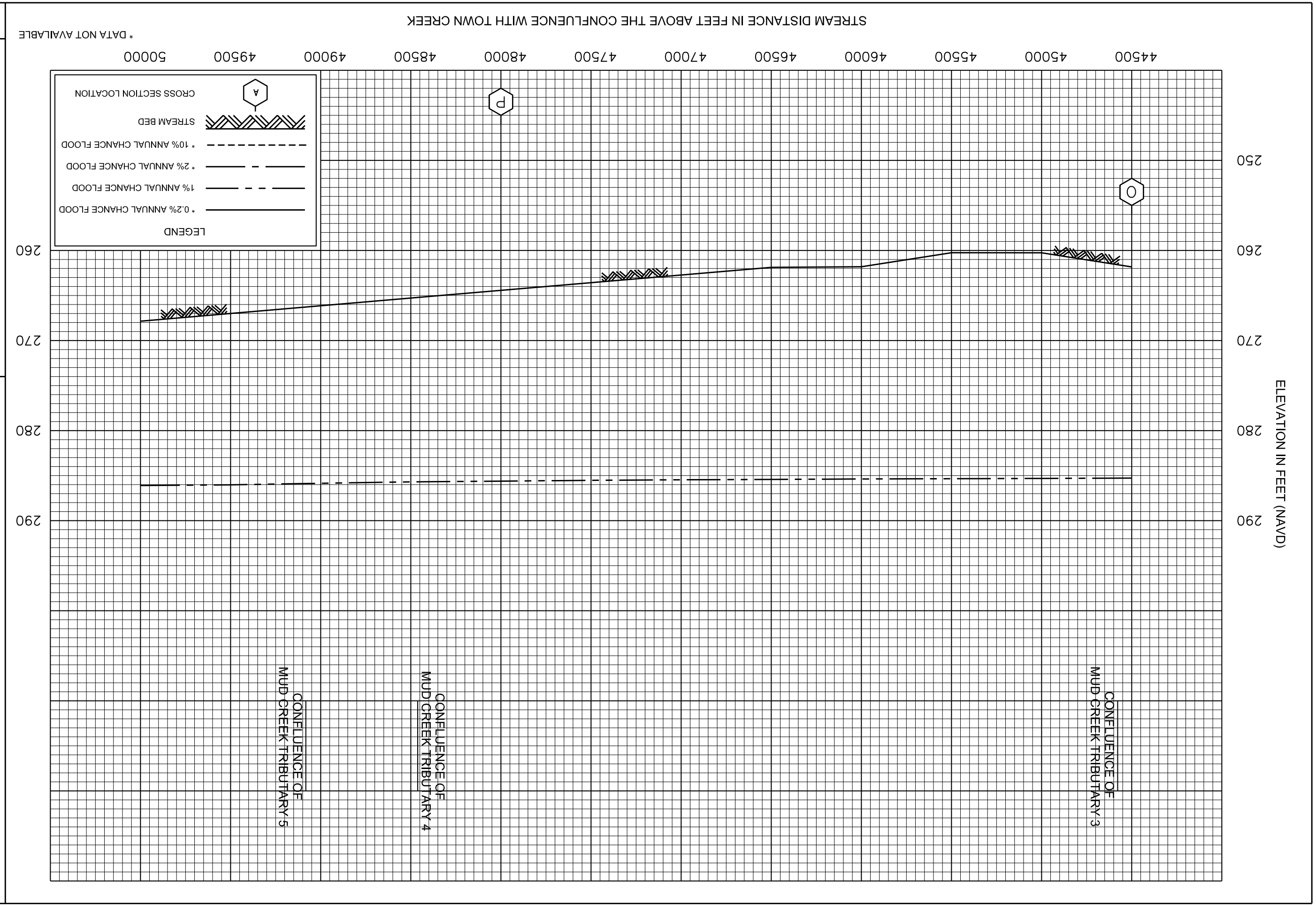


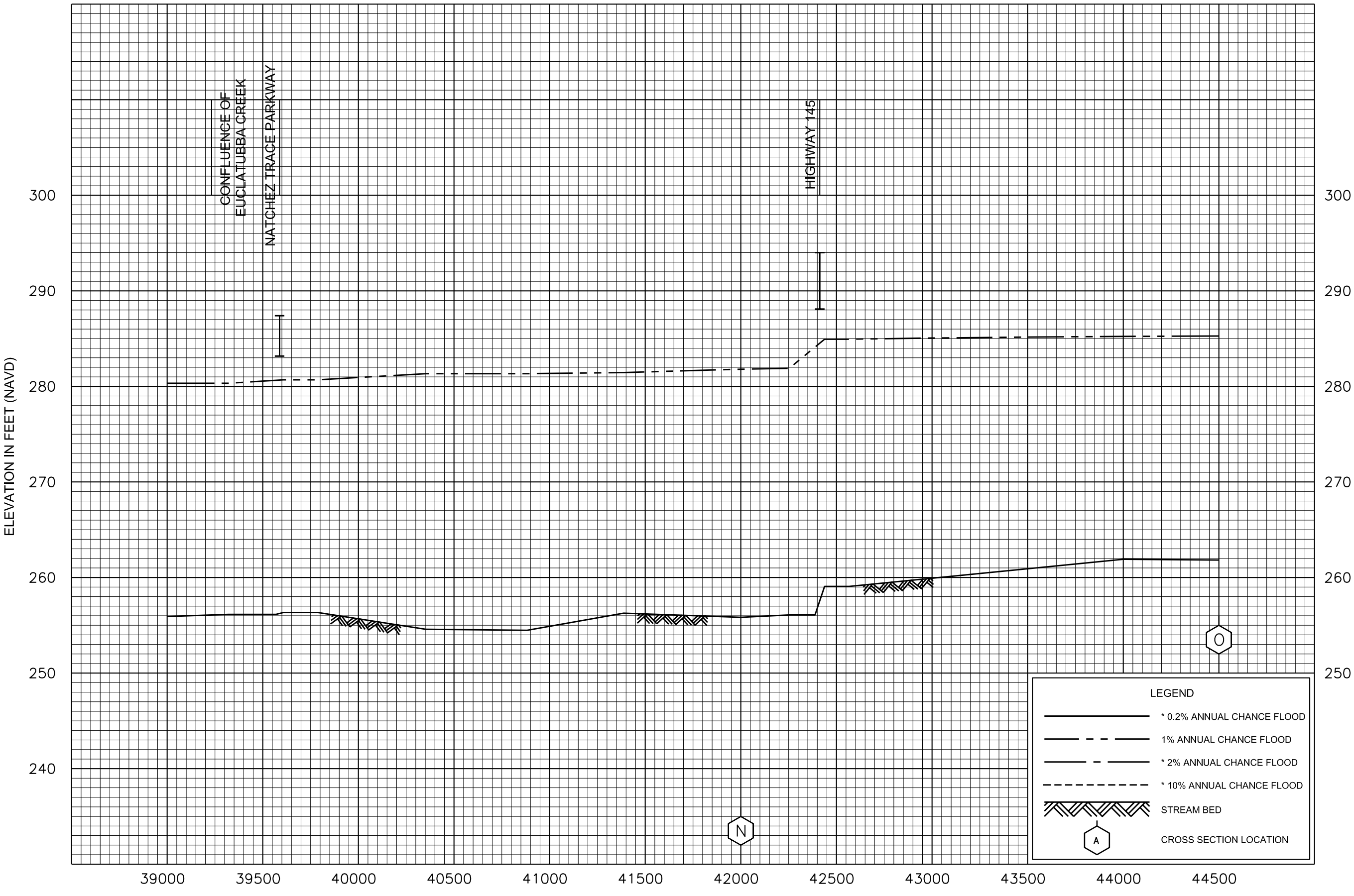
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

FLOOD PROFILES

MUD CREEK





* DATA NOT AVAILABLE

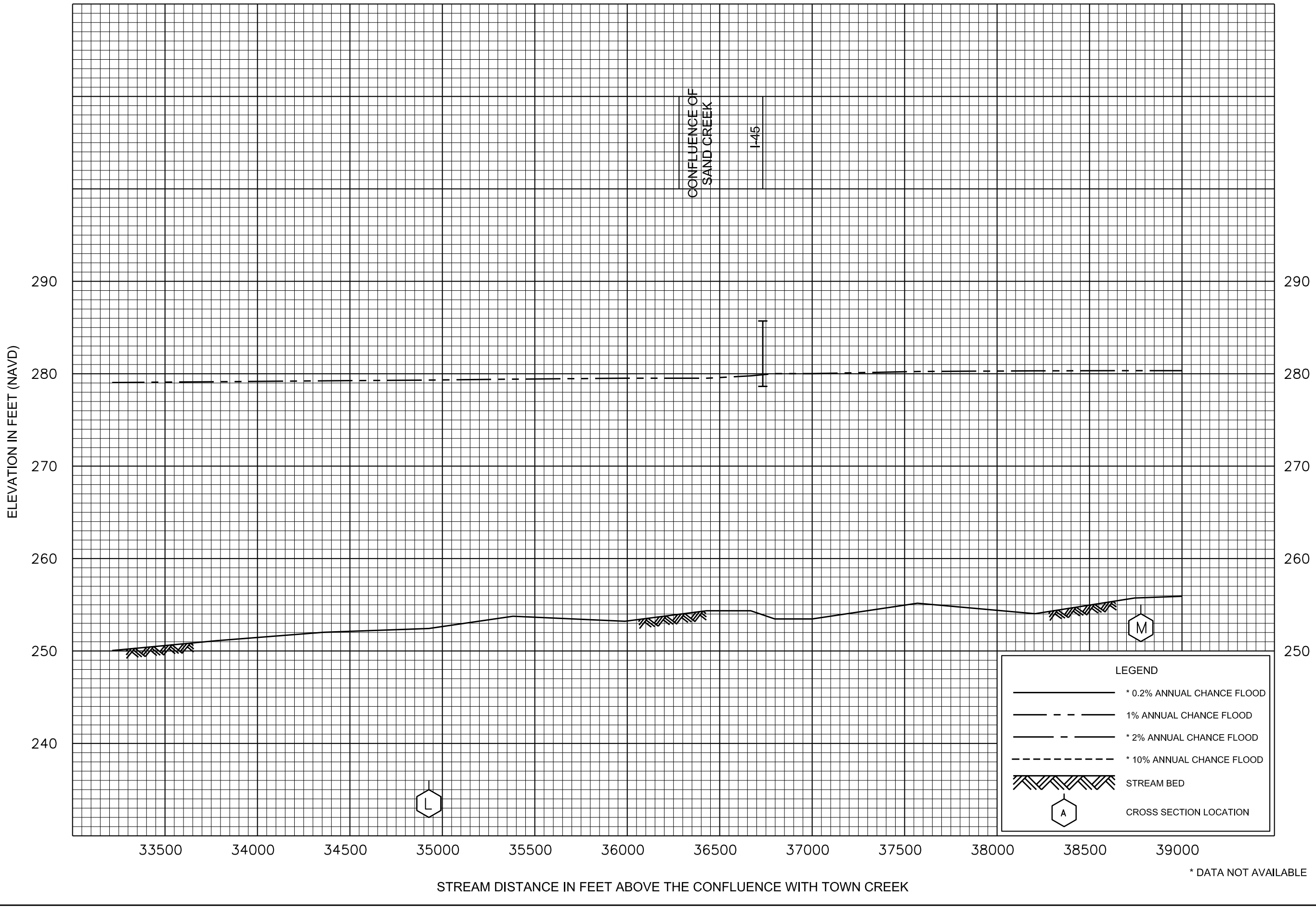
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

43P

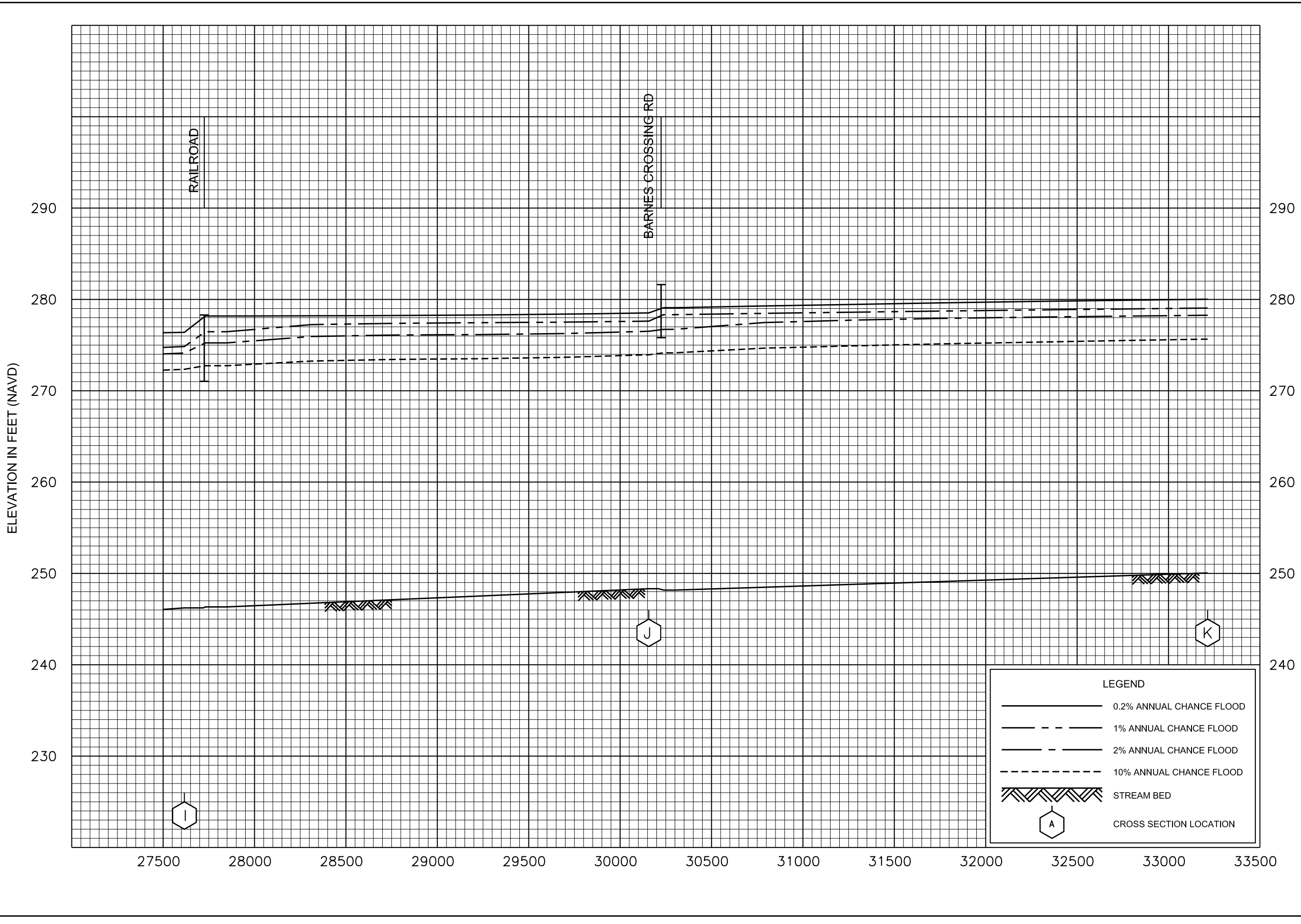


FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



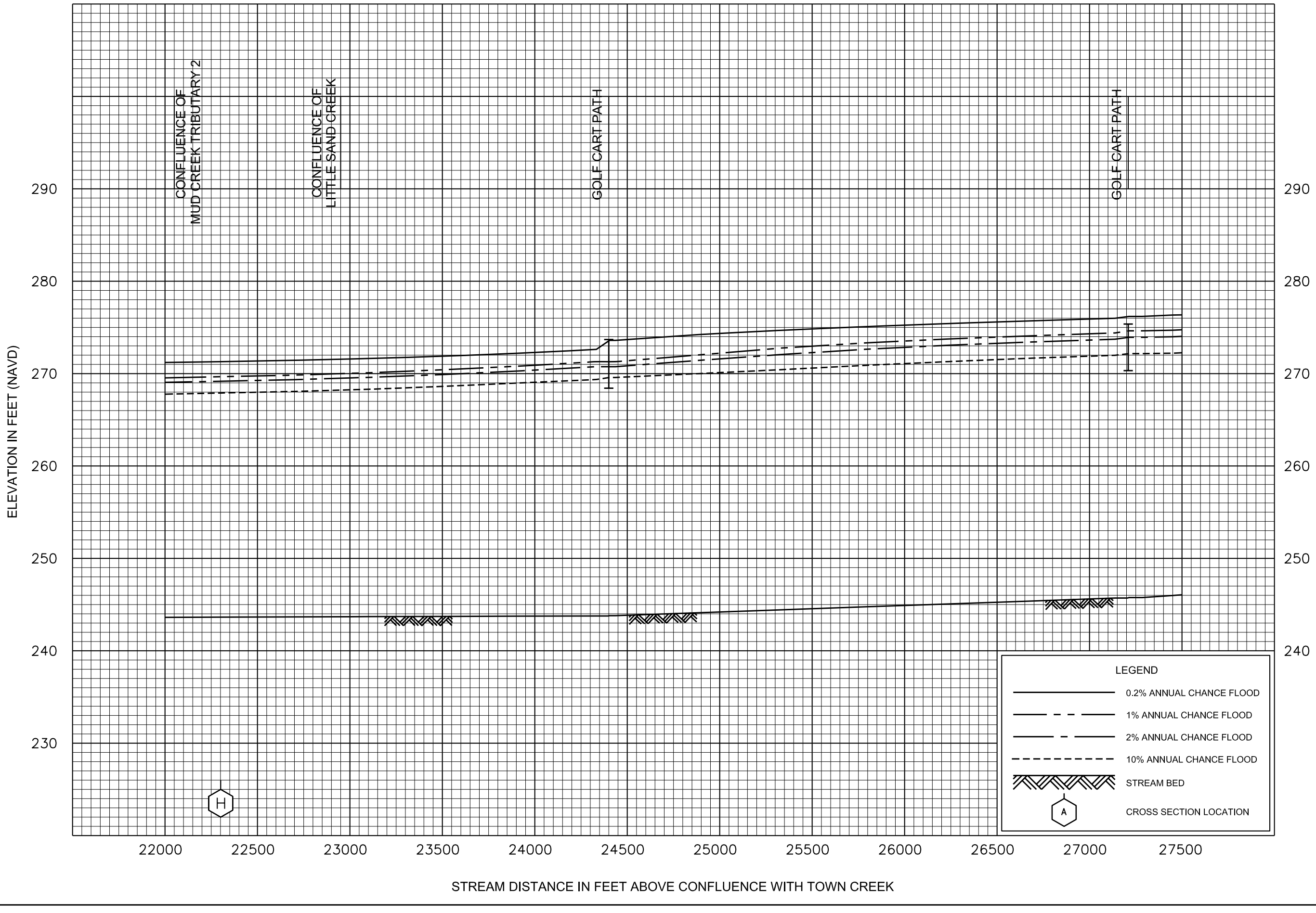
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

41P



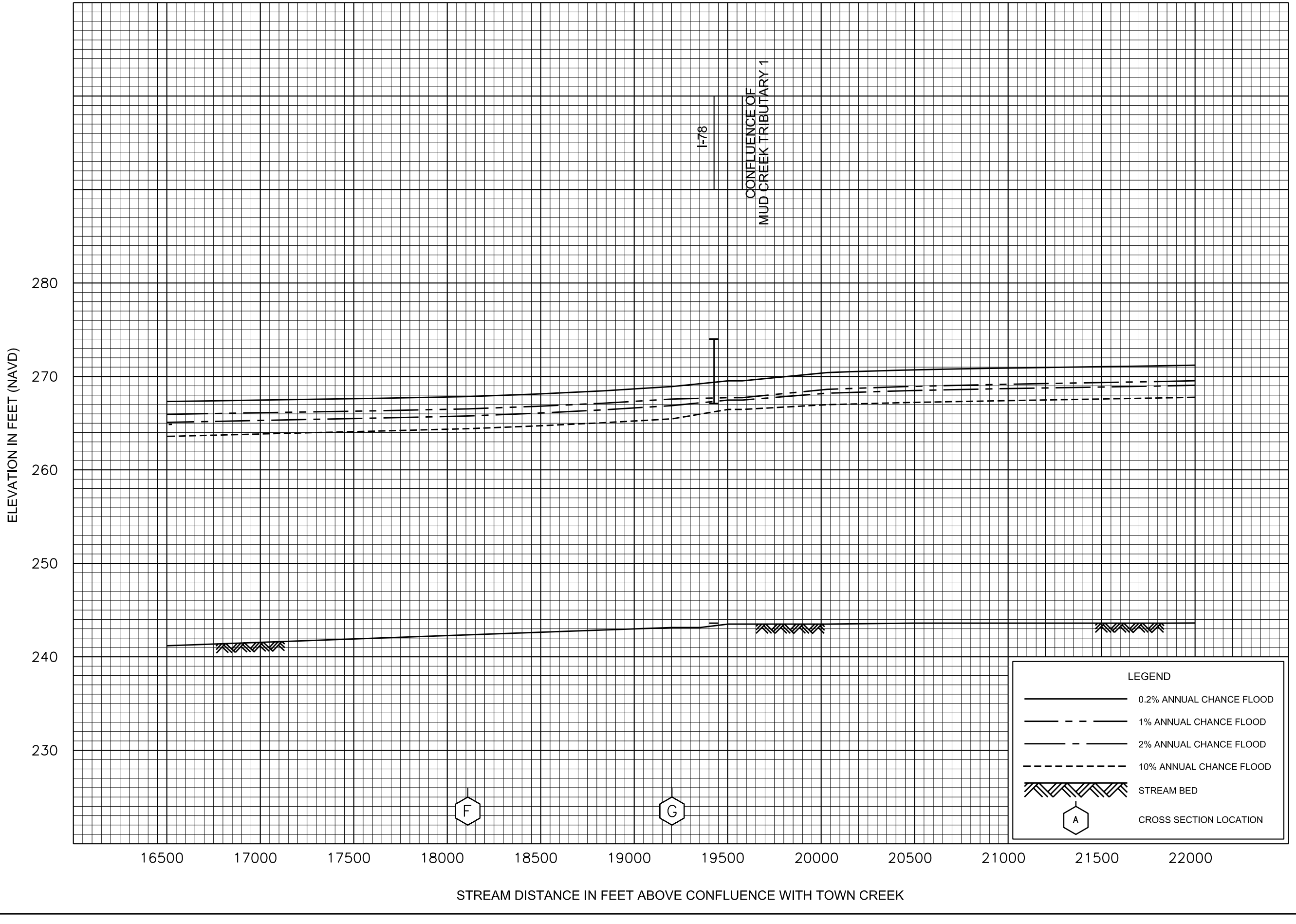
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

40P



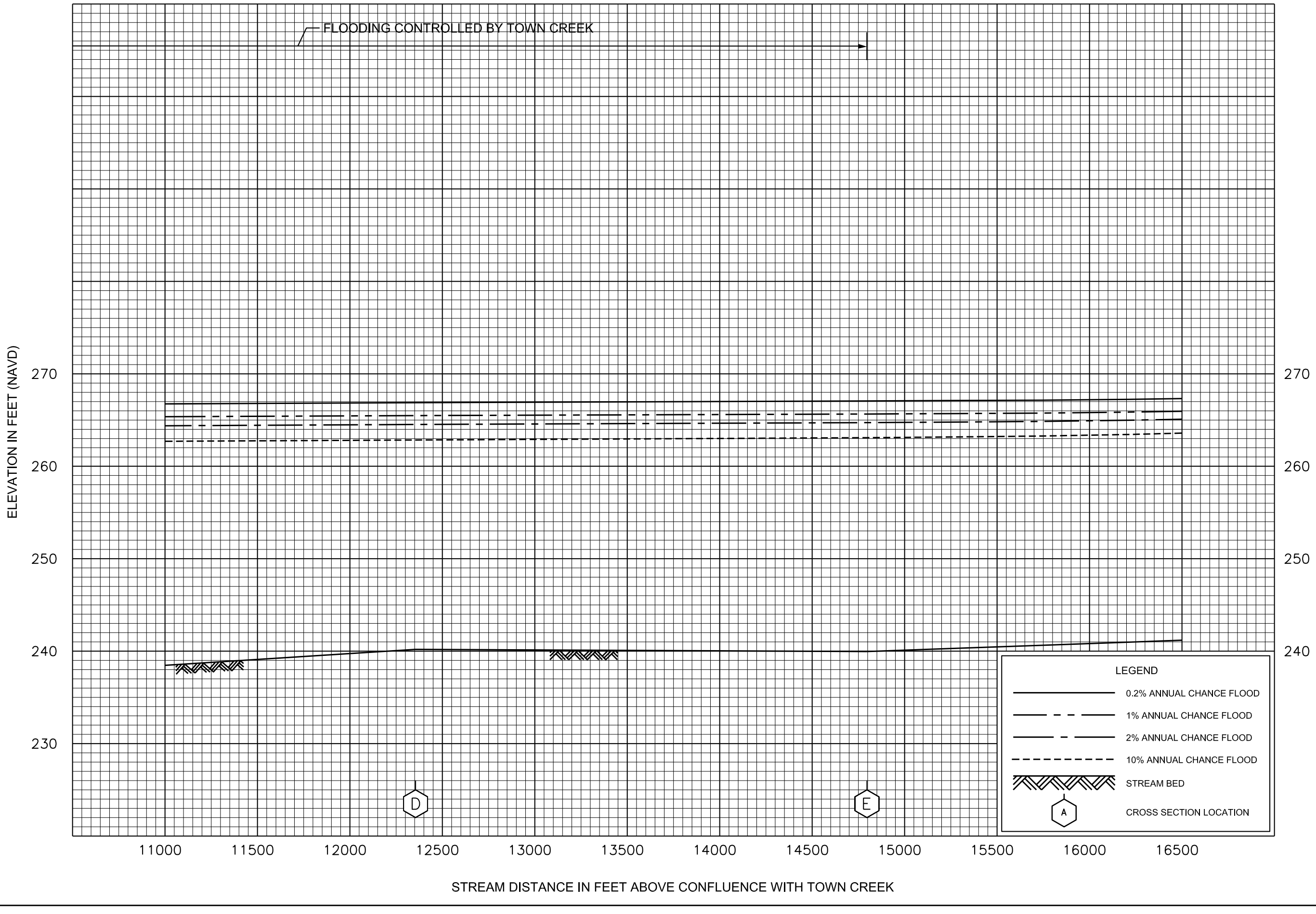
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

39P



FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

38P

FLOODING CONTROLLED BY TOWN CREEK

E MAIN STREET

ELEVATION IN FEET (NAVD)

270
260
250
240
230
220

B
C

5500 6000 6500 7000 7500 8000 8500 9000 9500 10000 10500 11000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH TOWN CREEK

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- A — CROSS SECTION LOCATION

FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

37P

FLOODING CONTROLLED BY TOWN CREEK

CONFLUENCE WITH TOWN CREEK

RAILROAD

ELEVATION IN FEET (NAVD)

270
260
250
240
230
220

0 500 1000 1500 2000 2500 3000 3500 4000 4500 5000 5500

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH TOWN CREEK

A

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- A — CROSS SECTION LOCATION

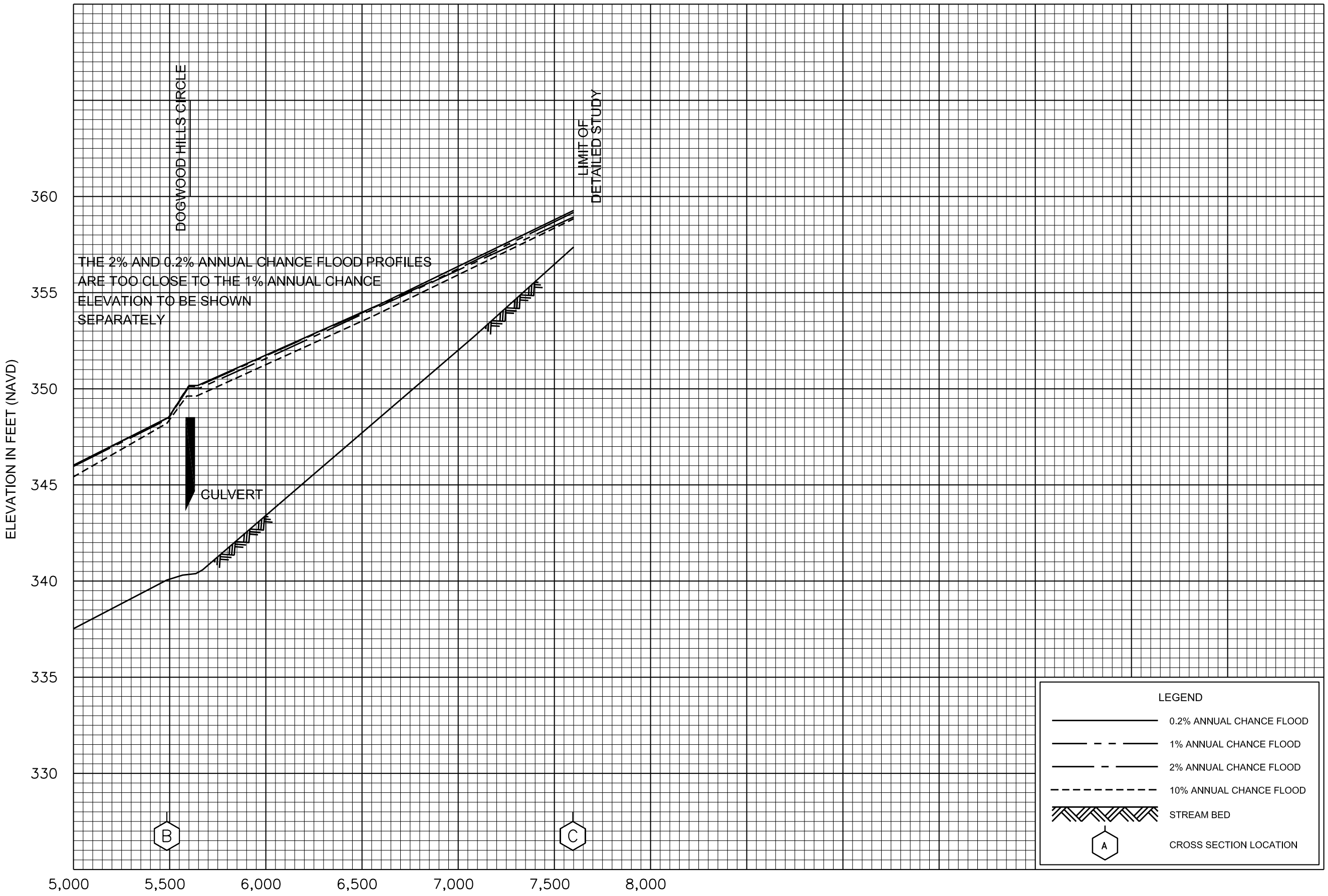
FLOOD PROFILES

MUD CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

36P

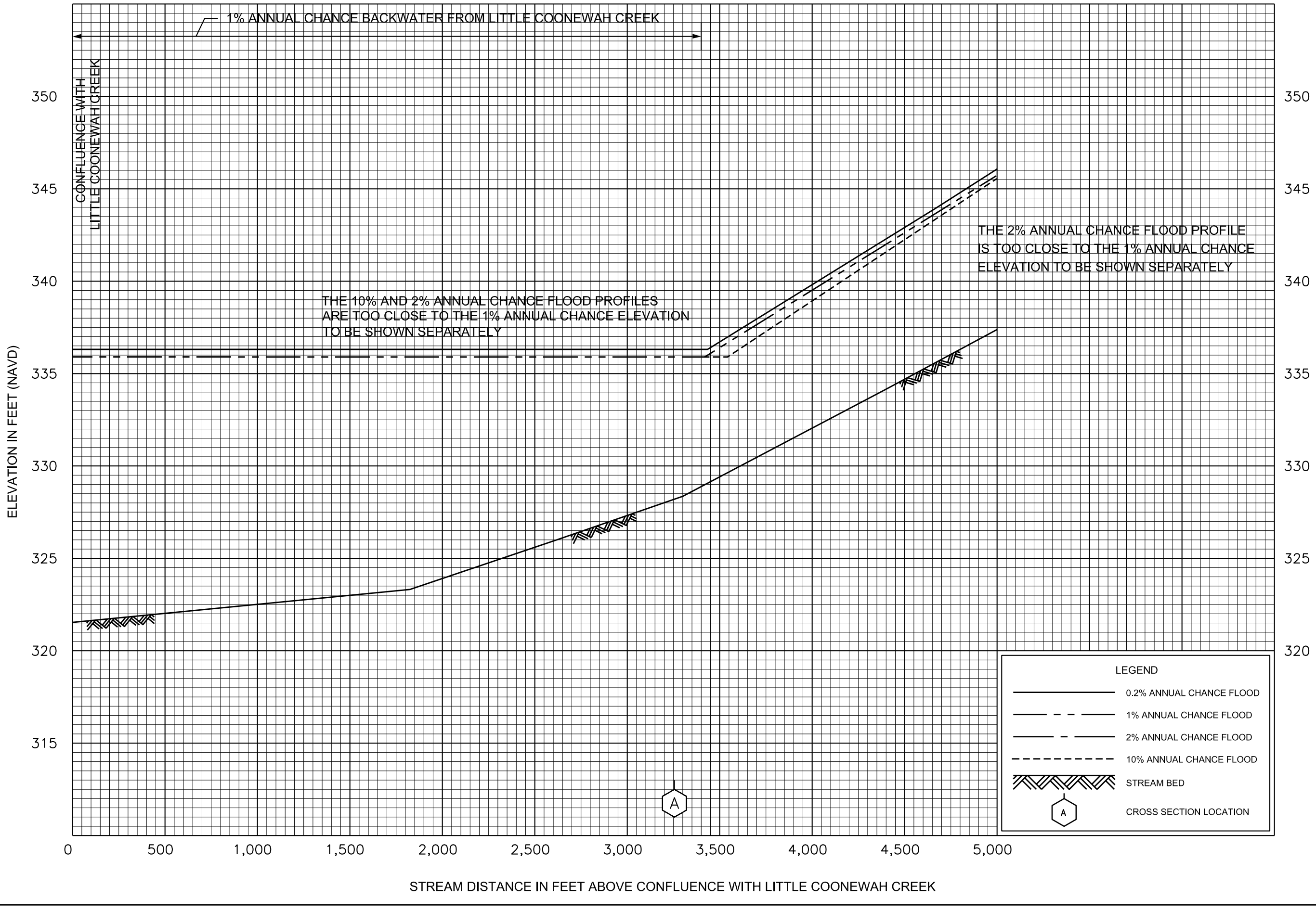


FLOOD PROFILES

LITTLE COONEWAH CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



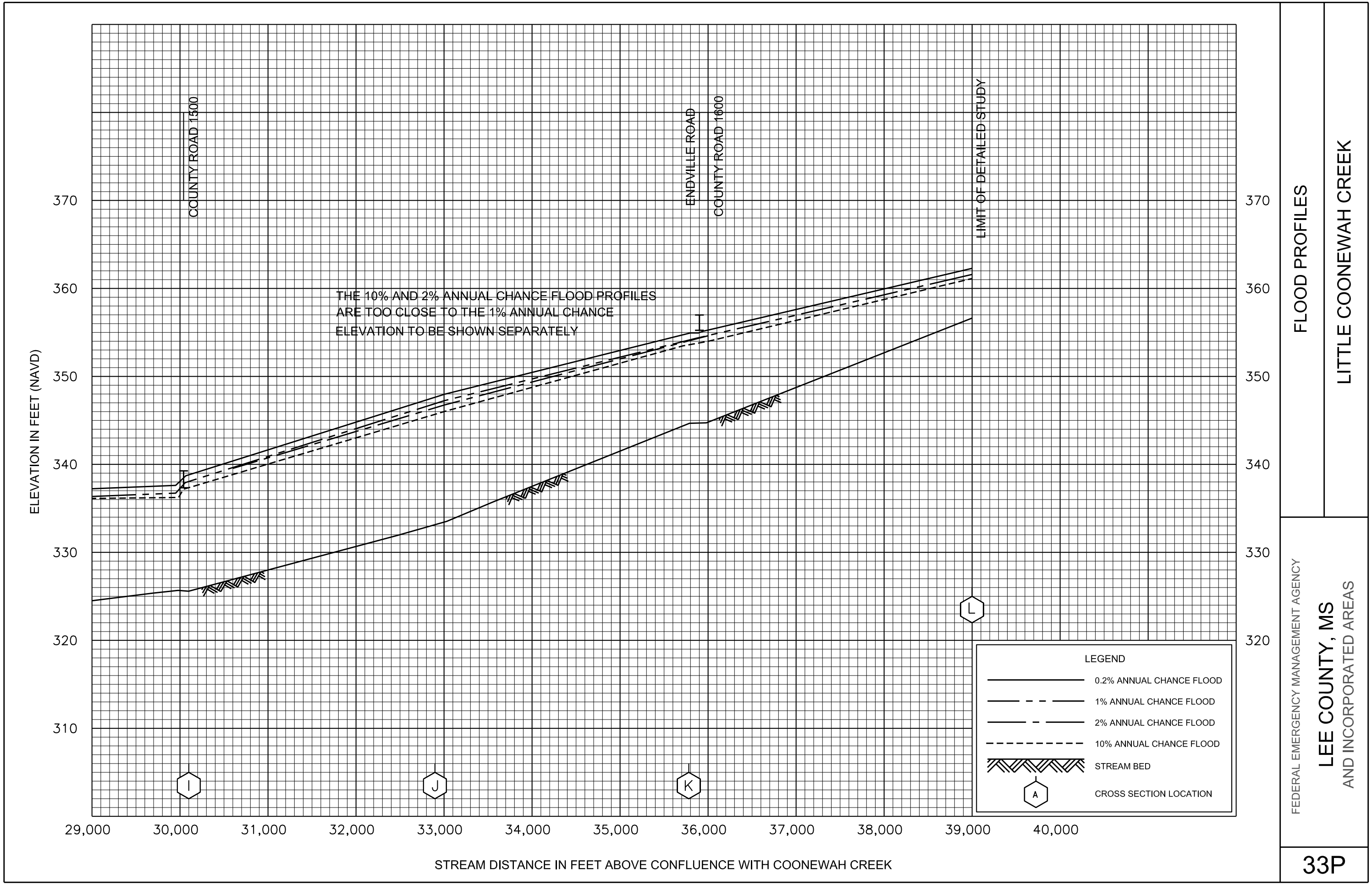
FLOOD PROFILES

LITTLE COONEWAH CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

34P



FLOOD PROFILES

LITTLE COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

33P

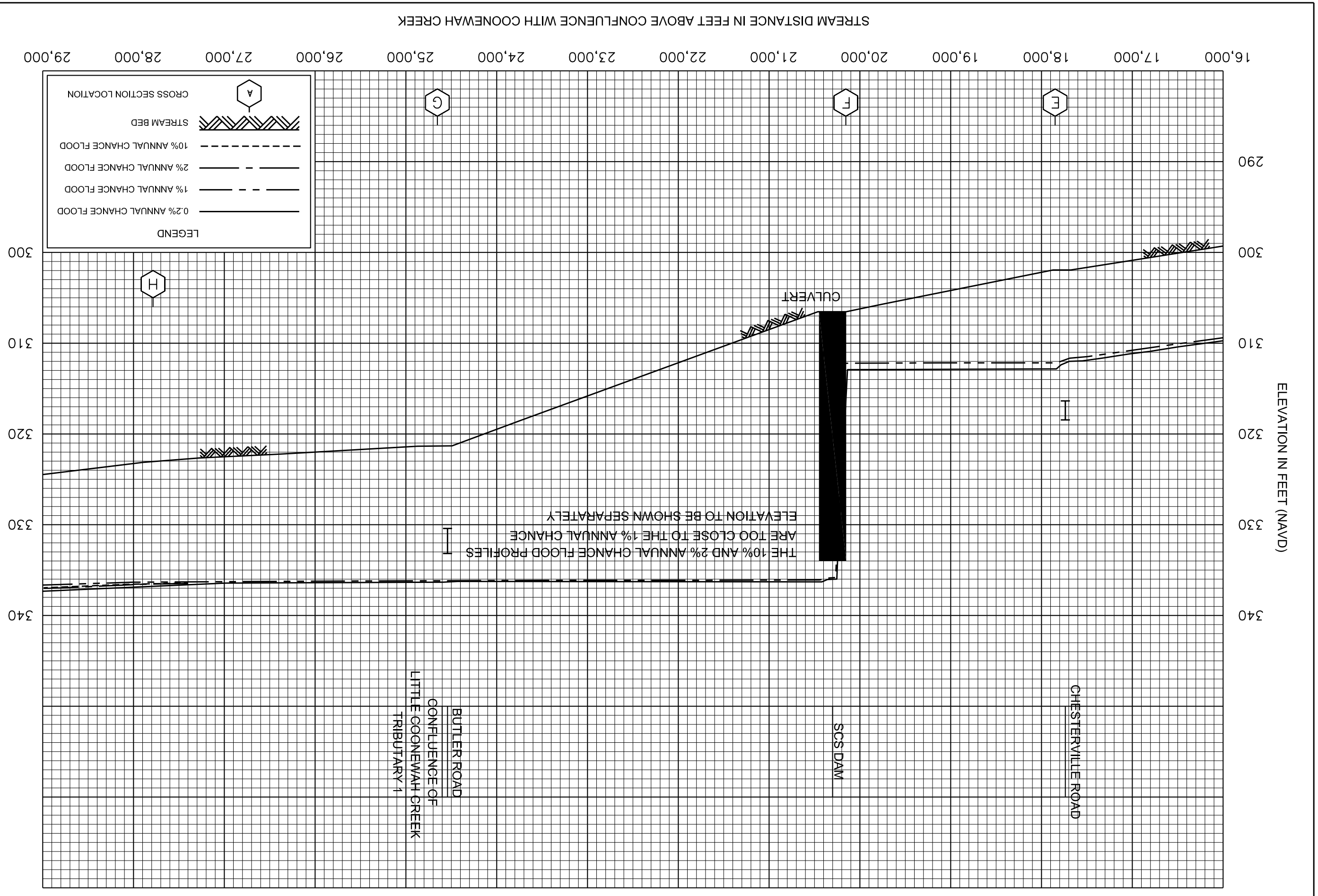
FEDERAL EMERGENCY MANAGEMENT AGENCY

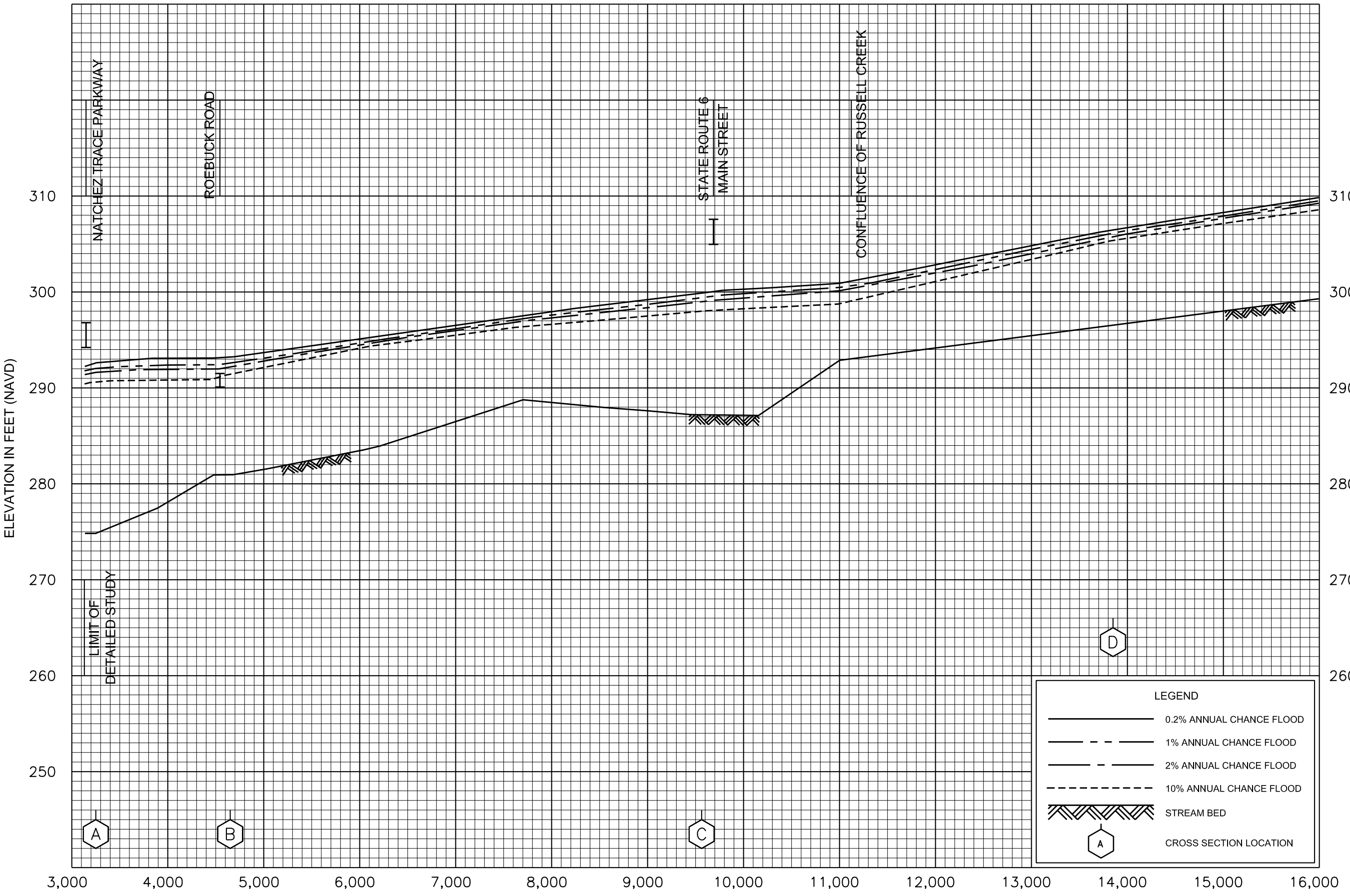
LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

LITTLE COONEWAH CREEK



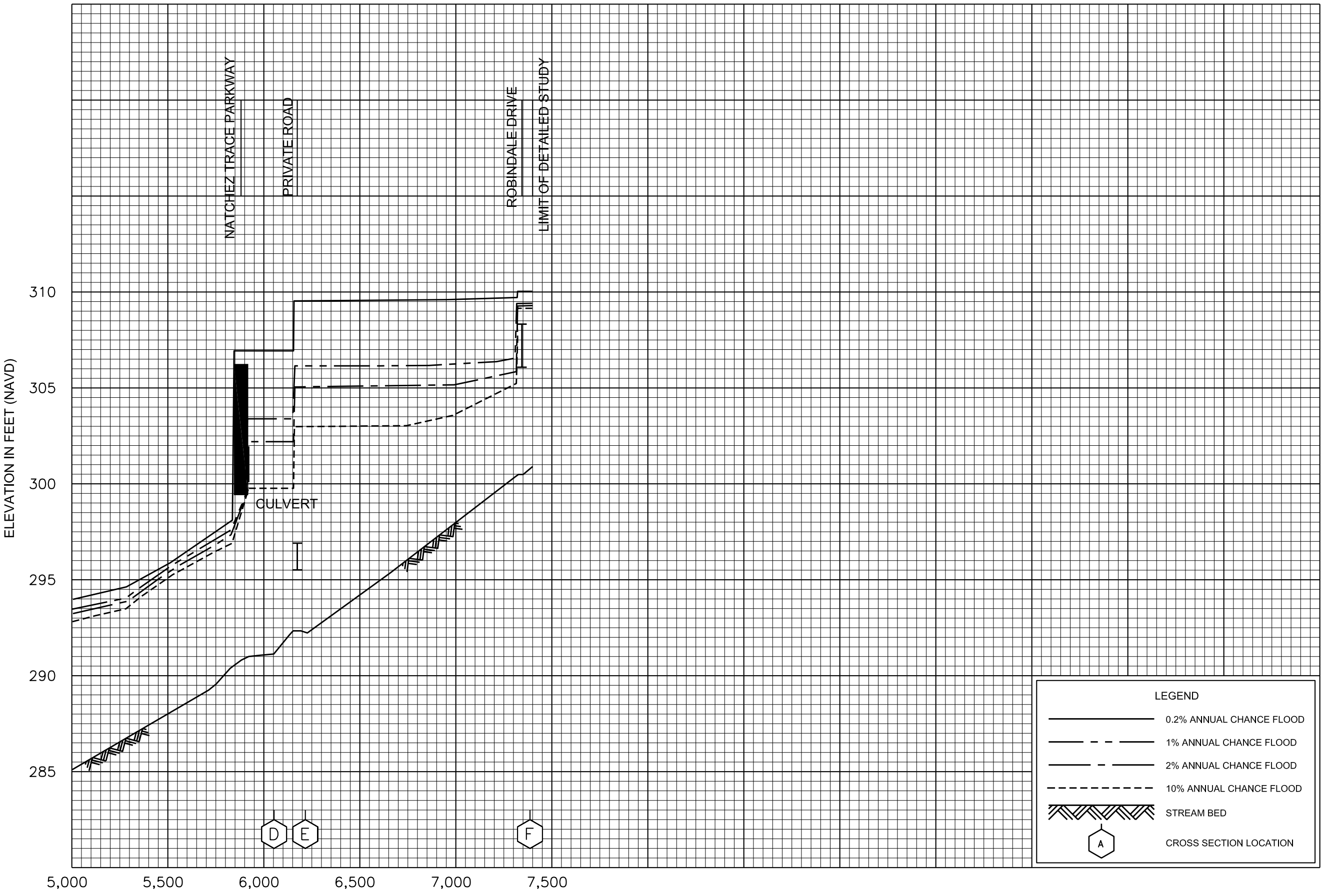


FLOOD PROFILES

LITTLE COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

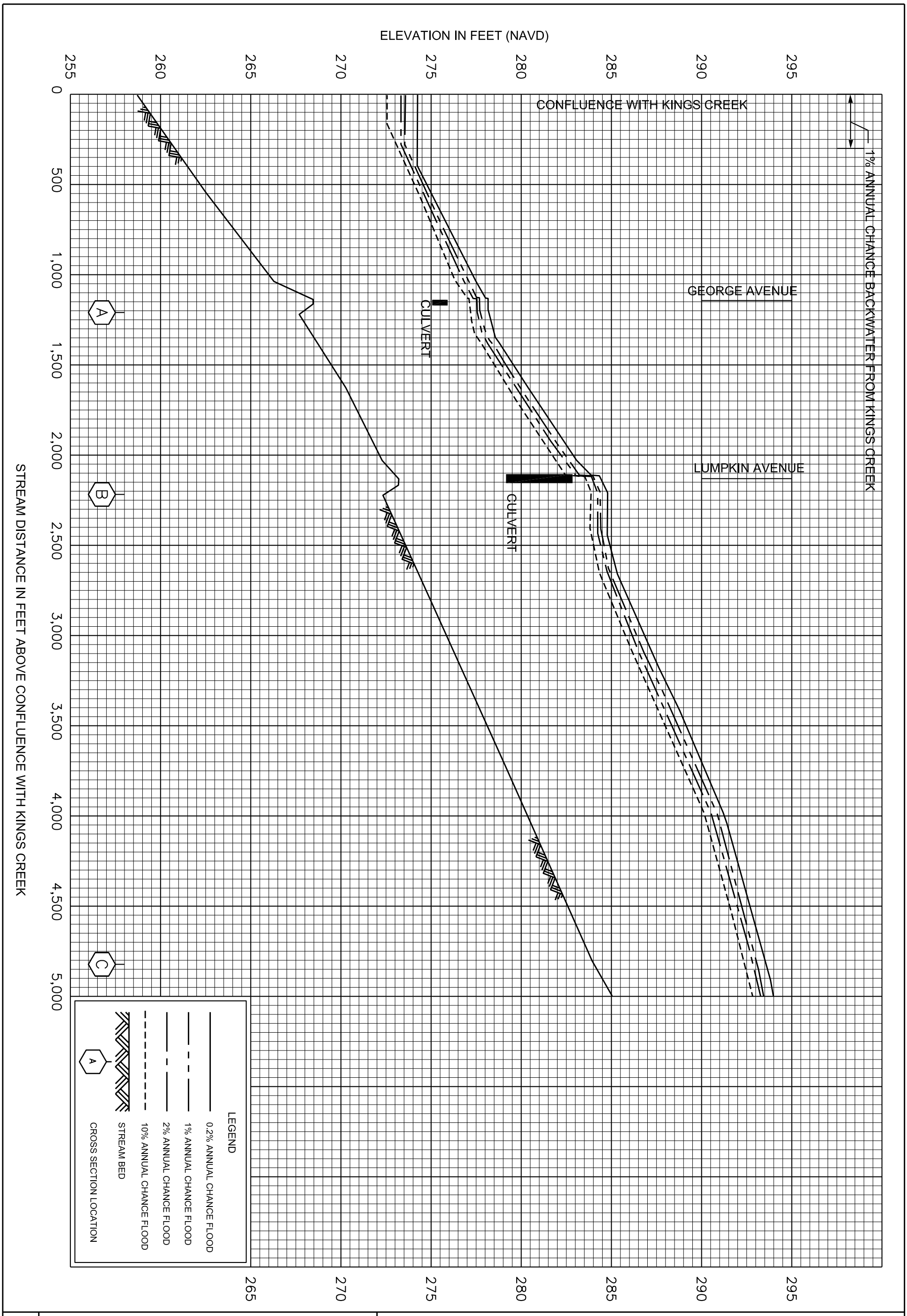


FLOOD PROFILES

KINGS CREEK TRIBUTARY 4

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



29P

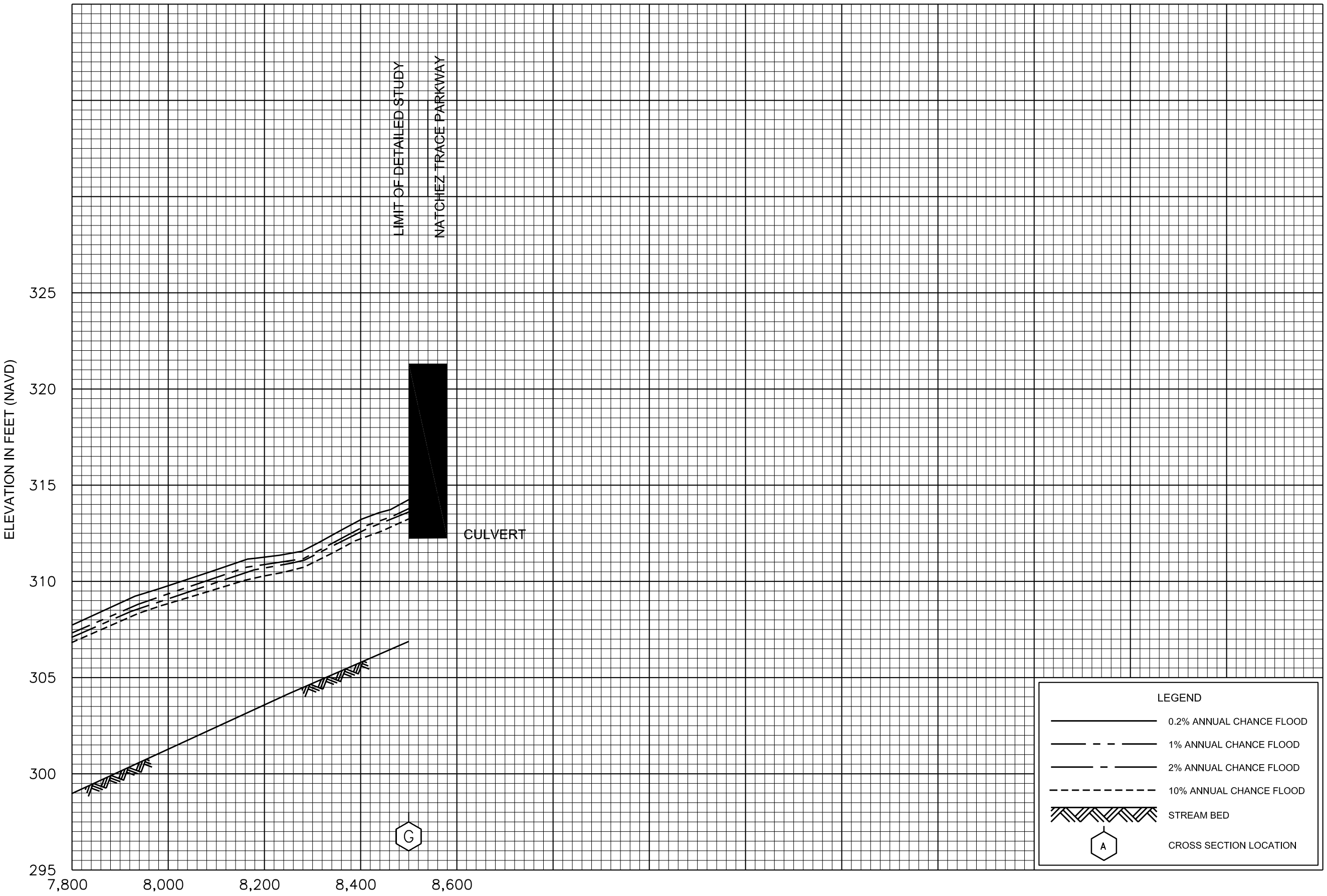
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

KINGS CREEK TRIBUTARY 4



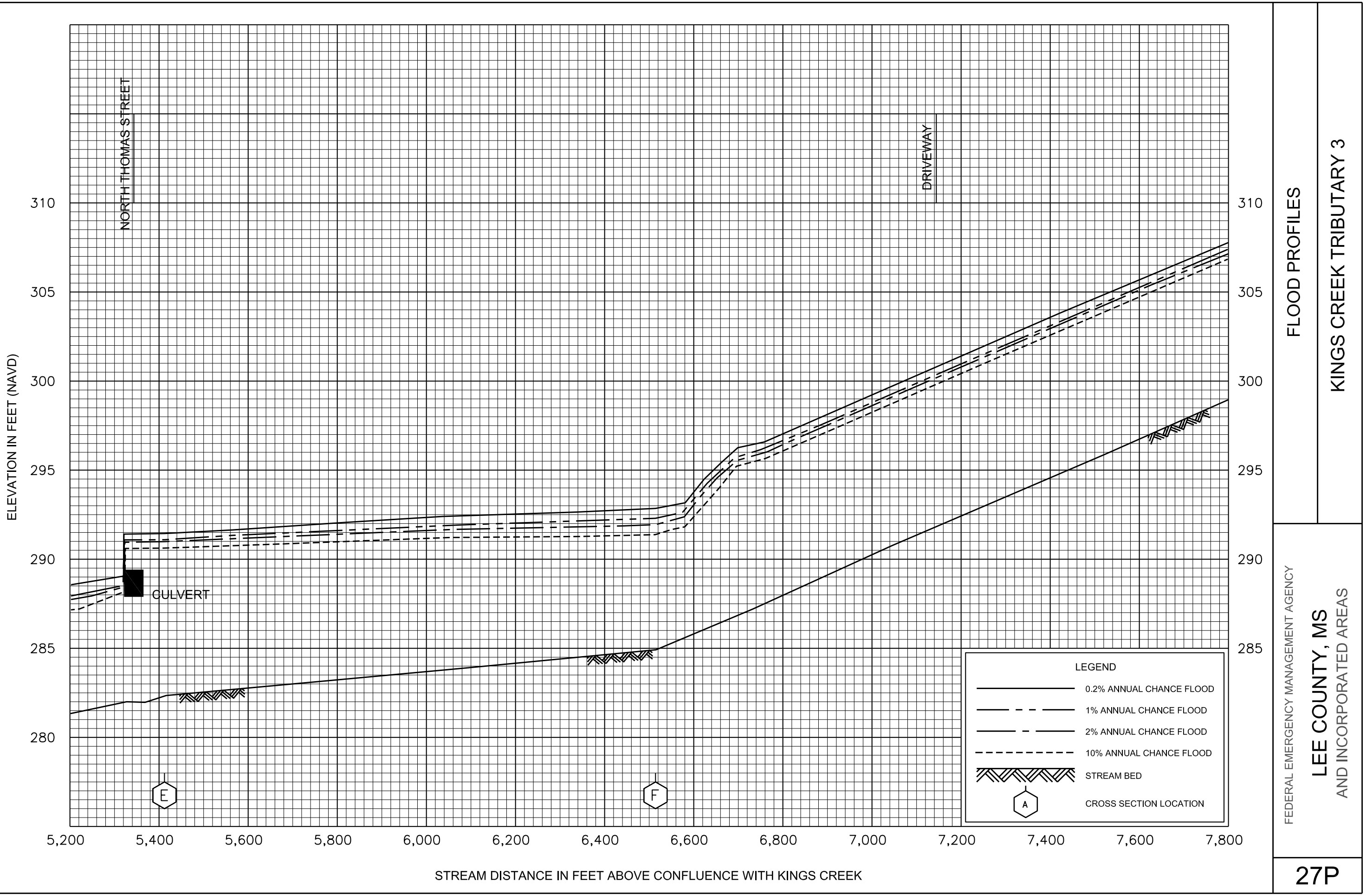
FLOOD PROFILES

KINGS CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

28P



FLOOD PROFILES

KINGS CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

ELEVATION IN FEET (NAVD)

290
285
280
275
270

NORTH FOSTER DRIVE

CULVERT

C

D

LEGEND

0.2% ANNUAL CHANCE FLOOD

1% ANNUAL CHANCE FLOOD

2% ANNUAL CHANCE FLOOD

10% ANNUAL CHANCE FLOOD

STREAM BED

A CROSS SECTION LOCATION

2,600 2,800 3,000 3,200 3,400 3,600 3,800 4,000 4,200 4,400 4,600 4,800 5,000 5,200

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH KINGS CREEK

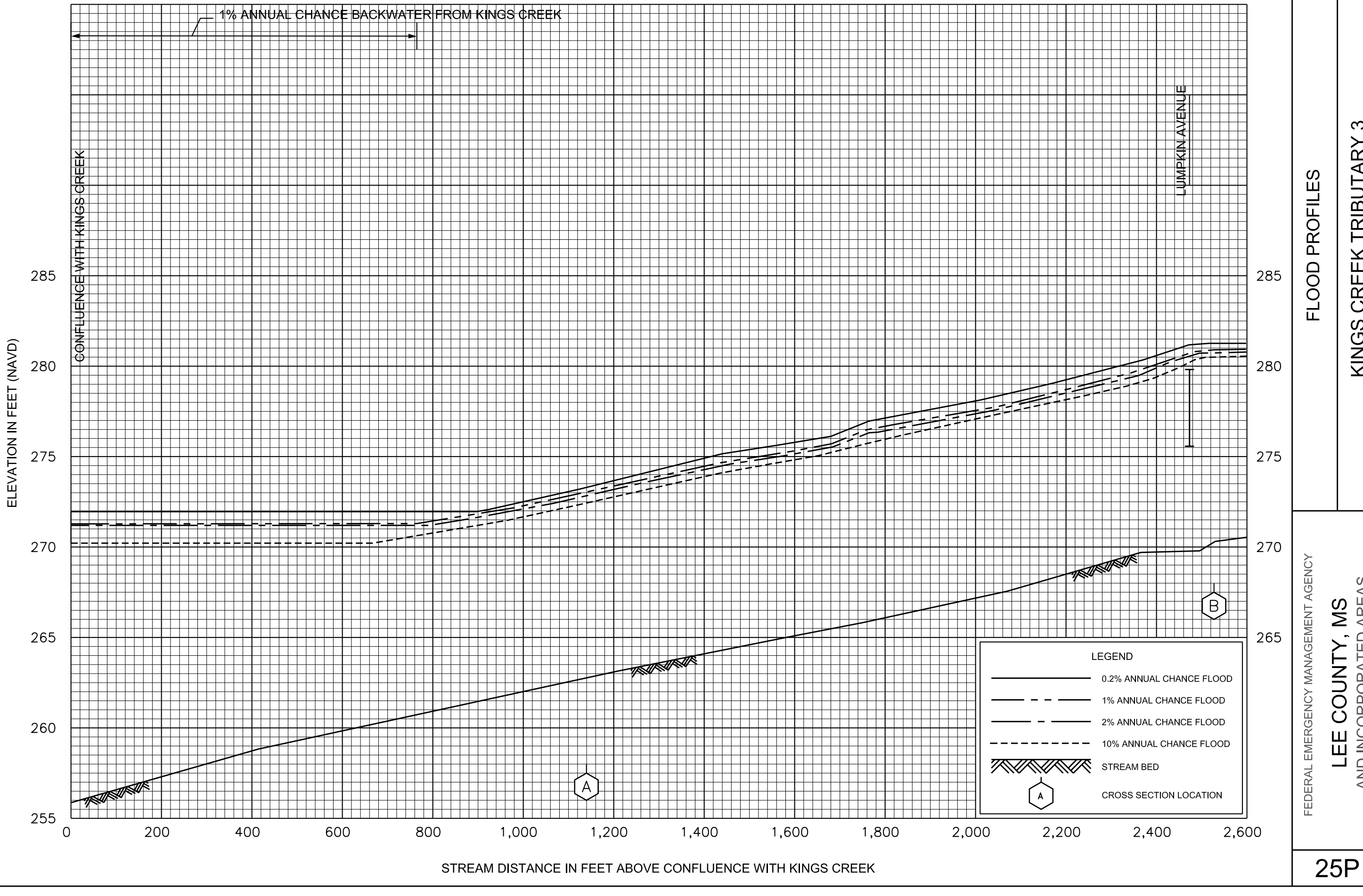
FLOOD PROFILES

KINGS CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

26P



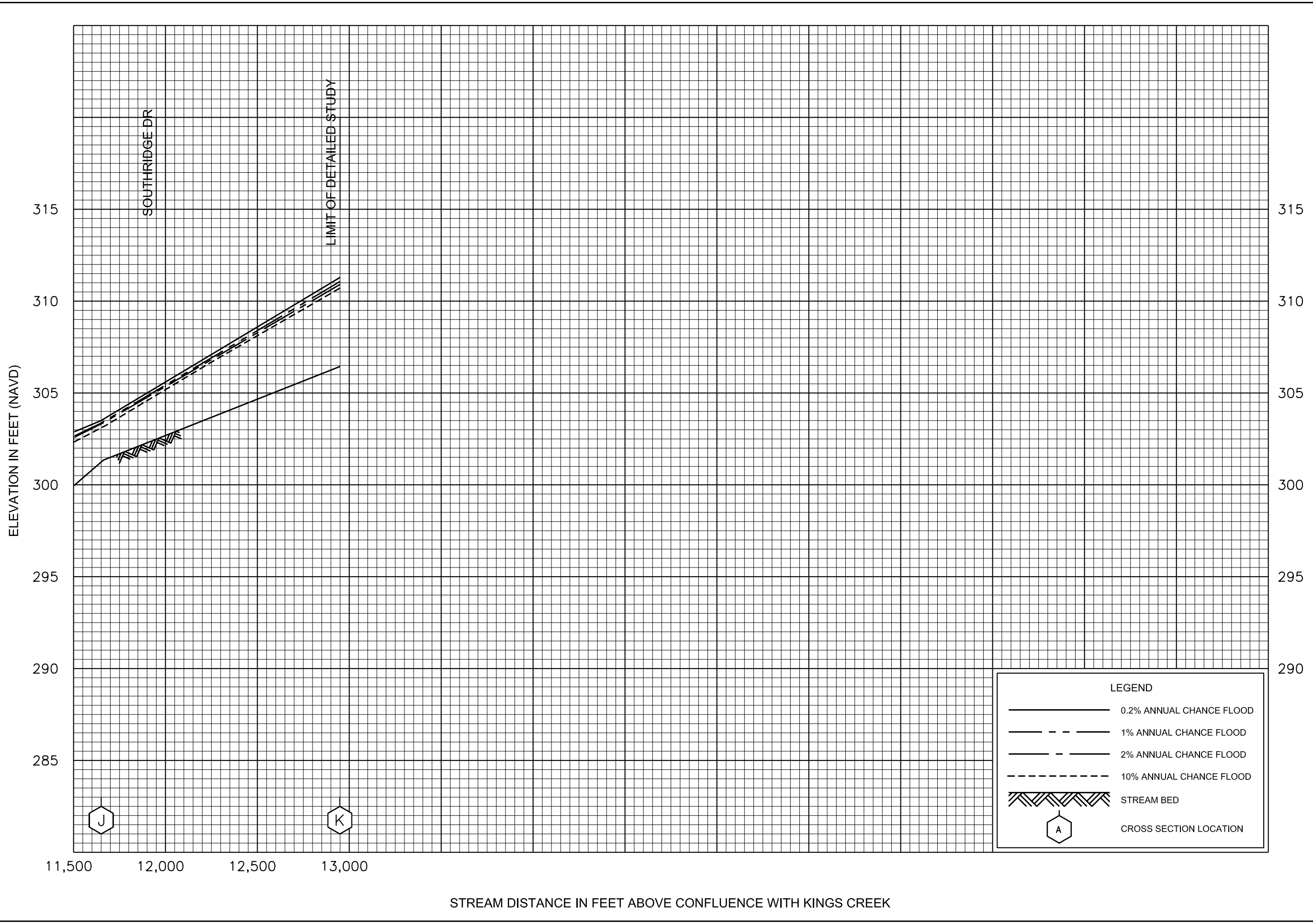
FLOOD PROFILES

KINGS CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

25P

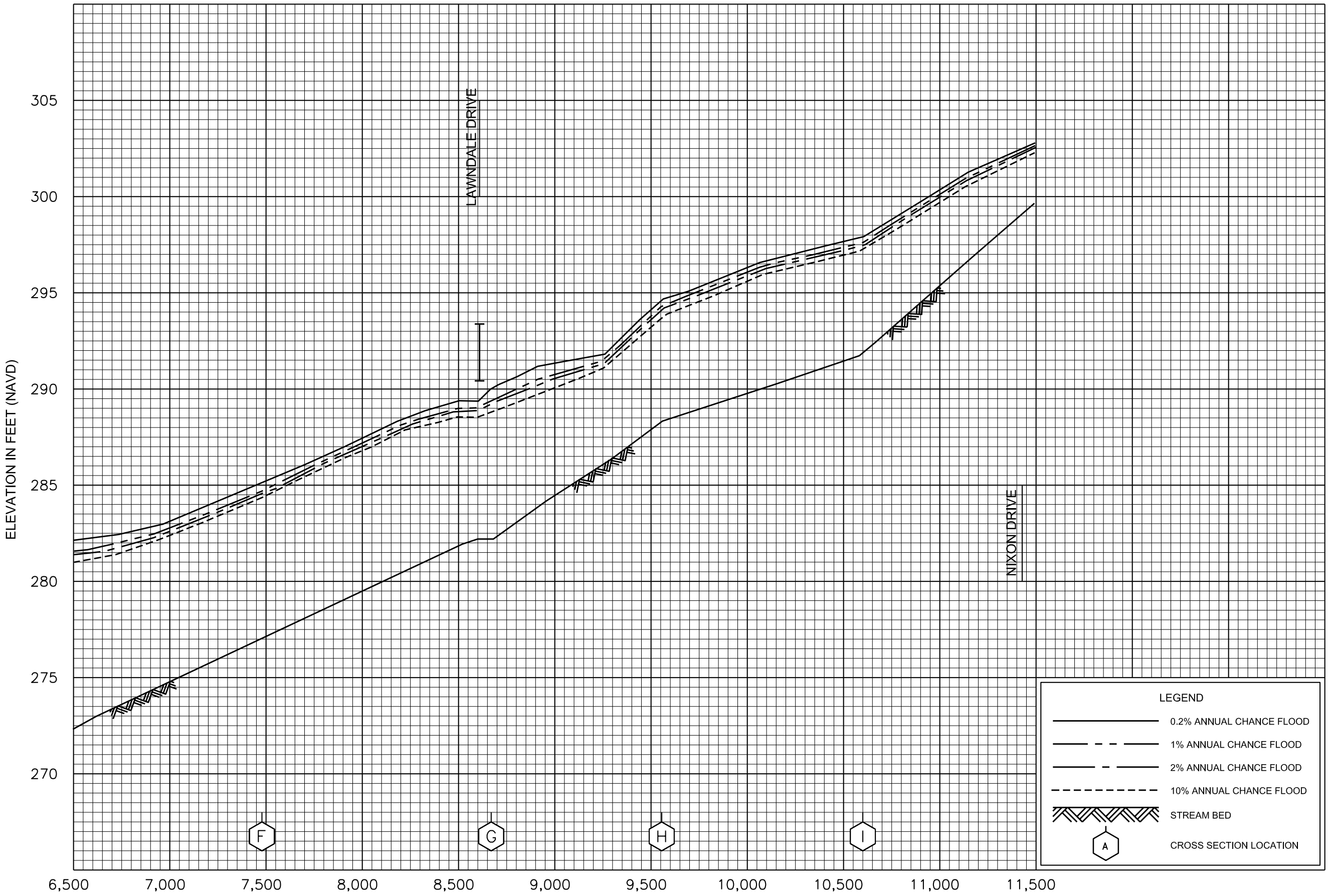


FLOOD PROFILES

KINGS CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



FLOOD PROFILES

KINGS CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

23P

ELEVATION IN FEET (NAVD)

285
280
275
270
265
260
255
250
245

0
500
1,000
1,500
2,000
2,500
3,000
3,500
4,000
4,500
5,000
5,500
6,000
6,500

1% ANNUAL CHANCE BACKWATER FROM KINGS CREEK

CONFLUENCE WITH KINGS CREEK

INDUSTRIAL ROAD

CULVERT

IDA STREET

MILFORD STREET

CULVERT

LAWNDALE DRIVE

CULVERT

DRIVEWAY

A
B
C
D
E

LEGEND

- 0.2% ANNUAL CHANCE FLOOD
- 1% ANNUAL CHANCE FLOOD
- 2% ANNUAL CHANCE FLOOD
- 10% ANNUAL CHANCE FLOOD
- STREAM BED
- A CROSS SECTION LOCATION

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH KINGS CREEK

22P

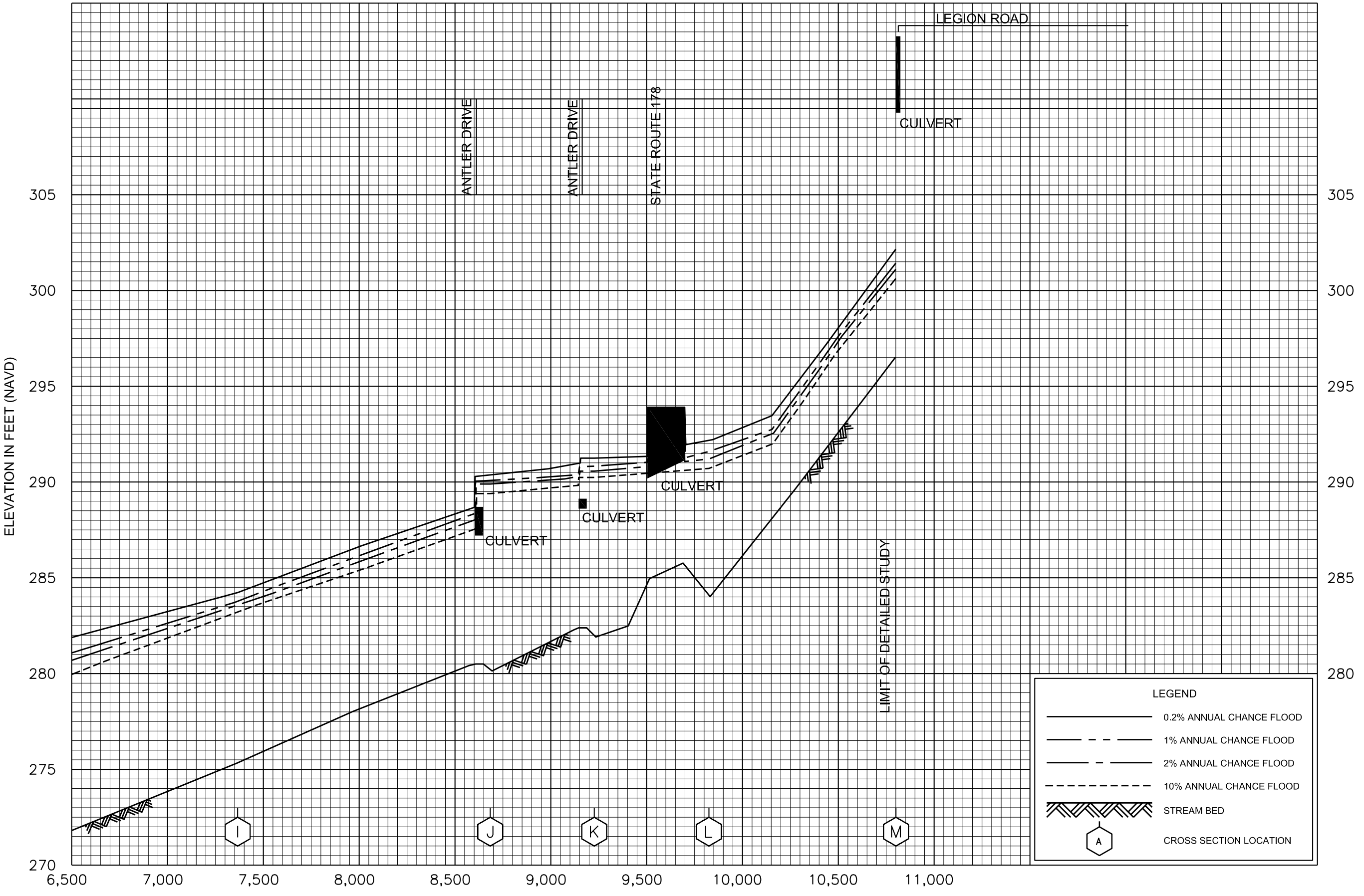
FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

KINGS CREEK TRIBUTARY 2

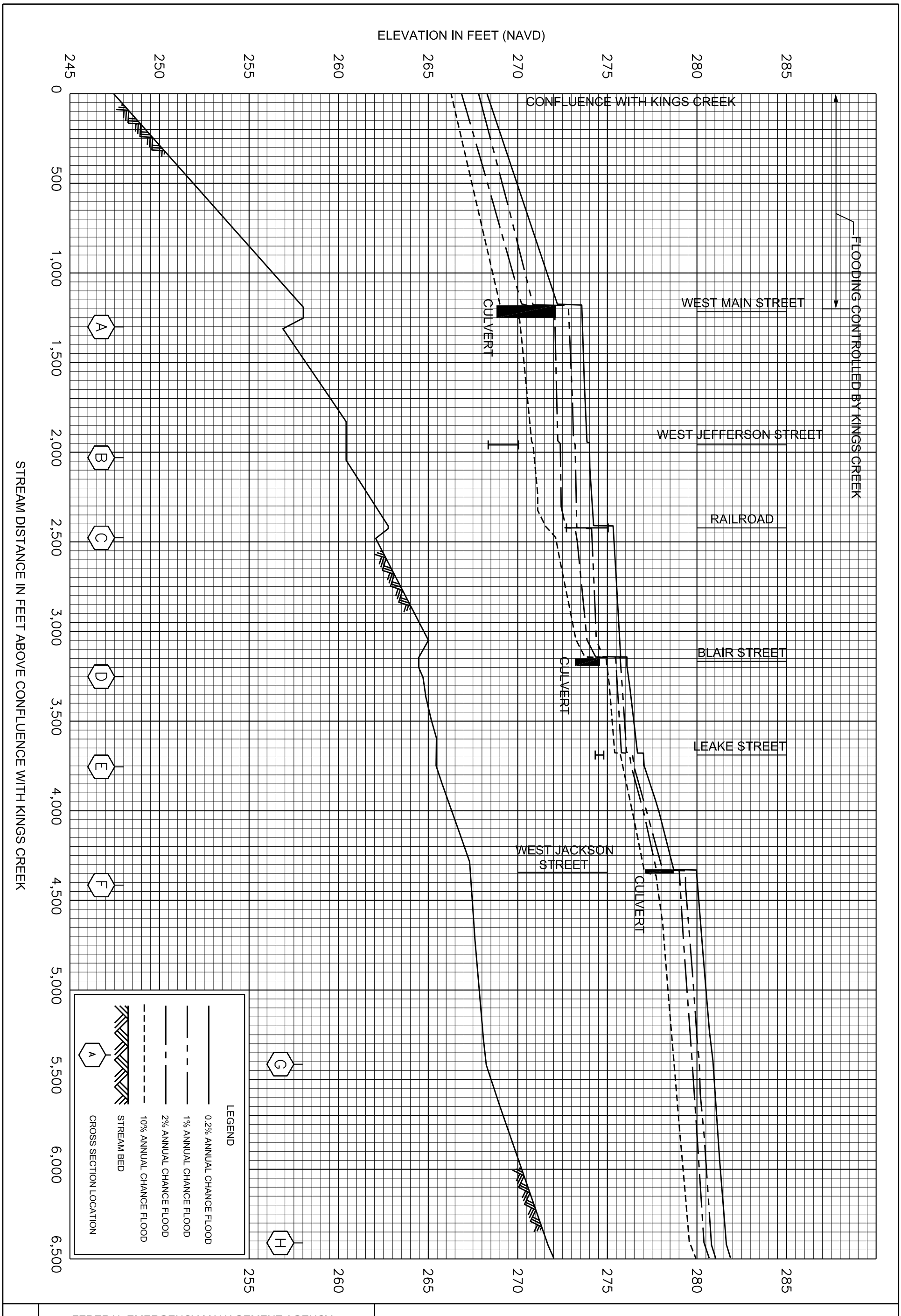


FLOOD PROFILES

KINGS CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



20P

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

KINGS CREEK TRIBUTARY 1

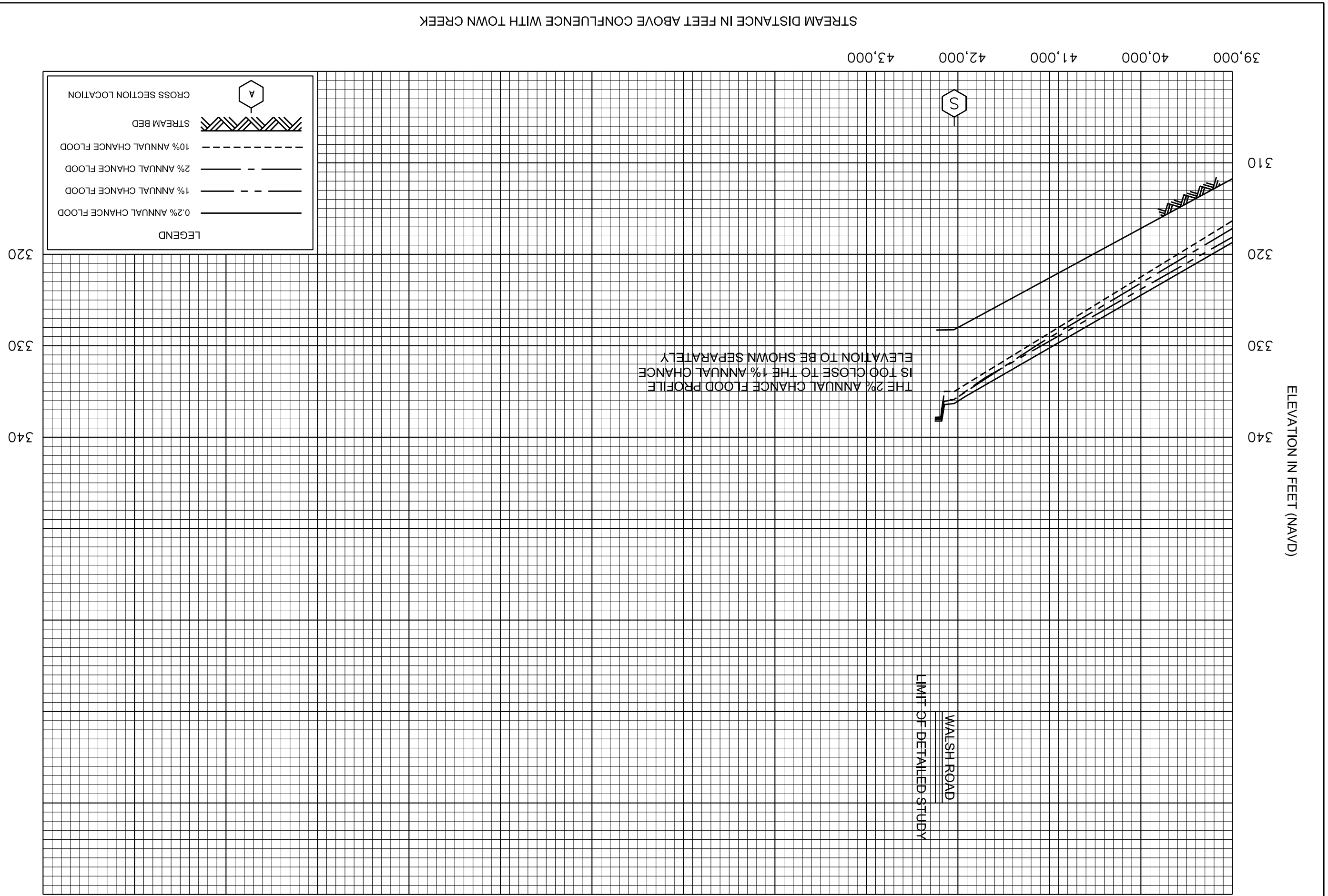
FEDERAL EMERGENCY MANAGEMENT AGENCY

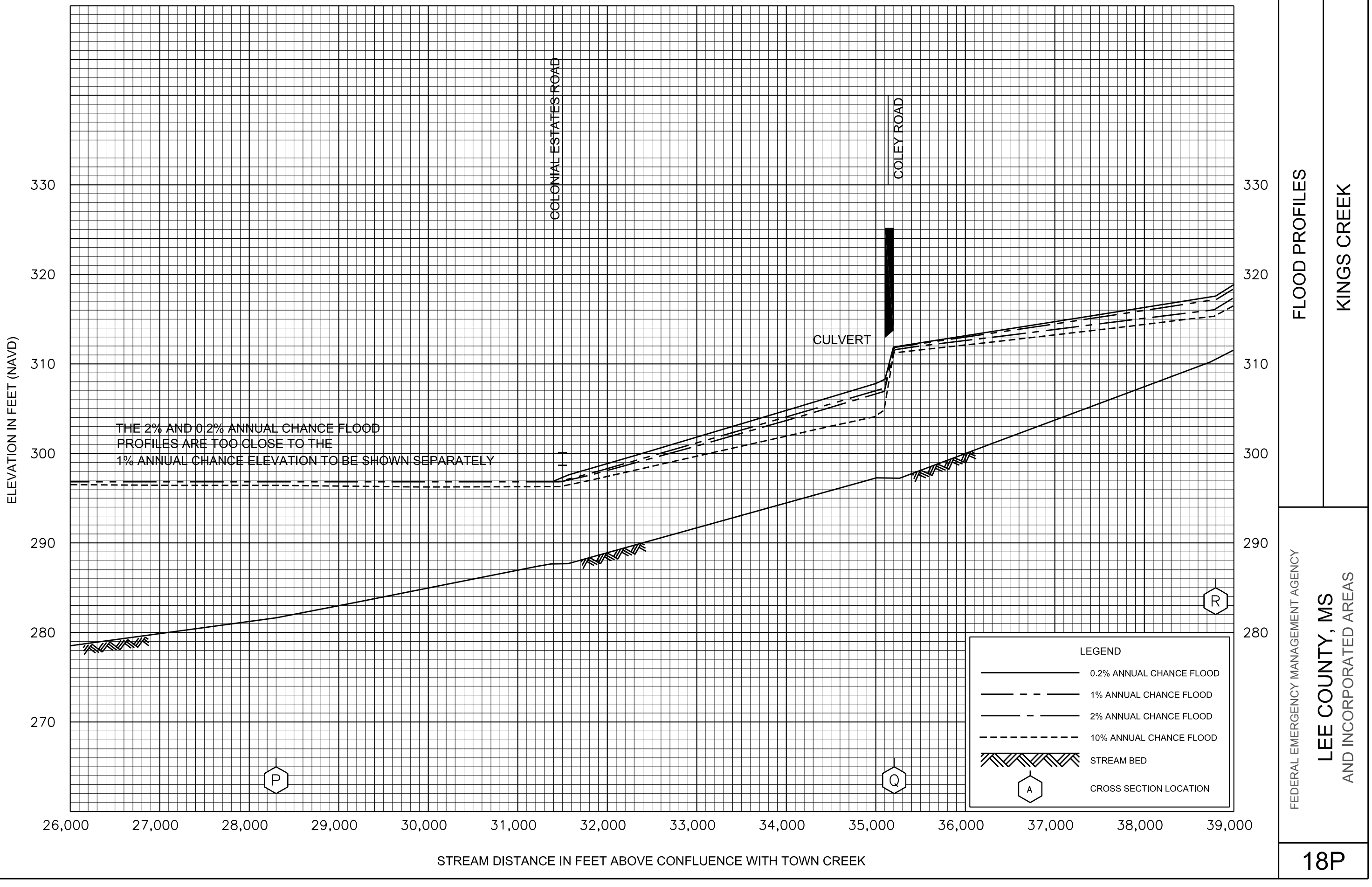
LEE COUNTY, MS

AND INCORPORATED AREAS

FLOOD PROFILES

KINGS CREEK





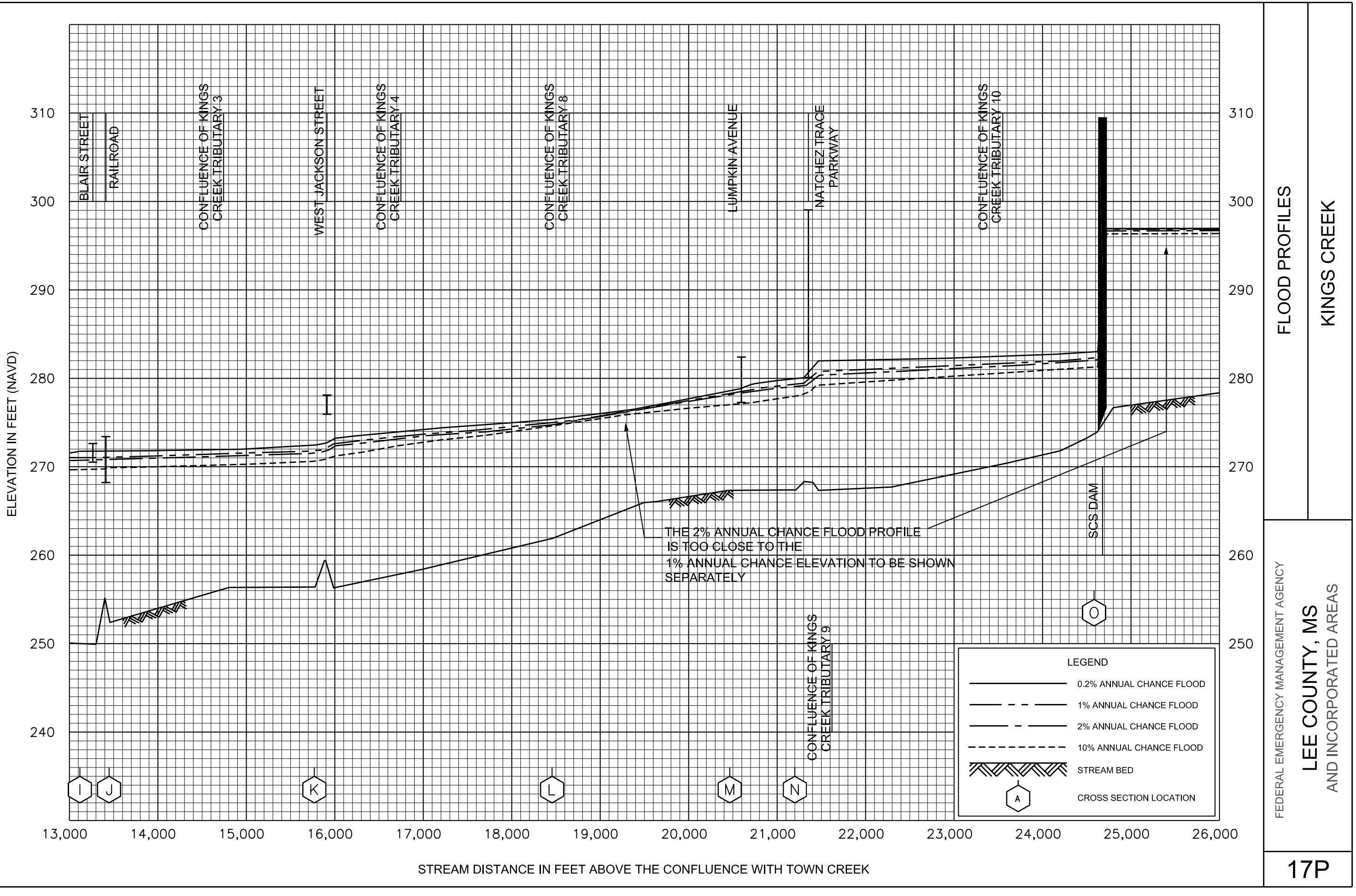
FLOOD PROFILES

KINGS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

18P



FLOOD PROFILES

KINGS CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

17P

ELEVATION IN FEET (NAVD)

220 230 240 250 260 270 280

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH TOWN CREEK

0 1,000 2,000 3,000 4,000 5,000 6,000 7,000 8,000 9,000 10,000 11,000 12,000 13,000

CONFLUENCE WITH TOWN CREEK

FLOODING CONTROLLED BY TOWN CREEK

EASON BLVD

U.S. ROUTE 45 RAMP

U.S. ROUTE 45 RAMP

U.S. ROUTE 45
MARTIN LUTHER KING DRIVE

RAILROAD

S SPRING STREET

S GREEN STREET

SOUTH GLOSTER STREET

CONFLUENCE OF KINGS CREEK TRIBUTARY 1

RANKIN BOULEVARD EXTENSION

CONFLUENCE OF KINGS CREEK TRIBUTARY 2

STATE ROUTE 6
MAIN STREET

A B C D E F G H

LEGEND

0.2% ANNUAL CHANCE FLOOD

1% ANNUAL CHANCE FLOOD

2% ANNUAL CHANCE FLOOD

10% ANNUAL CHANCE FLOOD

STREAM BED

A CROSS SECTION LOCATION

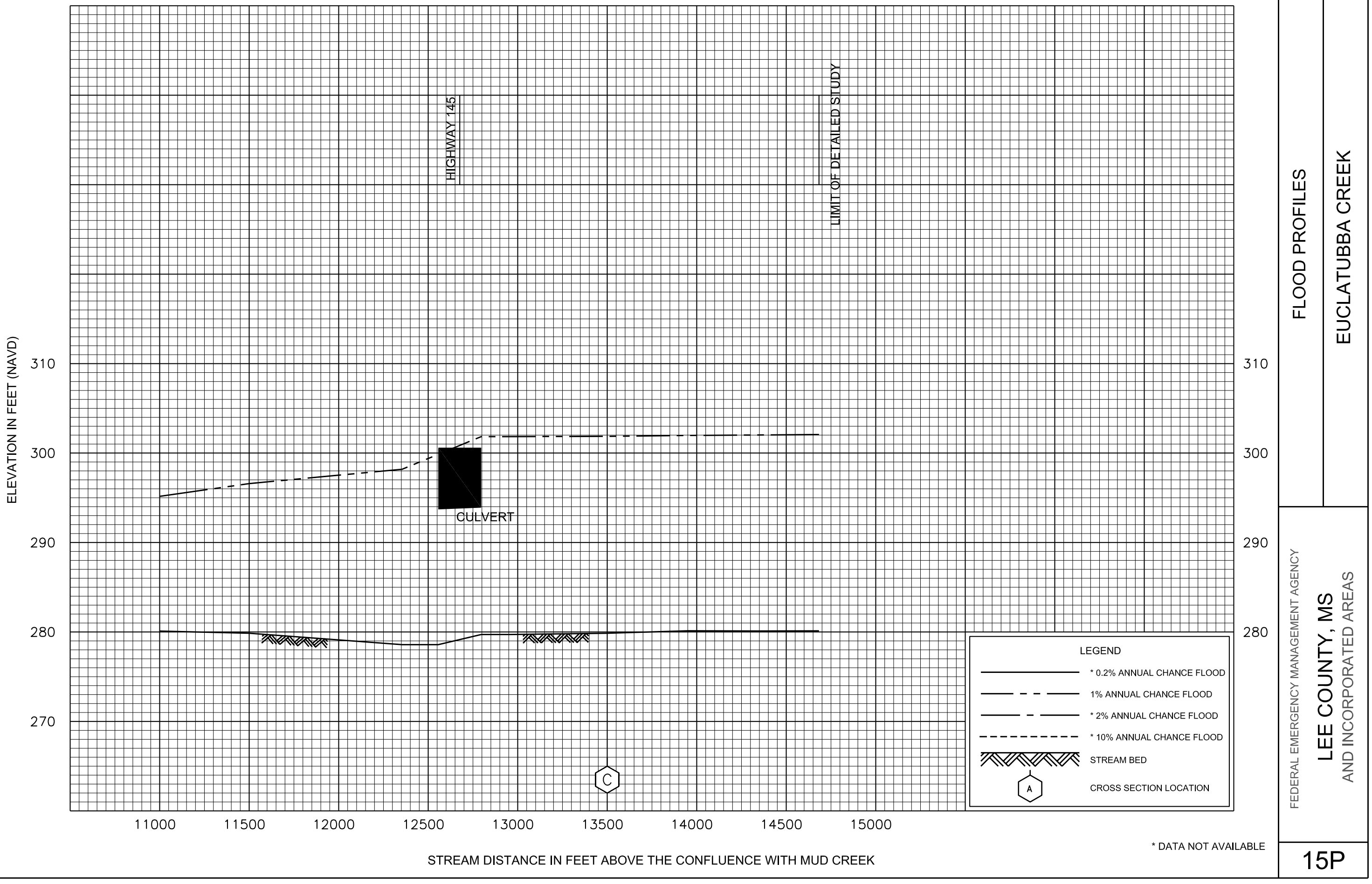
16P

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

FLOOD PROFILES

KINGS CREEK



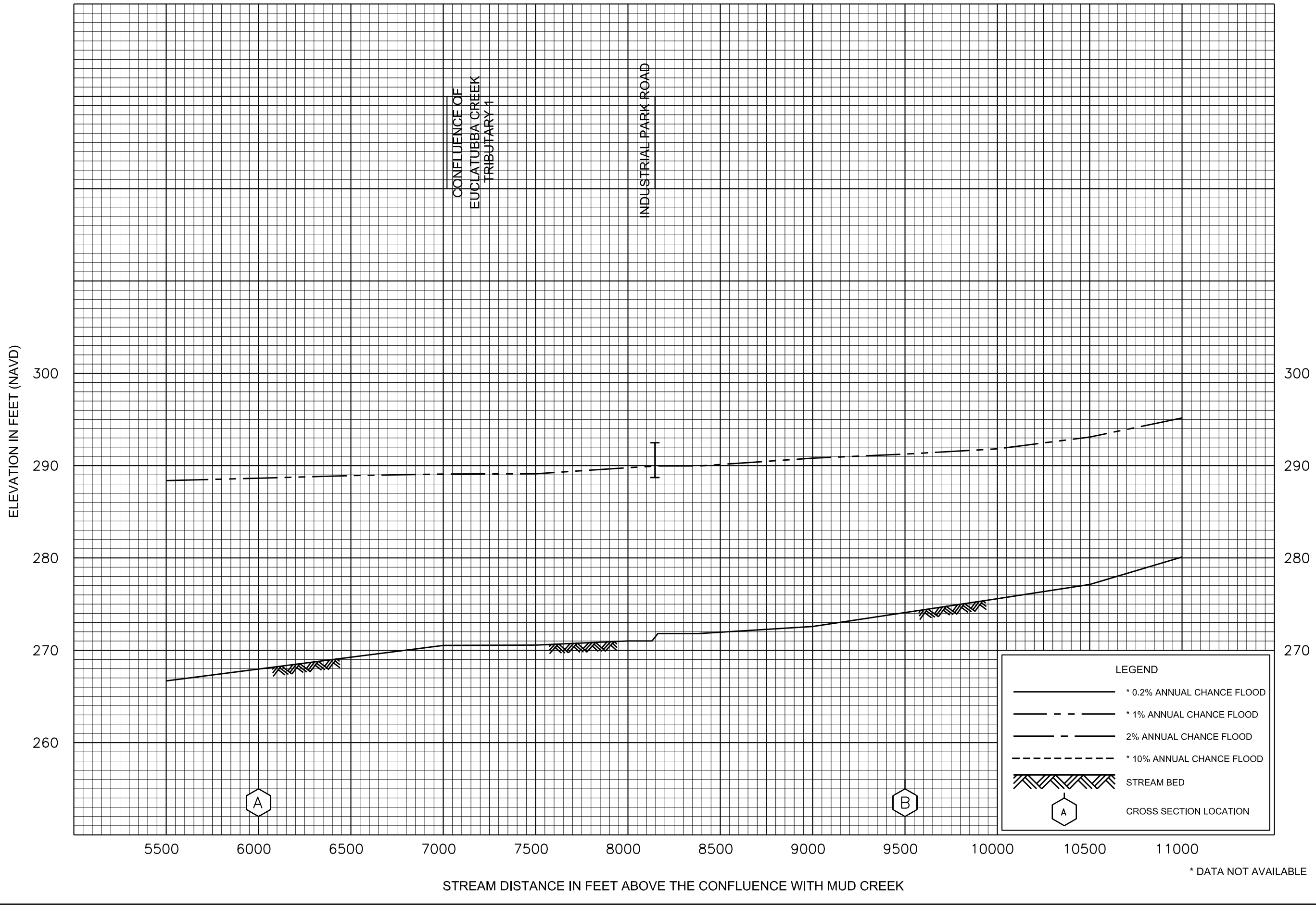
FLOOD PROFILES

EUCLATUBBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

15P

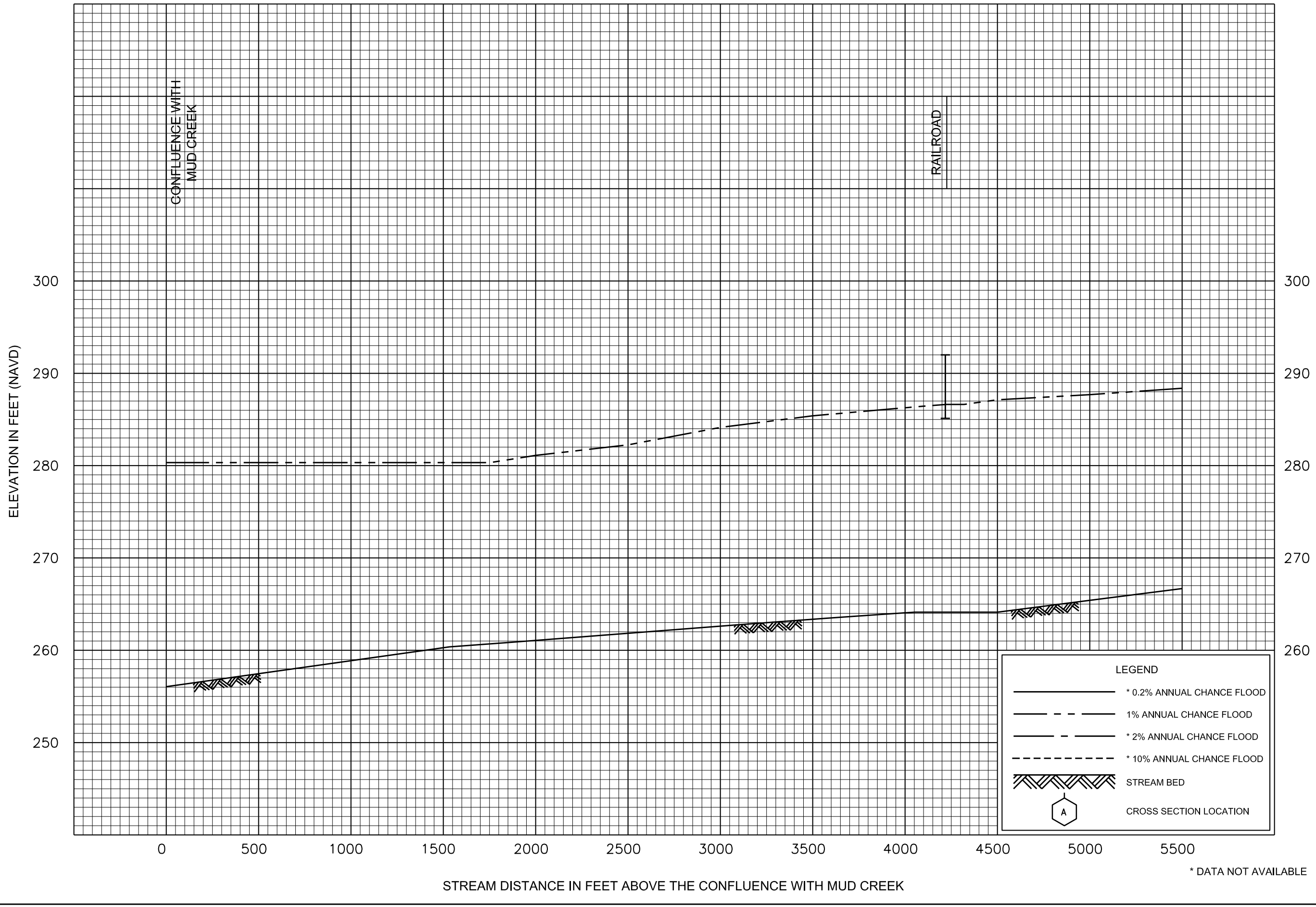


FLOOD PROFILES

EUCLATUBBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



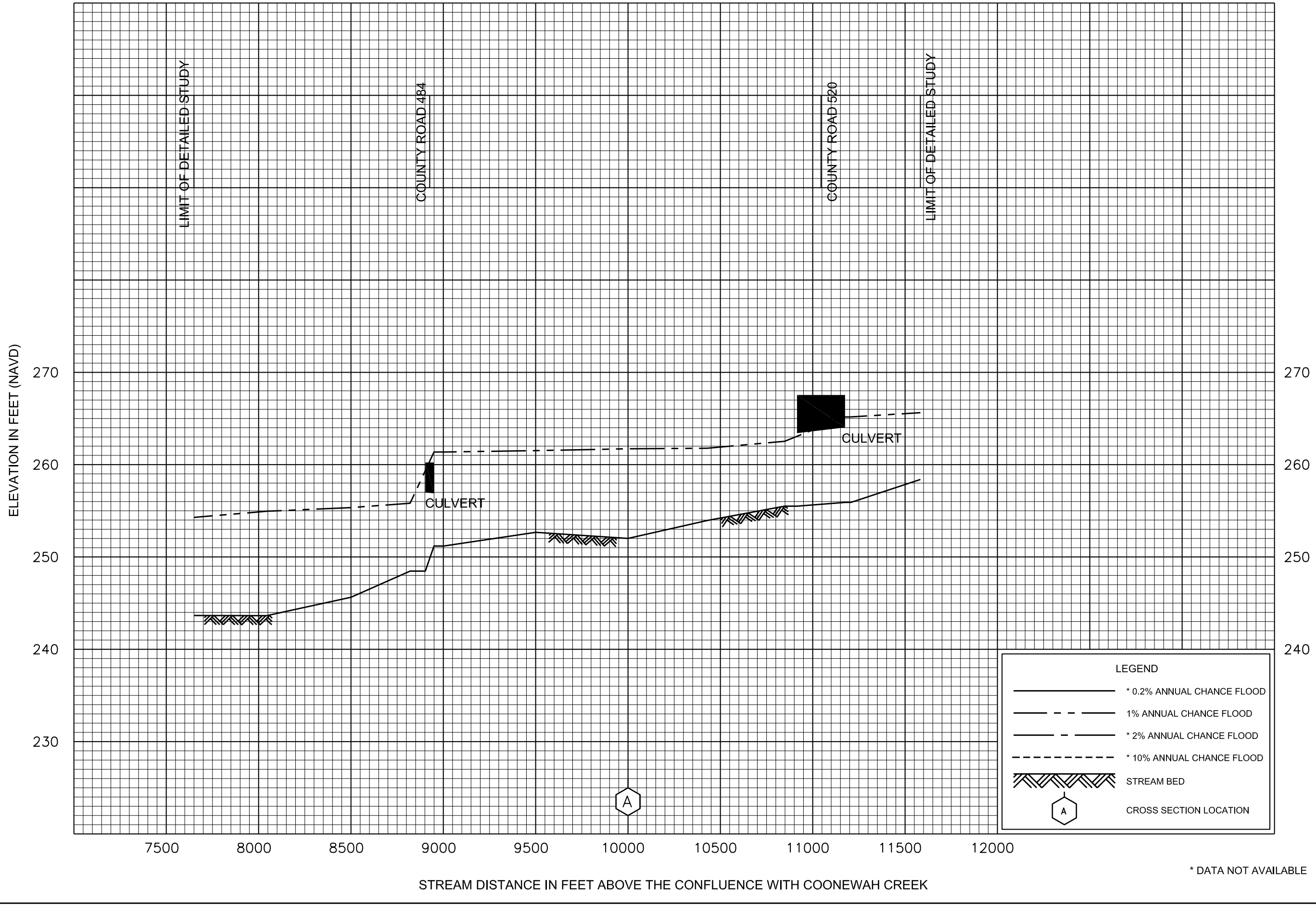
FLOOD PROFILES

EUCLATUBBA CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

13P



* DATA NOT AVAILABLE

FLOOD PROFILES

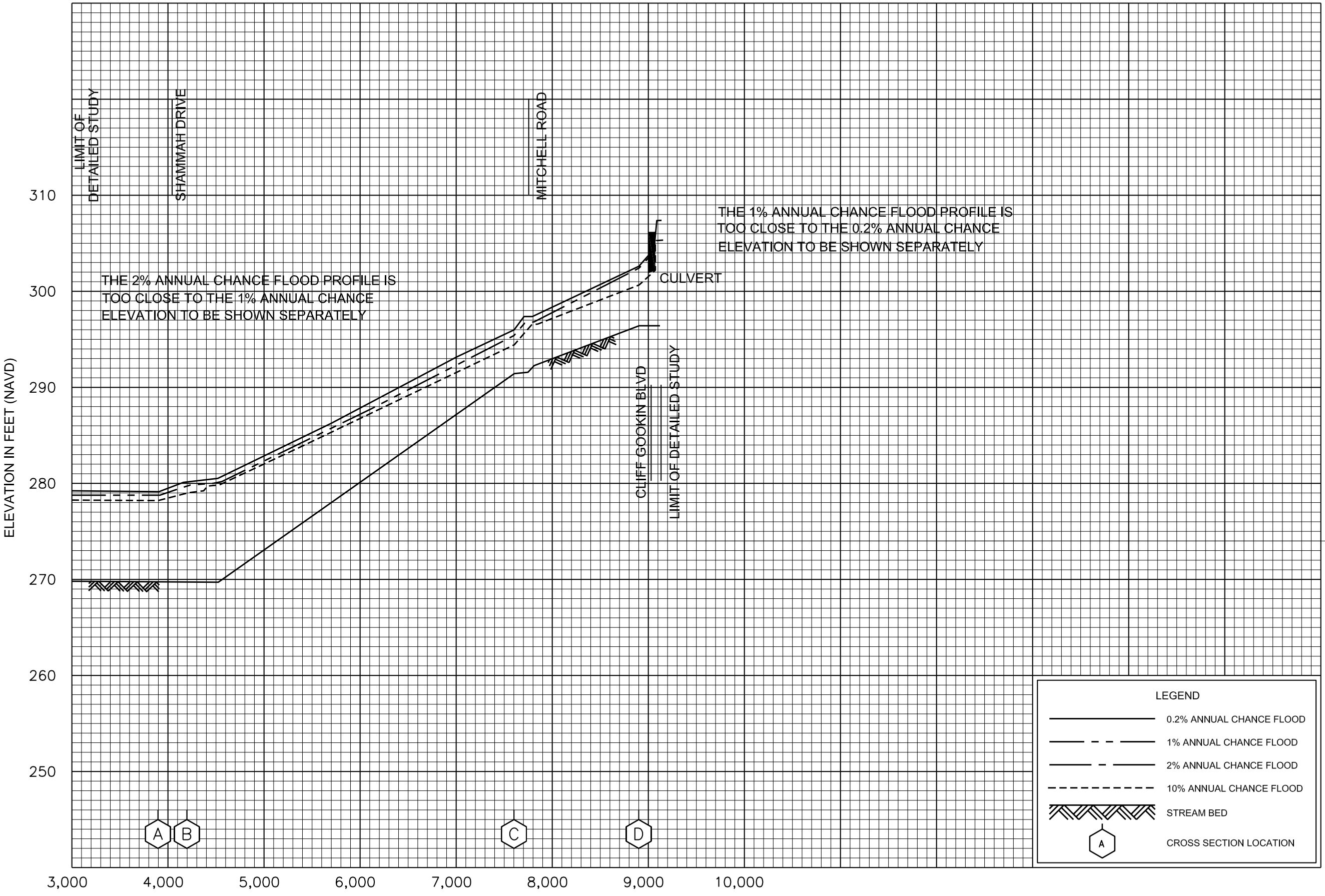
COONEWAH CREEK TRIBUTARY 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS

AND INCORPORATED AREAS

12P

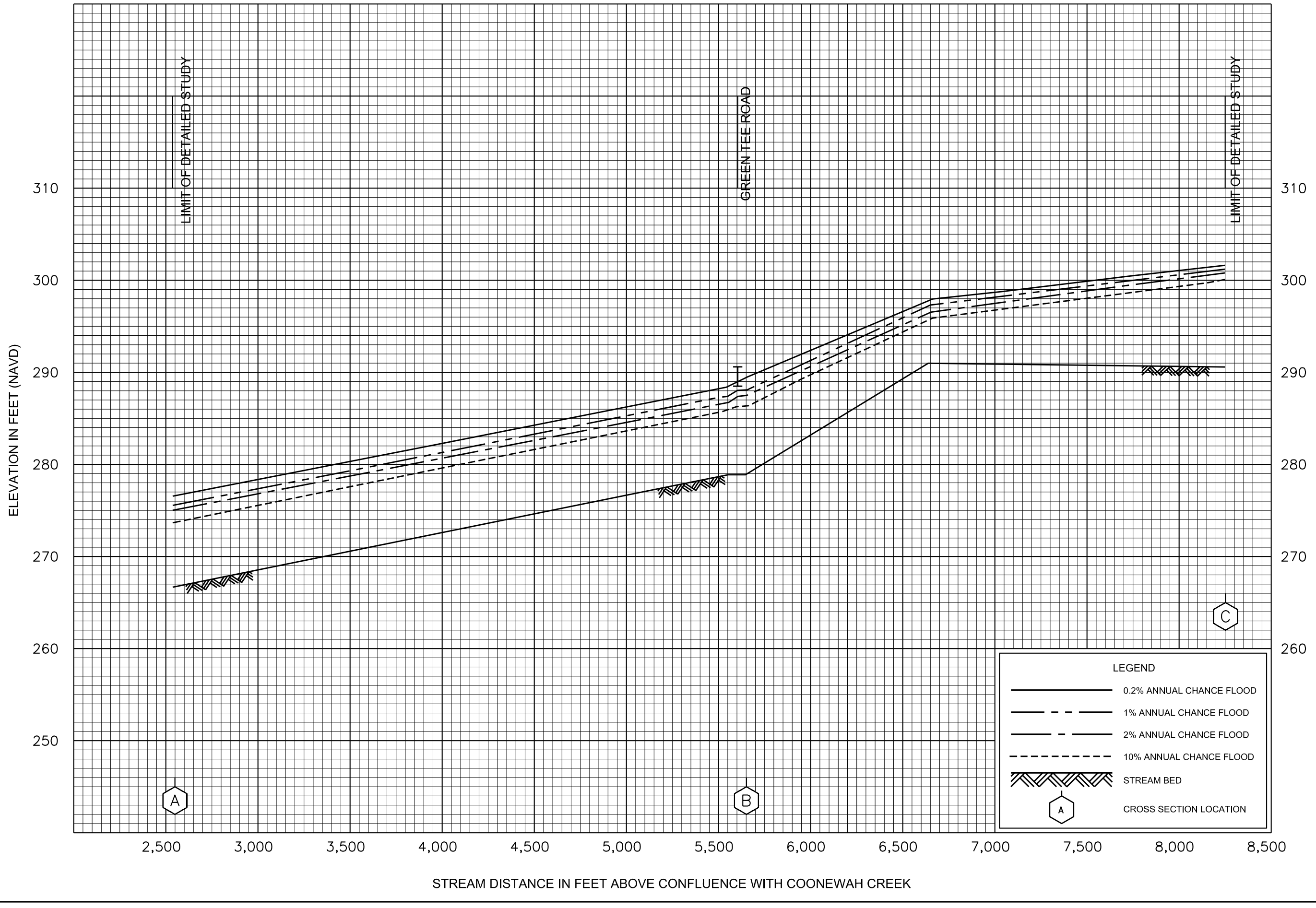


FLOOD PROFILES

COONEWAH CREEK TRIBUTARY 2

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS



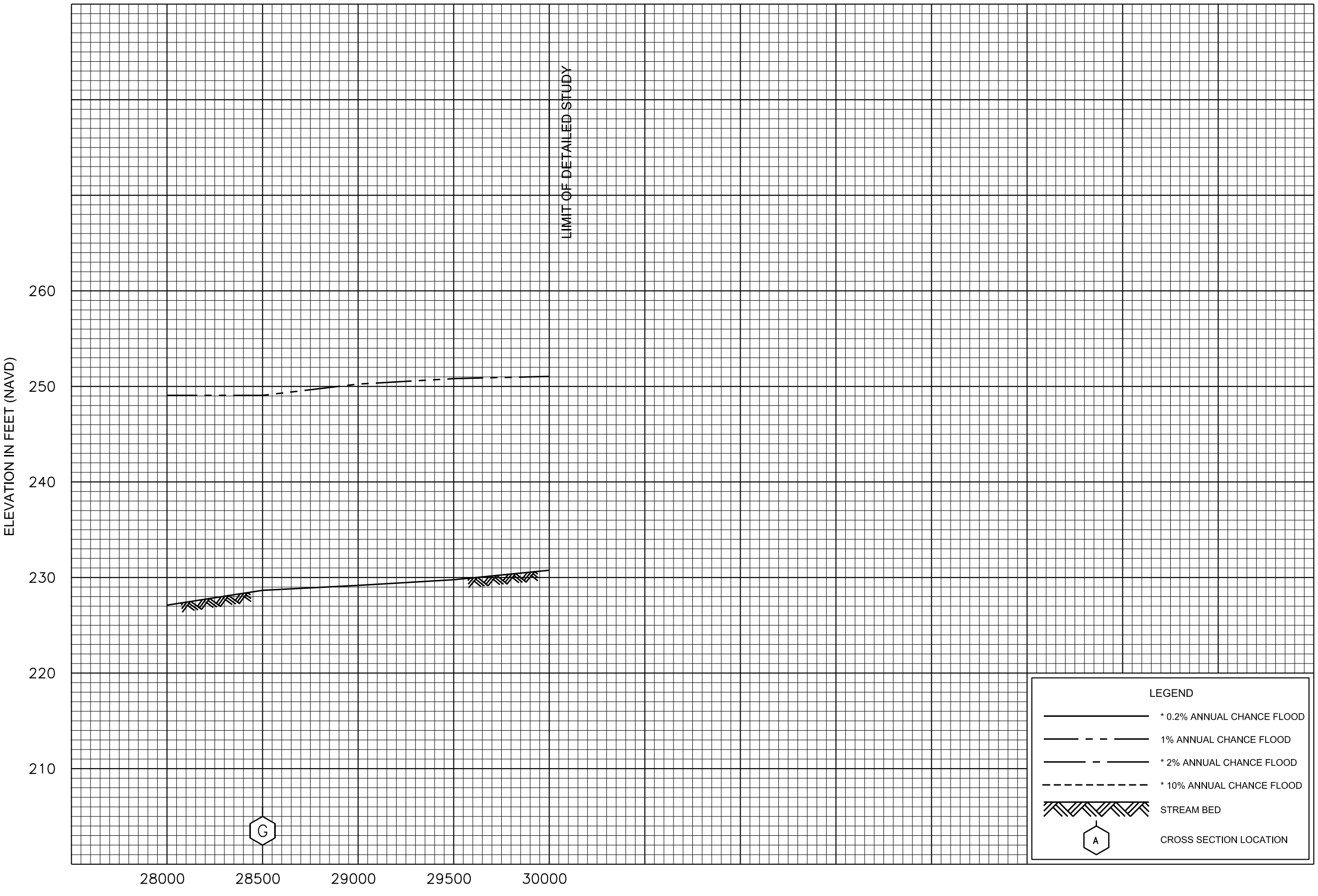
FLOOD PROFILES

COONEWAH CREEK TRIBUTARY 1

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

10P



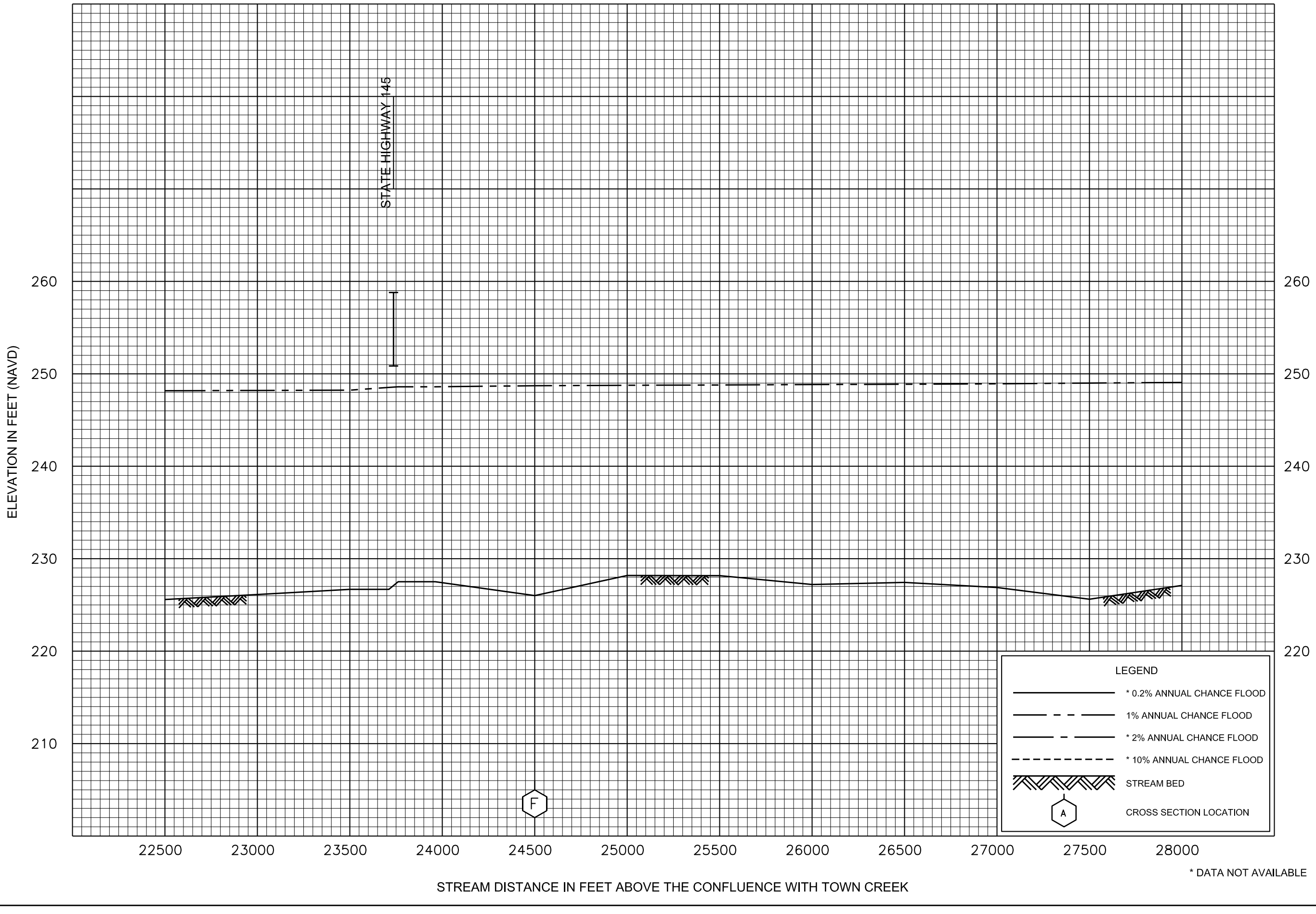
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

09P



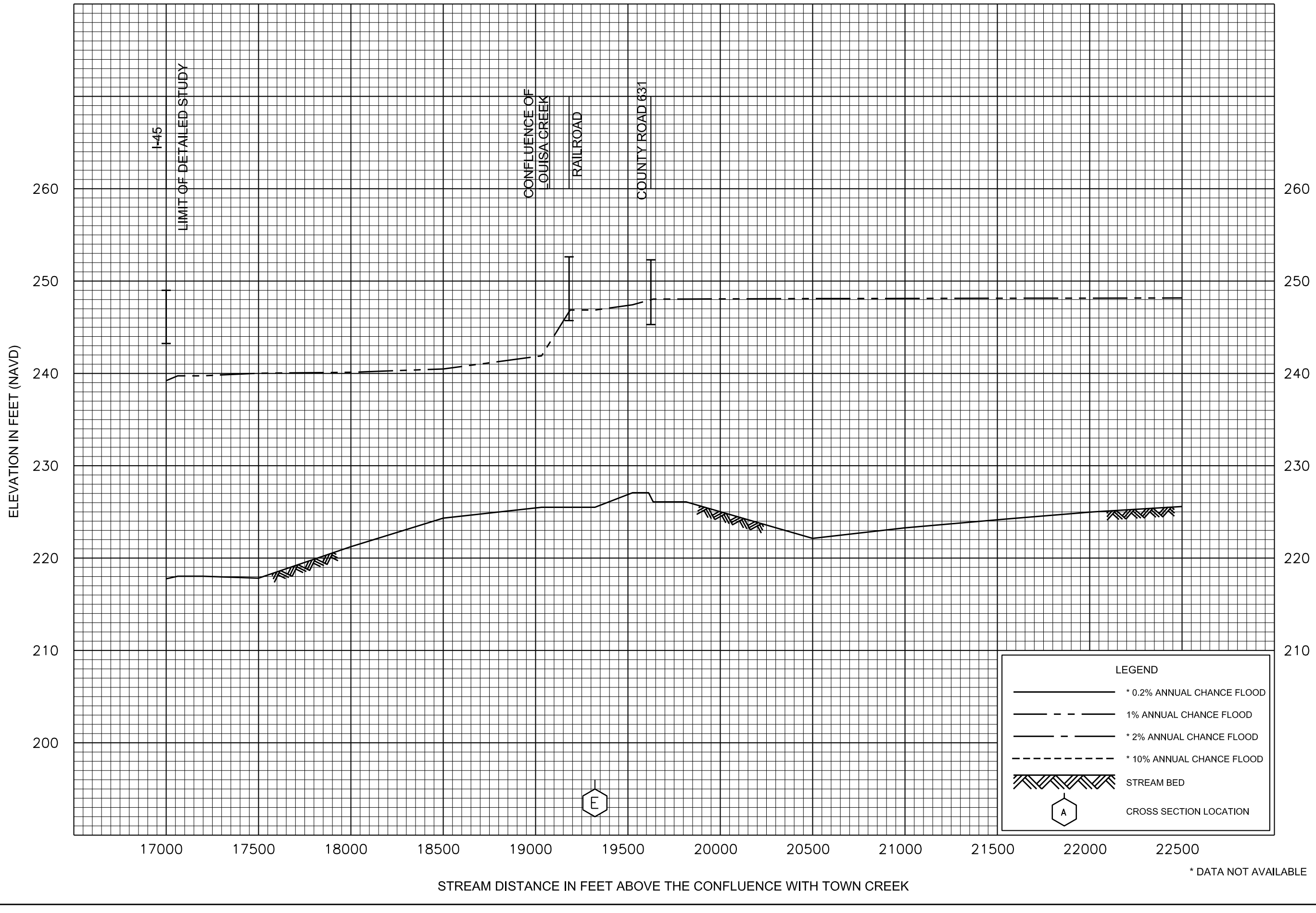
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

08P



ELEVATION IN FEET (NAVD)

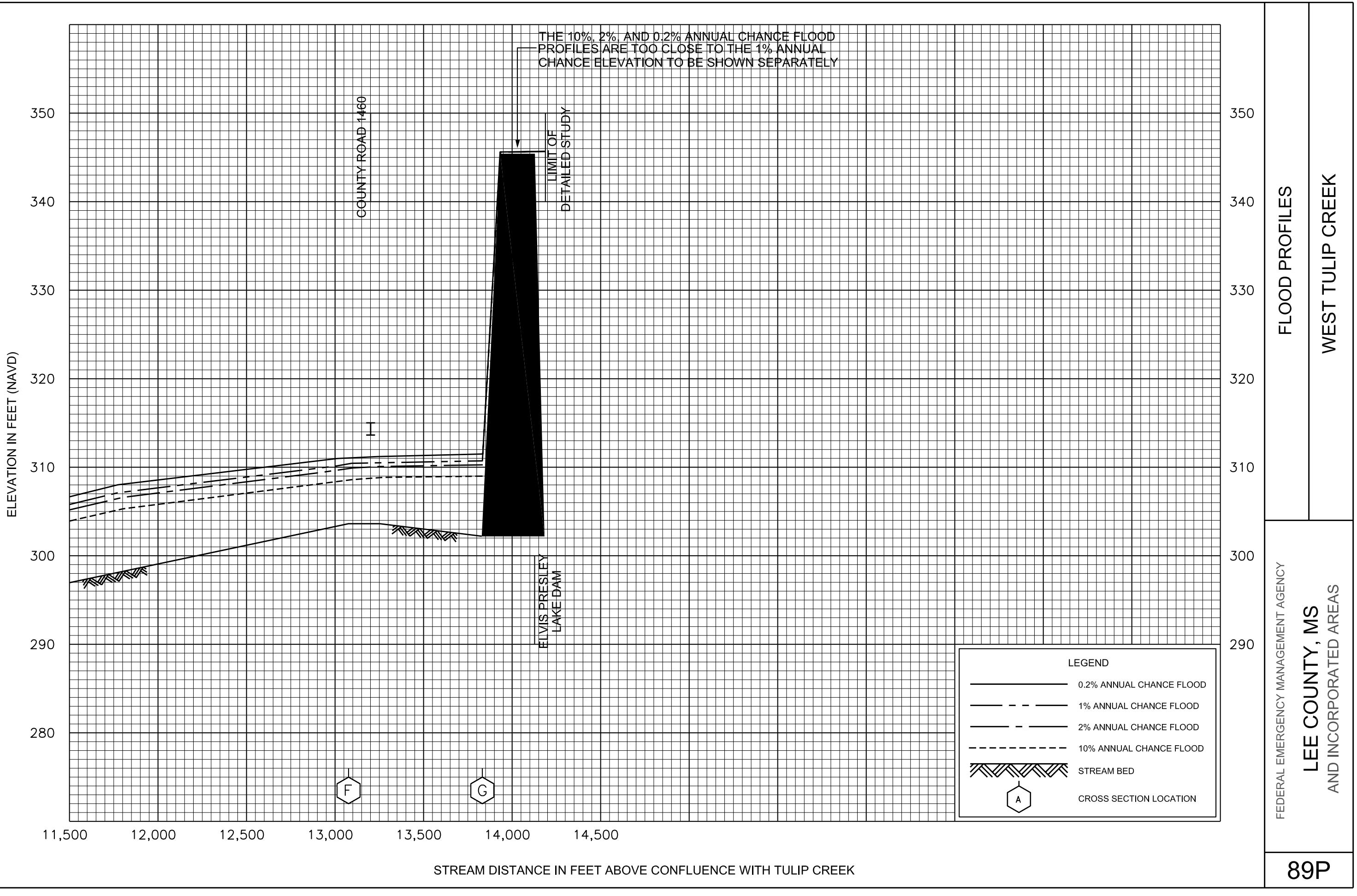
FLOOD PROFILES

COONEWAH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

07P



FLOOD PROFILES

WEST TULIP CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LEE COUNTY, MS
AND INCORPORATED AREAS

89P