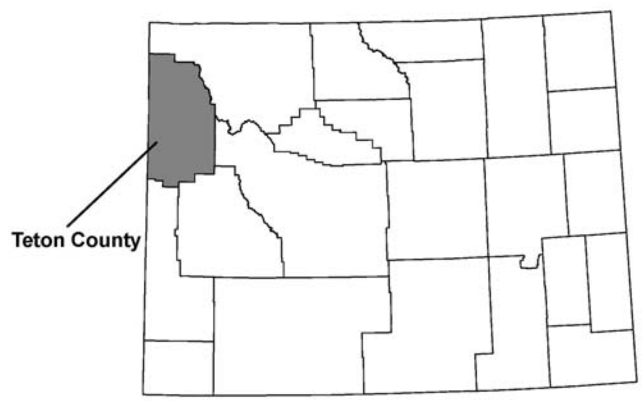
FLOOD INSURANCE STUDY

TETON COUNTY, WYOMING

AND INCORPORATED AREAS



Community Name	Community Number
JACKSON, TOWN OF	560052
TETON COUNTY (UNINCORPORATED AREAS)	560094

REVISED: SEPTEMBER 16, 2015

Federal Emergency Management Agency

FLOOD INSURANCE STUDY NUMBER
56039CV000C

NOTICE TO
FLOOD INSURANCE STUDY USERS

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

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

Old Zone	New Zone
A1 through A30	AE
B	X
C	X

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

ATTENTION: On FIRM panels 56039C2685E, 56039C2695E, 56039C2705E, and 56039C2715E, the Gros Ventre River Levees have not been demonstrated by the community or levee owner to meet the requirements of Section 65.10 of the NFIP regulations in 44 CFR as it relates to the levees' ability to provide 1%-annual-chance-flood protection. The subject areas are identified on FIRM panels (with notes and bounding lines) and in the FIS report as potential areas of flood hazard data changes based on further review.

FEMA has updated levee analysis and mapping protocols. Until such time as FEMA is able to initiate a new flood risk project to apply the new protocols, the flood hazard information on the aforementioned FIRM panels that are affected by the Gros Ventre River Levees is being added as a snapshot of the prior effective information presented on the FIRMs and FIS reports dated August 5, 2010. As indicated above, it is expected that affected flood hazard data within the subject area could be significantly revised. This may result in floodplain boundary changes, 1% annual chance flood elevation changes, and/or changes to flood hazard zone designations.

The effective FIRM panels (and the FIS) will again be revised to update the flood hazard information associated with the Gros Ventre River Levees when FEMA is able to initiate and complete a new flood risk project to apply the new protocols.

Initial Countywide FIS Effective Date: May 4, 1989
Revised Countywide FIS Effective Dates: September 29, 2006
August 5, 2010
September 16, 2015

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FLOOD INSURANCE STUDY
TETON COUNTY, WYOMING AND INCORPORATED AREAS

1.0 INTRODUCTION

1.1 Purpose of Study

This Flood Insurance Study (FIS) investigates the existence and severity of flood hazards in the geographic area of Teton County, Wyoming, including the Town of Jackson and the unincorporated areas of Teton County (hereinafter referred to collectively as Teton County), and aids in the administration of the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. This study has developed flood risk data for various areas of the community that will be used to establish actuarial flood insurance rates and assist the community in its efforts to promote sound floodplain management. Minimum floodplain management requirements for participation in the National Flood Insurance Program (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.

Please also note that FEMA has identified levees in this jurisdiction that have not been demonstrated by the community or levee owner to meet the requirements of Part 65.10 of the NFIP regulations as it relates to the levees' ability to withstand a 1% annual chance flood event. As such, there are temporary actions being taken until such time as FEMA is able to initiate a new flood risk project to apply new protocols. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information.

1.2 Authority and Acknowledgments

<u>Initial Countywide Study</u>
The sources of authority for this FIS are the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973.

The hydrologic and hydraulic analyses for this study were performed by Simons, Li & Associates, Inc., for the Federal Emergency Management Agency (FEMA), under Contract No. EMW-R-1168. This study was completed in June 1985.

<u>September 29, 2006 Revision</u>
This study was revised on September 29, 2006, to incorporate new detailed flood hazard information for Flat Creek and Spring Creek within Teton County. Cache Creek was re-delineated during this revision.

The hydrologic and hydraulic analyses for this restudy were performed by the Meridian Group, Inc., for Teton County. This work was completed in October 2002.

August 5, 2010 Revision
This study was revised on August 5, 2010, to incorporate new detailed flood hazard information for Flat Creek within Teton County. Snake River was re-delineated in the vicinity of the confluence with Flat Creek during this revision based on updated topography.

The hydraulic analysis for Flat Creek, downstream of High School Road, in Teton County was performed by ICON/G&O Joint Venture, for the FEMA, under contract EMS2001CO0070-TO03. This study was completed in September 2006.

September 16, 2015 Revision
Updated detailed hydraulic analyses for the Fish Creek, Lake Creek, and a portion of the Snake River affecting the unincorporated areas of Teton County were completed by BakerAECOM under FEMA contract number HSFEHQ-09-D-0368. The hydraulic analyses were completed in March 2014.

Base map information shown on this FIRM was provided in digital format by the USDA National Agriculture Imagery Program (NAIP). This information was photogrammetrically compiled at a scale of 1:24,000 from aerial photography dated 2012.

The projection used in the preparation of this map was UTM Zone12. The horizontal datum was NAD83, GRS80 spheroid. Differences in datum, spheroid, projection or UTM zone used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of information shown on the FIRM.

1.3 Coordination

Initial Countywide Study
Streams requiring detailed study were identified at a meeting held at the Jackson Town Hall on April 22, 1983, and attended by representatives of the Study Contractor (SC), FEMA, the Town of Jackson, Teton County, Wyoming Disaster and Civil Defense, and Grand Teton National Park.

August 5, 2010 Revision
The results of the August 5, 2010, revision were reviewed at the final Consultation Coordination Officer (CCO) meeting held on March 12, 2008, at the Administration Building in Jackson, Wyoming. The meeting was attended by representatives of FEMA, the State of Wyoming, local public entities, and the study contractor. All problems raised at that meeting were addressed in that study.

Mapping needs for the Teton Countywide Digital Flood Insurance Rate Map (DFIRM) update were identified in a meeting attended by representatives of Teton County, the Wyoming Office of Homeland Security, and the study contractor Baker on March 10, 2009. Baker then reviewed potential mapping options, the available data, funding available, and the volume and schedule of works to develop recommendations for the final study types for the Teton County DFIRM update.

September 16, 2015 Revision
The results of this countywide study were reviewed at the final Consultation Coordination Officer (CCO) meeting held on June 10, 2015 and attended by representatives from the

Town of Jackson, Teton County, FEMA, and the study contractor BakerAECOM. All problems raised at that meeting have been addressed in this study.

2.0 AREA STUDIED

2.1 Scope of Study

This FIS covers the geographic area of Teton County, Wyoming. The area of study is shown on the Vicinity Map (Figure 1).

Initial Countywide Study
The streams studied by detailed methods are the Snake and Gros Ventre Rivers; Flat, Fish, Teton, Lake, Cache, and Spring Creeks; and Buffalo Fork.

The areas studied by detailed methods were selected with priority given to all known flood hazard areas and areas of projected development or proposed construction through 1990.

September 16, 2015 Revision
For the updated countywide study, Fish Creek, Lake Creek, and the Snake River from Highway 89 upstream to the Federal Levee reach were studied in detail (Reference 26). The study reaches represent approximately 30 miles of new study information. Portions of Horse Creek and the Snake River below the Highway 89 were re-delineated using topographic data submitted to BakerAECOM by Teton County. Horse Creek and this portion of the Snake River are Zone A Special Flood Hazard Areas (SFHAs). All other studied flooding sources were converted from the original effective mapping to the countywide DFIRM format.

This countywide FIS also incorporates the determinations of letters issued by FEMA resulting in map changes called Letters of Map Revision (LOMR) as shown in Table 1, “Letters of Map Change.”

Table 1. Letters of Map Change

Community	Case Number	Flooding Sources/Project Identifier	Effective Date
Teton County	02-08-268P	Snake River/Canyon Club Inc.	August 8, 2002
Teton County	05-08-0317P	Fish Creek/Snake River Associates	March 15, 2006
Town of Jackson	14-08-0328P	Flat Creek/Lukas Farms Bridge Replacement	December 29, 2014

2.2 Community Description

Teton County is located in northwestern Wyoming. Teton County is bordered on the north by Park County, Wyoming; on the east by Park and Fremont Counties; on the south by Sublette and Lincoln Counties; and on the west by Bonneville, Fremont, and Teton Counties, Idaho and by Gallatin County, Montana. According to the 2010 U.S. Census, Teton County had 21,294 inhabitants, and most of whom lived in the Town of Jackson (Reference 27). Since 1980, the population has almost doubled.

The streams studied are mostly in the valley or tributary to the valley known as Jackson Hole. Jackson Hole is approximately 10 miles wide and 35 miles long. The valley bottom ranges in elevation from approximately 6,500 feet at the Teton National Park boundary to 6,000 feet at the southern end of Teton County. The Town of Jackson is situated at an elevation of 6,230 feet. The Snake River Range on the west side of the valley reaches peaks of approximately 10,000 feet. The Teton Range is on the western side of the valley and north of the study area and reaches peaks of 13,770 feet. The Gros Ventre and Wind River Ranges, on the eastern side of the valley, reach peaks of approximately 11,500 feet and form part of the Continental Divide. The northern end of Jackson Hole is bounded by high plateaus. The Snake and Gros Ventre River Ranges converge at the southern end of the valley to form a narrow canyon. This is the outlet of the Snake River, which flows almost due south from its source at Yellowstone Park through Teton Park, Jackson Lake, and Jackson Hole.

2.3 Principal Flood Problems

Flooding in the Jackson Hole area is attributable to snowmelt. High flows may occur for several days while the snowpack is rapidly melting. Flood hydrographs usually show a series of peaks and valleys caused by fluctuating temperatures.

Estimates of large floods at the Jackson-Wilson Bridge on the Snake River indicate that flows in excess of 20,000 cubic feet per second (cfs) occurred in 1894, 1904, 1910, 1911, 1912, 1913, 1914, 1917, 1918, 1927, 1928, and 1943 (Reference 1). The U.S. Geological Survey (USGS) published a peak flow of 21,800 cfs on the Snake River below Flat Creek in 1982 (Reference 2). The peak flows on the Snake River near Wilson in 1974 were 19,300 cfs (Reference 2). Another documented high-runoff year was 1981, photographs of which are presented in the Jackson Hole Guide (Reference 3). Other local flood problems were documented in 1918 and 1978 (References 4 and 5).

2.4 Flood Protection Measures

<u>Original Countywide Study</u>

There are levees along the Snake River that extend approximately 15.4 miles, from 4.2 miles below the Wilson Bridge to 11.2 miles above the Wilson Bridge. There are also levees on the Gros Ventre River. On the southern side of the channel, a levee extends from the confluence with the Snake River approximately 2.5 miles to above County Road. On the northern side of the Gros Ventre River, a levee extends from 1.3 river miles above the confluence with the Snake River for 1 mile, to just above County Road.

These levees on the Snake and Gros Ventre Rivers provide the community with some degree of protection from flooding. However, it has been determined that the Gros Ventre levees downstream of Cross Section C may not protect the community from rare events such as the 100-year flood. The criteria used to evaluate protection against the 100-year flood are 1) adequate design, including freeboard; 2) structural stability; and 3) proper operation and maintenance. Levees that do not provide protection from the 100-year flood are not considered in the hydraulic analysis of the 100-year floodplain.

The Gros Ventre levees downstream of Cross Section C do not have adequate freeboard and therefore were not considered in the hydraulic analysis. All other levees on the reaches of the Snake and Gros Ventre Rivers studied by detailed methods were credited with providing protection from the 100-year flood.

September 16, 2015 Revision
Within this jurisdiction, the Gros Ventre River levees have not been demonstrated by the community or levee owner to meet the requirements of NFIP regulation 65.10 regarding their ability to provide protection from the 1%-annual-chance-flood. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information.

The Federal levee portion of the Snake River levee system was certified by the USACE in January 2010. The information regarding the certification of the levee system can be found in the USACE report, Jackson Federal Levee Flood Capacity Study, (Reference 28).

3.0 ENGINEERING METHODS

For the flooding sources studied in detail 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 is expected to be equaled or exceeded once on the average during any 10-, 50-, 100-, or 500-year period (recurrence interval) have been selected as having special significance for floodplain management and for flood insurance rates. These events, commonly termed the 10-, 50-, 100-, and 500-year floods, have a 10-, 2-, 1-, and 0.2-percent chance, respectively, of being equaled or exceeded during any year. Although the recurrence interval represents the long-term average period between floods of a specific magnitude, rare floods could occur at short intervals or even within the same year. The risk of experiencing a rare flood increases when periods greater than 1 year are considered. For example, the risk of having a flood that equals or exceeds the 100-year flood (1-percent chance of annual exceedence) in any 50-year period is approximately 40 percent (4 in 10), and, for any 90-year period, the risk increases to approximately 60 percent (6 in 10). The analyses reported herein reflect flooding 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.

Note: Within this jurisdiction, the Gros Ventre River levees have not been demonstrated by the community or levee owner to meet the requirements of NFIP regulation 65.10 as it relates to their ability to provide protection from the 1%-annual-chance-flood. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information.

3.1 Hydrologic Analyses

Initial Countywide Study
For the original study, hydrologic analyses were carried out to establish the peak discharge-frequency relationships for each flooding source studied in detail affecting the community. For each of the 15 USGS Gaging Stations utilized in this analysis, the annual peak flow frequency data, as determined by Water Resources Council guidelines (Reference 6), were

available from the USGS. These included magnitudes of the 10-, 50-, 100-, and 500-year floods.

A regression analysis was then used to determine relationship between peak discharge (the dependent variable) and drainage area and flood frequency (the independent variables). Regression relationships are included in a hydrology report for the Town of Jackson and Teton County (Reference 7). Several other methods were also used to determine peak flows; however, it was determined that these results are not appropriate for the area covered by this study. These methods and results are discussed in the above-referenced report (Reference 7).

<u>September 29, 2006 Revision</u>
For the re-study of Flat Creek and Spring Creek there were no modifications in hydrology, and hence the discharge values shown in the previous Teton County FIS (Reference 20) still apply.

<u>August 5, 2010 Revision</u>
For the Flat Creek re-study, there were no modifications in hydrology; and hence the discharge values shown in the previous Teton County FIS (Reference 20) still apply.

<u>September 16, 2015 Revision</u>
The peak discharges were not updated for the new hydraulic analyses for Fish Creek and Lake Creek. The peak discharge used in the Snake River re-study from just below the Highway 89 bridge upstream to the Federal Levee system was taken from the USACE levee certification study for the Snake River (Reference 28).

Peak discharge-drainage area relationships for the streams studied by detailed methods are shown in Table 2.

Table 2. Summary of Discharges

Flooding Source and Location	Drainage Area (sq. miles)	Peak Discharges (Cubic Feet per Second) 10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
BUFFALO FORK						
At Upstream Study Limit – Burro Hill East Boundary Section 26 T45.N, R.113W.	312.9	3,480	--[1]	4,830	5,560	6,570
At Gaging Station at U.S. Highway 26	323.0	3,570	--[1]	5,070	5,640	6,730
Upsteam of Confluence with Lava Creek	333.4	3,660	--[1]	5,070	5,640	6,900
Downstream of Confluence with Lava Creek	375.6	4,020	--[1]	5,550	6,160	7,540
At Confluence with Snake River	378.0	4,040	--[1]	5,570	6,200	7,590
CACHE CREEK						
At Gaging Station	10.6	180	--[1]	210	250	290
At Confluence with Flat Creek	16.8	260	--[1]	310	360	420
[1] Data not available						
FISH CREEK						
Just Downstream of Teton Village	2.6	34	38[2]	47	1,760	55
Just Downstream of Rock Springs Canyon	4.7	90	103[2]	110	130	150
Just Downstream of Confluence with Jensen Canyon	10.2	170	191[2]	200	240	280
Just Downstream of Confluence with Lake Creek	53.9	690	770[2]	810	950	1,110
Just Downstream of Phillips Canyon	64.8	800	895[2]	940	1,110	1,300
Just Downstream of Confluence with Trail Creek	87.5	1,030	1,150[2]	1,210	1,420	1,670
Just Downstream of Confluence with Snake River	90.9	1,060	1,185[2]	1,250	1,460	1,720

[1]Data not available
[2]Data interpolated

Table 2. Summary of Discharges (continued)

		Peak Discharges (Cubic Feet per Second)				
Flooding Source and Location	Drainage Area (sq. miles)	10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
FISH CREEK – BUCK ROAD SPLIT	N/A	256	292[2]	312	431	485
FLAT CREEK						
Upstream of Confluence with Cache Creek	111.2	730	--[1]	950	1,210	1,560
Downstream of Confluence with Cache Creek	128.0	760	--[1]	980	1,240	1,590
At Highway 189	130.9	770	--[1]	990	1,250	1,600
Upstream of Confluence with Game Creek	147.5	800	--[1]	1,030	1,290	1,640
At Confluence with Snake River	160.5	830	--[1]	1,050	1,310	1,660
GROS VENTRE RIVER						
At U.S. Highway 26	634.8	5,320	--[1]	6,250	7,350	8,630
At County Road Near Jackson Hole Country Club	636.1	5,330	--[1]	6,260	7,360	8,650
At Confluence with Snake River	637.4	5,340	--[1]	6,280	7,370	8,660
LAKE CREEK						
Downstream of Confluence with Granite Creek	39.2	530	590[2]	620	730	860
At Confluence with Fish Creek	42.2	560	625[2]	660	770	910
SNAKE RIVER						
Just Upstream of Confluence with Gros Ventre River	1,878.0	12,500	--[1]	14,400	15,100	35,000
Just Downstream of Confluence with Gros Ventre River	--[1]	22,200	25,750[2]	28,400	30,800	36,100
At Teton- Lincoln County Boundary	3,344.0	--[1]	--[1]	--[1]	38,000	--[1]
SPRING CREEK						
At State Highway 22	9.4	160	--[1]	190	220	260
At County Road Near Boyles Hill	10.3	170	--[1]	200	240	280
At Dirt Road	11.7	190	--[1]	230	270	310
At Confluence with Snake River	12.0	200	--[1]	230	270	320

[1]Data not available
[2]Data interpolated

Table 2. Summary of Discharges (continued)

Flooding Source and Location	Drainage Area (sq. miles)	Peak Discharges (Cubic Feet per Second) 10-Percent Annual Chance	4-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
TETON CREEK						
Downstream of Bear Canyon	29.2	560	--[1]	820	930	1,110
Downstream of Mill Canyon	32.0	600	--[1]	880	1,000	1,380
At Idaho-Wyoming State Line	34.5	640	--[1]	930	1,060	1,470

[1]Data not available
[2]Data interpolated

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 in conjunction with the data shown on the FIRM.

<u>Initial Countywide Study</u>
Water-surface elevations (WSELs) of floods of the intervals were computed through use of the U.S. Army Corps of Engineers (USACE) HEC-2 step-backwater computer program (Reference 8).

Cross sections for the backwater analyses of all detailed study streams except the Snake River were obtained from aerial photography flown in October 1983 that was also used to develop planimetric work maps (Reference 9). Cross sections below the water surface were surveyed by conventional field measurement techniques. Bridges and culverts were also field surveyed for elevation and dimensional data.

For the Snake River, elevations were computed using cross sections developed by the USACE as part of the hydraulic analysis for its 1976 report on the Snake River (Reference 11). For this study, these cross sections were used in a hydraulic analysis performed by the SC. The widths of flooding computed at cross sections are not necessarily as wide as the mapped flood hazard area boundaries; some areas of the mapped floodplain represent areas of ineffective flow.

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 (See Section 4.2), selected cross-section locations are also shown on the Flood Insurance Rate Map (FIRM).

Reaches of Lake, Spring, Flat, and Fish Creeks lie within the Snake River floodplain. Flood elevations along these reaches are controlled by the Snake River. Lake Creek and Fish

Creek, from its confluence with the Snake River to Cross Section AG, are within the 500-year floodplain of the Snake River. No 500-year profile was created for either reach. Spring Creek from its confluence with the Snake River to Cross Section P and Flat Creek from its confluence with Snake River to Cross Section I are within the Snake River floodplain. For these reaches, no profiles were created. Regulatory elevations are shown on the Snake River profiles.

The starting WSELs for Fish and Spring Creeks and the Gros Ventre River were determined at their confluence with the Snake River.

The starting WSELs for Cache, Flat, and Teton Creeks were obtained by the slope area method.

For the Gros Ventre River, the HEC 2 model showed that breakout to the north will occur near the confluence with the Snake River; however, no cross section geometry was developed for this area. An approximate cross section was interpolated and used to determine the discharge loss to the overbank, assuming critical depth at that cross section. The shallow flooding shown in the overbank is the result of this breakout. The discharge for the 100 year event remaining in the channel downstream of the breakout corresponds to the discharge computed for the 10 year event. Therefore, 100 year elevations shown for this reach correspond to the elevations calculated for the 10 year event.

<u>September 29, 2006 Revision</u>
Floodplain and floodway boundaries, cross sections, and BFEs were re delineated in digital format along Flat Creek from approximately 50 feet downstream of High School Road to approximately 1,400 feet upstream of the confluence of Cache Creek and U.S. Highway 26, Spring Creek from approximately 800 feet downstream of Tribal Trail Road to approximately 4,550 feet upstream of Tribal Trail Road, and Cache Creek within the Town of Jackson's current corporate limits. Boundary re-delineations were prepared using updated contour lines with a 1 foot contour interval and spot elevation data. All digital floodplain information was calibrated to the digital base map as well as the HEC 2 models.

Review of the hydraulic calculations revealed that hydraulic conditions have changed along portions of Flat Creek and Spring Creek. Therefore, to incorporate the most up-to-date data into the revised FIRM, several hydraulic models were revised.

Flat Creek
A portion of the hydraulic analysis for Flat Creek was updated before the floodplain and floodway boundaries were redelineated. Hydraulic model revisions included the addition of three bridge structures constructed after completion of the currently effective flood study. Additionally, a Letter of Map Revision (LOMR) dated January 30, 2001 (Case No. 00 08 250P), was incorporated into the HEC 2 model. The revised hydraulic model provides continuous coverage of Flat Creek within the current Town of Jackson corporate limits. Nine cross sections were added to the HEC 2 model in order to incorporate the three bridge structures. Two effective cross sections were removed from the model as a part of the bridge modeling routine. After the hydraulic models were updated, the boundaries for the 1 percent and 0.2 percent annual chance floods were delineated.

Duplicate HEC 2 models were created for the effective multiple profile run as well as the floodway run with the above referenced LOMR incorporated. Additionally, a LOMR dated October 3, 2000 (Case No 00 08 247P), which revised the regulatory floodway, was incorporated into the duplicate HEC 2 floodway model. A revised floodway model was not created, because BFEs do not change significantly, except at the upstream side of the new bridges where BFEs become higher. Hence the corrected effective model is used as the revised floodway model.

Cache Creek
The hydraulic conditions along Cache Creek remain essentially unchanged since the effective flood study was performed. Therefore, no revisions to the HEC 2 models were necessary. The boundaries for the 0.2 percent annual chance flood were not delineated because they coincide with the Zone AE boundaries.

Spring Creek
The hydraulic models for the multiple profile and floodway runs were revised for a portion of Spring Creek because of a discrepancy in existing ground elevation data between the HEC 2 model and field conditions and to incorporate a newly constructed bridge. Floodplain and floodway boundary delineations were completed only within the Town of Jackson corporate limits. The additional reach included in the revised hydraulic models for Teton County was prepared to ensure accuracy of the tie in to floodplain information shown for the county. Field surveys were performed along Spring Creek at the locations of the cross sections used in the effective HEC 2 model. New sections were added between effective sections for purposes of modeling a twin box culvert that was constructed following the effective flood study. A cross section was removed as a part of the structure modeling routine. Additionally, a section was added to the hydraulic model between effective sections to increase the accuracy of the flood data in that area. As a result of changes in the GR card data, the regulatory floodway limits could no longer be used. Therefore, a new floodway was calculated. As a result of this analysis, BFEs have increased. The boundaries of the 0.2 percent annual chance flood were not delineated because they coincide with the Zone AE boundaries.

Floodplain and floodway boundaries, cross sections, and BFEs were delineated in digital format and are included in the digital base map file. All digital floodplain information was calibrated to the base map as well as the HEC 2 models.

Starting WSELs for the Flat Creek and the Spring Creek were matched to the previous Teton County FIS (Reference 20).

Channel roughness factors (Manning's “n” values) were determined by field inspection at each cross section and ranged from 0.035 to 0.04 in main channel and 0.05 to 0.06 on over bank for the Flat Creek and 0.04 in main channel and 0.06 on over bank for the Spring Creek.

Water surface profile computations at bridges are based on current normal bridge openings. Consideration was not given either to the possible blockage of bridge openings by sediment and debris or to future bridge enlargement.

<u>August 5, 2010 Revision</u>
Flat Creek
Hydraulic model revisions included the addition of multiple bridge structures including a couple pedestrian bridges constructed after completion of the currently effective flood study. Water-surface elevations for Flat Creek below High School Road were computed using the COE HEC-RAS step-backwater computer program (Reference 21). Cross

sections for the backwater analysis of Flat Creek were obtained from aerial photography flown in October 2003, which was also used to develop planimetric workmaps (Reference 22). After the hydraulic models were updated, the boundaries for the 1 percent and 0.2 percent annual chance floods were delineated.

Floodplain and floodway boundaries, cross sections, and BFEs were delineated in digital format along Flat Creek from the confluence with the Snake River to just downstream of High School Road. Boundary delineations were prepared using updated contour lines with a 2 foot contour interval and spot elevation data (Reference 22). All digital floodplain information was calibrated to the digital base map as well as the HEC RAS models.

Starting WSELs for the Flat Creek were based on normal depth calculation with a slope of 0.003 ft/ft.

Channel roughness factors (Manning's “n” values) were determined by field inspection at each cross section and ranged from 0.035 to 0.06 in main channel and 0.05 to 0.08 on over bank for the Flat Creek.

Table 2, Manning’s “n” Values for Detailed-Study Streams, and Table 3, Floodway Data, were revised to reflect the results of the restudy.

Water surface profile computations at bridges are based on current normal bridge openings. Consideration was not given either to the possible blockage of bridge openings by sediment and debris or to future bridge enlargement. Base flow in Flat Creek was considered negligible, therefore, at the time of the survey and mapping the water depth between the structures was shallow and believed to have a negligible impact on the floodplain analysis.

<u>September 16, 2015 Revision</u>
Detailed hydraulic analyses were performed on four streams within Teton County, Wyoming. All four reaches including Fish Creek, Gros Ventre River, Lake Creek, and Snake River are located in the Unincorporated Areas of Teton County, Wyoming. Zone AE floodplains and floodways produced by these analyses will be incorporated into the Teton County, Wyoming Countywide DFIRM project.

The U.S. Army Corps of Engineers (USACE) HEC-RAS program, Version 4.1, was used to prepare the hydraulic modeling. Topographic data used to define the stream geometry consisted of detailed survey data obtained by Nelson Engineering and HSE which included surveyed cross sections as well as bridge/culvert data points. This data was supplemented with the two foot topographic contour mapping.

Geometric data for the revision reach was adapted from the topographic information using the USACE HEC-GeoRAS program and input into HEC-RAS for detailed model development. Culvert and bridge geometries were recorded by Nelson Engineering and HSE through survey data, photographs, and field notes. This data was used to manually enter culvert and bridge data into the HEC-RAS model. Where applicable, surveyed channel cross section information was manually input into the geo-referenced floodplain cross sections produced by HEC-GeoRAS.

Manning's 'n' roughness values were evaluated using photographs during the field survey, aerial imagery, as well as previous studies. A field visit provided additional verification of site conditions and confirmation that the chosen roughness values were reasonable.

Floodway analyses were performed for all the study reaches and are included in the corresponding HEC-RAS models as separate plans. Initial floodway runs were performed using Method 4 with the equal conveyance option turned on and a target rise in water surface elevation of 1.0 foot. The Method 4 results were input into Method 1 and negative surcharges and surcharges greater than 1.0 foot were removed by manually adjusting the encroachment stations. The final encroachment stations were imported into ArcGIS through HEC-GeoRAS where floodway delineations were manually digitized between modeled cross sections using engineering judgment.

All the HEC-RAS hydraulic modeling was executed under the assumption of subcritical flow to produce the most conservative water surface elevations.

Fish Creek

For Fish Creek, the channel Manning's 'n' roughness value varied from 0.035 to 0.04 and was based on the stream bed composition of gravels, cobbles, and sporadic boulders indicative of mountain streams. The overbank 'n' values were set from 0.04 to 0.10 depending on the specific land use and vegetation density which varied from cultivated areas with short and high grasses to medium and dense brush with some stands of medium timber. These values were deemed to be realistically conservative based on the site photographs and are in accordance with the original effective detailed study.

The downstream boundary conditions for Fish Creek were set to normal depth with an average slope of 0.002 which was obtained from the two foot contour information at the confluence with the Snake River.

Portions of Fish Creek lie within the Snake River 0.2%- and 1%-annual-chance-floodplains. Flood elevations along these reaches are controlled by the Snake River. For the 0.2%-annual-chance-floodplain, Fish Creek lies within the Snake River floodplain from its confluence with the Snake River to Cross Section AG. No 0.2%-annual-chance-flood profile was created for Fish Creek within this reach. Regulatory elevations for the reaches outlined above are shown on the Snake River profiles.

A split flow reach was modeled on Fish Creek that were not originally studied under the effective analysis. The diverted flow occurs just upstream of the Buck Road Bridge and appears to be a naturally occurring split flow path. The 1%-annual-chance-flow was calculated by using a lateral weir at the location of the split to obtain an initial discharge estimate. Split flow optimization was then used to obtain an energy balance between the main branch of Fish Creek and the Buck Road Split thus producing the final discharge estimates.

An effective LOMR Case# 05-08-0317P was located on upstream end of the Fish Creek study reach. The LOMR reach extends from approximately 1,970 feet downstream of Jensen Canyon Road to just downstream of McCollister Drive. The original LOMR HEC-RAS hydraulic model and associated mapping were not geo-referenced. As a result, the AutoCAD topographic work map was manually placed in ArcMap using referenced points and geo-referenced through the use of HEC-GeoRAS in order to produce continuous floodplain and HEC-RAS hydraulic model that were in geospatial agreement. The LOMR Case# 05-08-0317P surveyed cross section information and bridge geometry were then input into the updated HEC-RAS modeling after being adjusted from the National Geodetic Veridical Datum of 1929 (NGVD 1929) to North American Vertical Datum of 1988 (NAVD 1988). The datum shift was based on an average of the calculated datum shift collected at three locations within the Fish Creek revision reach. The locations where the datum shift was calculated included the downstream end, middle reach, and upstream end of the revision reach and resulted in an average datum shift of 4.2 feet (NGVD 1929 + 4.2 feet = NAVD 1988).

When reviewing the effective LOMR Case# 05-08-0317P documentation, hydraulic modeling, and floodplain mapping two discrepancies became apparent. The first discrepancy was that the proposed bridges that were approved under CLOMR Case# 03-08-0298R were not included in the approved LOMR Case# 05-08-0317P since they were not constructed at the time the LOMR was submitted. This caused the structures to be removed from the modeling and mapping that was approved through the LOMR. But when reviewing current aerial imagery of the LOMR reach, it became apparent that the structures have been constructed since the date the LOMR was approved. Further research revealed that the bridges that were proposed and approved under CLOMR Case# 03-08-0298R were designed to fully span the floodplain and cause no impacts on the modeled water surface elevation. To verify that the bridges were constructed as proposed under CLOMR Case# 03-08-0298R, the submitting engineering consultant, Rendezvous Engineering, was contacted. Rendezvous Engineering did confirm that the structures were designed so they would not impact the floodplain and the bridges were constructed as proposed under CLOMR Case# 03-08-0298R. As a result, the bridge geometry from the HEC-RAS modeling approved under CLOMR Case# 03-08-0298R was used to incorporate the proposed bridges into the updated modeling for Fish Creek.

The second LOMR discrepancy became apparent when overlaying the topographic workmap from the effective LOMR Case# 05-08-0317P on updated aerial imagery of the LOMR site. It became apparent that the majority of the channelization and structures were constructed as proposed under the approved CLOMR and LOMR but the location of the golf cart bridge on the downstream end of the LOMR reach and the access road on the upstream end of the LOMR reach were shifted when compared to their proposed locations. As a result, these two structures were shifted in the updated mapping and modeling to correspond to their as-built locations.

To determine if any significant impacts occurred as a result of the modifications to the effective LOMR Case# 05-08-0317P modeling, the effective LOMR modeling results were compared to the updated HEC-RAS modeling results. As a result of the incorporating the effective LOMR modeling and the two changes described above, the maximum increase in the 1%-annual-chance water surface elevation was 0.4 foot and the maximum decrease was 0.3 foot. The maximum increase in 1%-annual-chance-floodplain was 13 feet and the maximum decrease was 19 feet. The entire floodplain was still contained within the channel as originally designed. The changes from the effective LOMR Case# 05-08-0317P were deemed acceptable and thus the original results of the LOMR analysis are still considered valid.

Gros Ventre River
As discussed in the FIS, the Gros Ventre River levees do not have adequate freeboard to protect in the event of the 100-year flood. Since new peak discharges were calculated to support the Gros Ventre River hydraulic analysis as part of the DFIRM project, a “with levee” hydraulic analysis was completed to see if the minimum freeboard requirement could

be met. In addition to a new peak discharge to use in the Gros Ventre River hydraulic analysis, the updated survey and topographic data discussed previously were used in the HEC-RAS hydraulic model.

The Gros Ventre River levees have not been demonstrated by the community or levee owner to meet the requirements of NFIP regulation 65.10 as it relates to its ability to provide protection from the 1% annual chance flood event. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information.

The “with levee” hydraulic analysis showed the Gros Ventre River levees lack sufficient freeboard at several locations even when the slight reduction in the peak discharges for the 1%-annual-chance-flood event was considered. At the time of the analysis, Teton County officials requested that the levee seclusion method for the Gros Ventre River levees be utilized so that the Teton County DFIRM project would not be delayed further. The USACE has plans to further analyze the levees and potentially certify them. Four FIRM panels (56039C2685E, 56039C2695E, 56039C2705E, and 56039C2715E) have been secluded and the study seclusion area is based on the “with levee” water surface elevations that were mapped to show a conservative “without” levee special flood hazard area (SFHA) delineation. The Gros Ventre River elevations will be reported in NAVD 1988 datum, but the SFHA will not be revised and will be lifted directly from the current effective FIRM. Note, the Gros Ventre River profile has been modified slightly to show the backwater effects of the revised Snake River study.

Lake Creek
For Lake Creek, the channel Manning’s ‘n’ value was set to 0.04 and was based on the stream bed composition of gravels, cobbles, and sporadic boulders indicative of mountain streams. The overbank ‘n’ values were set from 0.04 to 0.12 depending on the specific land use and vegetation density which varied from cultivated areas with short and high grasses to medium and dense brush with some heavy stands of timber. These values were deemed to be realistically conservative based on the site photographs and are in accordance with the original effective detailed study.

The downstream boundary conditions for Lake Creek were set to normal depth with an average slope of 0.006 which was obtained from the two foot contour information at the confluence with Fish Creek.

The entire reach of Lake Creek lies within the 0.2%-annual-chance-floodplain of the Snake River. Since the 0.2%-annual-chance-floodplain elevations along this reach are controlled by the Snake River, no 0.2%-annual-chance-flood profile was created for Lake Creek. The 0.2%-annual-chance-flood profile elevations in this reach are shown on the Snake River profiles.

Multiple locations along Lake Creek exhibit characteristics of a perched channel where some shallow flooding resulting from the 1%-annual-chance-flood could potentially break out of the main channel. The majority of these areas produce flows with nominal depth much less than one foot so the resulting flooding would be covered by the existing Snake River 0.2%-annual-chance-floodplain. However, two locations along Lake Creek showed a potential for more significant flooding to break out of the main channel. In these locations, lateral weirs were placed along the channel bank to calculate the resulting discharges and food depths to determine if a 1%-annual-chance-flood split flow should be mapped. These weir calculations were conducted at the following locations: on the left overbank near

Canyon Road; and on the left overbank just upstream of Granite Creek Road. At each location, the average and maximum depth of flow was less than one foot so the shallow floodplain mapping in these areas would be consistent with the existing Snake River 0.2%-annual-chance-floodplain. No flow was removed from the main channel at any of the weir locations on Lake Creek in order to produce a more conservative hydraulic analysis and resulting mapped floodplain.

In the upstream portion of the Lake Creek study, no channel survey data was available from approximately 1,660 feet downstream of Rang Road to the upstream limit of study so the effective Lake Creek HEC-2 cross section data was used to model up to the effective limit of study. New geo-referenced cross sections were cut from the terrain surface using HEC-GeoRAS at the locations of the original effective cross sections. The channel geometry was then incorporated from the effective HEC-2 modeling for Lake Creek. In addition, no survey data was available for the Rang Road Bridge located in this reach so the effective HEC-2 bridge geometry was incorporated into the updated HEC-RAS modeling. The effective HEC-2 cross section and bridge geometry were adjusted from the vertical datum of NGVD 1929 to NAVD 1988 based on an average of the calculated datum shift collected at three locations within the revision reach. The locations where the datum shift was calculated included the downstream end, middle reach, and upstream end of the revision reach and resulted in an average datum shift of 4.4 feet (NGVD 1929 + 4.4 feet = NAVD 1988).

Snake River
LOMR 02-08-268P along the lower portion of the Snake River from the Teton-Lincoln County Line to a point approximately 24,200 feet upstream was incorporated into this map revision.

For Snake River, the channel Manning's 'n' value was set to a range of 0.038 to 0.045 and was based on the stream bed composition of gravels, cobbles, and sand bars indicative of mountain streams. The overbank 'n' values were set from 0.04 to 0.1 depending on the specific land use and vegetation density which varied from cultivated areas with short and high grasses to medium and dense brush with some moderate stands of timber. These values were deemed to be realistically conservative based on the site photographs and are in accordance with the original effective detailed study.

The downstream boundary conditions for the Snake River were set to normal depth with an average slope of 0.0005 which was obtained from the two foot contour information at the downstream limit of study.

Snake River is characterized mostly by a braided gravel bed channel with numerous gravel bars and sub-channels that vary in shape and depth over short distances. The main channel of the Snake River at the time of this study may not be the location of the thalweg in future analyses. Fluvial geomorphology and sediment transport were not factored into the hydraulic analysis for the Snake River.

The Snake River study reach extends from approximately 400 feet downstream of State Highway 89 upstream approximately 8 miles to the downstream extent of the Federal levee system. Within the study reach, several non-Federal levees have been constructed on both the left and right channel banks. These non-Federal levees are non-accredited and as such the hydraulic analysis was performed using the natural valley procedure where water is allowed to flow on either side (riverside and landside) of the levee.

A separate hydraulic model plan ("with-levee") was developed to determine the base flood elevations (BFE) for the Snake River for the condition where the non-accredited levees remain in place.

Roughness factors (Manning's "n") used in the hydraulic computations were chosen based on engineering judgment and field observations of the streams and floodplain areas. Roughness values for the main channels ranged from 0.030 to 0.060, while floodplain roughness values ranged from 0.035 to 0.150 for all floods. A detailed list of the values for each stream is provided in Table 3, Manning's "n" Values for Detailed Study Streams.

Table 3. Manning's "n" Values

Stream	Channel	Overbanks
Buffalo Fork	0.035-0.055	0.075-0.080
Cache Creek	0.040-0.050	0.070-0.110
Fish Creek	0.035-0.040	0.040-0.100
Flat Creek	0.035-0.060	0.050-0.080
Gros Ventre River	0.040	0.055
Lake Creek	0.040	0.040-0.120
Snake River	0.038-0.045	0.040-0.100
Spring Creek	0.040	0.060
Teton Creek	0.040-0.050	0.075-0.110

To obtain current elevation, description, and/or location information for benchmarks shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

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 used for newly created or revised FIS reports and FIRMs was the National Geodetic Vertical Datum of 1929 (NGVD). With the completion of the North American Vertical Datum of 1988 (NAVD), many FIS reports and FIRMs are now prepared using NAVD as the referenced vertical datum.

Flood elevations shown in this FIS report and on the FIRM are referenced to the NAVD. These flood elevations must be compared to structure and ground elevations referenced to the same vertical datum. It is important to note that adjacent counties may be referenced to NGVD, which may result in differences in base flood elevations across county lines.

Some of the data used in this revision were taken from the prior effective FIS reports and FIRMs and adjusted to NAVD. The datum conversion factor from NGVD to NAVD in Teton County was conducted on a stream by stream basis. The vertical datum offset values used in this countywide study area included in Table 4. The revised hydraulic analyses for the streams that were restudied for this FIS update were completed in the NAVD datum, and it was not necessary to calculate a vertical datum offset. The streams that were restudied for this map revision were completed in the NAVD datum, and a vertical datum offsets for Fish

Creek, Lake Creek and the Snake River from just downstream of the Highway 89 bridge upstream to the Federal Levee system were not computed.

Table 4. Vertical Datum Offset

Flooding Source	Vertical Datum Offset from NGVD (ft)
Buffalo Fork	4.3
Cache Creek	4.4
Flat Creek	4.2
Gros Ventre River	4.2
Snake River – LOMR 02-08-268P	4.2
Snake River – Federal Levee Section	4.2
Spring Creek	4.2
Teton Creek	4.2

For more information regarding conversion between the NGVD and NAVD, see the FEMA publication entitled *Converting the National Flood Insurance Program to the North American Vertical Datum of 1988* (Reference 19), visit the National Geodetic Survey website at www.ngs.noaa.gov, or contact the National Geodetic Survey at the following address:

NGS Information Services, NOAA, N/NGS12
National Geodetic Survey SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282
Fax: (301) 713-4172, or
Telephone: (301) 713-3242

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.

To obtain current elevation, description, and/or location information for benchmarks shown on this map, please contact the Information Services Branch of the NGS at (301) 713-3242, or visit their website at www.ngs.noaa.gov.

4.0 FLOODPLAIN MANAGEMENT APPLICATIONS

The NFIP encourages State and local governments to adopt sound floodplain management programs. Therefore, each FIS provides 100-year flood elevations and delineations of the 100- and 500-year floodplain boundaries and 100-year floodway to assist communities in developing floodplain management measures.

4.1 Floodplain Boundaries

Initial Countywide Study

To provide a national standard without regional discrimination, the 1.0%-annual-chance (100-year) flood has been adopted by FEMA as the base flood for floodplain management purposes. The 0.2%-annual-chance (500-year) flood is employed to indicate additional areas of flood risk in the community. For each stream studied in detail, the 0.2%-annual-chance and 1%-annual-chance floodplain boundaries have been delineated using the flood elevations determined at each cross section. Between cross sections, boundaries were interpolated. These boundaries were then adjusted using aerial photography (Reference 9).

The types of vegetation discernible on the photography were used as a guide to the relative elevations between cross sections. Field checks were then used to further adjust the boundaries as necessary. Floodplain boundaries were also checked against topographic maps with a scale of 1:24,000, with contour intervals of 10 to 40 feet (Reference 10); however, these maps were not enlarged to the scale of the work maps (1:4,800), so a direct comparison was not made.

Floodplain boundaries for the Snake River were taken directly from a report prepared by the USACE (Reference 11).

September 29, 2006 Revision

The floodplain delineations for Flat Creek, Spring Creek, and Cache Creek were revised as part of this revision. Boundary re-delineations were prepared using updated contour lines with a 1 foot contour interval and spot elevation data. All digital floodplain information was calibrated to the digital base map as well as the HEC 2 models

August 5, 2010 Revision

The floodplain delineation for Flat Creek was revised as part of this revision. Cross sections for the backwater analysis of Flat Creek were obtained from aerial photography flown in October 2003, which was also used to develop planimetric workmaps (Reference 22). After the hydraulic models were updated, the boundaries for the 0.2%- and 1.0%-annual-chance floods were delineated.

September 16, 2015 Revision

Fish Creek, Lake Creek, Snake River

For this restudy in Teton County, several topographic data sources were utilized. For the Snake River, Baker AECOM merged the 1-foot DEM grid tiles developed by the USACE with FEMA's LiDAR data acquired in 2011. The merged data was used to develop a 1-meter DEM and 2-foot contours which was used for the hydraulic analyses and mapping output. For Fish and Lake Creeks, Baker AECOM merged the Snake River gridded mosaic developed by the USACE and Sanborn Mapping with the Teton Conservation District's LiDAR data acquired in 2008. The merged data was used to develop a 1-meter DEM and 2-foot contours which was used for the hydraulic analyses and mapping output. Nelson Engineering provided field cross section surveys and other hydraulically significant data along the study area during the collection periods August-November 2010. HSE provided additional field cross section surveys and other hydraulically significant data within Fish and Lake Creeks during the collection periods April-May 2013.

Gros Ventre River
Within this jurisdiction, the Gros Ventre River levees have not been demonstrated by the community or levee owner to meet the requirements of NFIP regulation 65.10 regarding their ability to provide protection from the 1%-annual-chance-flood. As such, the floodplain boundaries in this area are subject to change. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information on how this affects the floodplain boundaries shown on this FIRM.

The 0.2%- and 1.0%-annual-chance-flood boundaries are shown on the FIRM. On this map, the 1%-annual-chance-flood boundary corresponds to the boundary of the areas of special flood hazards (Zones A, AE, and AO), and the 0.2%-annual-chance floodplain boundary corresponds to the boundary of areas of moderate flood hazards. In cases where the 0.2%- and 1.0%-annual-chance floodplain boundaries are close together, only the 1%-annual-chance event floodplain boundary is shown. Small areas within the floodplain boundaries may lie above the flood elevations but cannot be shown because of limitations of the map scale and/or lack of detailed topographic data.

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 l00-year 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 l00-year 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 study are presented to local agencies as minimum standards that can be adopted directly or used as a basis for additional floodway studies.

<u>Initial Countywide Study</u>
The floodways presented in this study were 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 floodway along the Snake River represents only that portion of the floodplain which was modeled as containing all flows in the HEC-2 run. Therefore, encroachment to the floodway boundaries will not increase the computed elevations. The floodway computed for the reach of the Gros Ventre River downstream of the breakout (discussed in Section 3.2) represents that portion of the floodplain modeled as containing all 100-year flows. Because the breakout was not modeled in the HEC-2 run, the 100-year discharges used and elevations computed downstream of the breakout represent the results of encroachment at the breakout. Therefore, the 100-year boundaries and elevations are adopted as the floodway for this reach. The results of the floodway computations are tabulated for selected cross sections (see Table 5, Floodway Data). The computed floodways are shown on the FIRM. In cases where the floodway and l00-year floodplain boundaries are either close together or collinear, only the floodway boundary is shown.

On both Flat and Spring Creeks, which are tributary to Snake River, a reach of floodway falls entirely within the Snake River floodway. The results of the floodway computations for these reaches are presented; however, only the Snake River floodway is shown on the FIRM. This condition exists at Cross Section C on Flat Creek and at Cross Sections A and C on Spring Creek.

<u>September 26, 2006 Revision</u>
The floodways for Flat Creek, Spring Creek, and Cache Creek were updated as part of this revision.

<u>August 5, 2010 Revision</u>
The floodway delineation for Flat Creek was updated as part of this revision.

<u>September 16, 2015 Revision</u>
The floodway delineations for Fish Creek, Lake Creek and the Snake River were updated as part of this revision. A floodway was not computed for LOMR 02-08-268P. The LOMR reach for the Snake River begins at the Teton-Lincoln County Line and extends to a point approximately 24,200 feet upstream was incorporated into this map revision.

The area between the floodway and 100-year floodplain boundaries is termed the floodway fringe. The floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the WSEL of the 100-year flood by 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.

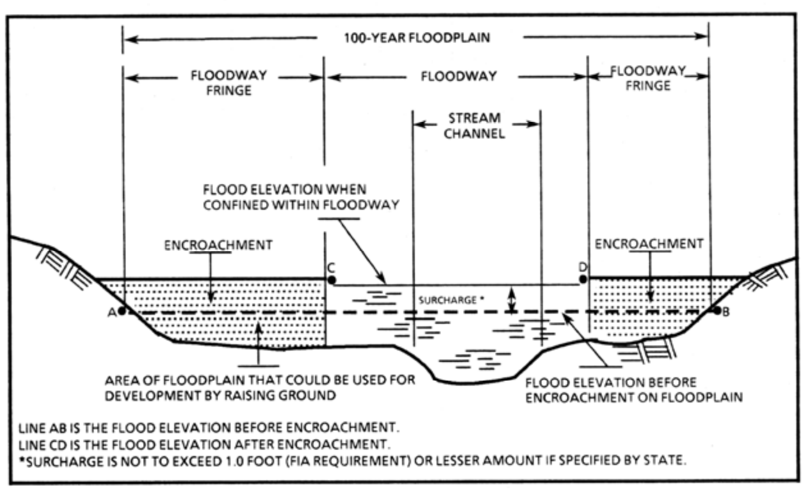

Figure 1. Floodway Schematic

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	**DISTANCE**[1]	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY** (FEET NAVD)	**WITH FLOODWAY**	**INCREASE**
BUFFALO FORK								
A	340	370	1,594	3.9	6,724.4	6,724.4	6,725.3	0.9
B	2,630	1520	4,300	1.4	6,726.5	6,726.5	6,727.4	0.9
C	4,720	1601	2,900	2.1	6,728.9	6,728.9	6,729.7	0.8
D	6,340	1194	2,236	2.7	6,730.6	6,730.6	6,731.5	0.9
E	7,620	800	2,256	2.7	6,735.3	6,735.3	6,736.3	1.0
F	9,180	380	1,152	5.3	6,738.8	6,738.8	6,739.4	0.6
G	12,250	500	1,450	4.4	6,747.5	6,747.5	6,747.8	0.3
H	13,600	244	912	6.7	6,752.0	6,752.0	6,752.1	0.1
I	15,100	120	620	9.9	6,755.3	6,755.3	6,755.4	0.1
J	16,430	270	1,019	6.0	6,759.7	6,759.7	6,760.1	0.4
K	17,990	300	969	6.3	6,766.8	6,766.8	6,767.1	0.3
L	19,470	222	1,002	5.6	6,771.2	6,771.2	6,771.5	0.3
M	21,290	317	1,481	3.8	6,776.6	6,776.6	6,776.6	0.0
N	22,180	174	840	6.7	6,777.6	6,777.6	6,777.6	0.0
O	24,800	1170	3,437	1.6	6,781.0	6,781.0	6,781.0	0.0
P	27,150	380	1,654	3.4	6,781.8	6,781.8	6,781.9	0.1
Q	28,950	1550	4,769	1.2	6,782.4	6,782.4	6,782.8	0.4
R	32,570	1007	2,220	2.5	6,783.4	6,783.4	6,783.9	0.5
S	34,360	1306	2,520	2.2	6,784.5	6,784.5	6,785.2	0.7
T	36,330	920	3,309	1.7	6,785.2	6,785.2	6,786.2	1.0
U	37,250	193	1,811	3.1	6,785.4	6,785.4	6,786.4	1.0
V	39,100	1600	6,223	0.9	6,784.9	6,784.9	6,785.8	0.9
W	42,150	1769	3,299	1.4	6,786.8	6,786.8	6,787.6	0.8
X	47,640	1020	2,496	2.2	6,788.8	6,788.8	6,789.7	0.9
Y	52,800	487	1,356	4.1	6,794.4	6,794.4	6,795.2	0.8
Z	55,350	850	2,987	1.9	6,796.9	6,796.9	6,797.7	0.8

[1]Stream distance in feet above a point 900 feet downstream of U.S. Routes 26, 89, and 191

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

BUFFALO FORK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	**DISTANCE**[1]	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY**	**WITH FLOODWAY**	**INCREASE**
BUFFALO FORK (Continued)								
AA	57,620	743	2,260	2.5	6,799.4	6,799.4	6,800.3	0.9
AB	61,240	679	1,402	4.0	6,802.9	6,802.9	6,803.7	0.8
AC	63,040	400	1,614	3.5	6,807.3	6,807.3	6,808.2	0.9
AD	64,670	256	1,274	4.4	6,811.3	6,811.3	6,811.5	0.2
AE	66,260	268	1,036	5.4	6,814.2	6,814.2	6,814.5	0.3
AF	67,590	354	1,654	3.4	6,816.9	6,816.9	6,817.8	0.9

[1]Stream distance in feet above a point 900 feet downstream of U.S. Routes 26, 89, and 191

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	**DISTANCE**[1]	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY** (FEET NAVD)	**WITH FLOODWAY**	**INCREASE**
CACHE CREEK								
A	7,510	23	58	6.2	6,326.4	6,326.4	6,326.4	0.0
B	8,780	28	56	6.4	6,341.9	6,341.9	6,342.2	0.3
C	9,740	31	56	6.5	6,355.2	6,355.2	6,355.2	0.0
D	10,099	23	45	8.0	6,361.2	6,361.2	6,361.2	0.0
E	10,196	30	141	2.6	6,365.9	6,365.9	6,365.9	0.0
F	10,410	23	49	7.4	6,365.9	6,365.9	6,365.9	0.0
G	11,400	22	55	6.5	6,378.2	6,378.2	6,378.2	0.0
H	12,284	33	59	6.1	6,388.2	6,388.2	6,388.2	0.0
I	12,440	38	168	2.1	6,392.8	6,392.8	6,392.8	0.0

[1]Stream distance in feet above confluence with Flat Creek

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

CACHE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY	INCREASE
FISH CREEK								
A	9,438	127	370	3.8	6,088.9	6,086.2[2]	6,086.2	0.0
B	10,115	132	354	4.0	6,088.9	6,088.0[2]	6,088.0	0.0
C	12,403	107	411	3.5	6,096.1	6,096.1	6,096.2	0.1
D	13,422	78	293	4.9	6,099.1	6,099.1	6,099.2	0.1
E	14,237	159	723	2.0	6,101.0	6,101.0	6,101.1	0.1
F	16,470	109	421	3.4	6,105.1	6,105.1	6,105.5	0.4
G	18,245	121	375	2.6	6,108.7	6,108.7	6,108.8	0.1
H	19,196	89	308	3.2	6,110.8	6,110.8	6,111.0	0.2
I	19,973	90	231	4.3	6,113.6	6,113.6	6,113.6	0.0
J	22,800	78	247	4.0	6,120.7	6,120.7	6,121.1	0.4
K	24,497	152	463	2.4	6,124.4	6,124.4	6,124.5	0.1
L	25,537	116	366	3.0	6,126.6	6,126.6	6,126.9	0.3
M	26,580	96	343	3.2	6,130.8	6,130.8	6,131.0	0.2
N	27,557	108	385	2.9	6,132.8	6,132.8	6,133.0	0.2
O	29,246	134	379	2.9	6,135.9	6,135.9	6,136.0	0.1
P	30,467	89	300	3.7	6,139.1	6,139.1	6,139.2	0.1
Q	31,681	98	315	3.5	6,141.9	6,141.9	6,141.9	0.0
R	32,560	121	394	2.8	6,143.6	6,143.6	6,143.6	0.0
S	33,647	143	466	2.4	6,147.4	6,147.4	6,147.4	0.0
T	34,532	70	268	4.2	6,149.6	6,149.6	6,149.7	0.1
U	35,199	79	318	3.5	6,151.4	6,151.4	6,151.4	0.0
V	36,268	81	342	3.3	6,154.1	6,154.1	6,154.2	0.1
W	37,486	115	404	2.8	6,157.2	6,157.2	6,157.3	0.1
X	38,274	70	225	4.9	6,159.3	6,159.3	6,159.4	0.1
Y	39,494	88	311	3.6	6,161.8	6,161.8	6,161.9	0.1
Z	40,452	134	457	2.4	6,164.3	6,164.3	6,164.4	0.1

[1]Stream distance in feet above confluence with Snake River

[2]Elevation computed without consideration of backwater effects from Snake River

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

FLOODWAY DATA

FISH CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY	INCREASE
FISH CREEK (Continued)								
AA	41,812	89	376	3.0	6,166.7	6,166.7	6,166.7	0.0
AB	42,793	140	346	3.2	6,169.3	6,169.3	6,169.3	0.0
AC	43,548	116	460	2.4	6,171.5	6,171.5	6,171.6	0.1
AD	44,939	54	171	6.5	6,175.5	6,175.5	6,175.5	0.0
AE	45,626	91	261	4.3	6,179.4	6,179.4	6,179.5	0.1
AF	46,896	99	403	2.8	6,185.1	6,185.1	6,185.2	0.1
AG	47,877	92	272	4.1	6,187.0	6,187.0	6,187.1	0.1
AH	48,845	72	233	4.8	6,190.1	6,190.1	6,190.2	0.1
AI	49,867	82	263	3.6	6,193.0	6,193.0	6,193.1	0.1
AJ	50,645	63	194	4.9	6,195.5	6,195.5	6,195.5	0.0
AK	51,551	48	84	2.9	6,197.0	6,197.0	6,197.1	0.1
AL	52,639	71	92	2.6	6,200.4	6,200.4	6,200.5	0.1
AM	53,592	19	36	6.7	6,203.4	6,203.4	6,203.4	0.0
AN	54,635	25	46	5.3	6,209.6	6,209.6	6,209.8	0.2
AO	56,611	42	69	3.5	6,221.7	6,221.7	6,222.0	0.3
AP	57,702	55	80	1.6	6,224.6	6,224.6	6,224.6	0.0
AQ	58,789	41	87	1.5	6,228.2	6,228.2	6,228.6	0.4
AR	59,836	37	71	1.8	6,231.5	6,231.5	6,231.5	0.0
AS	60,739	37	84	1.6	6,234.9	6,234.9	6,235.3	0.4
AT	61,733	51	76	1.7	6,238.2	6,238.2	6,238.2	0.0
AU	63,011	35	57	2.3	6,242.3	6,242.3	6,242.3	0.0
AV	64,056	44	71	1.8	6,247.4	6,247.4	6,247.5	0.1
AW	65,174	57	58	2.2	6,253.1	6,253.1	6,253.1	0.0
AX	66,353	34	64	2.0	6,257.4	6,257.4	6,257.4	0.0
AY	67,498	18	41	3.1	6,263.0	6,263.0	6,263.5	0.5
AZ	68,539	28	60	2.2	6,267.0	6,267.0	6,267.2	0.2

[1]Stream distance in feet above confluence with Snake River

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

FLOODWAY DATA

FISH CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	**DISTANCE[1]**	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY** (FEET NAVD)	**WITH FLOODWAY**	**INCREASE**
FISH CREEK (Continued)								
BA	69,750	16	34	3.8	6,272.5	6,272.5	6,272.6	0.1
BB	70,836	27	78	1.0	6,275.6	6,275.6	6,275.6	0.0
BC	71,936	20	43	1.1	6,278.1	6,278.1	6,278.1	0.0
BD	73,036	15	29	1.7	6,279.6	6,279.6	6,279.6	0.0
BE	74,036	11	19	2.4	6,283.1	6,283.1	6,283.1	0.0
BF	74,836	12	15	3.2	6,285.4	6,285.4	6,285.4	0.0
BG	75,636	8	13	3.6	6,288.8	6,288.8	6,289.0	0.2
BH	76,436	5	7	6.5	6,290.9	6,290.9	6,290.9	0.0

[1]Stream distance in feet above confluence with Snake River

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

FLOODWAY DATA

FISH CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	**DISTANCE[1]**	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY** (FEET NAVD)	**WITH FLOODWAY**	**INCREASE**
FISH CREEK SPLIT								
A	1,047	35	59	7.3	6,108.7	6,108.7	6,108.7	0.0
B	2,600	54	159	2.7	6,115.3	6,115.3	6,115.4	0.1
C	4,728	53	168	2.6	6,120.2	6,120.2	6,120.5	0.3
D	5,787	90	232	1.9	6,123.5	6,123.5	6,123.9	0.4

[1]Stream distance in feet above confluence with Fish Creek

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

FLOODWAY DATA

FISH CREEK SPLIT

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY	INCREASE
FLAT CREEK								
A	0	79	299	4.4	5,950.9	5,950.9	5,950.9	0.0
B	1,192	70	347	3.8	5,952.2	5,952.2	5,952.3	0.1
C	1,918	90	316	4.1	5,952.8	5,952.8	5,953.2	0.4
D	3,983	96	212	6.1	5,958.0	5,958.0	5,958.0	0.0
E	5,098	196	350	3.7	5,962.4	5,962.4	5,962.4	0.0
F	6,083	111	374	3.5	5,964.0	5,964.0	5,964.0	0.0
G	7,128	72	256	5.1	5,965.8	5,965.8	5,965.8	0.0
H	7,676	107	353	3.7	5,967.1	5,967.1	5,967.2	0.1
I	8,261	102	246	5.3	5,968.5	5,968.5	5,968.6	0.1
J	9,964	125	306	4.2	5,977.8	5,977.8	5,977.8	0.0
K	10,788	126	216	6.0	5,981.8	5,981.8	5,981.8	0.0
L	13,500	353	866	1.5	5,991.8	5,991.8	5,992.7	0.9
M	14,998	165	368	3.5	6,001.3	6,001.3	6,002.3	1.0
N	15,975	232	434	3.0	6,006.8	6,006.8	6,007.8	1.0
O	18,517	104	215	6.0	6,029.1	6,029.1	6,029.1	0.0
P	19,558	182	363	3.6	6,034.3	6,034.3	6,034.7	0.4
Q	20,321	237	864	1.5	6,043.6	6,043.6	6,043.9	0.3
R	21,819	243	505	2.6	6,045.4	6,045.4	6,045.8	0.4
S	23,216	183	371	3.5	6,050.8	6,050.8	6,051.2	0.4
T	23,920	182	290	4.5	6,054.1	6,054.1	6,054.1	0.0
U	24,583	140	317	4.1	6,057.2	6,057.2	6,057.5	0.3
V	25,492	289	475	2.7	6,060.2	6,060.2	6,060.6	0.4
W	26,059	348	573	2.3	6,061.2	6,061.2	6,061.7	0.5
X	26,698	285	510	2.5	6,063.3	6,063.3	6,064.2	0.9
Y	27,558	260	524	2.5	6,065.4	6,065.4	6,066.2	0.8
Z	28,724	291	488	2.7	6,068.9	6,068.9	6,069.1	0.2

[1]Stream distance in feet above U.S. Highway 89

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

FLOODWAY DATA

FLAT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FLAT CREEK (Continued)								
AA	30,265	693	966	1.3	6,075.1	6,075.1	6,075.4	0.3
AB	31,623	350	713	1.8	6,076.7	6,076.7	6,077.0	0.3
AC	34,120	240	530	2.4	6,081.5	6,081.5	6,082.2	0.7
AD	35,245	362	354	3.6	6,084.7	6,084.7	6,084.8	0.1
AE	36,388	395	471	2.7	6,088.5	6,088.5	6,088.8	0.3
AF	37,318	145	295	4.4	6,090.5	6,090.5	6,091.3	0.8
AG	39,218	296	446	2.9	6,098.7	6,098.7	6,099.4	0.7
AH	40,385	191	294	4.4	6,104.9	6,104.9	6,105.5	0.6
AI	41,113	202	455	2.8	6,107.3	6,107.3	6,108.3	1.0
AJ	42,286	176	304	4.2	6,111.3	6,111.3	6,111.8	0.5
AK	42,837	191	431	3.0	6,113.2	6,113.2	6,114.2	1.0
AL	43,564	57	273	4.7	6,117.3	6,117.3	6,117.3	0.0
AM	43,934	52	237	5.4	6,118.8	6,118.8	6,118.8	0.0
AN	44,519	46	217	5.9	6,120.2	6,120.2	6,120.2	0.0
AO	45,695	47	134	9.6	6,125.2	6,125.2	6,125.2	0.0
AP	46,705	39	299	4.3	6,130.8	6,130.8	6,130.8	0.0
AQ	47,345	121	180	7.2	6,132.8	6,132.8	6,133.5	0.7
AR	49,453	210	251	5.1	6,148.3	6,148.3	6,148.6	0.3
AS	50,263	120	345	3.7	6,153.0	6,153.0	6,154.0	1.0
AT	50,883	71	171	7.5	6,157.0	6,157.0	6,157.3	0.3
AU	52,003	33	191	6.7	6,165.3	6,165.3	6,165.5	0.2
AV	52,703	123	339	3.8	6,170.9	6,170.9	6,170.9	0.0
AW	53,973	117	196	6.6	6,174.1	6,174.1	6,174.4	0.3
AX	55,203	340	606	2.1	6,180.9	6,180.9	6,181.1	0.2
AY	55,903	102	173	7.5	6,185.6	6,185.6	6,185.7	0.1
AZ	56,373	257	514	2.5	6,189.0	6,189.0	6,189.2	0.2

[1]Stream distance in feet above U.S. Highway 89

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

FLOODWAY DATA

FLAT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD (FEET NAVD)			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
FLAT CREEK (Continued)								
BA	57,373	44	128	9.8	6,200.0	6,200.0	6,200.0	0.0
BB	58,420	37	135	9.3	6,206.7	6,206.7	6,206.7	0.0
BC	59,320	58	307	4.1	6,211.7	6,211.7	6,212.4	0.7
BD	60,260	57	249	5.0	6,214.5	6,214.5	6,214.8	0.3
BE	61,150	54	312	4.0	6,216.0	6,216.0	6,216.6	0.6
BF	61,390	178	855	1.4	6,216.2	6,216.2	6,216.9	0.7
BG	61,630	34	219	5.5	6,216.2	6,216.2	6,216.8	0.6
BH	62,340	78	546	2.2	6,217.3	6,217.3	6,217.8	0.5

[1]Stream distance in feet above U.S. Highway 89

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

FLAT CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	**DISTANCE**[1]	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY** (FEET NAVD)	**WITH FLOODWAY**	**INCREASE**
GROS VENTRE RIVER								
A	2,400	995	2,410	3.1	6,255.5	6,255.5	6,256.0	0.5
B	3,855	770	1,863	4.2	6,265.5	6,265.5	6,265.8	0.3
C	5,175	650	1,575	4.6	6,273.6	6,273.6	6,273.9	0.3
D	6,525	290	1,114	4.7	6,283.4	6,283.4	6,283.7	0.3
E	8,210	766	1,559	4.8	6,293.9	6,293.9	6,293.9	0.0
F	9,340	865	1,094	6.7	6,301.6	6,301.6	6,301.6	0.0
G	10,435	470	1,308	5.9	6,309.6	6,309.6	6,309.6	0.0
H	12,235	630	1,794	3.9	6,323.1	6,323.1	6,323.5	0.4
I	14,015	510	1,365	5.5	6,335.4	6,335.4	6,336.0	0.6
J	15,415	400	1,144	4.4	6,344.3	6,344.3	6,345.0	0.7
K	16,230	600	1,678	4.4	6,350.1	6,350.1	6,351.1	1.0
L	17,610	774	1,546	4.1	6,360.8	6,360.8	6,361.1	0.3

ATTENTION:
The Gros Ventre River cross-sections lie within an area that has not been updated on the FIRM now because of the presence of levees that have not been demonstrated to meet the requirements of the NFIP Regulation 65.10. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS for more information.

[1]Stream distance in feet above confluence with Snake River

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY
TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

GROS VENTRE RIVER

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY	INCREASE
LAKE CREEK								
A	634	40	131	5.9	6,198.9	6,198.9	6,199.4	0.5
B	2,624	59	237	3.3	6,206.5	6,206.5	6,206.6	0.1
C	3,899	54	193	4.0	6,210.7	6,210.7	6,211.4	0.7
D	5,419	52	197	3.9	6,216.0	6,216.0	6,216.9	0.9
E	6,680	59	153	5.1	6,220.1	6,220.1	6,220.2	0.1
F	8,346	68	234	3.3	6,225.3	6,225.3	6,225.6	0.3
G	10,698	200	488	1.6	6,233.7	6,233.7	6,234.2	0.5
H	12,599	45	158	4.9	6,239.2	6,239.2	6,239.4	0.2
I	14,884	59	183	4.2	6,246.2	6,246.2	6,246.3	0.1
J	17,189	61	173	4.4	6,253.9	6,253.9	6,253.9	0.0
K	19,417	58	201	3.8	6,262.2	6,262.2	6,262.4	0.2
L	21,331	88	271	2.8	6,268.6	6,268.6	6,268.8	0.2
M	23,360	66	152	5.1	6,274.1	6,274.1	6,274.8	0.7
N	25,404	49	215	3.6	6,279.0	6,279.0	6,279.2	0.2
O	27,624	53	182	4.2	6,286.0	6,286.0	6,286.1	0.1
P	29,829	127	205	4.0	6,290.6	6,290.6	6,290.6	0.0
Q	31,505	62	199	3.7	6,295.1	6,295.1	6,295.3	0.2
R	33,591	46	167	4.4	6,299.7	6,299.7	6,300.0	0.3
S	35,551	48	151	4.9	6,304.0	6,304.0	6,304.2	0.2
T	36,815	56	208	3.5	6,307.8	6,307.8	6,308.0	0.2
U	38,220	39	149	4.9	6,312.1	6,312.1	6,312.1	0.0
V	39,573	65	204	3.6	6,318.5	6,318.5	6,318.6	0.1
W	41,194	39	140	5.2	6,322.9	6,322.9	6,322.9	0.0

[1]Stream distance in feet above confluence with Fish Creek

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

FLOODWAY DATA

LAKE CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE
					(FEET NAVD)			
SNAKE RIVER								
A	1,167	2,199	13,768	2.2	5,956.5	5,956.5	5,956.5	0.1
B	6,201	697	3,706	8.3	5,965.8	5,965.8	5,966.0	0.2
C	10,138	1,161	5,348	5.8	5,979.2	5,979.2	5,979.3	0.1
D	14,646	1,696	6,046	5.1	5,991.2	5,991.2	5,991.3	0.1
E	19,498	2,535	8,194	3.8	6,002.5	6,002.5	6,003.1	0.6
F	27,178	2,649	7,670	4.0	6,023.9	6,023.9	6,024.6	0.7
G	32,181	1,285	5,775	5.3	6,038.9	6,038.9	6,039.4	0.5
H	36,764	2,437	7,227	4.3	6,055.0	6,055.0	6,055.1	0.1
I	41,844	2,241	52,711	3.6	6,072.3	6,072.3	6,072.3	0.0
J	46,818	1,669	5,305	5.8	6,091.2	6,091.2	6,091.2	0.0
K	51,948	1325	3,068	6.1	6,107.9	6,107.9	6,107.9	0.0
L	56,648	1238	4,854	4.8	6,129.2	6,129.2	6,129.2	0.0
M	60,948	1448	2,943	7.9	6,144.3	6,144.3	6,144.3	0.0
N	65,288	814	4,241	5.5	6,163.0	6,163.0	6,163.0	0.0
O	72,298	1153	5,119	4.6	6,192.1	6,192.1	6,192.1	0.0
P	77,398	883	4,333	5.4	6,210.6	6,210.6	6,210.6	0.0
Q	82,598	1369	2,333	10.0	6,229.0	6,229.0	6,229.0	0.0
R	88,698	2395	2,038	7.4	6,252.7	6,252.7	6,252.7	0.0
S	93,598	1826	4,278	3.5	6,275.1	6,275.1	6,275.1	0.0
T	99,498	2181	1,927	7.8	6,296.8	6,296.8	6,296.8	0.0
U	105,998	1828	1,870	8.1	6,319.0	6,319.0	6,319.0	0.0
V	111,348	1670	1,786	8.4	6,344.0	6,344.0	6,344.0	0.0
W	115,798	1593	1,747	8.6	6,362.0	6,362.0	6,362.0	0.0
X	120,198	1616	2,879	5.3	6,379.4	6,379.4	6,379.4	0.0
Y	125,848	642	2,259	6.7	6,404.3	6,404.3	6,404.3	0.0

[1]Stream distance in feet above US Highway 89

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

SNAKE RIVER ABOVE US HIGHWAY 89

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	**DISTANCE**[1]	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY** (FEET NAVD)	**WITH FLOODWAY**	**INCREASE**
SPRING CREEK								
A	780	92	167	1.6	--[2]	5,993.2	5,994.2	1.0
B	2,250	128	87	3.1	--[2]	5,998.8	5,998.9	0.1
C	3,670	121	138	2.0	--[2]	6,005.4	6,005.4	0.0
D	4,860	90	126	2.1	--[2]	6,008.3	6,008.5	0.2
E	6,070	80	141	1.9	--[2]	6,010.6	6,010.6	0.0
F	7,800	47	72	3.8	--[2]	6,019.2	6,019.2	0.0
G	9,330	106	93	2.9	--[2]	6,023.6	6,023.6	0.0
H	11,000	75	135	2.0	--[2]	6,028.0	6,028.1	0.1
I	13,035	56	126	2.1	--[2]	6,033.8	6,033.8	0.0
J	14,500	43	51	5.3	--[2]	6,039.3	6,039.3	0.0
K	16,710	103	149	1.8	--[2]	6,045.6	6,045.9	0.3
L	17,730	52	93	2.9	--[2]	6,048.6	6,048.6	0.0
M	19,392	99	142	1.9	--[2]	6,054.7	6,054.7	0.0
N	20,804	63	108	2.5	--[2]	6,057.3	6,057.3	0.0
O	22,875	61	51	5.3	--[2]	6,063.2	6,063.2	0.0
P	24,301	30	46	5.8	--[2]	6,075.3	6,075.3	0.0
Q	25,977	60	108	2.5	6,092.0	6,092.0	6,092.7	0.7
R	27,200	97	69	3.9	6,099.0	6,099.0	6,099.4	0.4
S	28,800	78	79	3.4	6,104.4	6,104.4	6,104.5	0.1
T	30,350	51	79	3.4	6,110.3	6,110.3	6,110.4	0.1
U	31,580	48	125	2.2	6,113.3	6,113.3	6,113.9	0.6
V	33,000	80	128	2.1	6,115.7	6,115.7	6,115.7	0.0
W	34,400	44	67	3.6	6,119.3	6,119.3	6,119.5	0.2
X	36,070	42	74	3.3	6,126.2	6,126.2	6,126.4	0.2
Y	37,450	44	51	4.7	6,133.3	6,133.3	6,133.3	0.0
Z	38,270	28	78	3.1	6,135.4	6,135.4	6,135.4	0.0

[1]Stream distance in feet above confluence with Snake River

[2]Elevations controlled by Snake River. Refer to Snake River Profiles for Regulatory Elevations

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE[1]	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY	INCREASE
SPRING CREEK (Continued)								
AA	38,801	55	85	2.8	6,138.7	6,138.7	6,138.9	0.2
AB	40,091	56	89	2.7	6,143.9	6,143.9	6,144.4	0.5
AC	42,871	33	73	3.3	6,155.6	6,155.6	6,155.8	0.2
AD	43,380	27	60	4.0	6,158.2	6,158.2	6,158.6	0.4
AE	44,070	45	60	3.7	6,162.4	6,162.4	6,162.5	0.1

[1]Stream distance in feet above confluence with Snake River

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

SPRING CREEK

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	**DISTANCE**[1]	**WIDTH (FEET)**	**SECTION AREA (SQUARE FEET)**	**MEAN VELOCITY (FEET PER SECOND)**	**REGULATORY**	**WITHOUT FLOODWAY** (FEET NAVD)	**WITH FLOODWAY**	**INCREASE**
TETON CREEK								
A	0	15	100	10.0	6,377.4	6,377.4	6,377.4	0.0
B	3,175	100	144	6.9	6,406.6	6,406.6	6,406.6	0.0
C	4,040	25	120	8.3	6,421.4	6,421.4	6,421.4	0.0
D	5,435	90	160	6.3	6,441.2	6,441.2	6,441.2	0.0
E	6,985	85	146	7.0	6,465.5	6,465.5	6,465.6	0.1
F	9,050	141	199	5.1	6,493.7	6,493.7	6,493.7	0.0
G	11,070	348	153	8.2	6,517.3	6,517.3	6,517.8	0.5
H	12,570	148	174	6.5	6,542.0	6,542.0	6,542.0	0.0
I	14,075	206	222	5.8	6,560.2	6,560.2	6,560.3	0.1
J	15,860	97	144	6.9	6,591.6	6,591.6	6,591.6	0.0
K	16,835	94	155	6.0	6,606.8	6,606.8	6,606.8	0.0

[1]Stream distance in feet above County Line Road

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

FLOODWAY DATA

TETON CREEK

5.0 INSURANCE APPLICATION

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

Zone A

Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the FIS by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no Base (100-year) Flood Elevations (BFEs) or depths are shown within this zone.

Zone AE

Zone AE is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the FIS by detailed methods. 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 500-year floodplain, areas within the 500-year floodplain, areas of 100-year flooding where average depths are less than 1 foot, areas of 100-year flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 100-year 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.

Within this jurisdiction, the Gros Ventre River levees have not been demonstrated by the community or levee owner to meet the requirements of NFIP regulation 65.10 regarding their ability to provide protection from the 1%-annual-chance-flood. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS report for more information on how this affects the FIRM.

For flood insurance applications, the map designates flood insurance rate zones as described in Section 5.0 and, in the 1%-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 0.2%- and 1%-annual-chance floodplains, the floodways, and the locations of selected cross sections used in the hydraulic analyses and floodway computations.

The current FIRM presents flooding information for the entire geographic area of Teton County. Previously, separate Flood Hazard Boundary Maps (FHBMs) were prepared for the incorporated and the unincorporated areas of the county. Historical data relating to the maps prepared for each community are presented in Table 6, Community Map History.

COMMUNITY NAME	INITIAL IDENTIFICATION	FLOOD HAZARD BOUNDARY MAP REVISIONS DATE	FIRM EFFECTIVE DATE	FIRM REVISIONS DATE
Jackson, Town of	May 10, 1974	April 16, 1976	May 4, 1989	
Teton County (Unincorporated Areas)	August 29, 1978	None	May 4, 1989	

TABLE 6

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

COMMUNITY MAP HISTORY

7.0 OTHER STUDIES

No other FISs have been performed or are being undertaken for Teton County at this time. Because of the more detailed methodology applied in this study, it supersedes the previously printed FHBMs for the Town of Jackson (Reference 13) and the unincorporated areas of Teton County (Reference 14). This FIS supersedes previously printed FISs and FIRMs dated September 26, 2006, (Reference 29) and August 5, 2010 (Reference 30).

A Special Flood Hazard Information report was prepared for the Snake River by the USACE in 1976 (Reference 11). Cross-section data developed as part of that report were also used by the SC to develop flood elevations in this study. However, elevations in this study are not in exact agreement with those in the earlier report. For cross sections computed at critical depth in the USACE report, the USACE increased the elevations by a factor of 1.2-critical depth. This was not done for elevations presented in this study. The USACE also ran the Snake River as three separate reaches, which accounts for some of the elevation differences between that report and this study. There have also been some modifications to the HEC-2 program since the USACE report was prepared.

FISs have been published for adjacent areas of Fremont and Lincoln Counties, Wyoming, and Bonneville County, Idaho (References 15, 16, and 17, respectively). FHBMs have been published for adjacent areas of Park and Sublette Counties, Wyoming, and Teton County, Idaho (References 18, 19, and 20, respectively).

8.0 LOCATION OF DATA

Information concerning the pertinent data used in the preparation of this study can be obtained by contacting FEMA, Federal Insurance and Mitigation Division, Denver Federal Center, Building 710, Box 25267, Denver, Colorado 80225-0267.

9.0 BIBLIOGRAPHY AND REFERENCES

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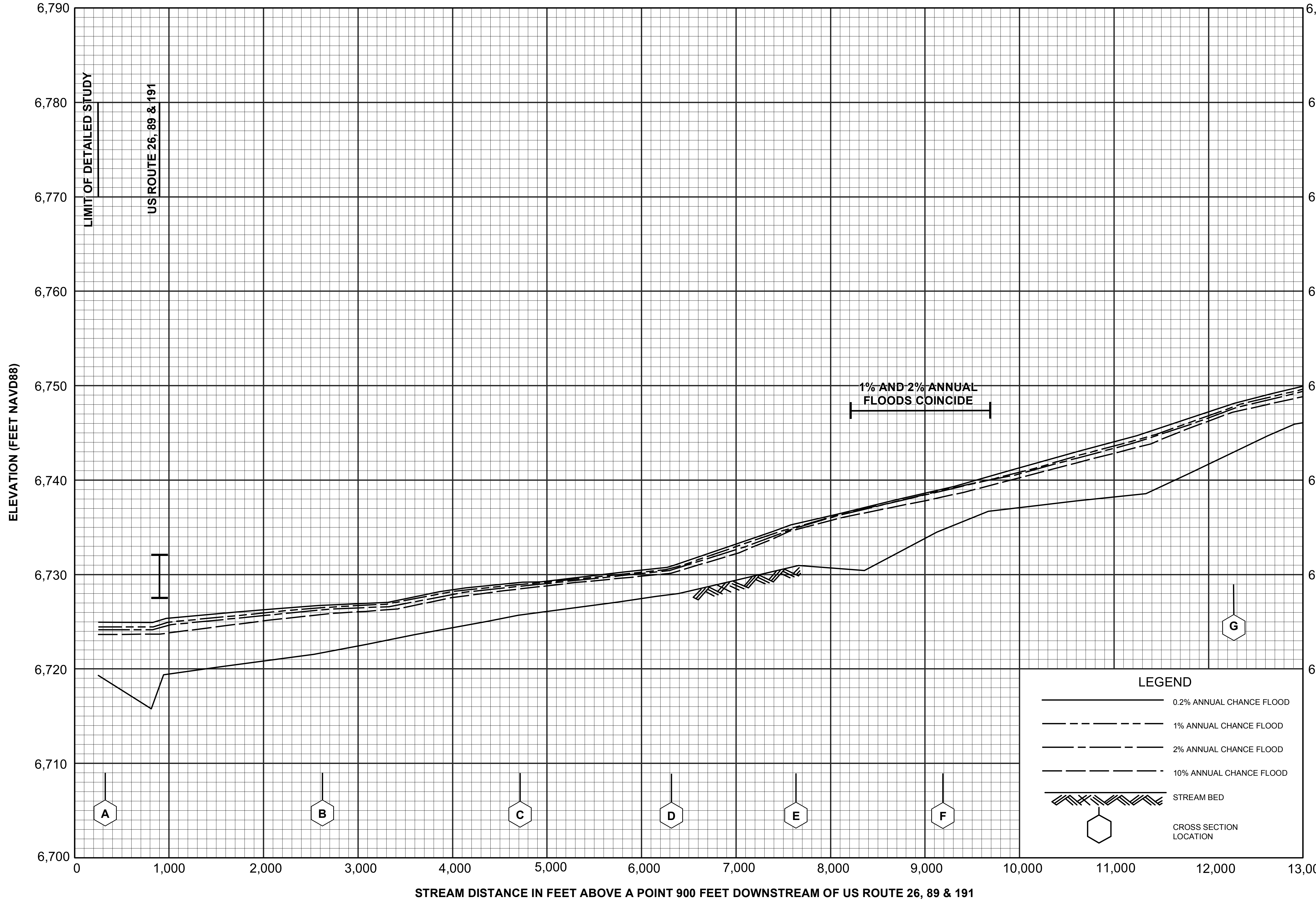


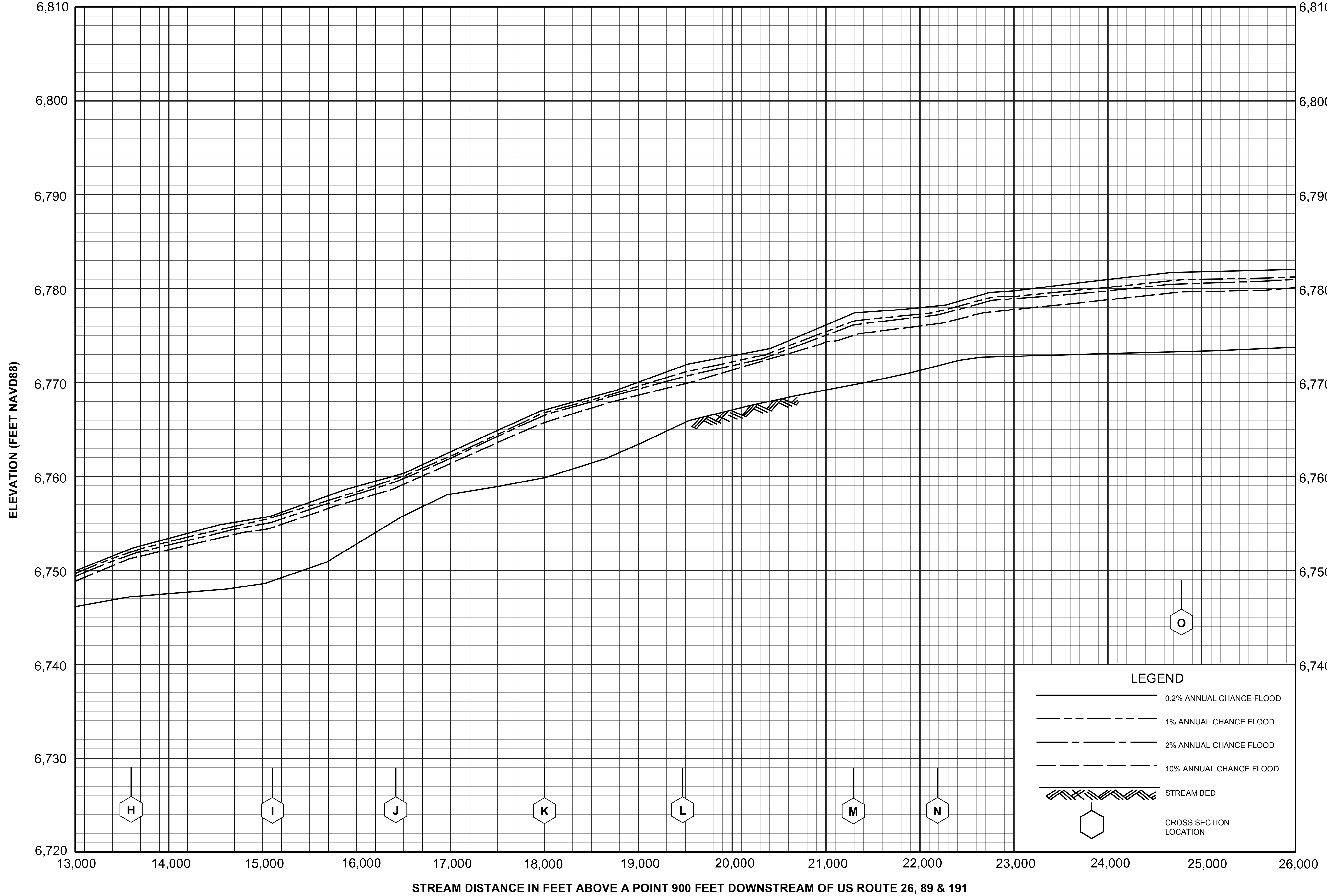
FLOOD PROFILES

BUFFALO FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

01P



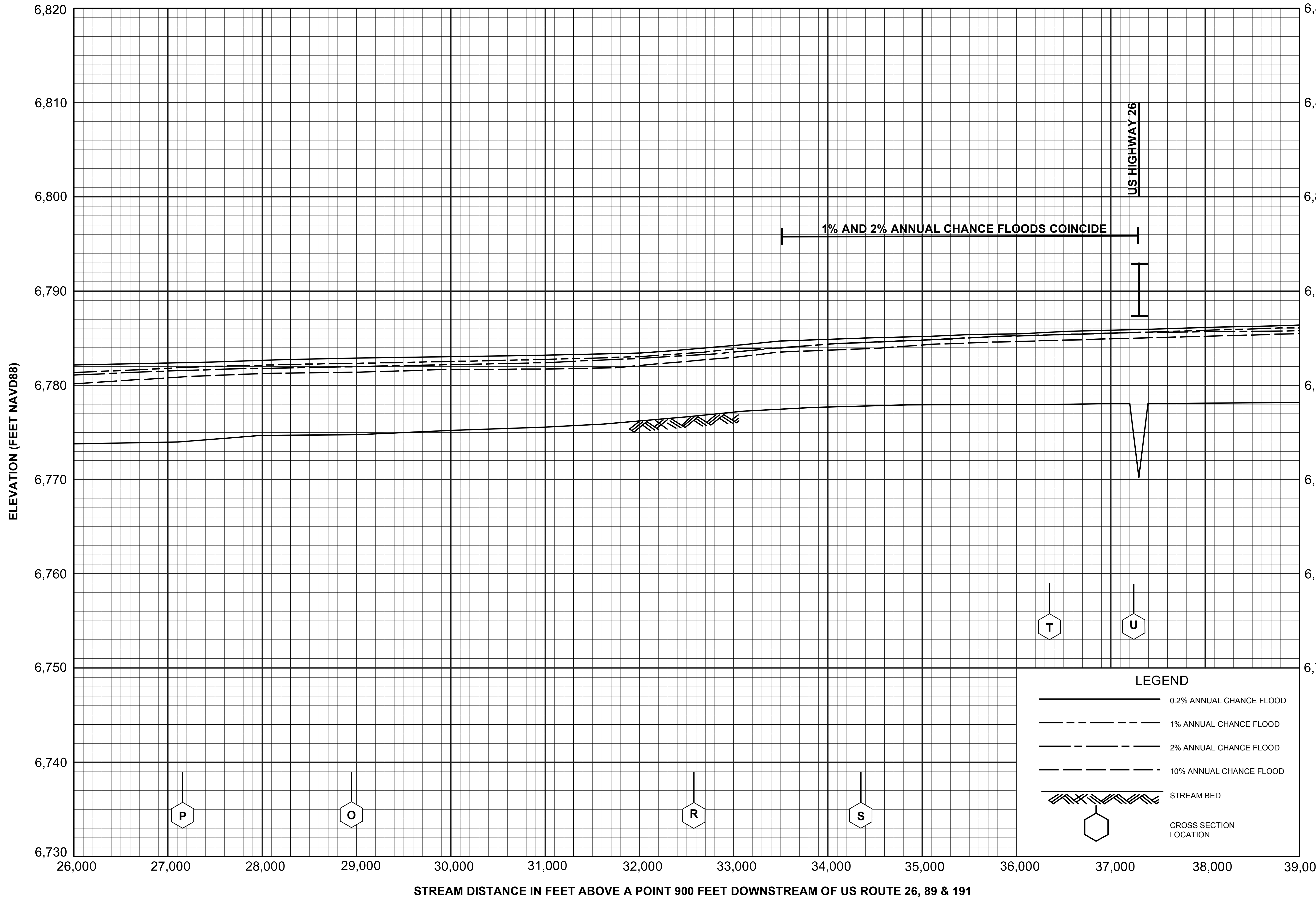
FLOOD PROFILES

BUFFALO FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

02P



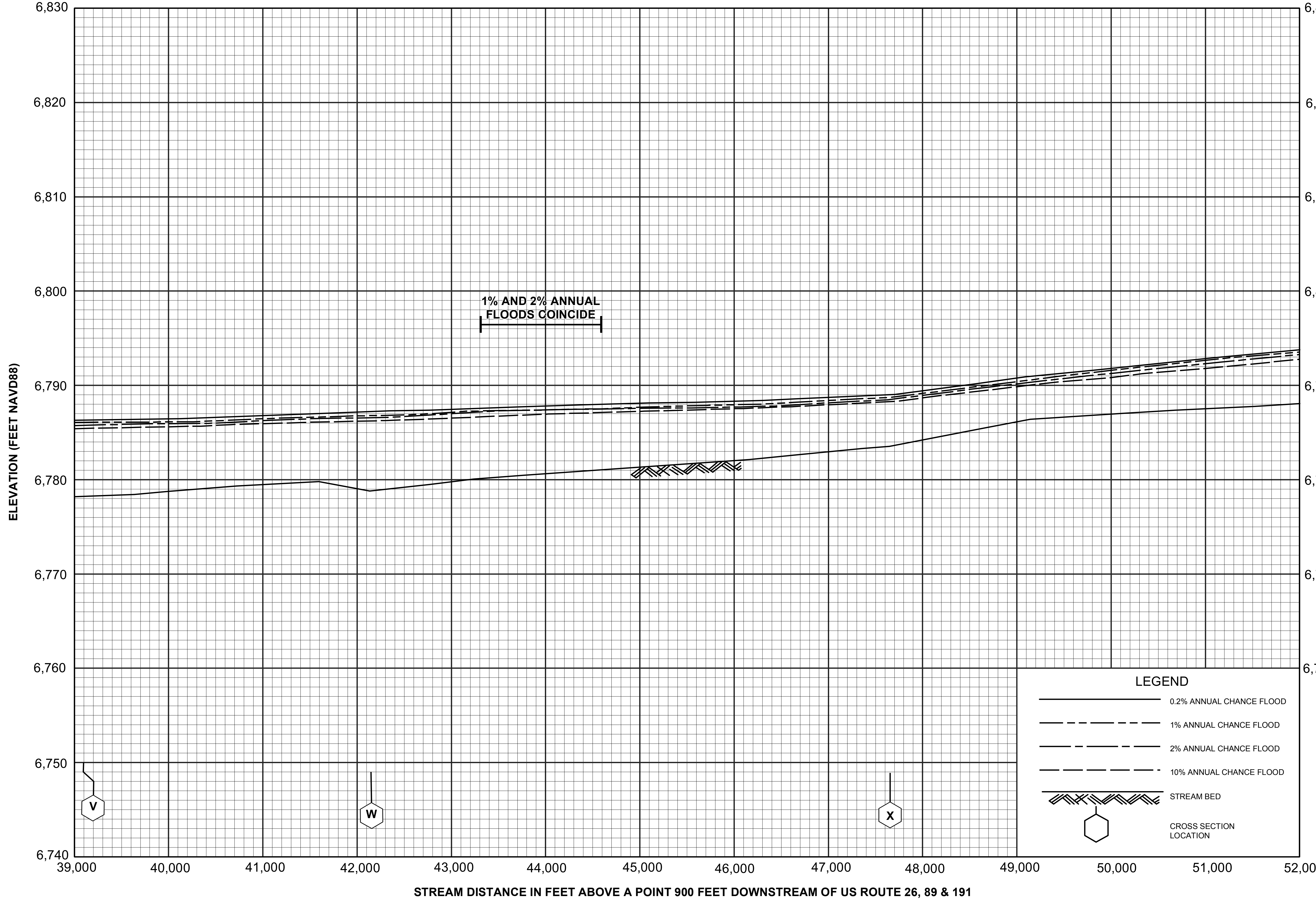
FLOOD PROFILES

BUFFALO FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

03P



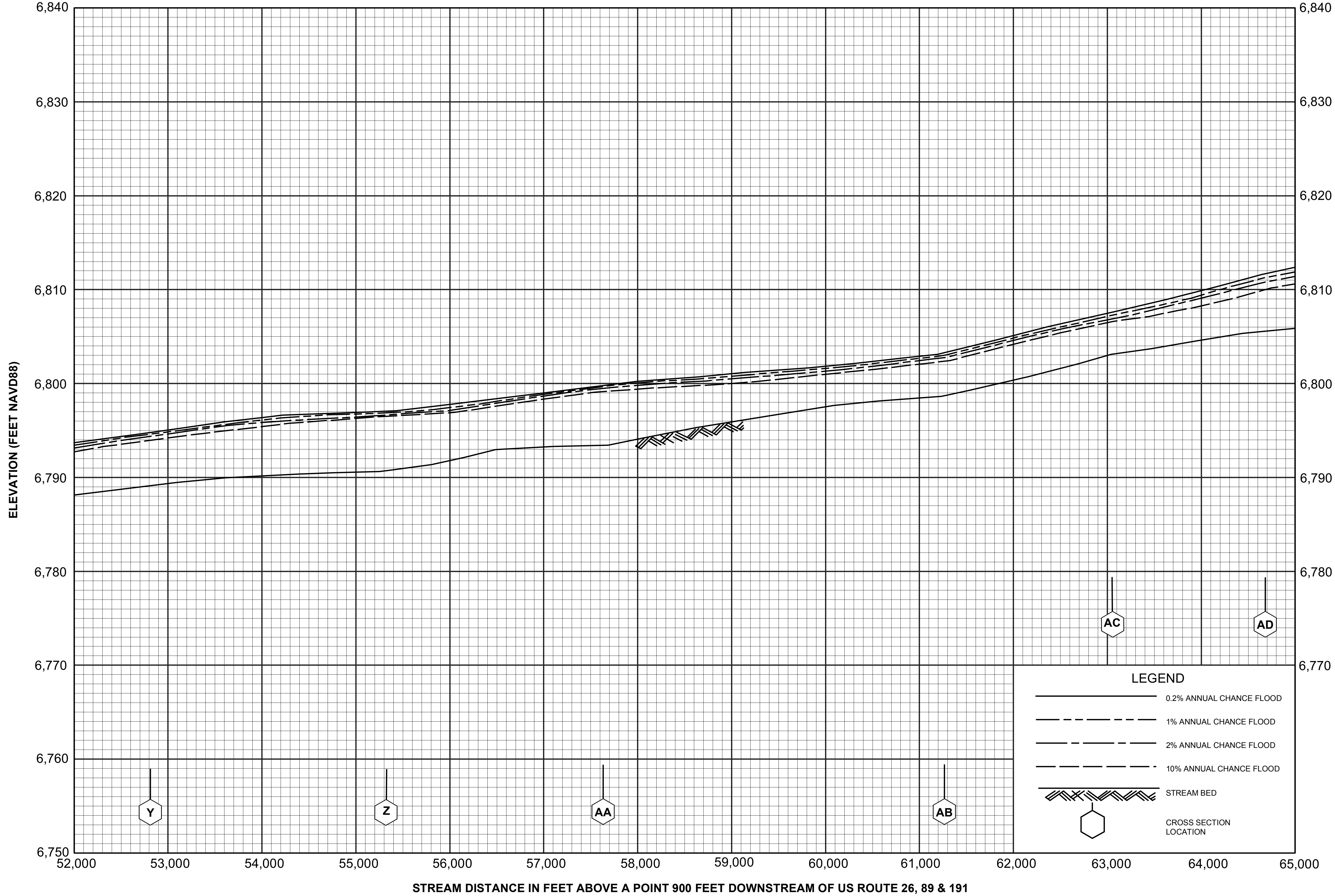
FLOOD PROFILES

BUFFALO FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

04P



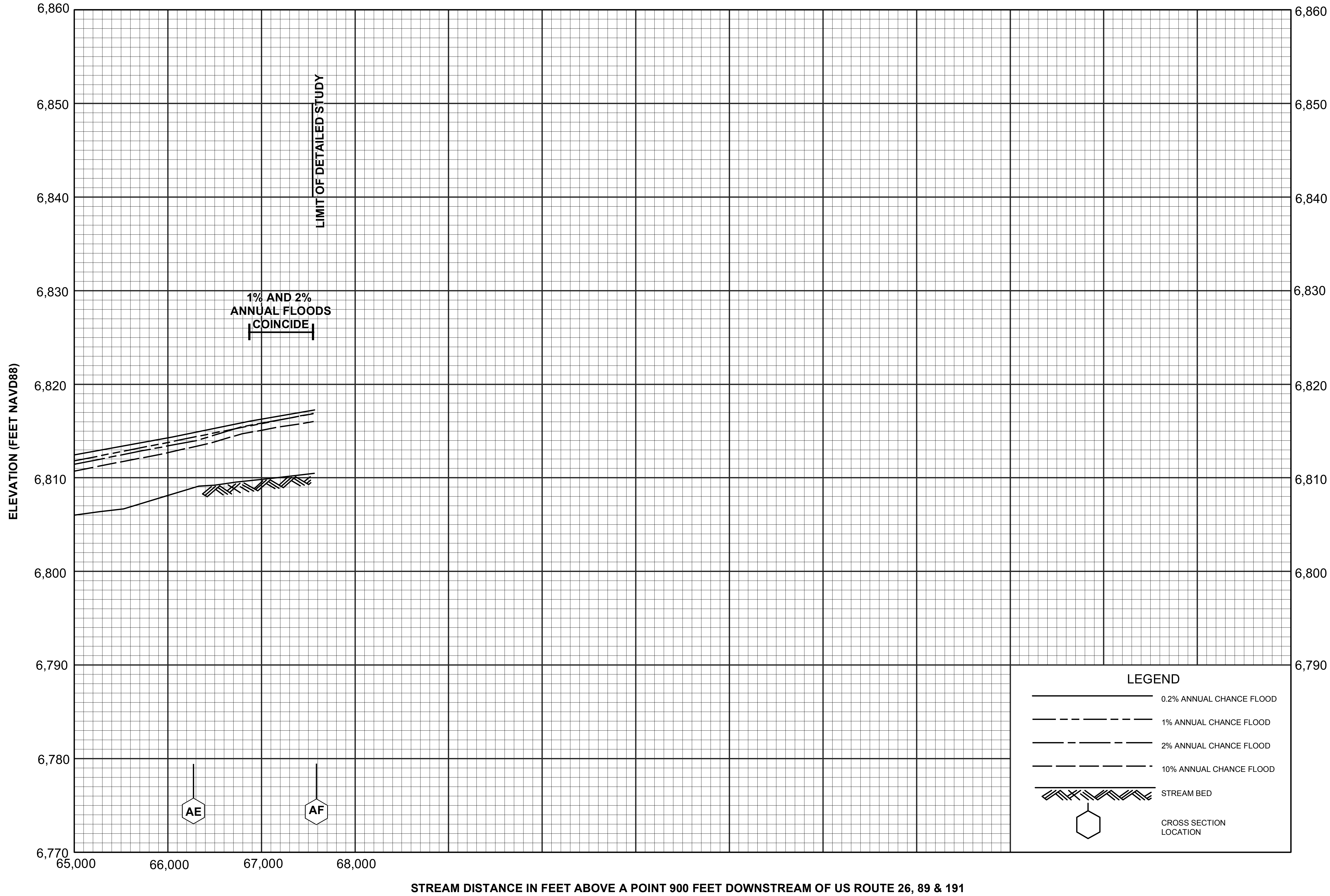
FLOOD PROFILES

BUFFALO FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

05P



FLOOD PROFILES

BUFFALO FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

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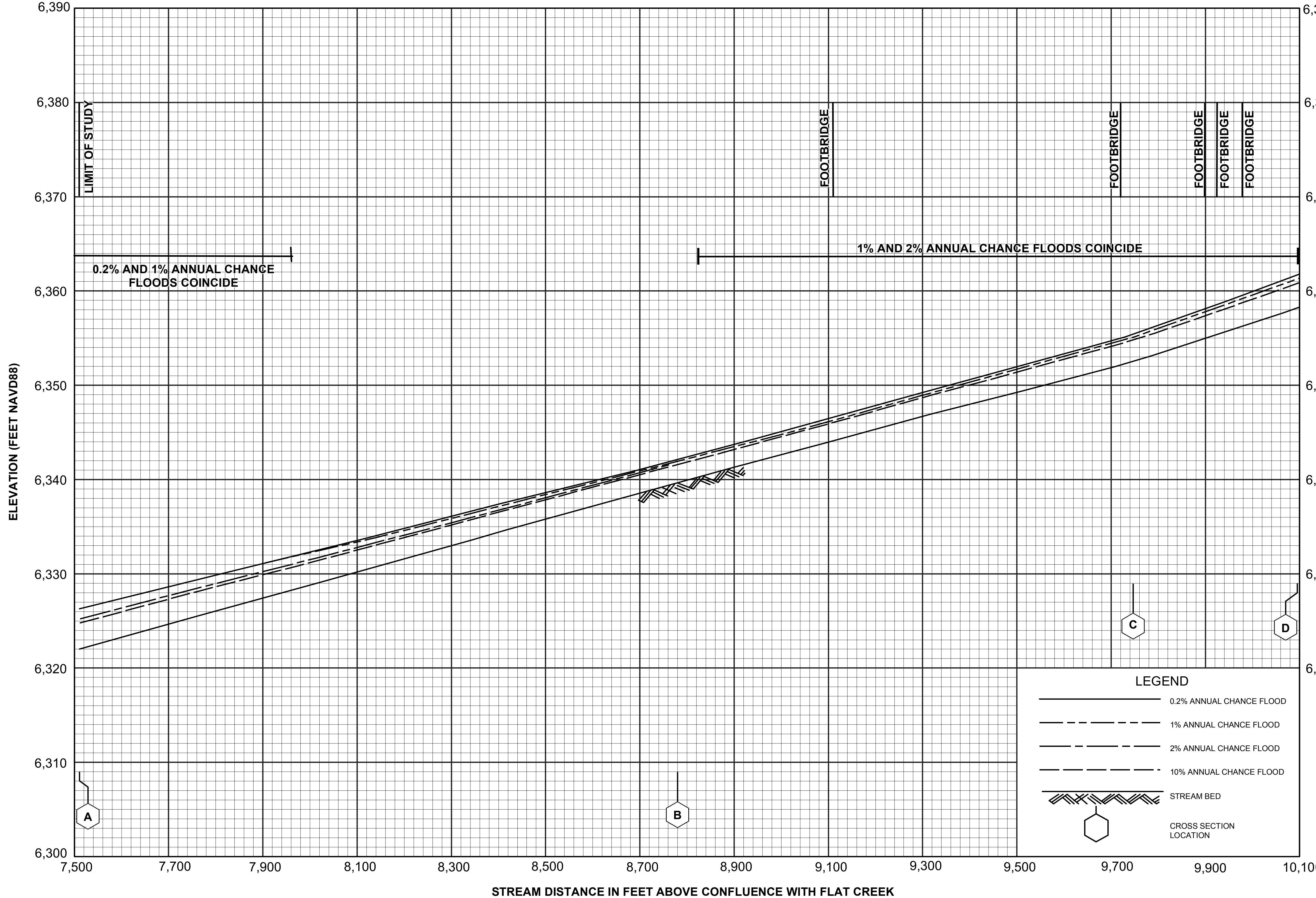


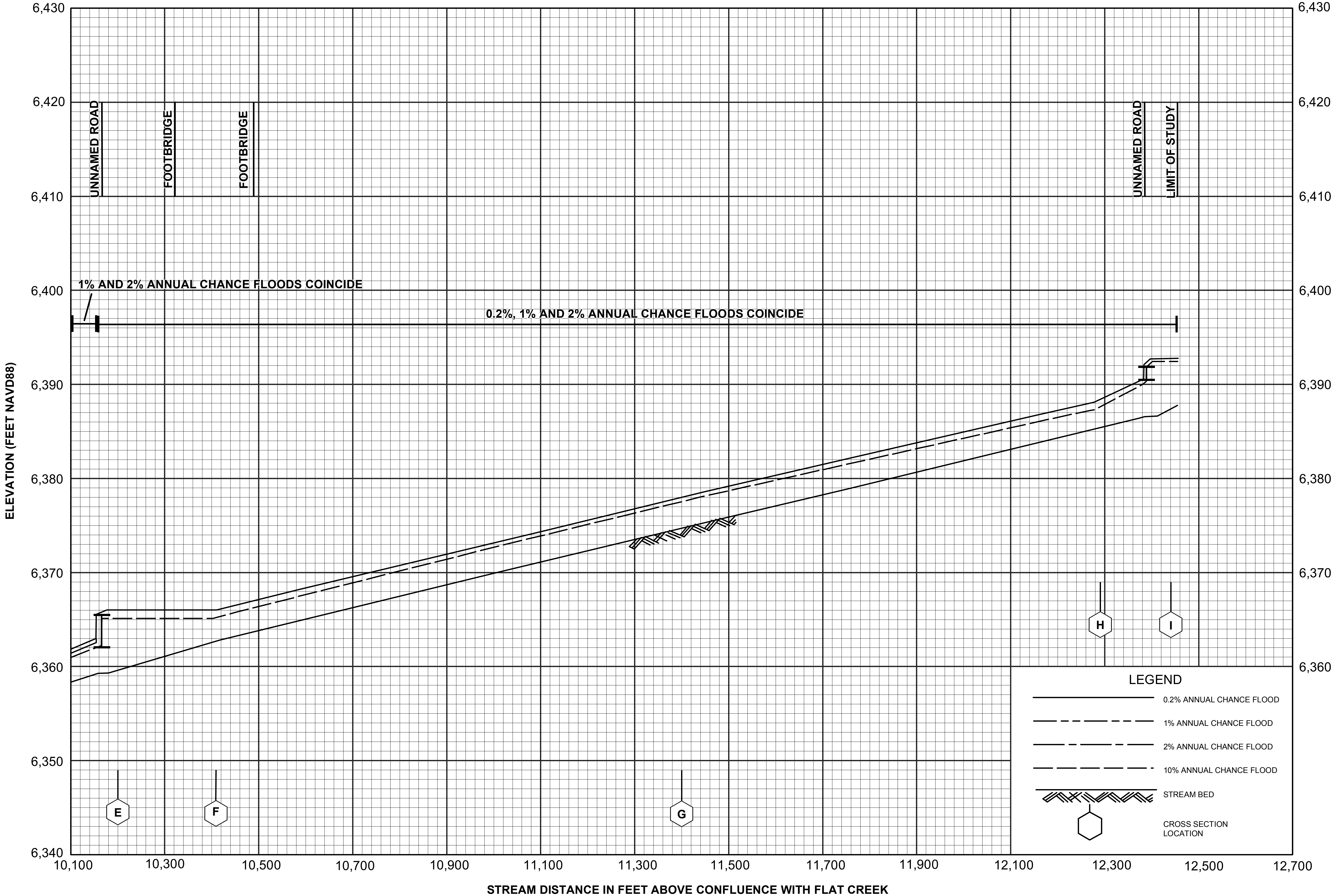
FLOOD PROFILES

CACHE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

07P

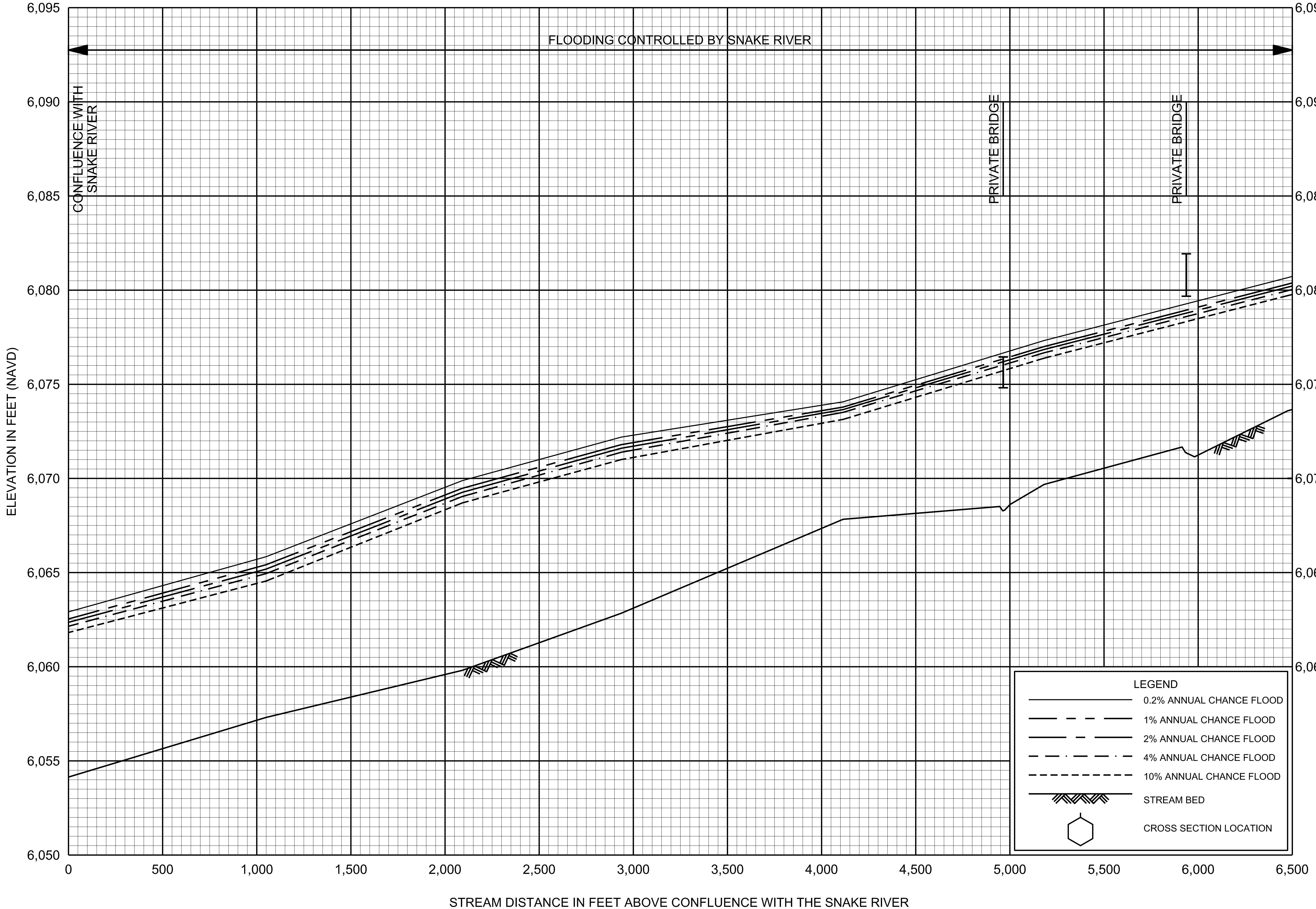


FLOOD PROFILES

CACHE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



FLOOD PROFILES

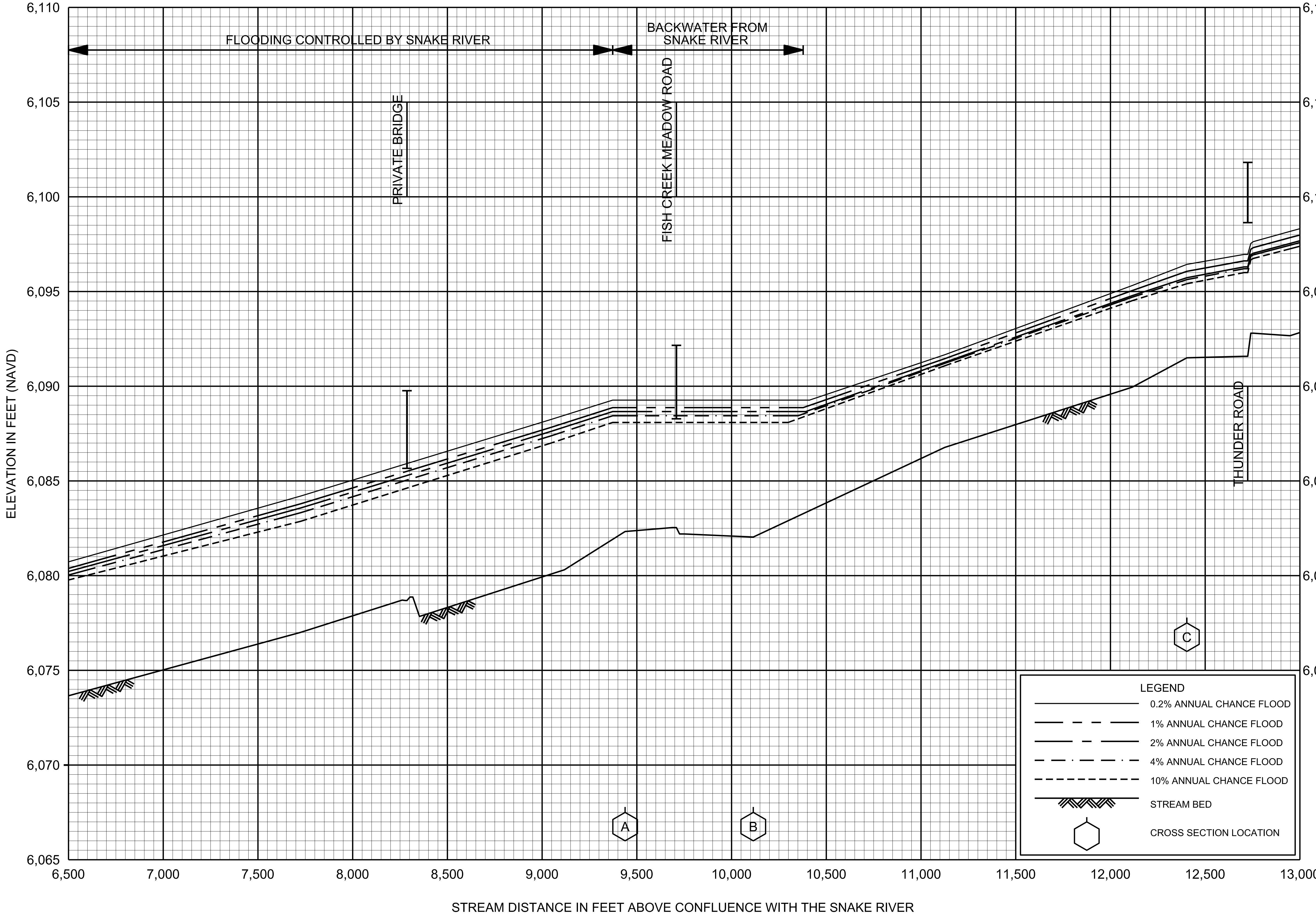
FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS

09P



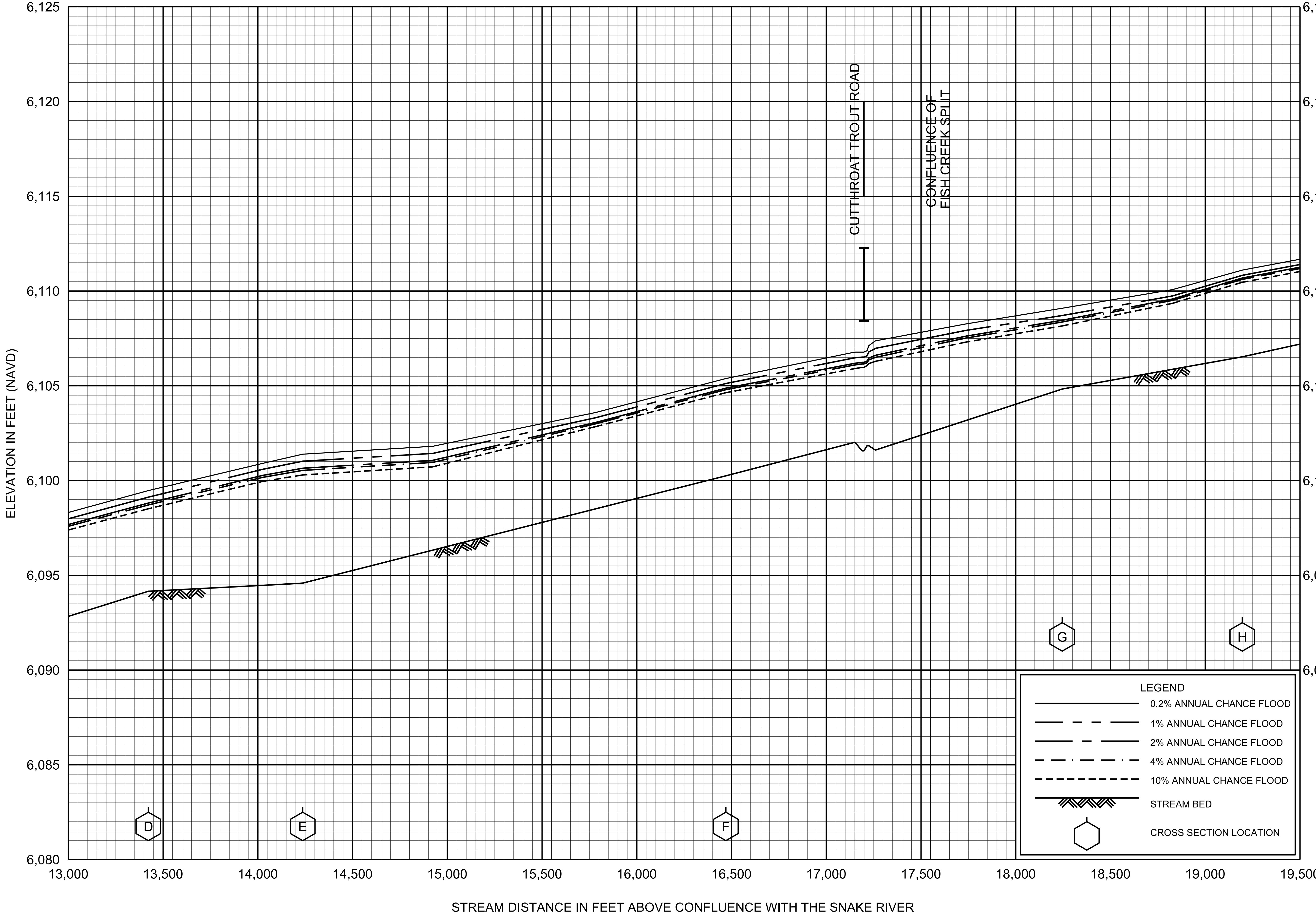
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



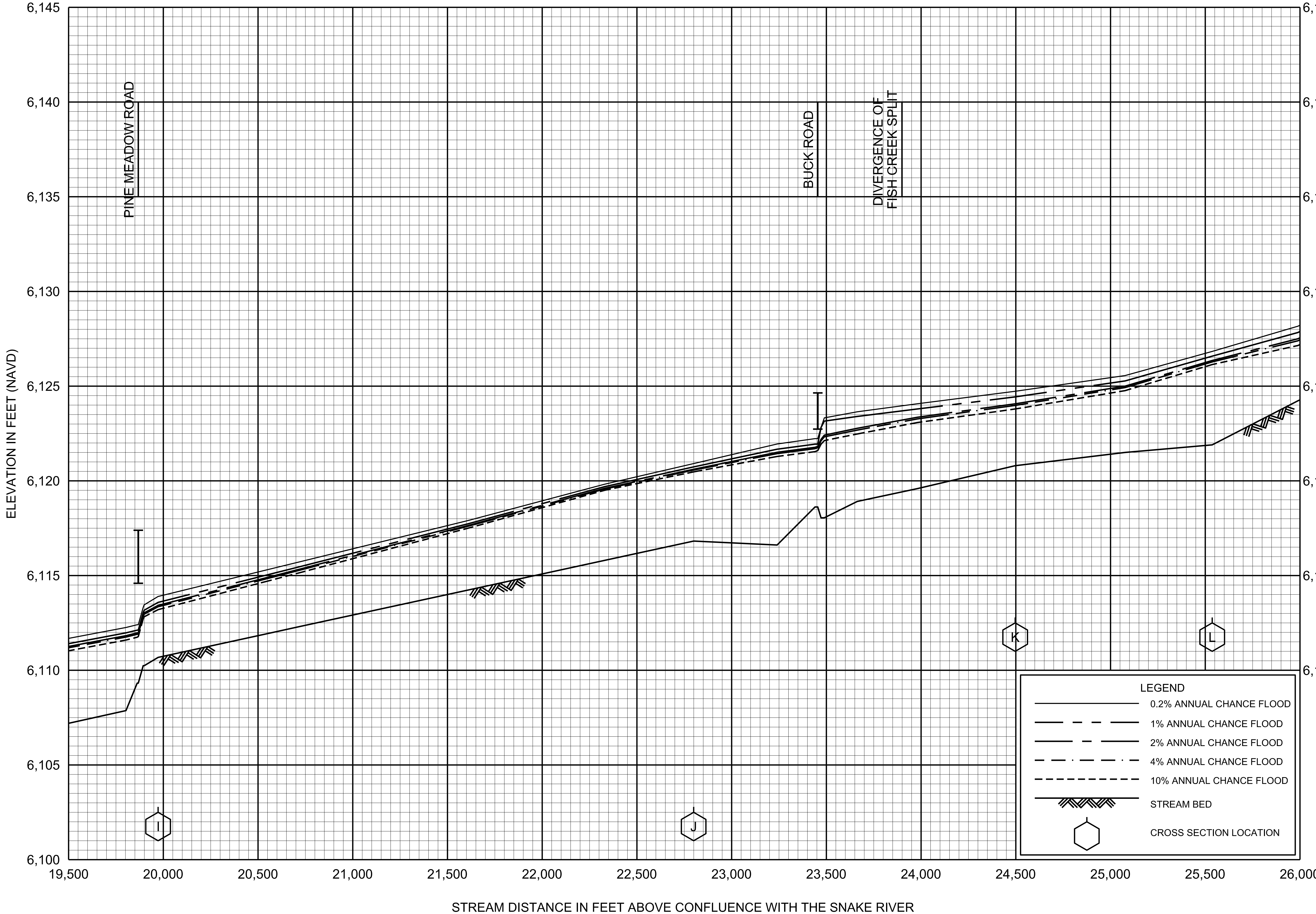
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



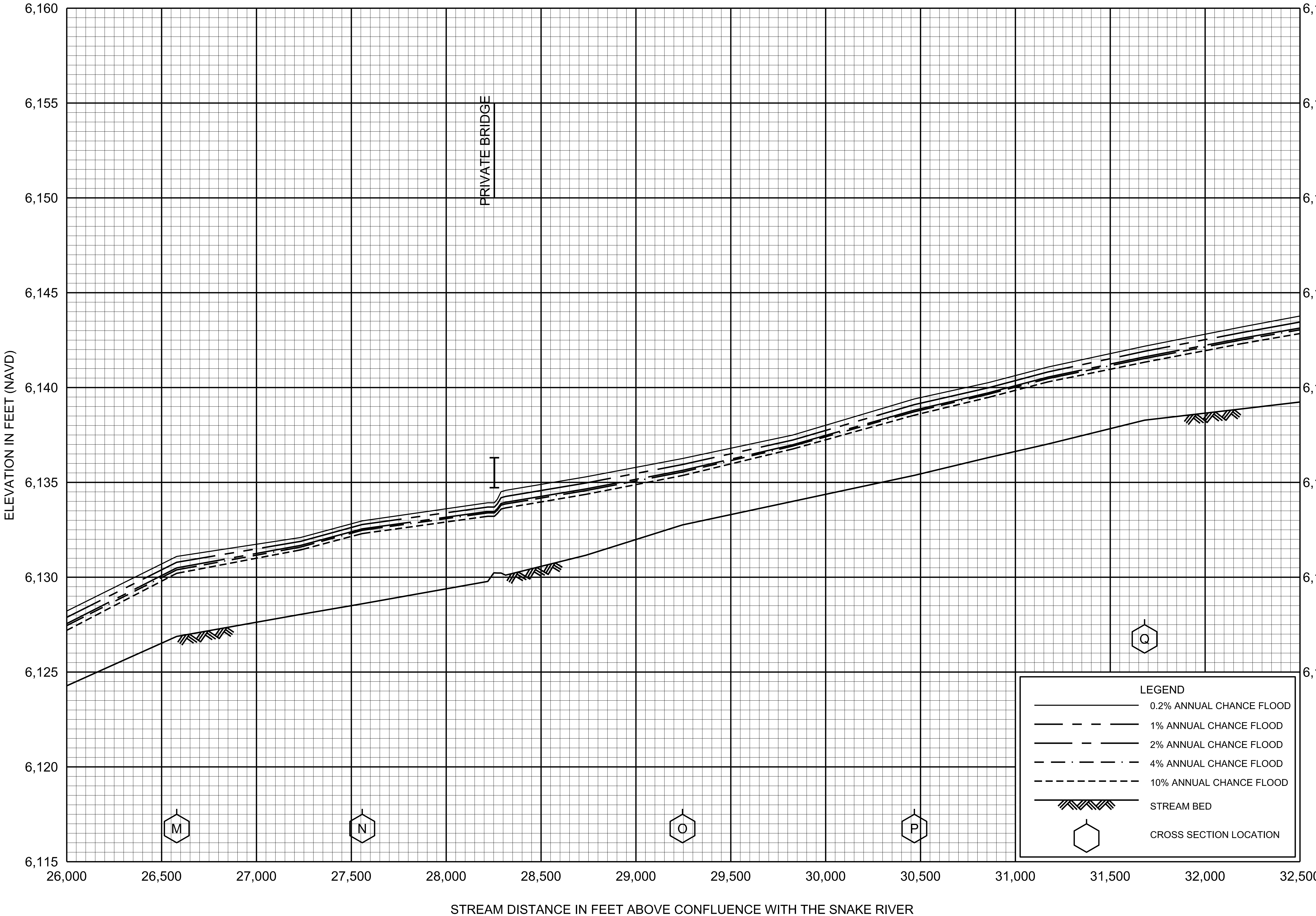
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



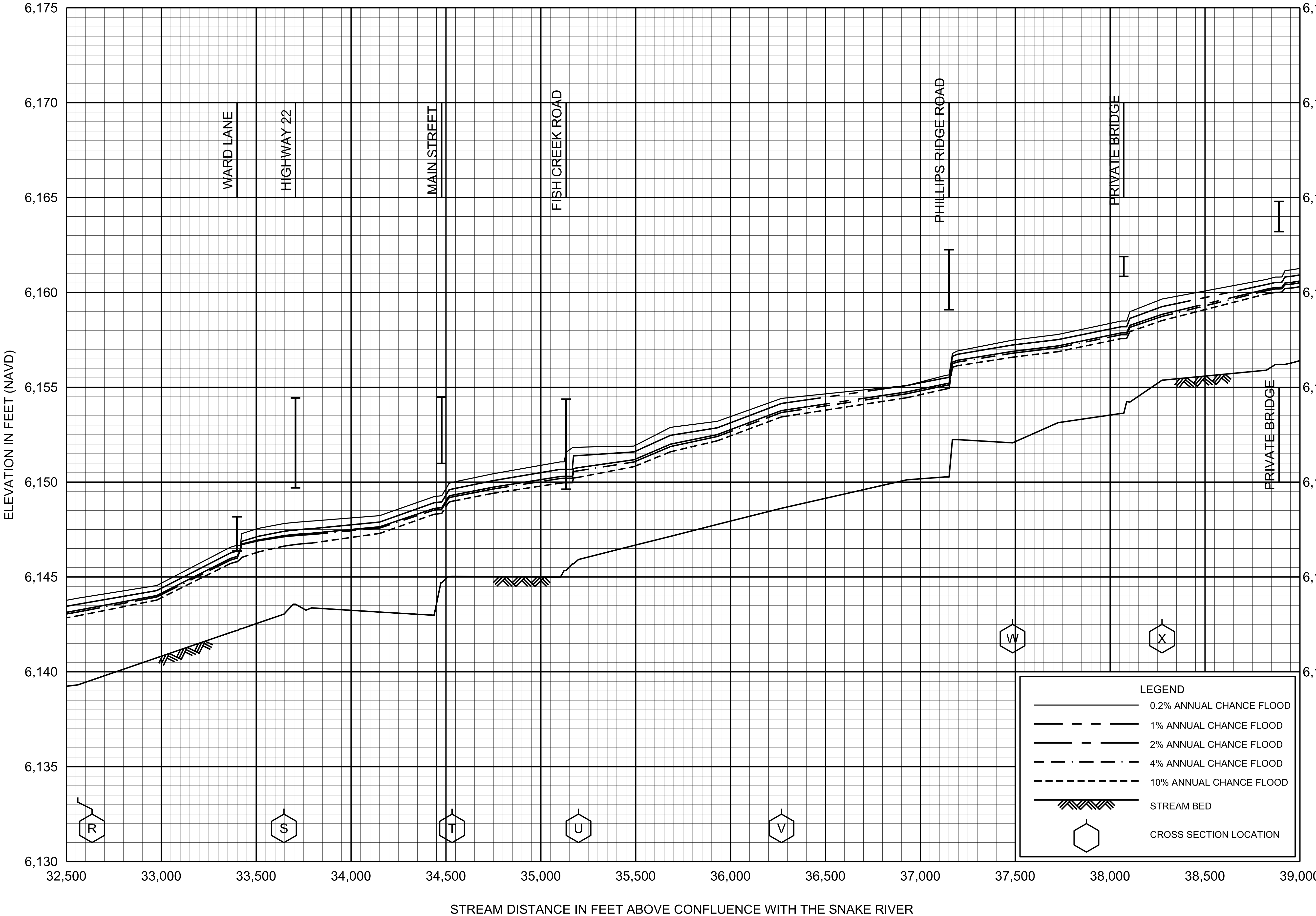
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



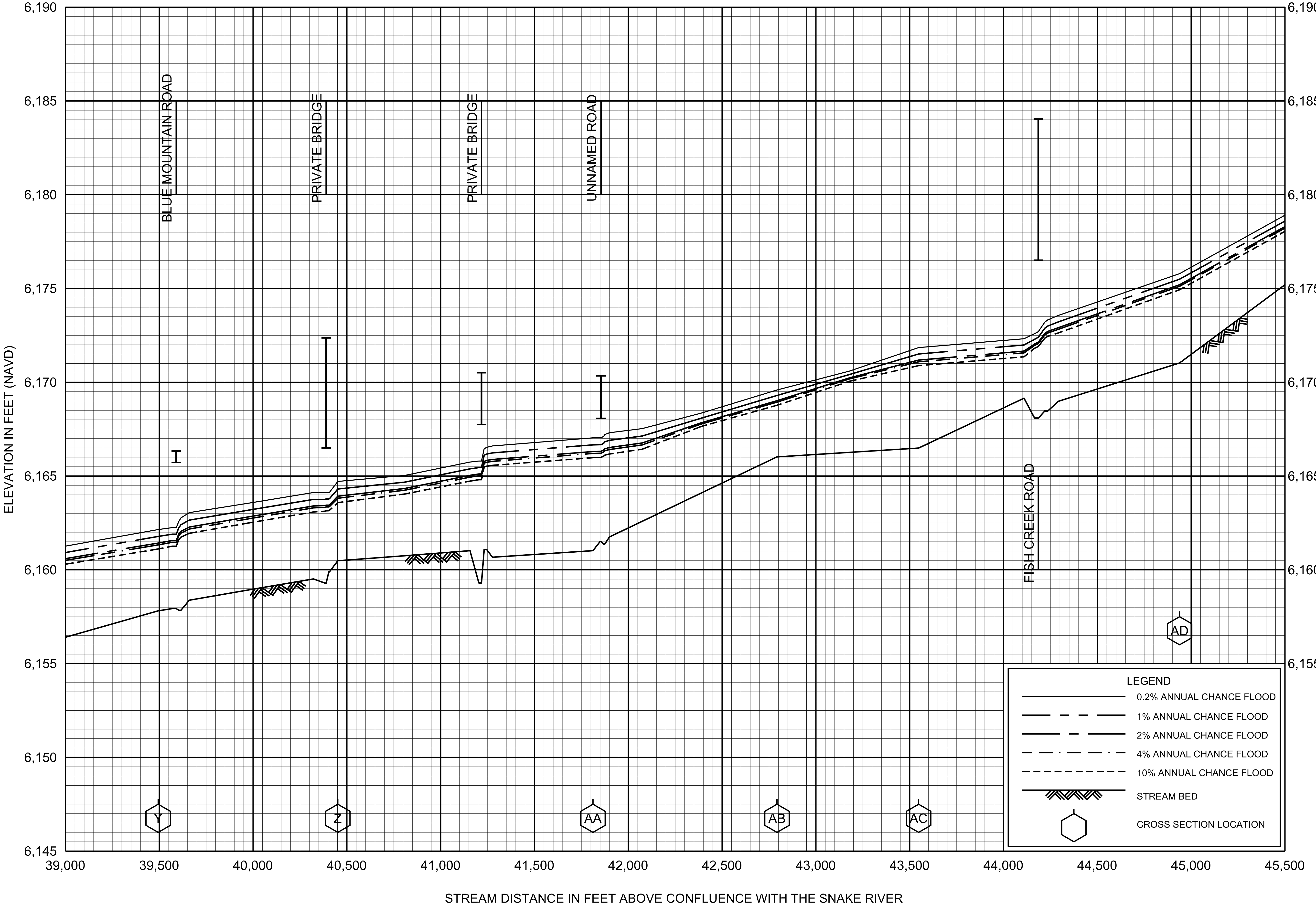
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS

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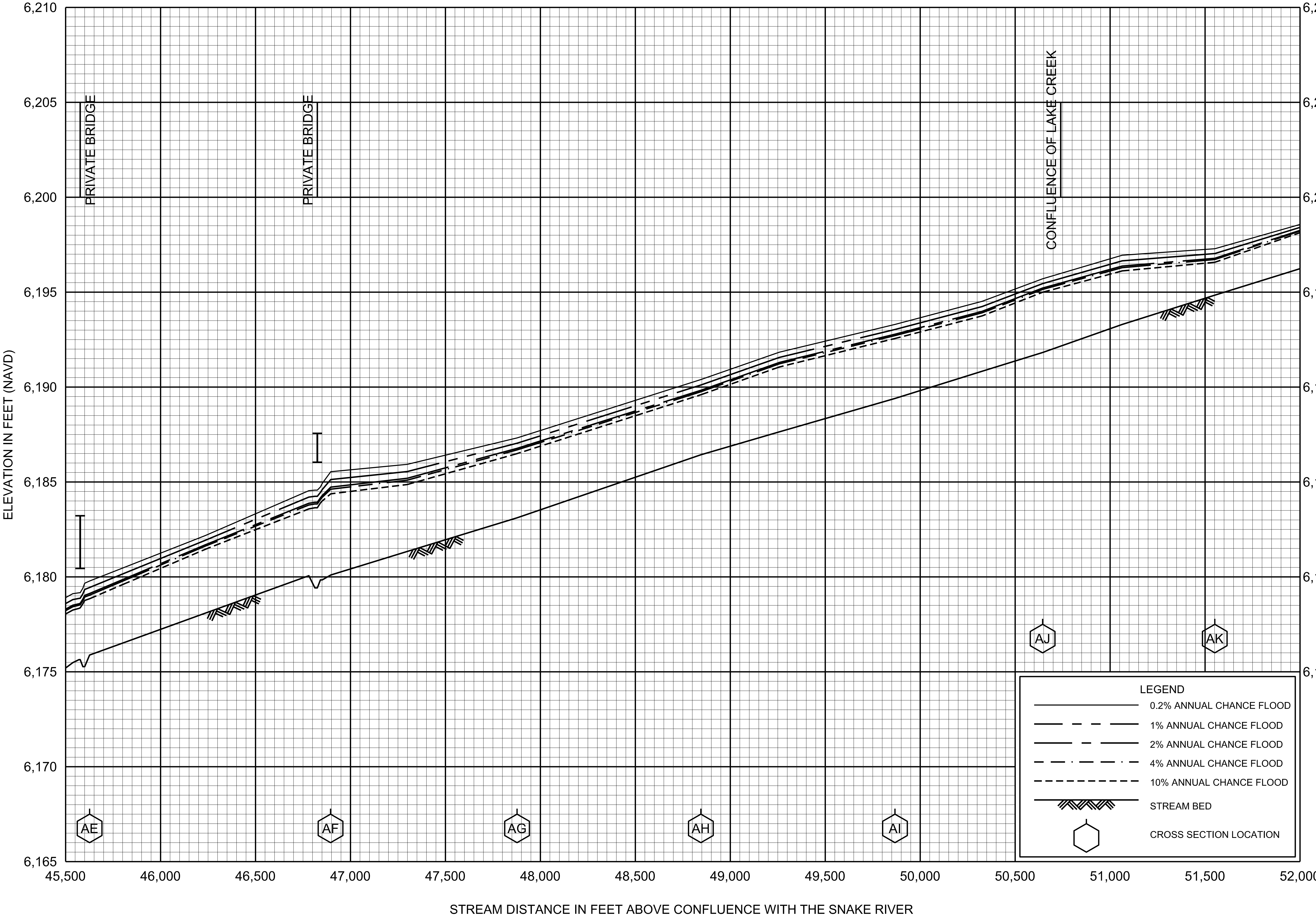


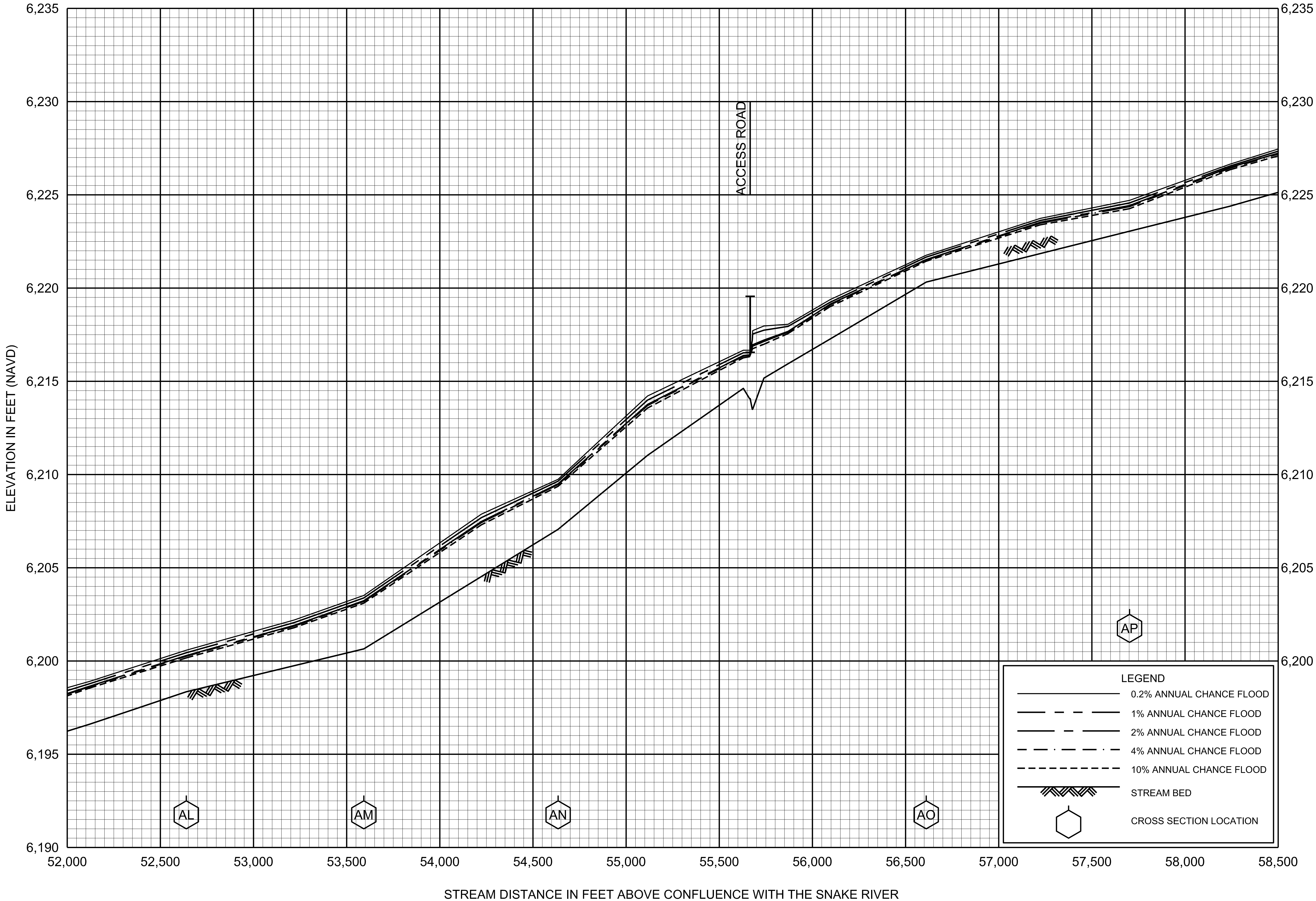
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



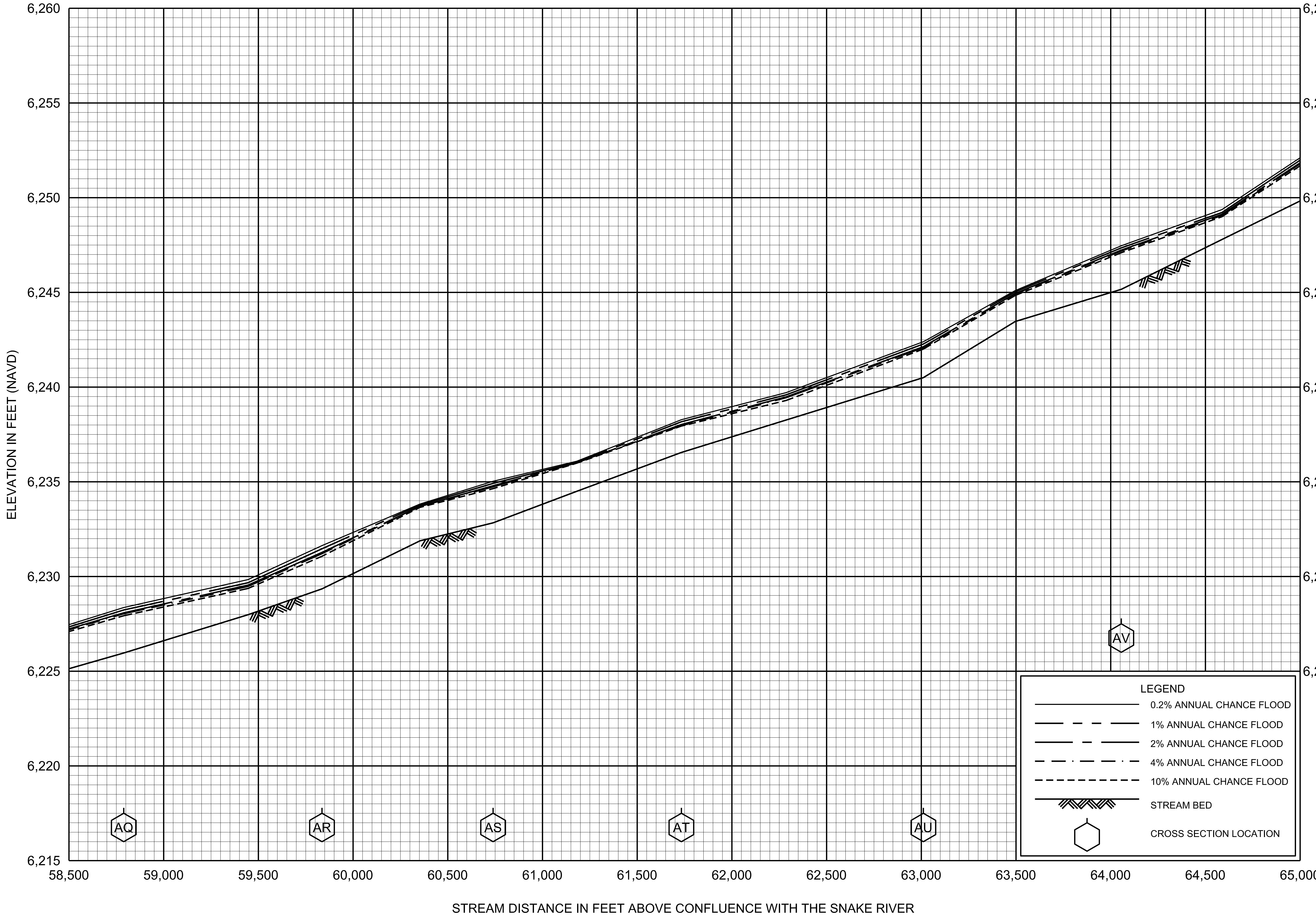
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



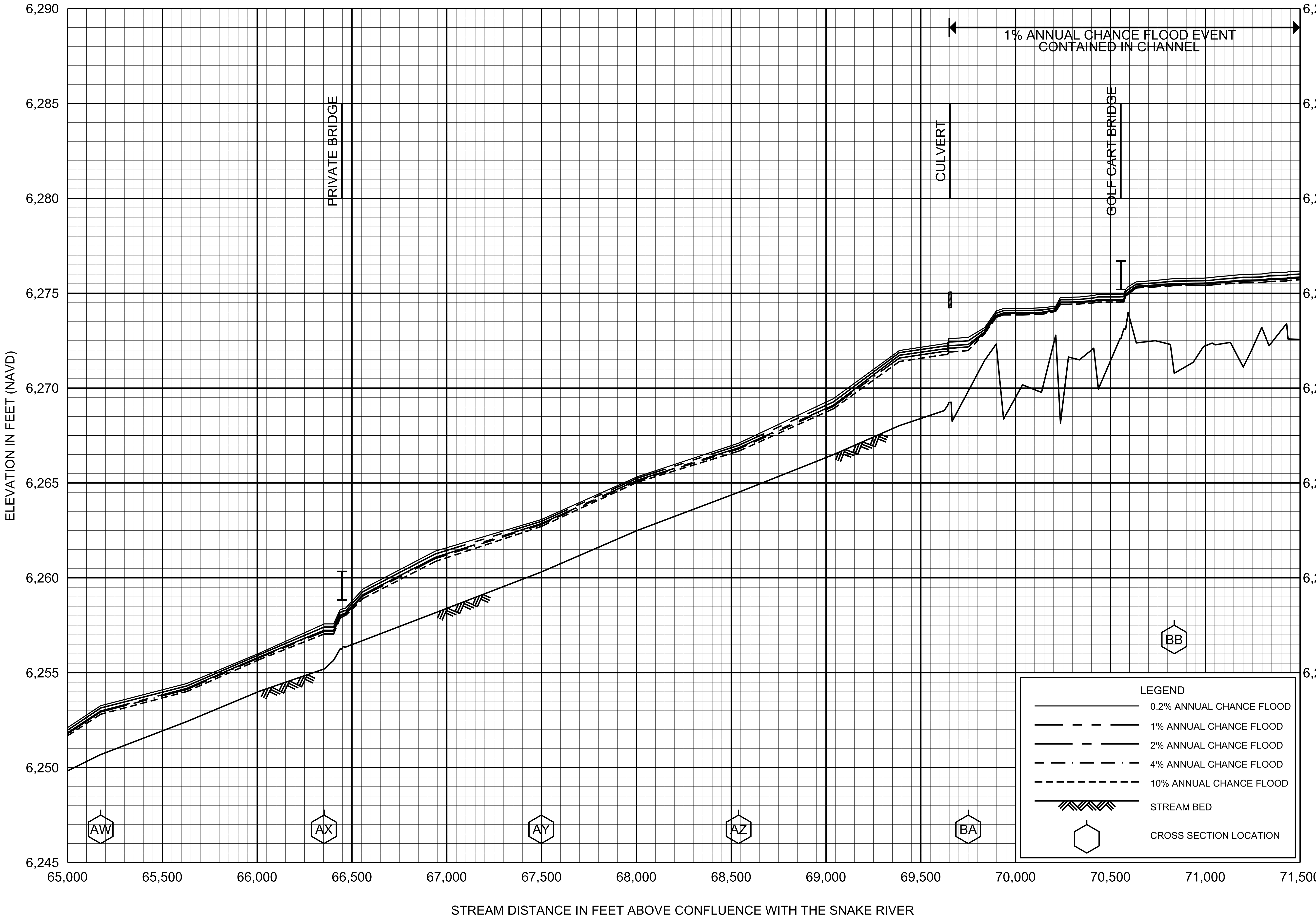
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



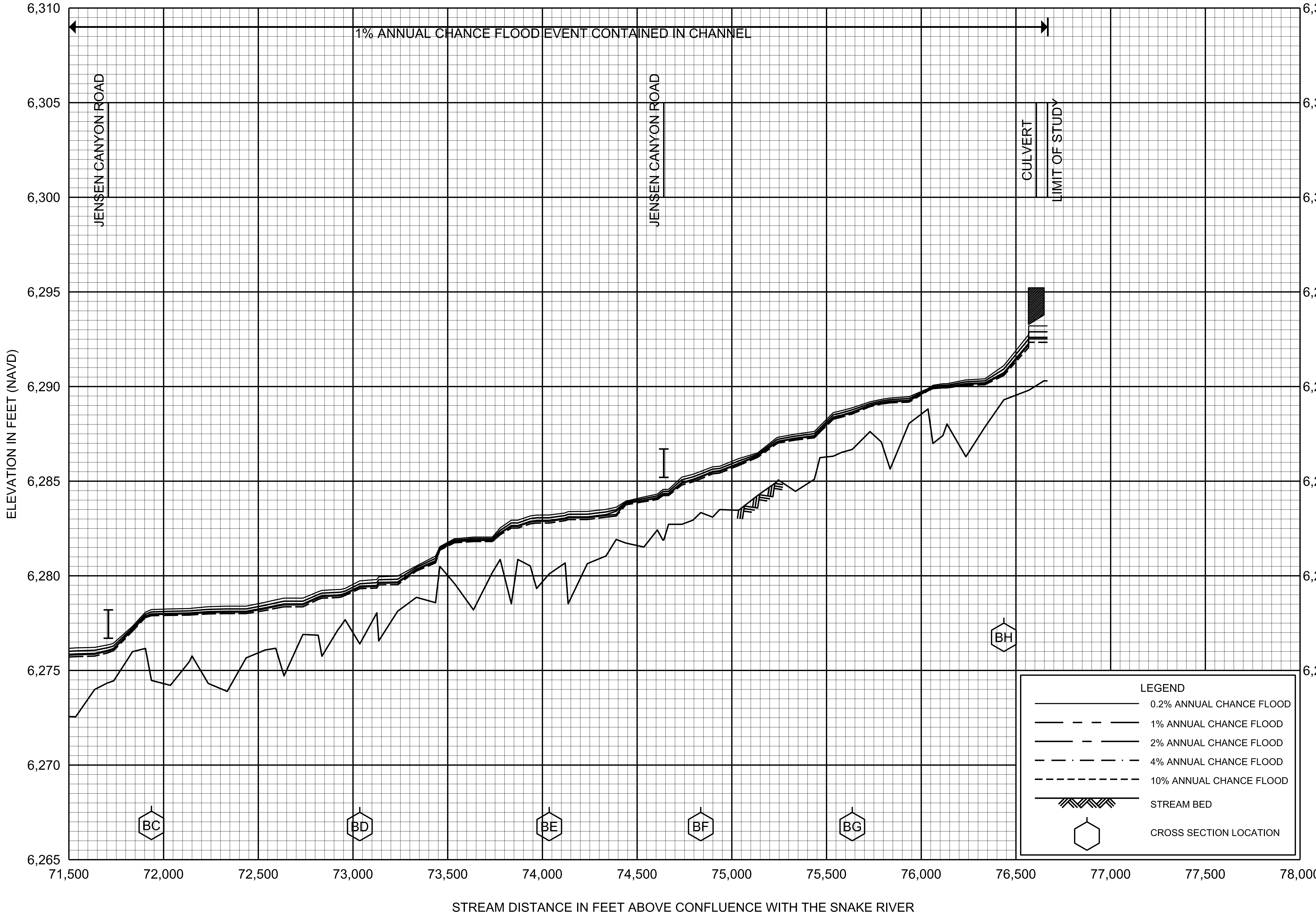
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



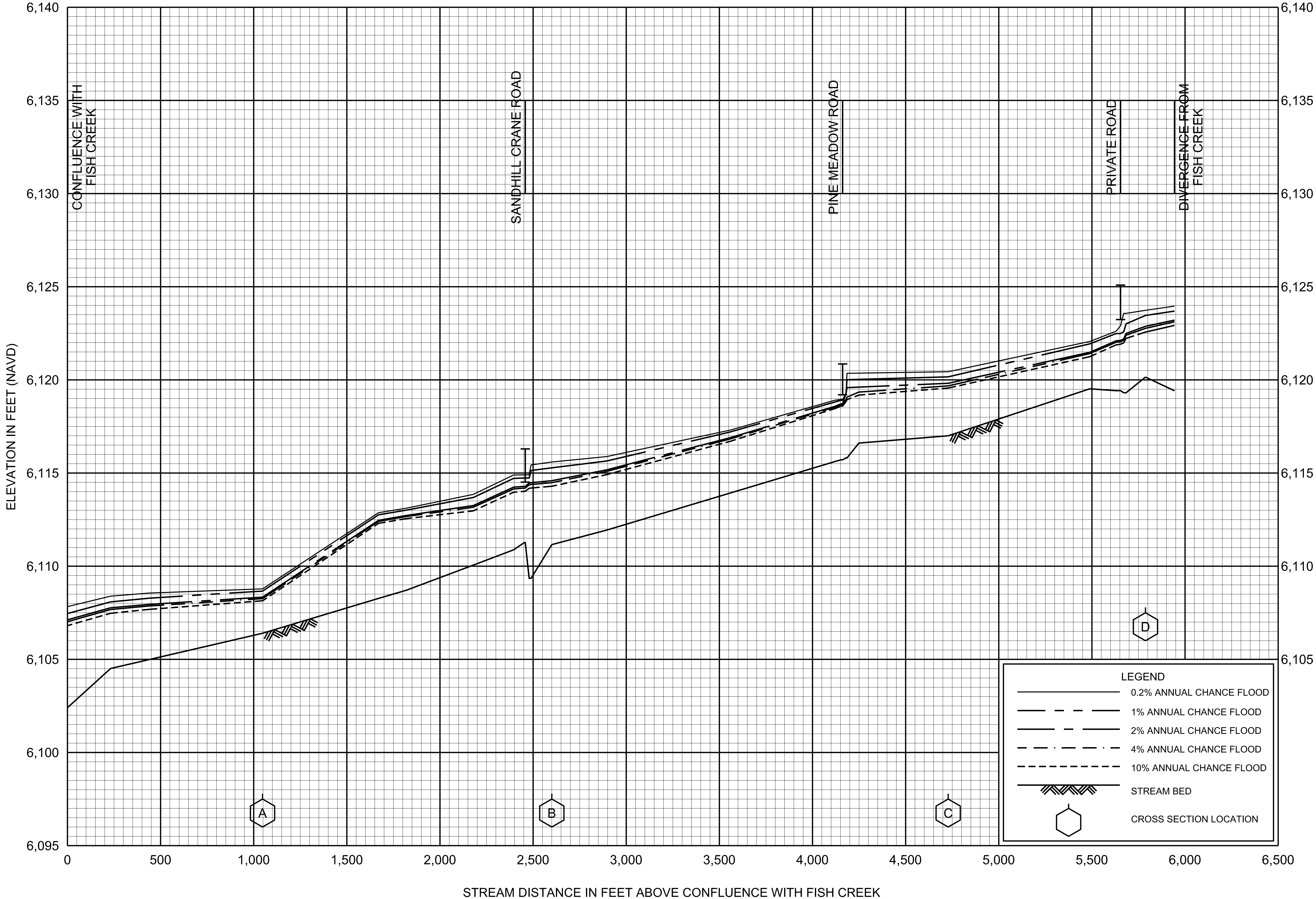
FLOOD PROFILES

FISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



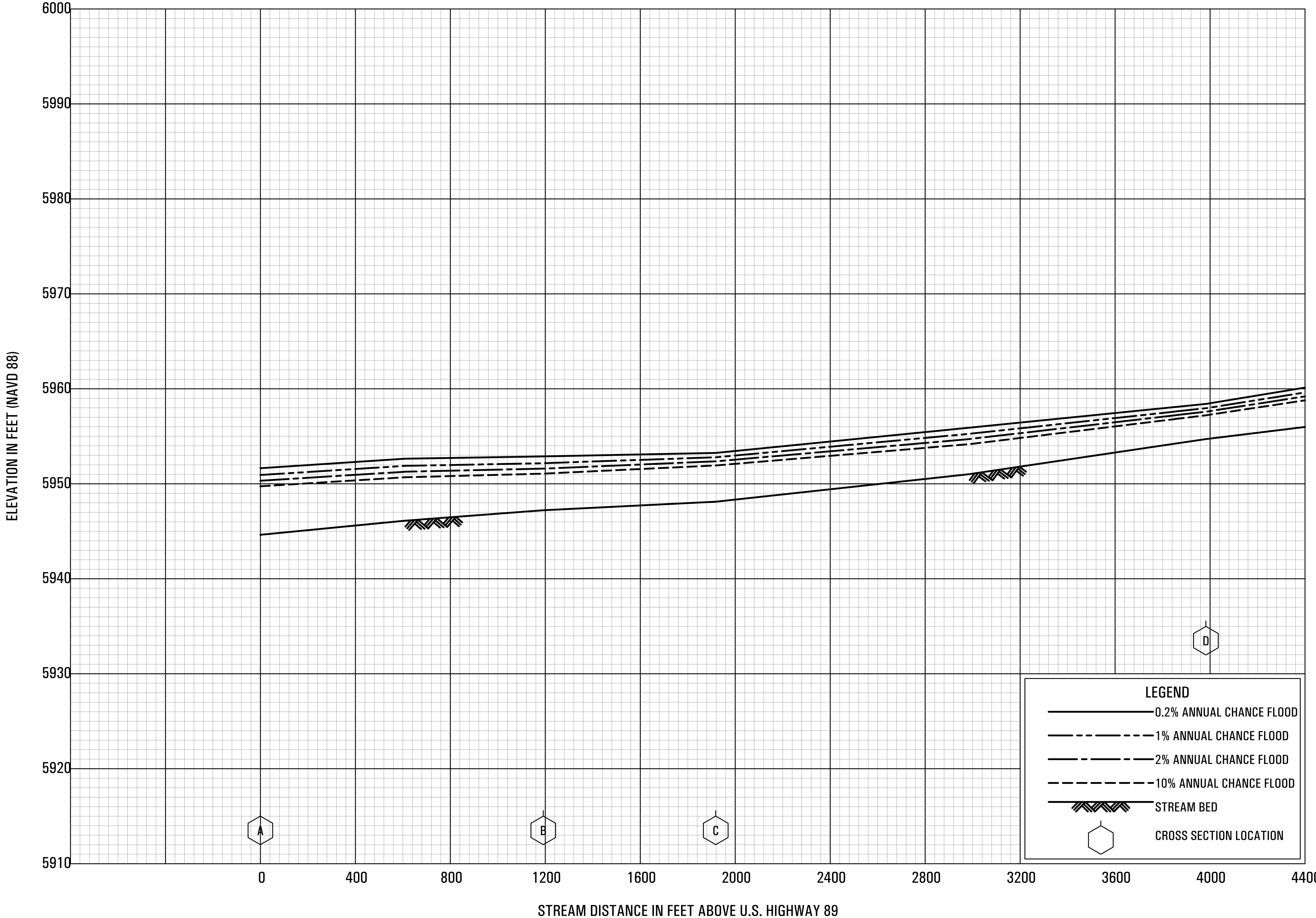
FLOOD PROFILES

FISH CREEK SPLIT

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



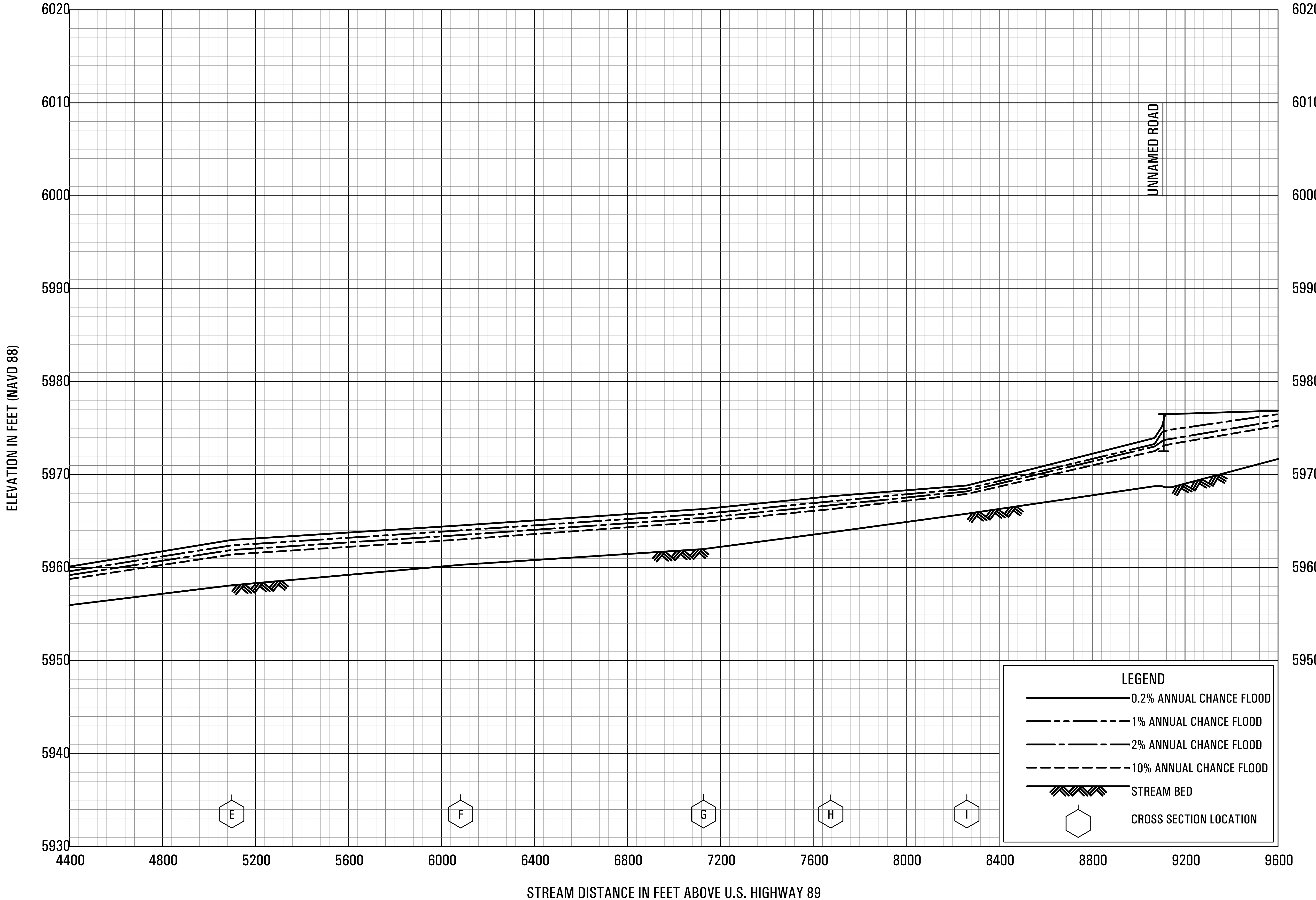
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



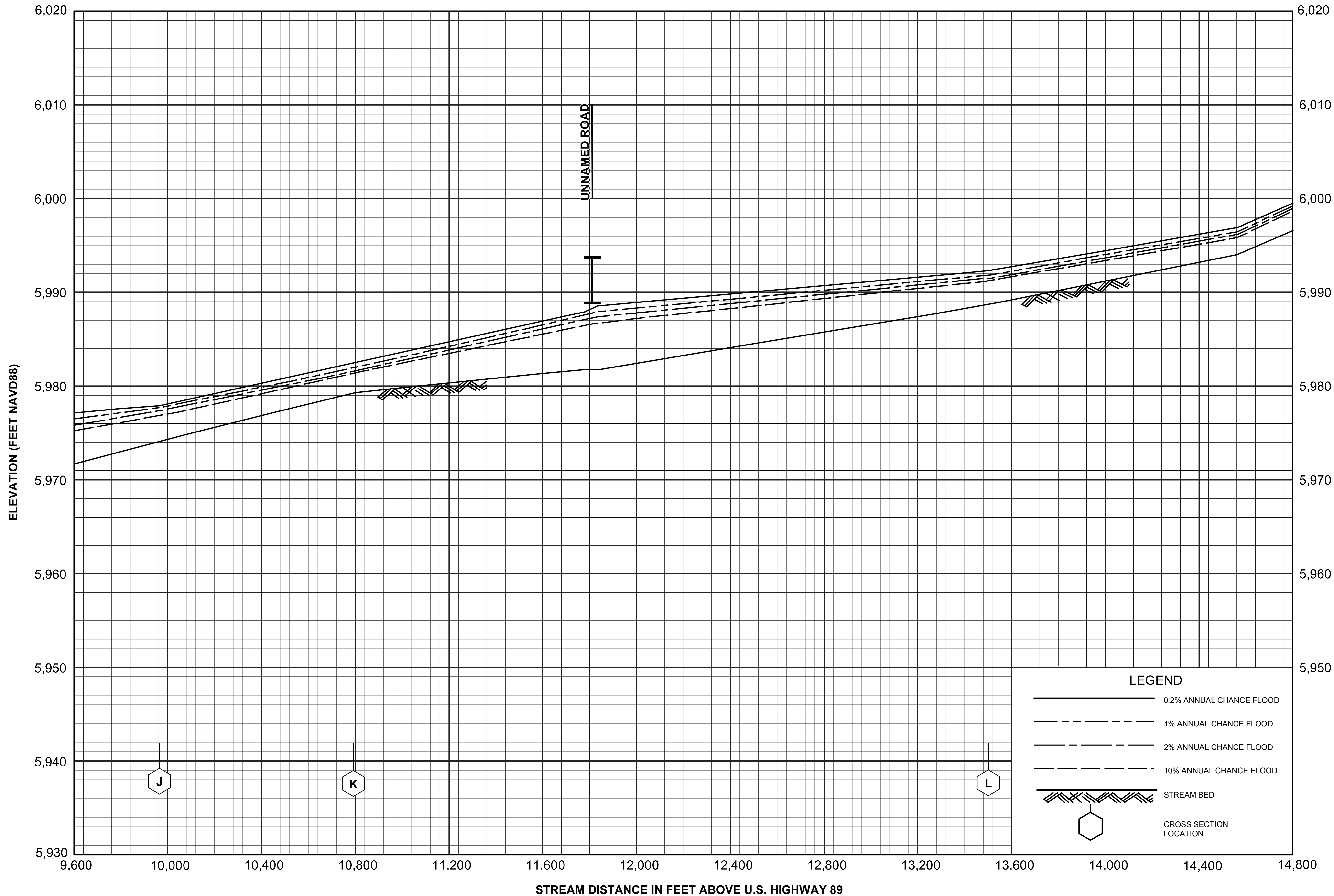
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS

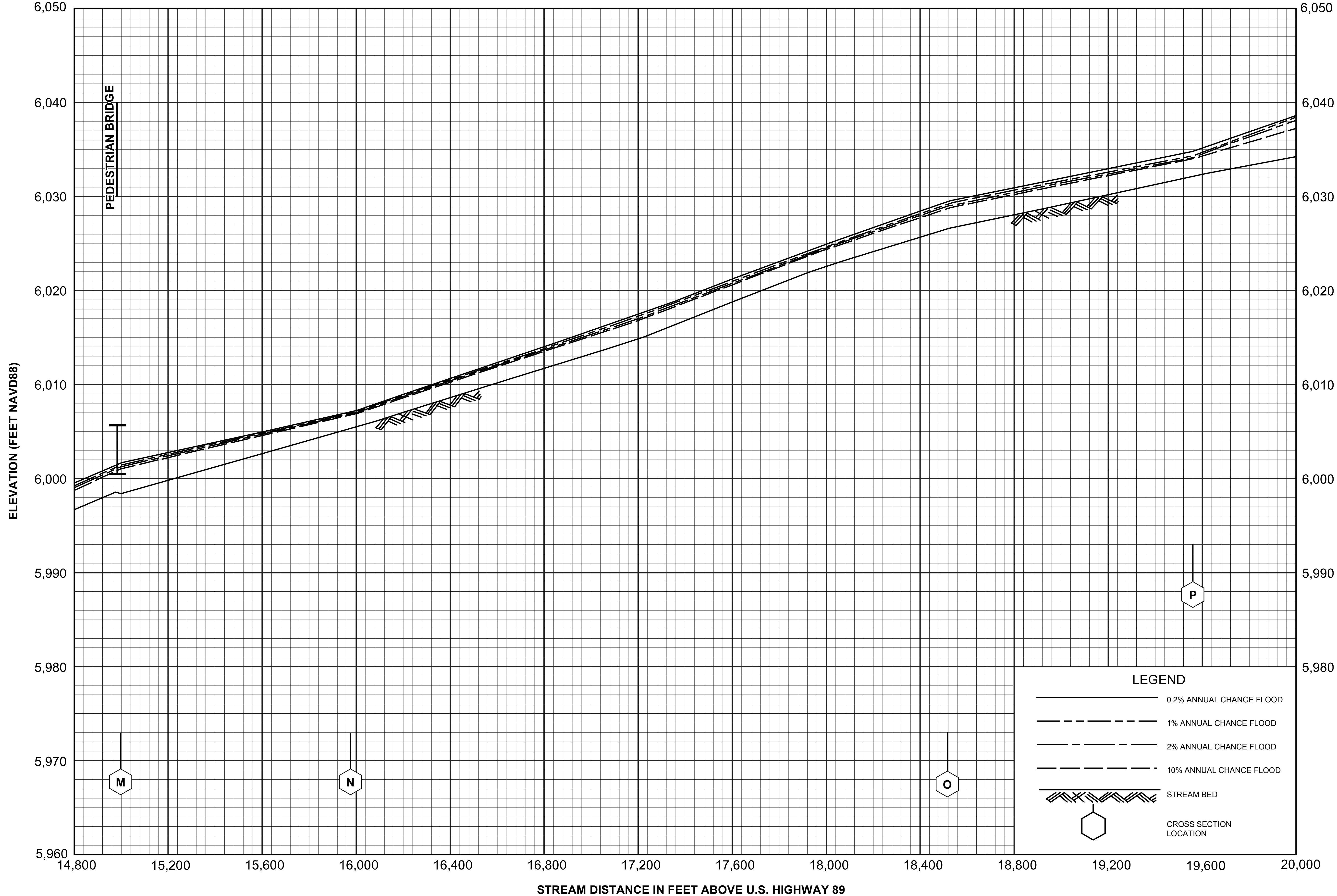


FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



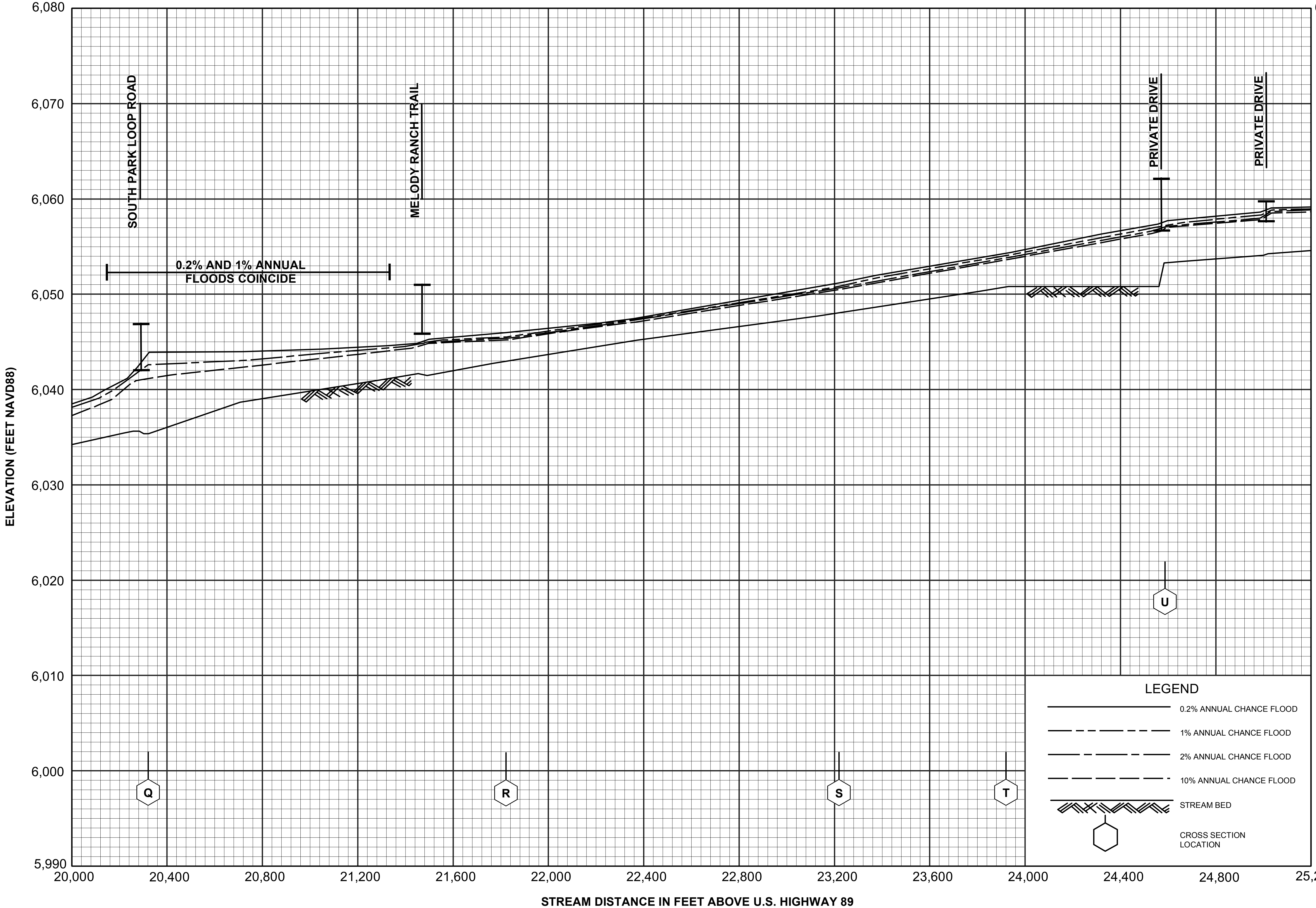
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

25P

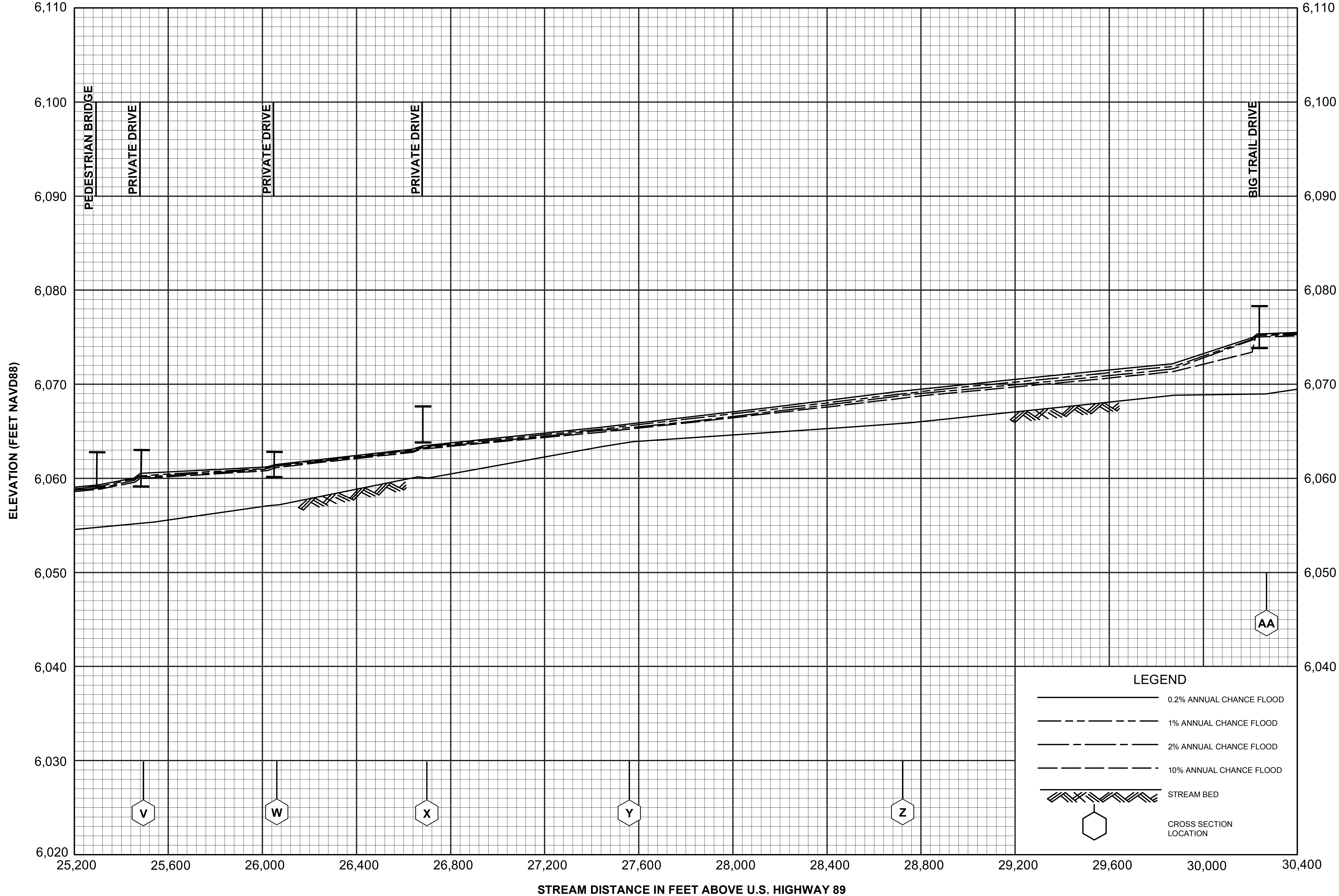


FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



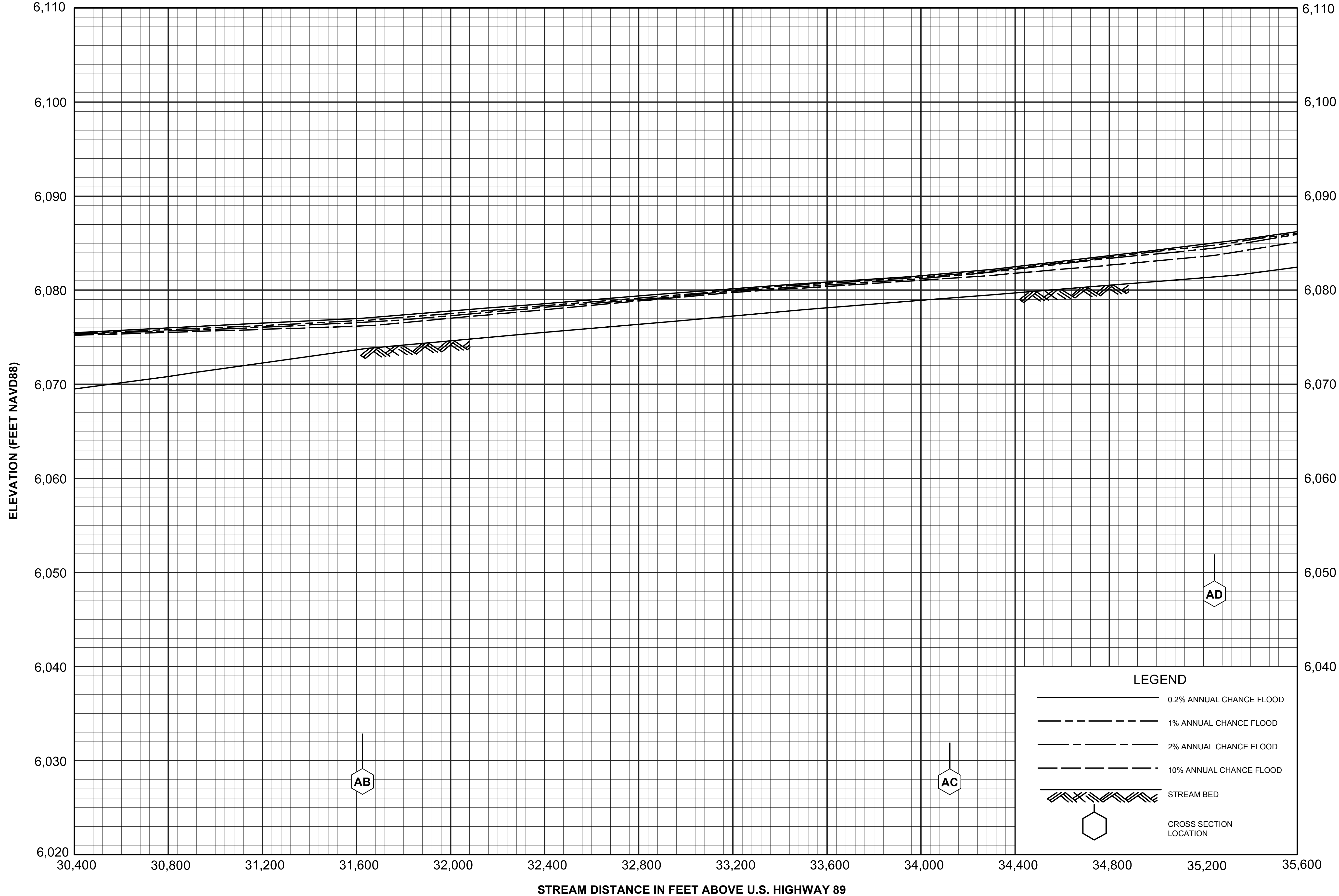
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

27P



FLOOD PROFILES

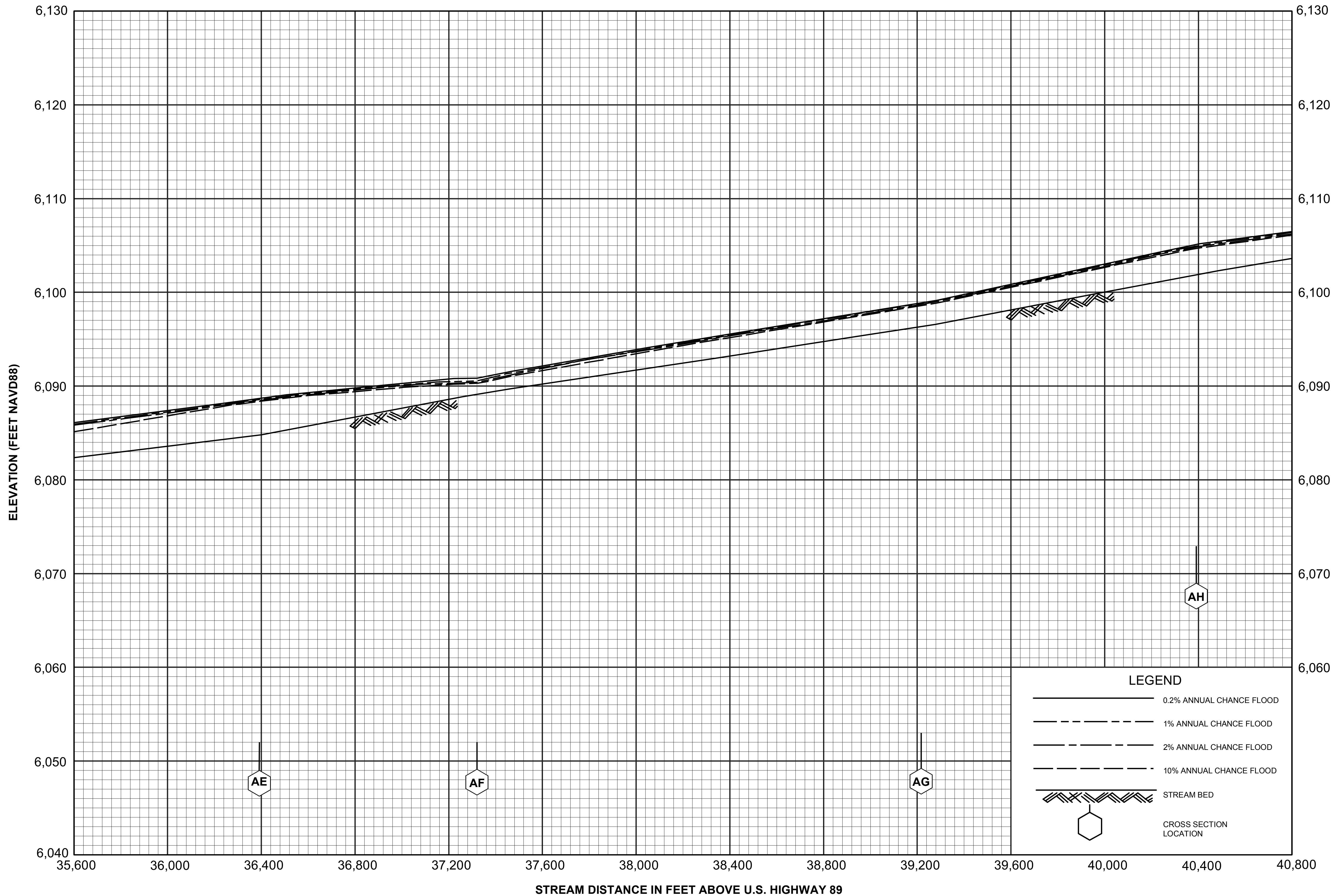
FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS

28P



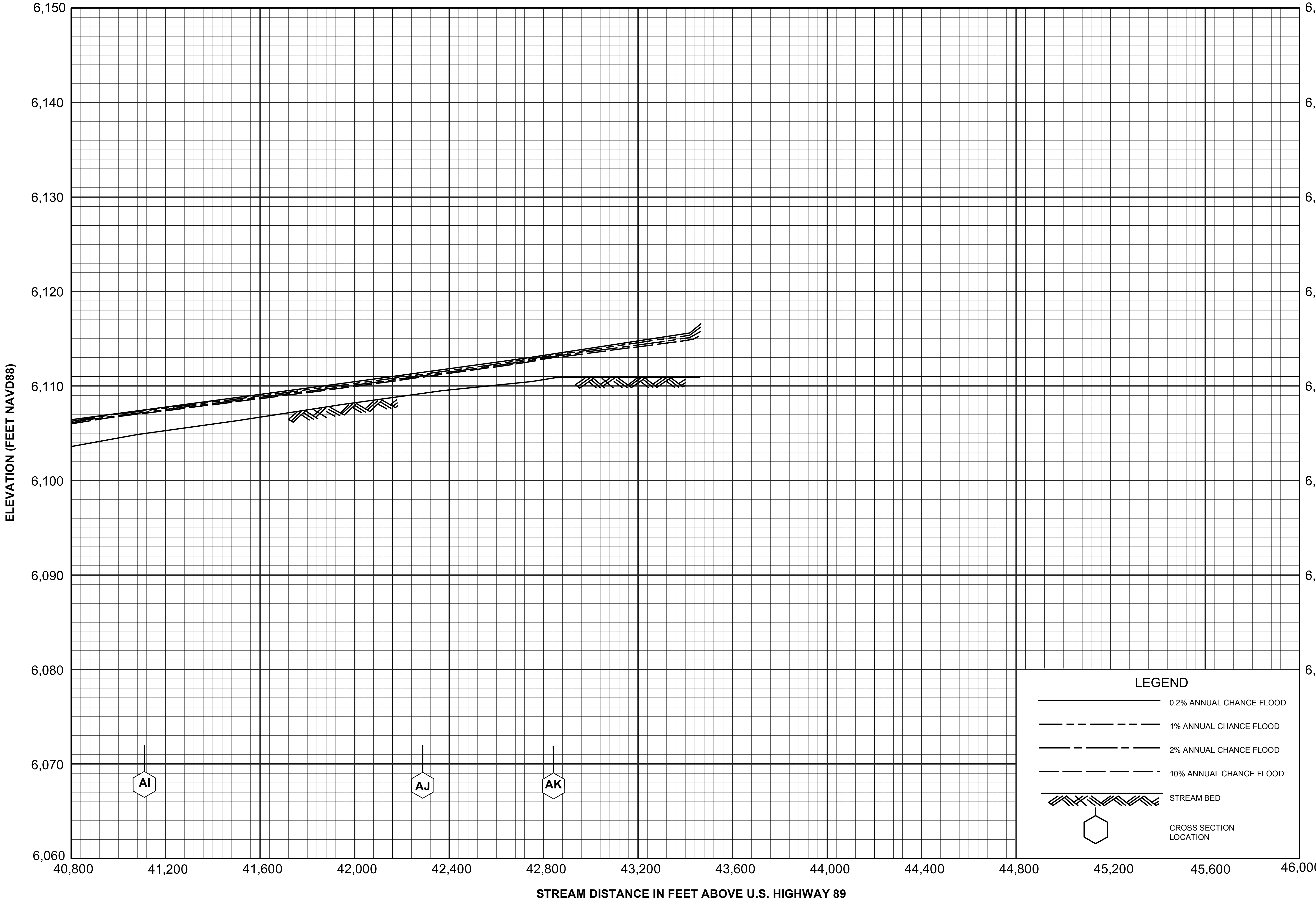
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

29P



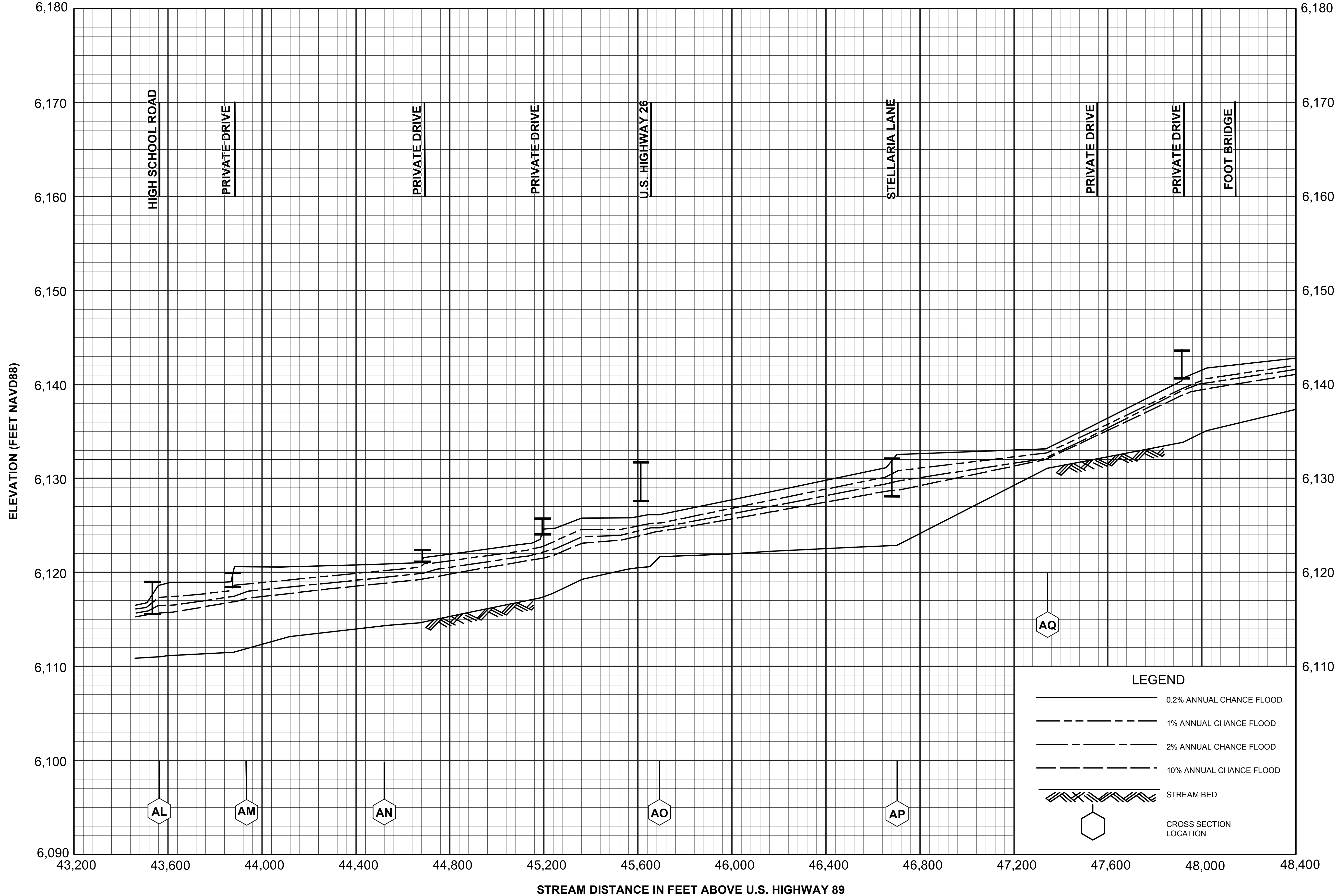
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

30P

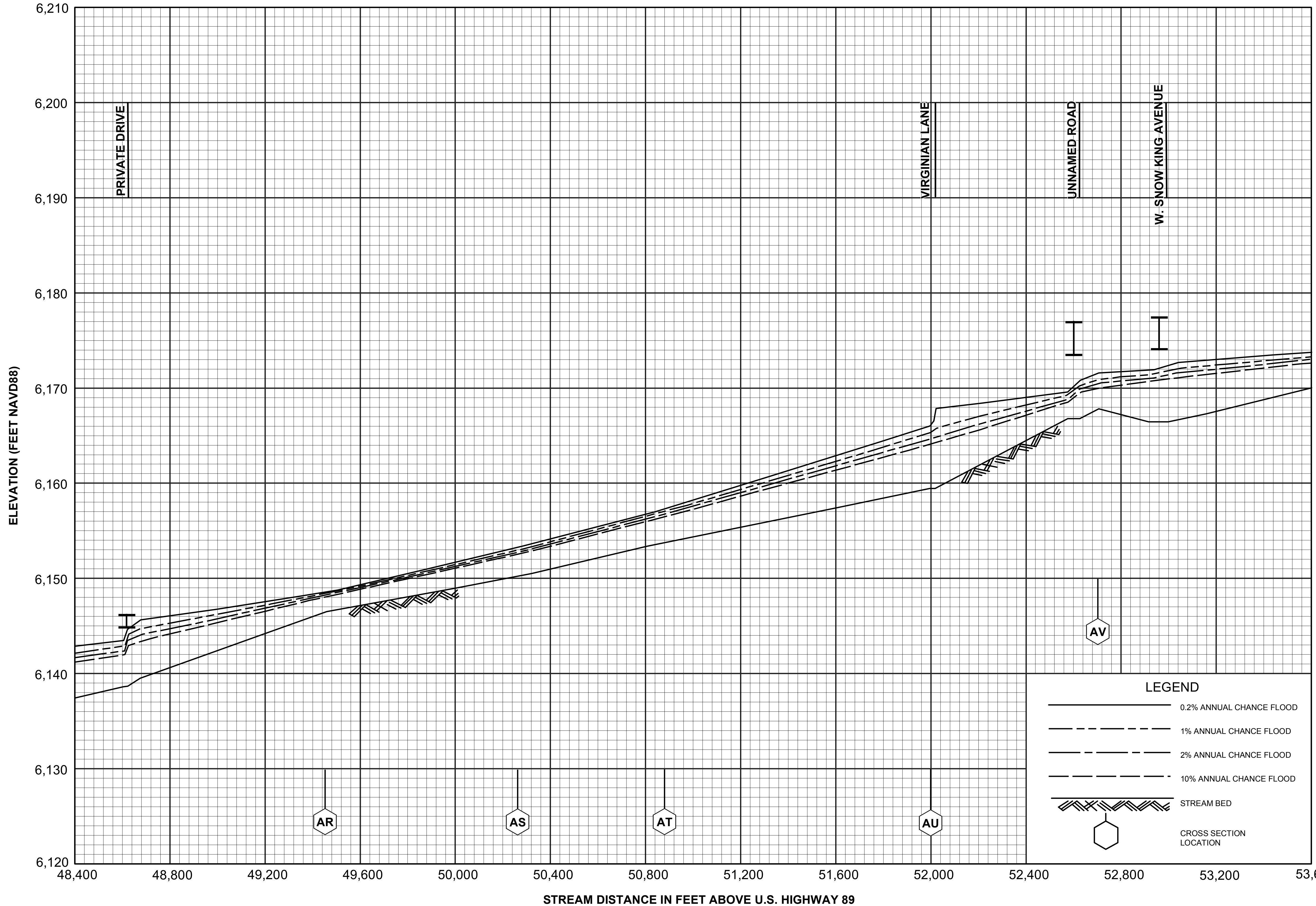


FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



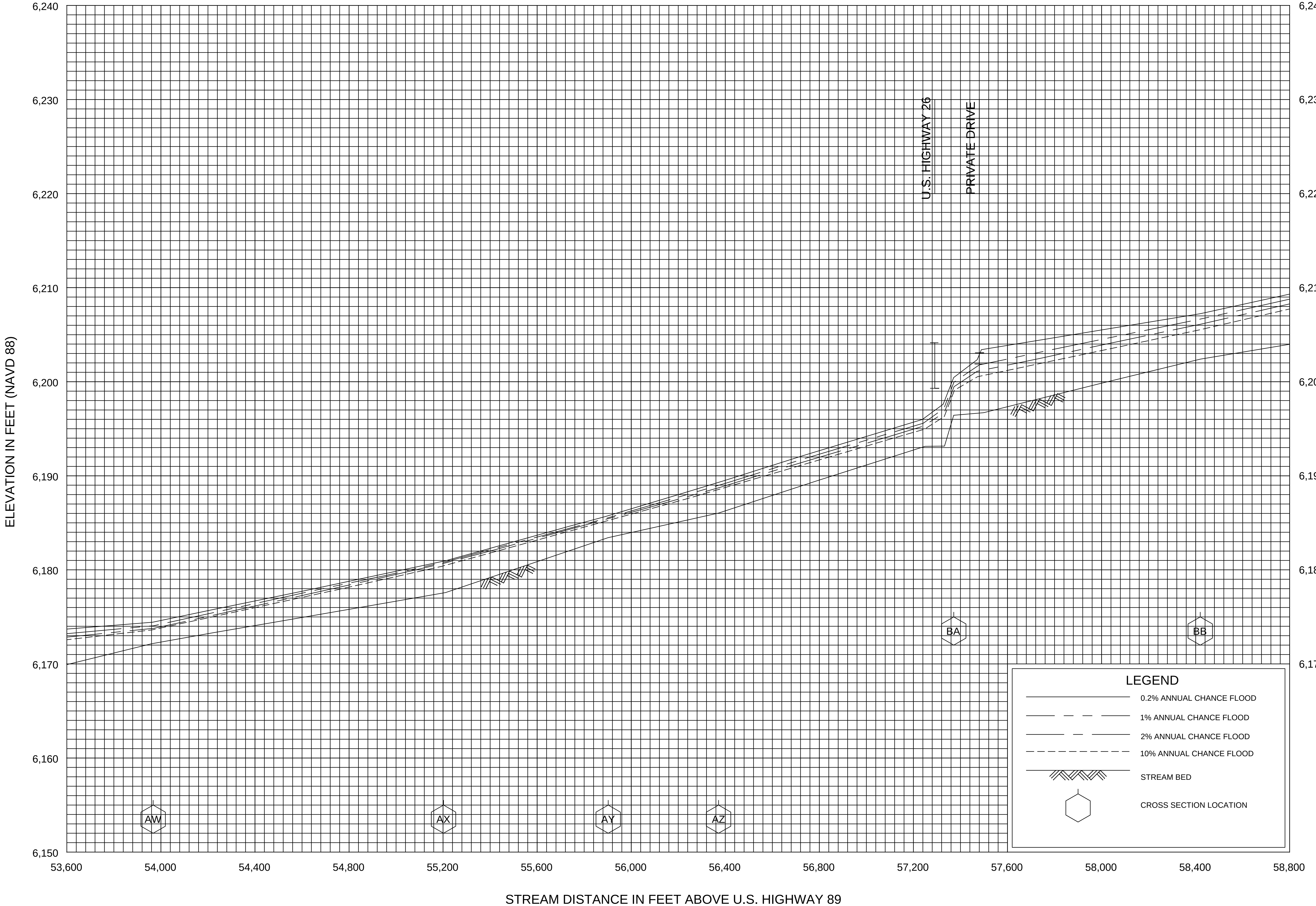
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

32P



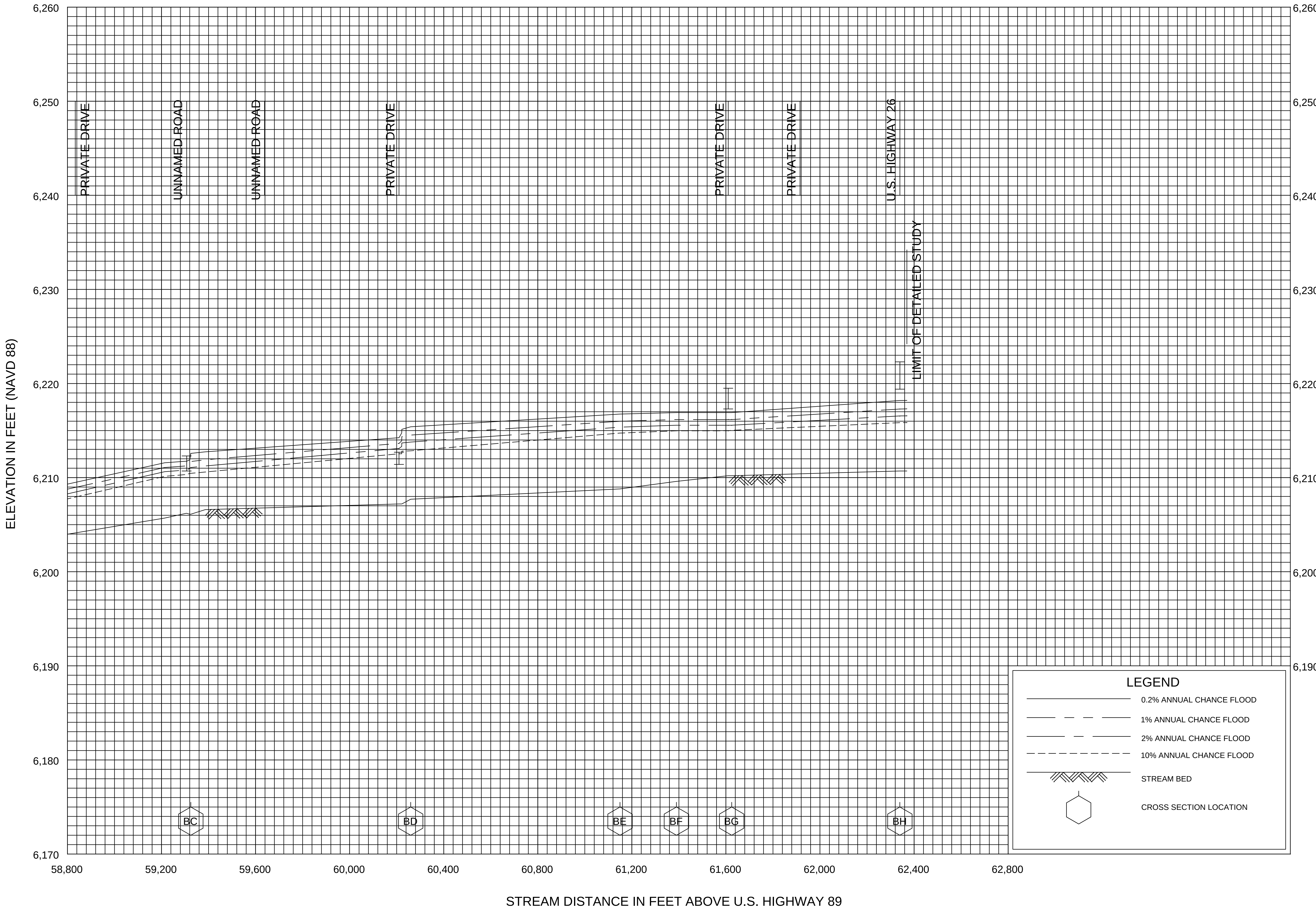
FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

33P

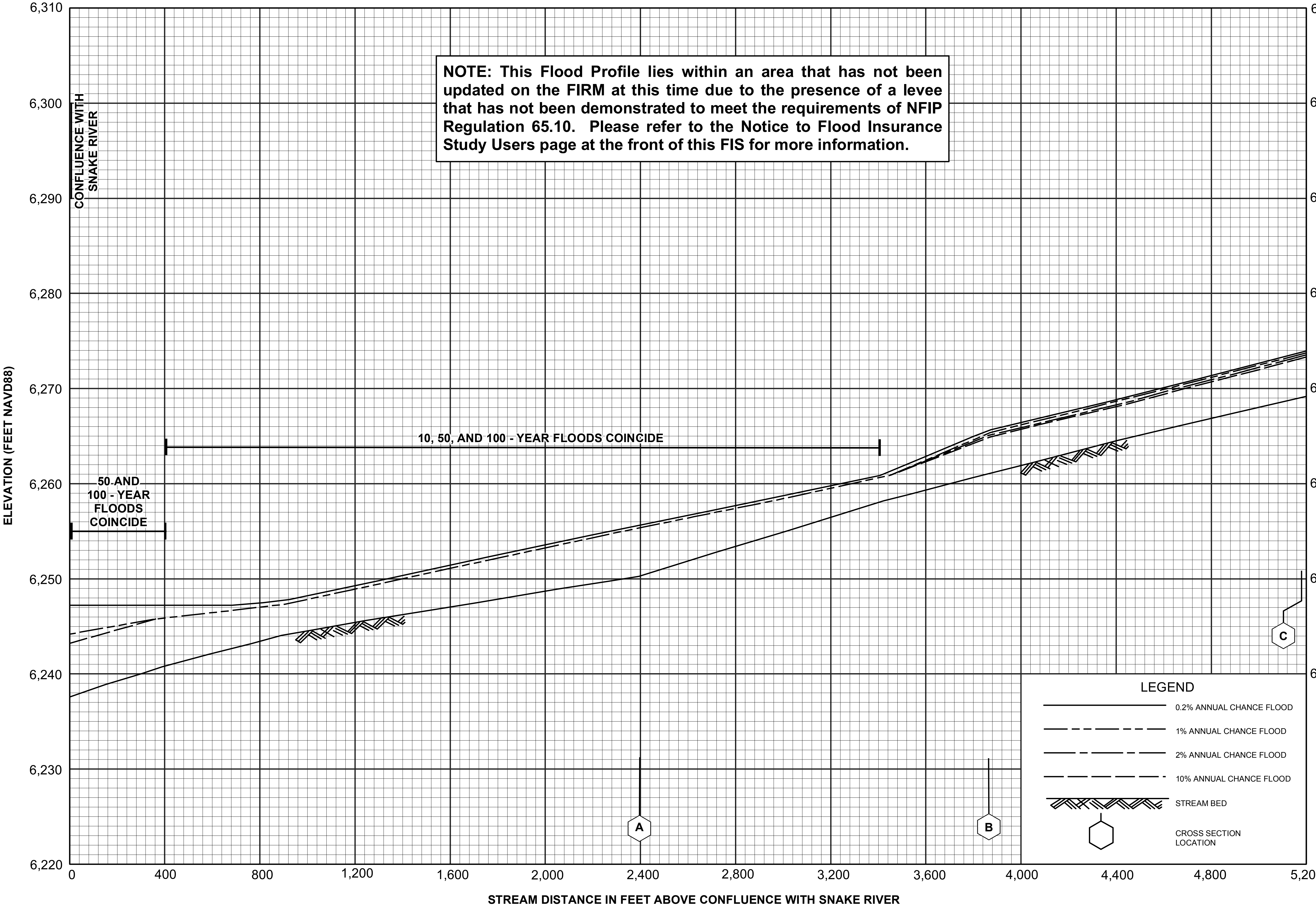


FLOOD PROFILES

FLAT CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

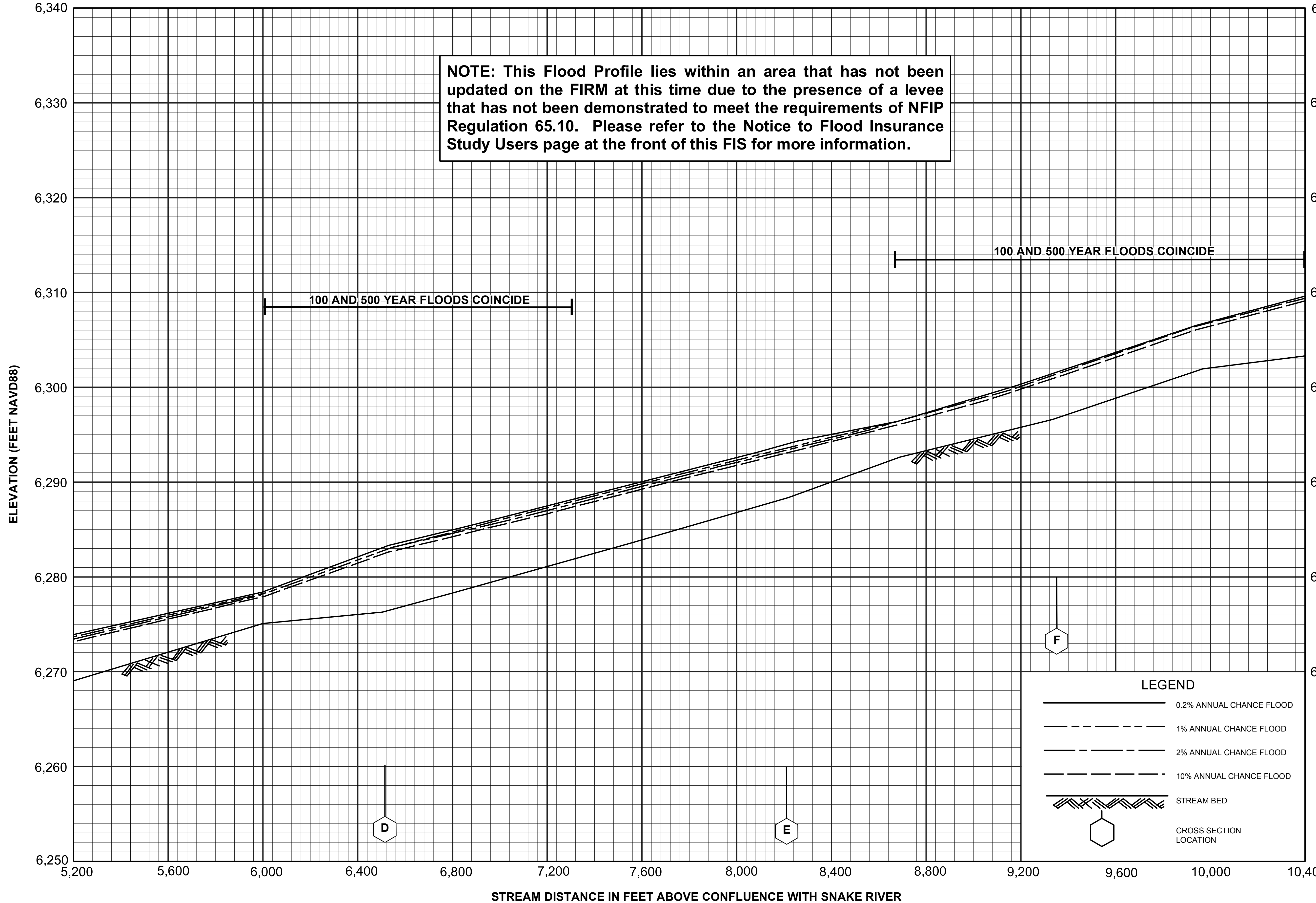


FLOOD PROFILES

GROS VENTRE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

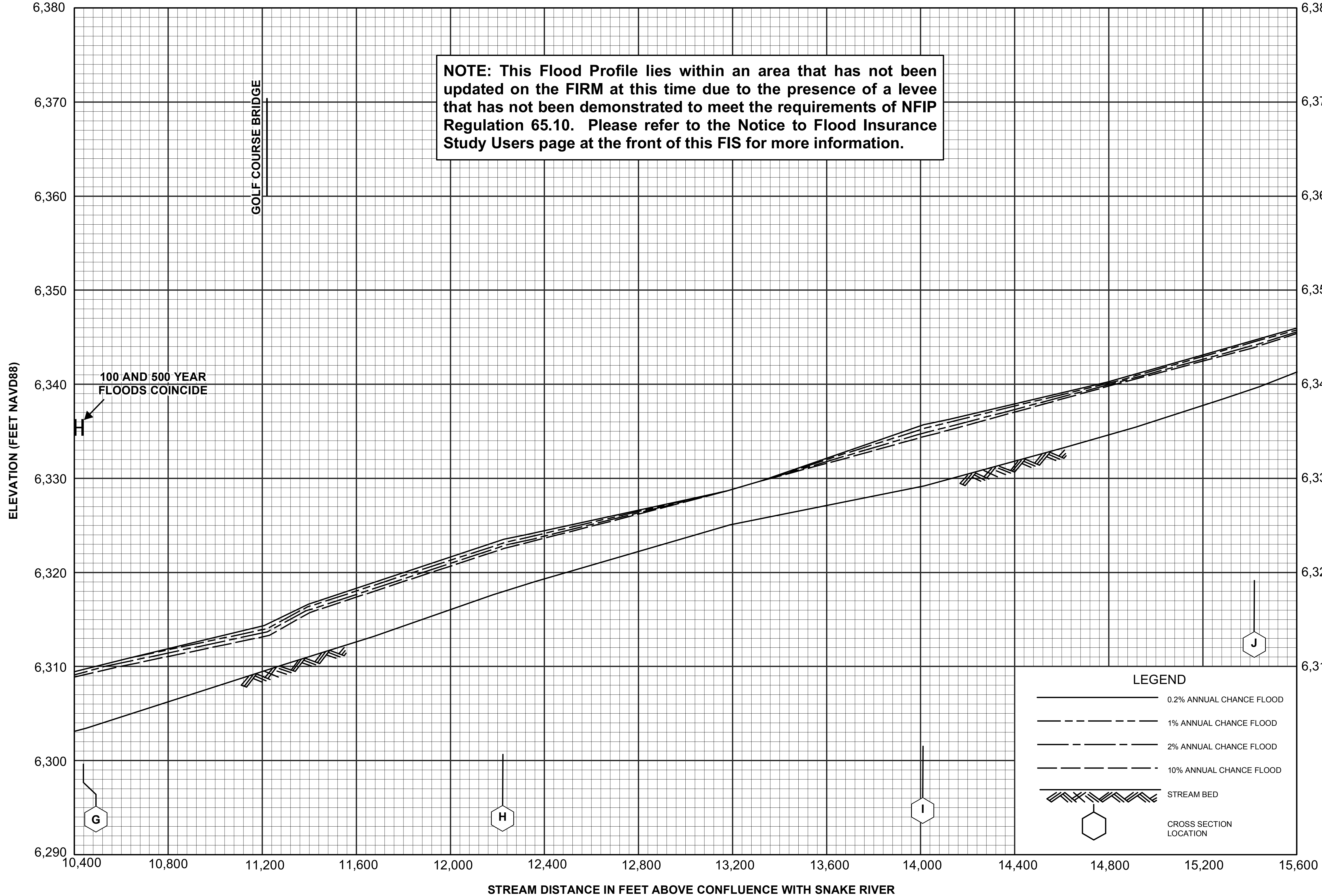


FLOOD PROFILES

GROS VENTRE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS

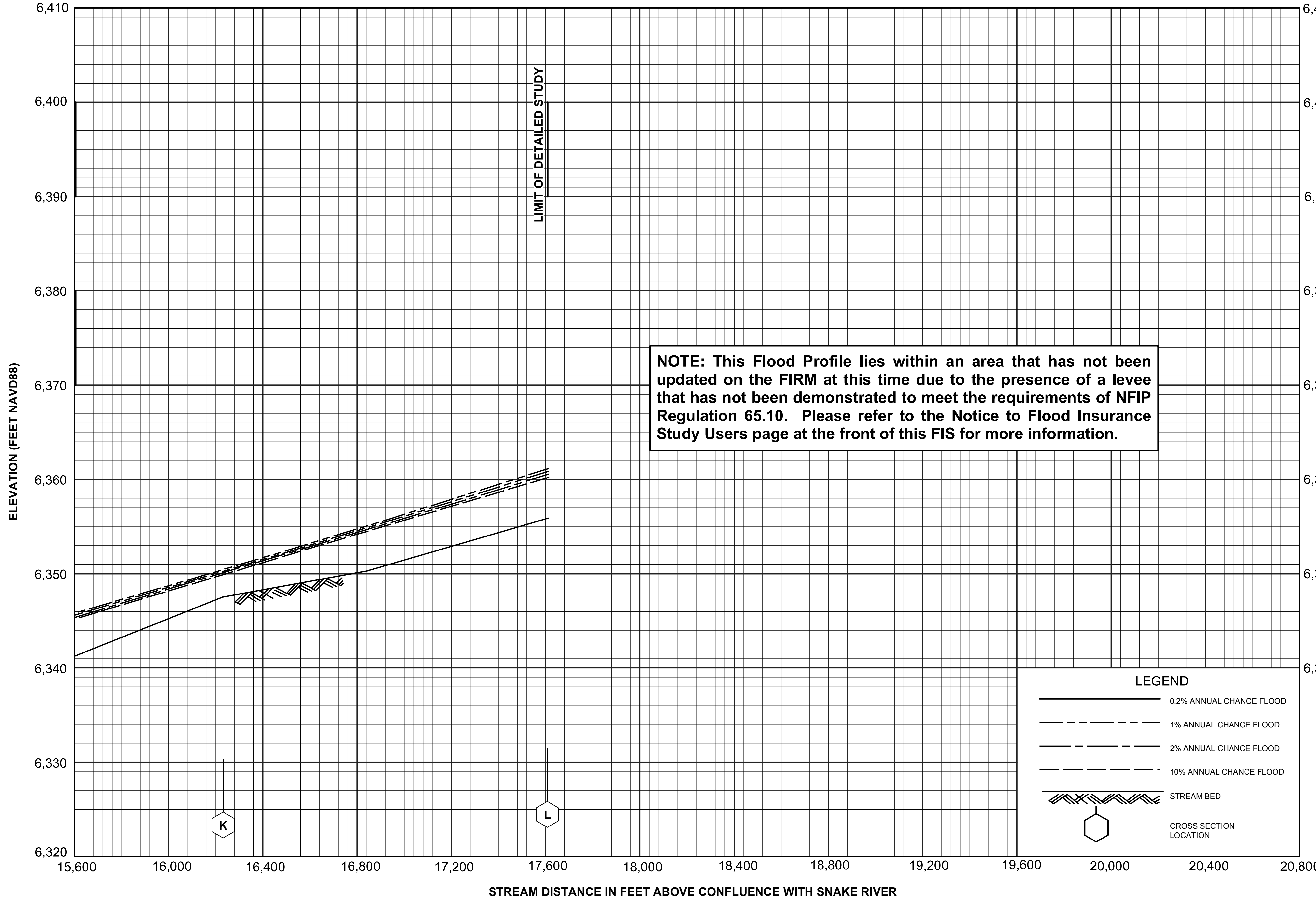


FLOOD PROFILES

GROS VENTRE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



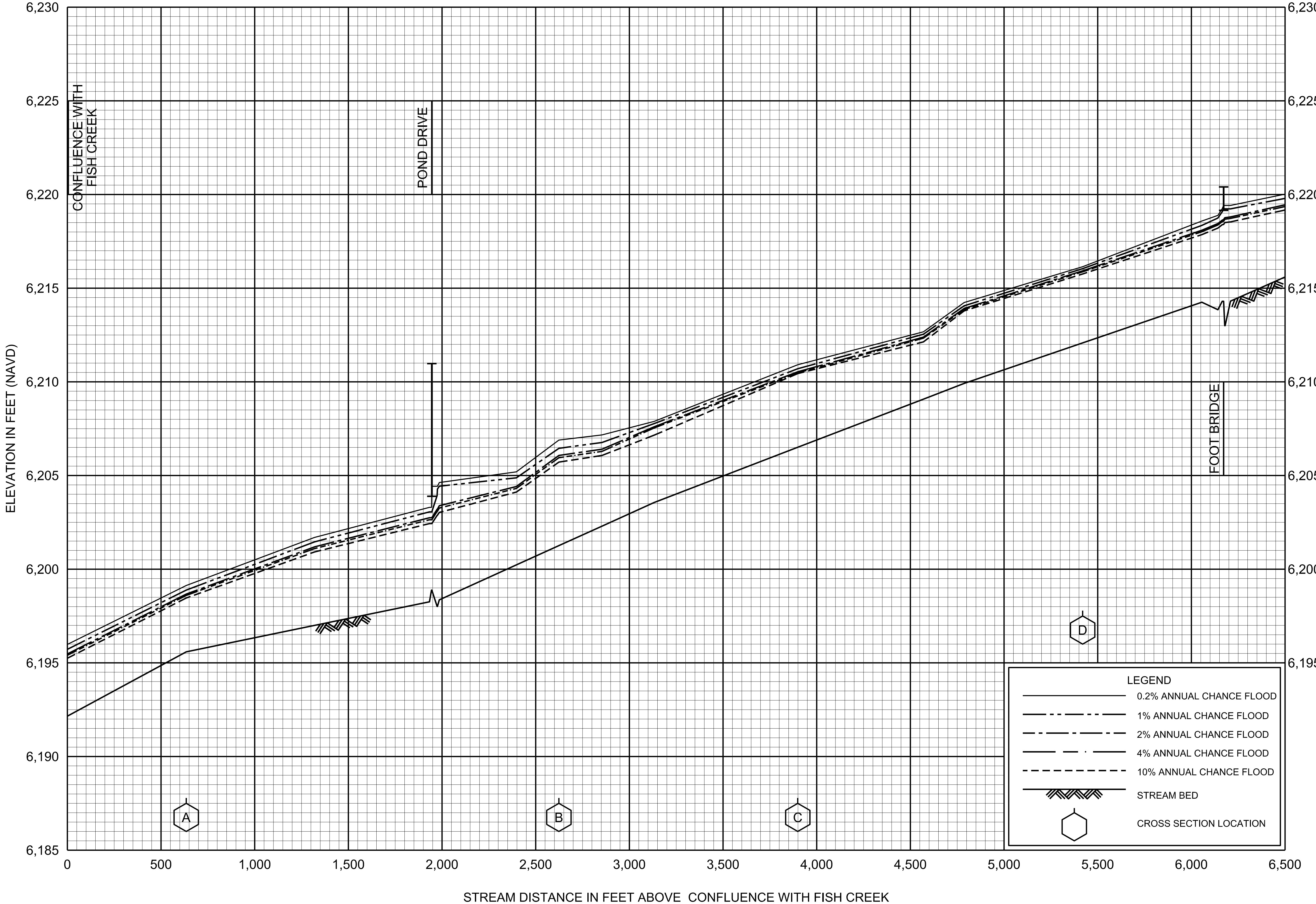
NOTE: This Flood Profile lies within an area that has not been updated on the FIRM at this time due to the presence of a levee that has not been demonstrated to meet the requirements of NFIP Regulation 65.10. Please refer to the Notice to Flood Insurance Study Users page at the front of this FIS for more information.

FLOOD PROFILES

GROS VENTRE RIVER

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY AND INCORPORATED AREAS



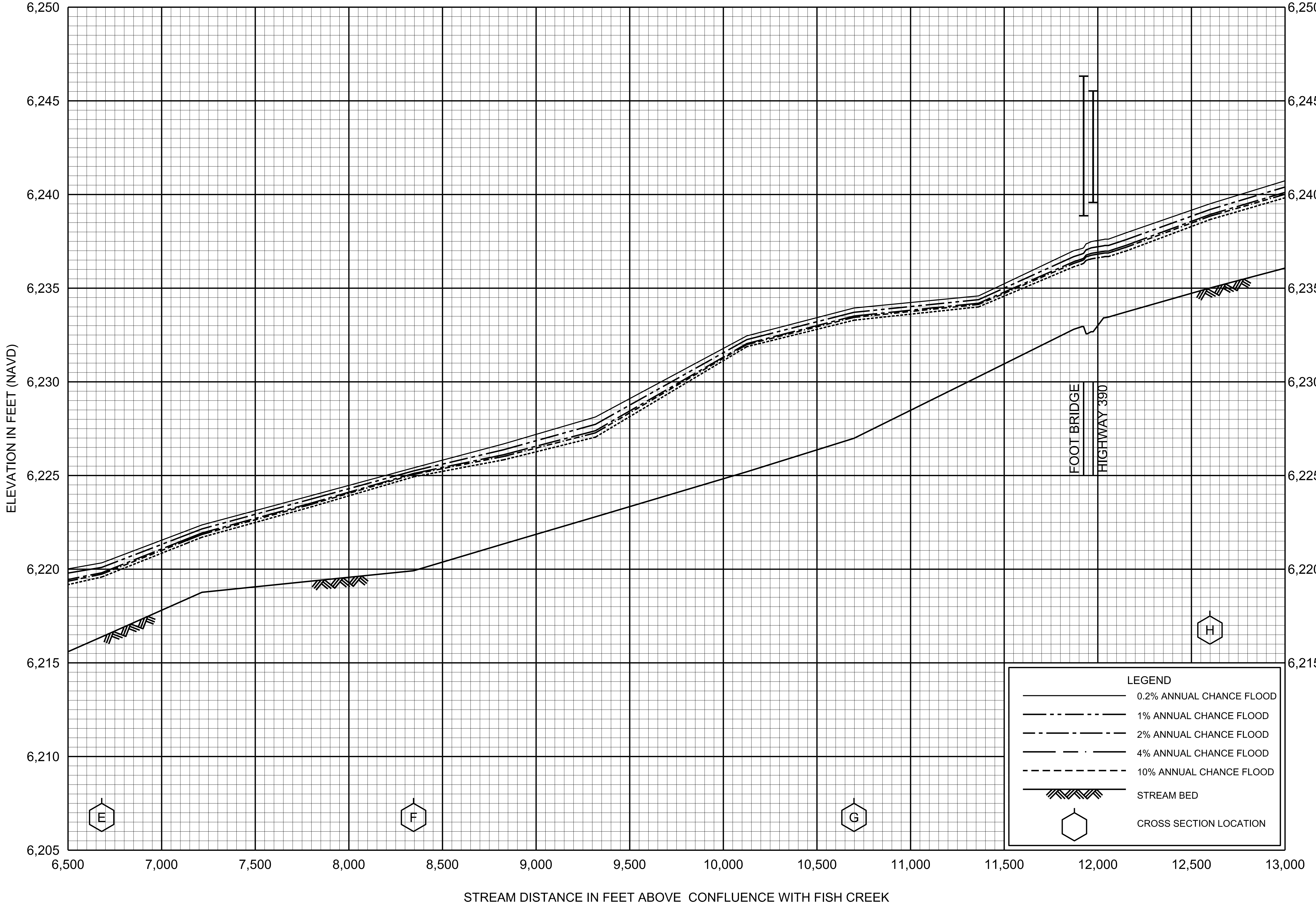
FLOOD PROFILES

LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



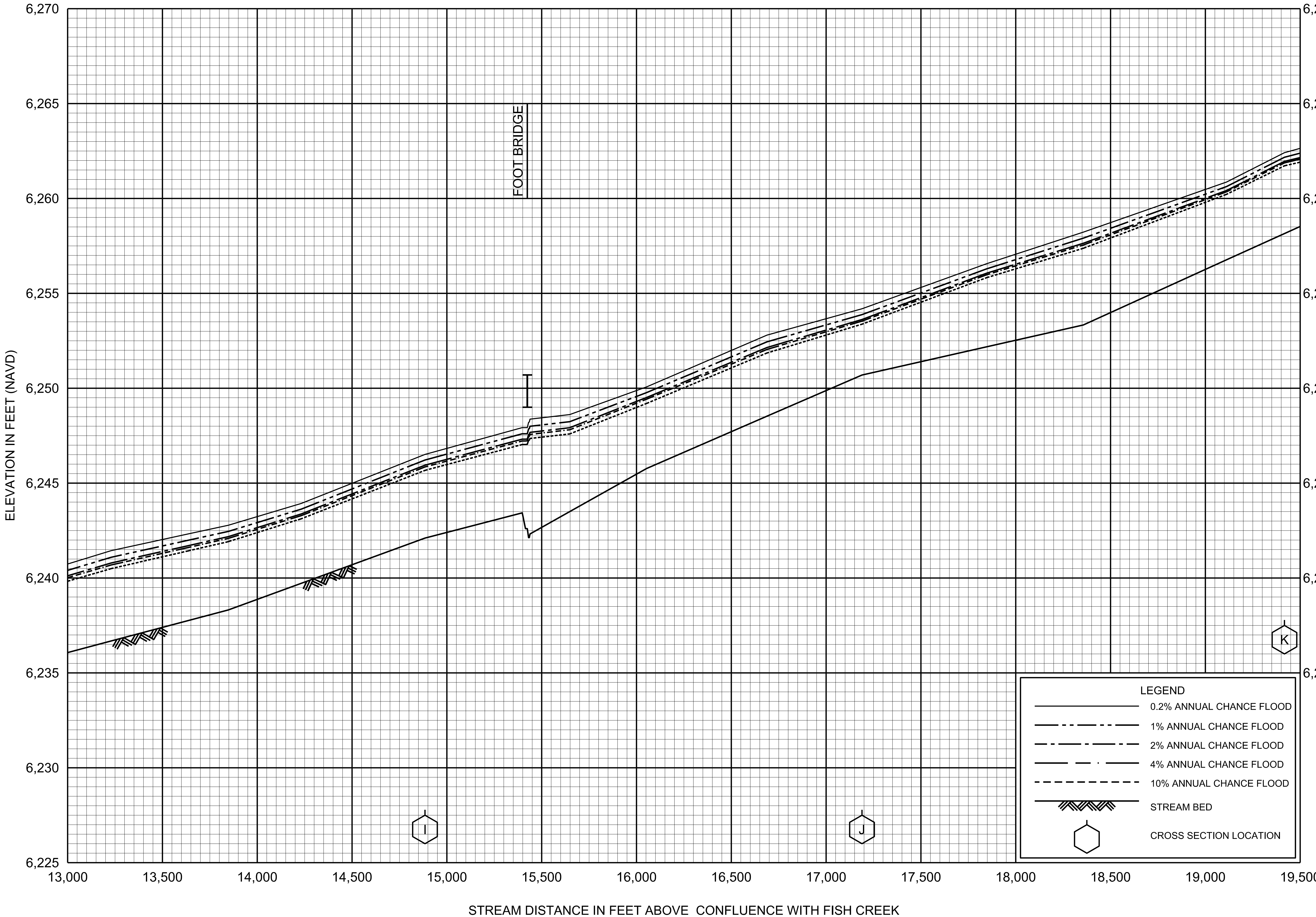
FLOOD PROFILES

LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



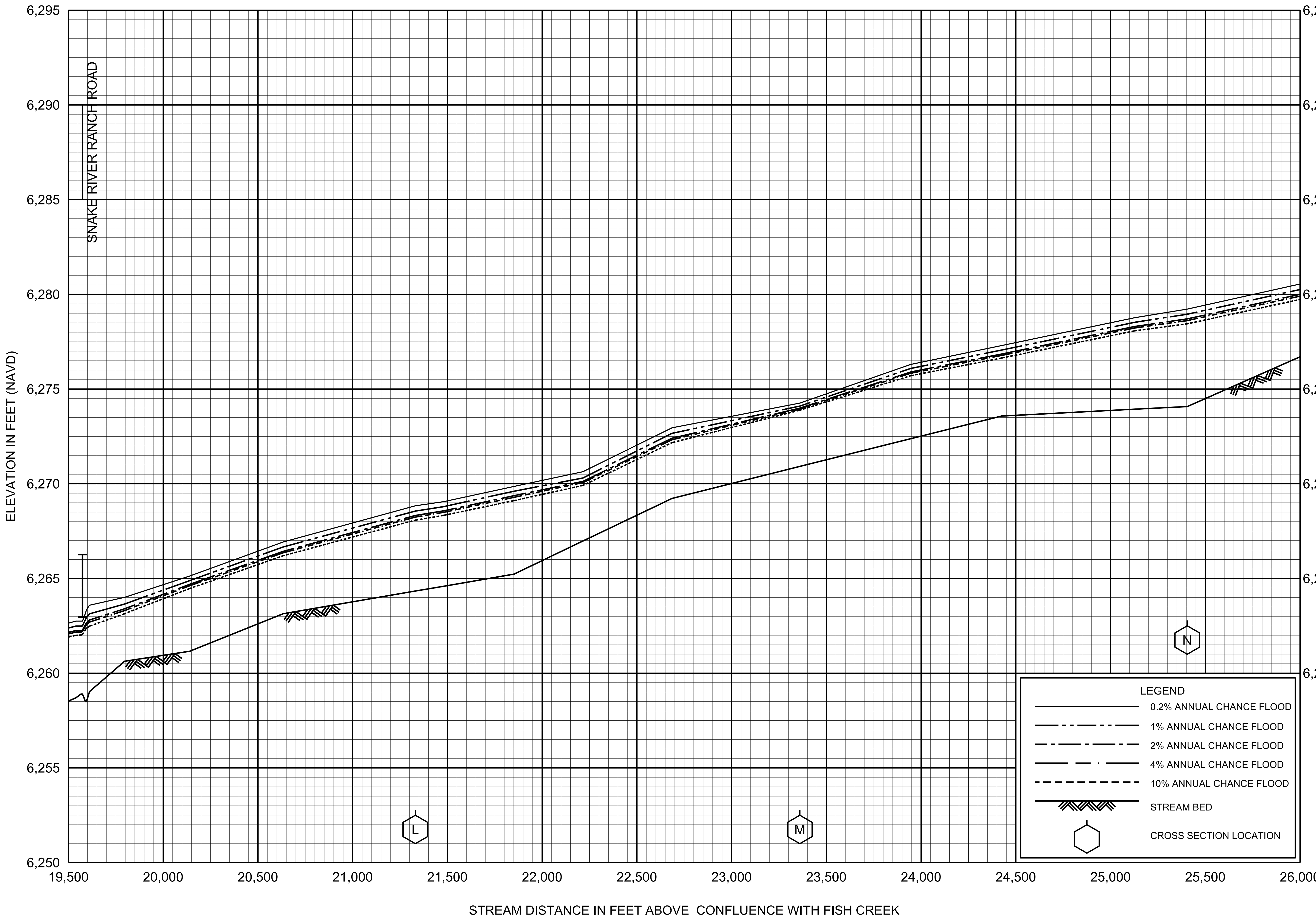
FLOOD PROFILES

LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



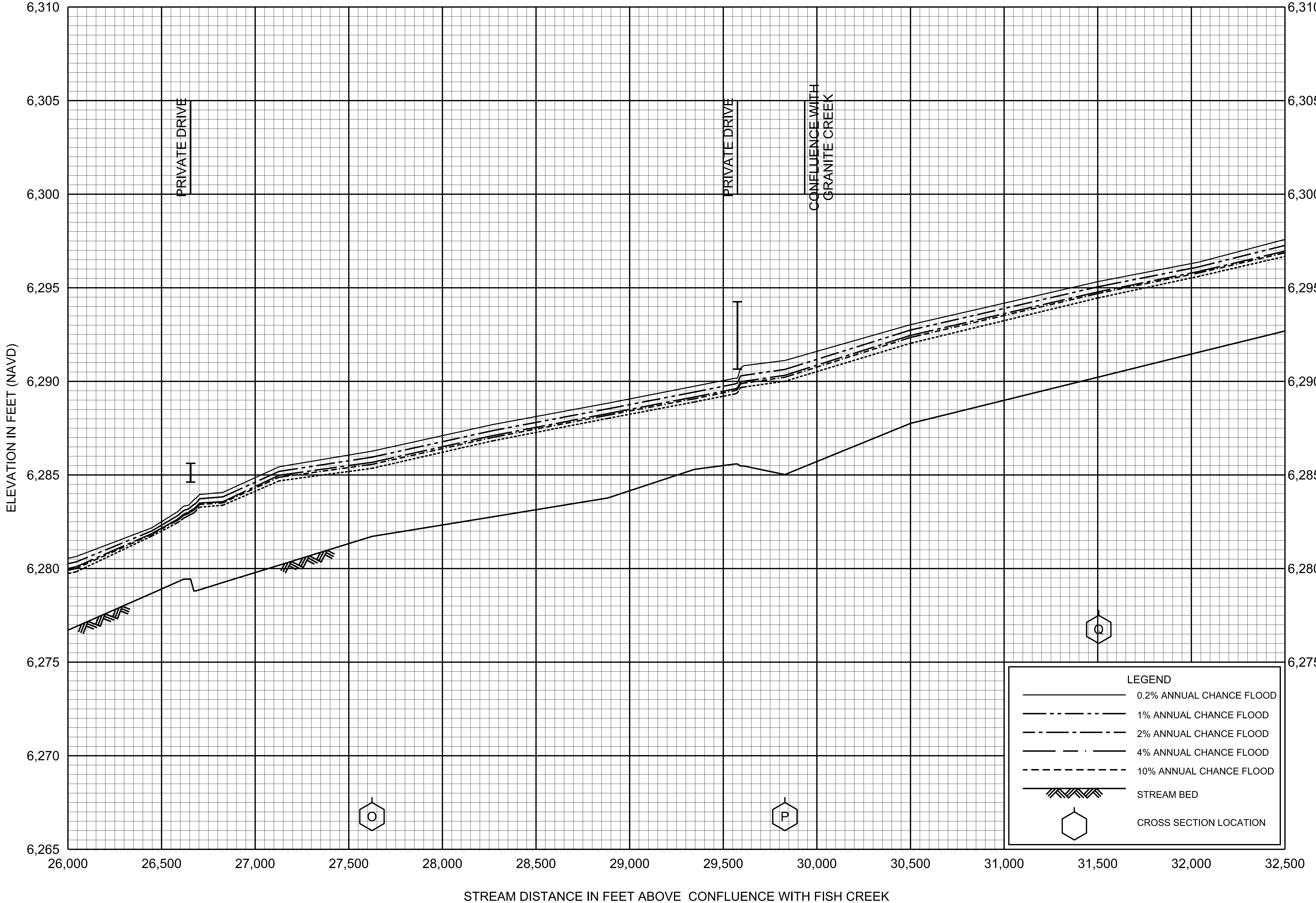
FLOOD PROFILES

LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



FLOOD PROFILES

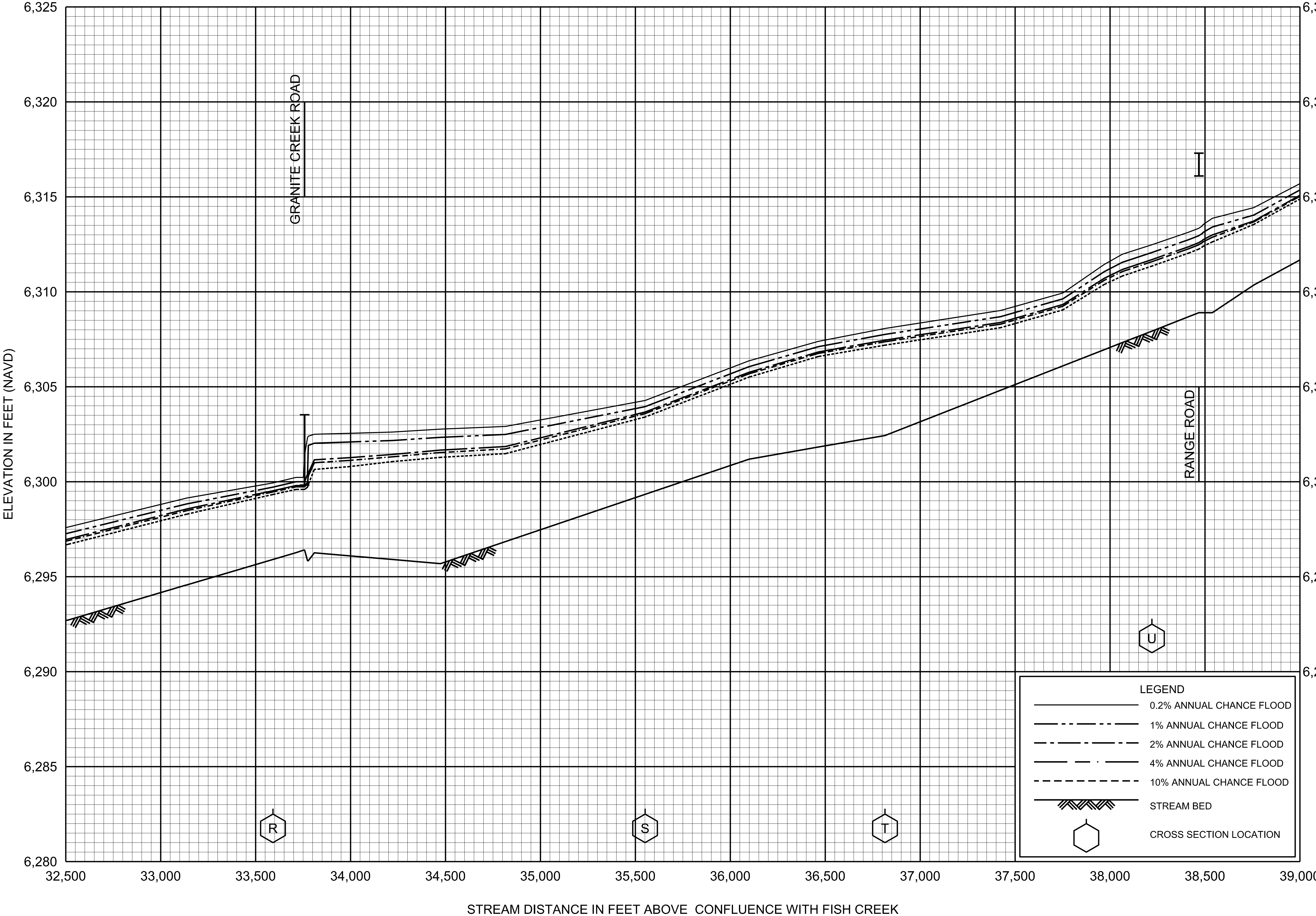
LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS

43P



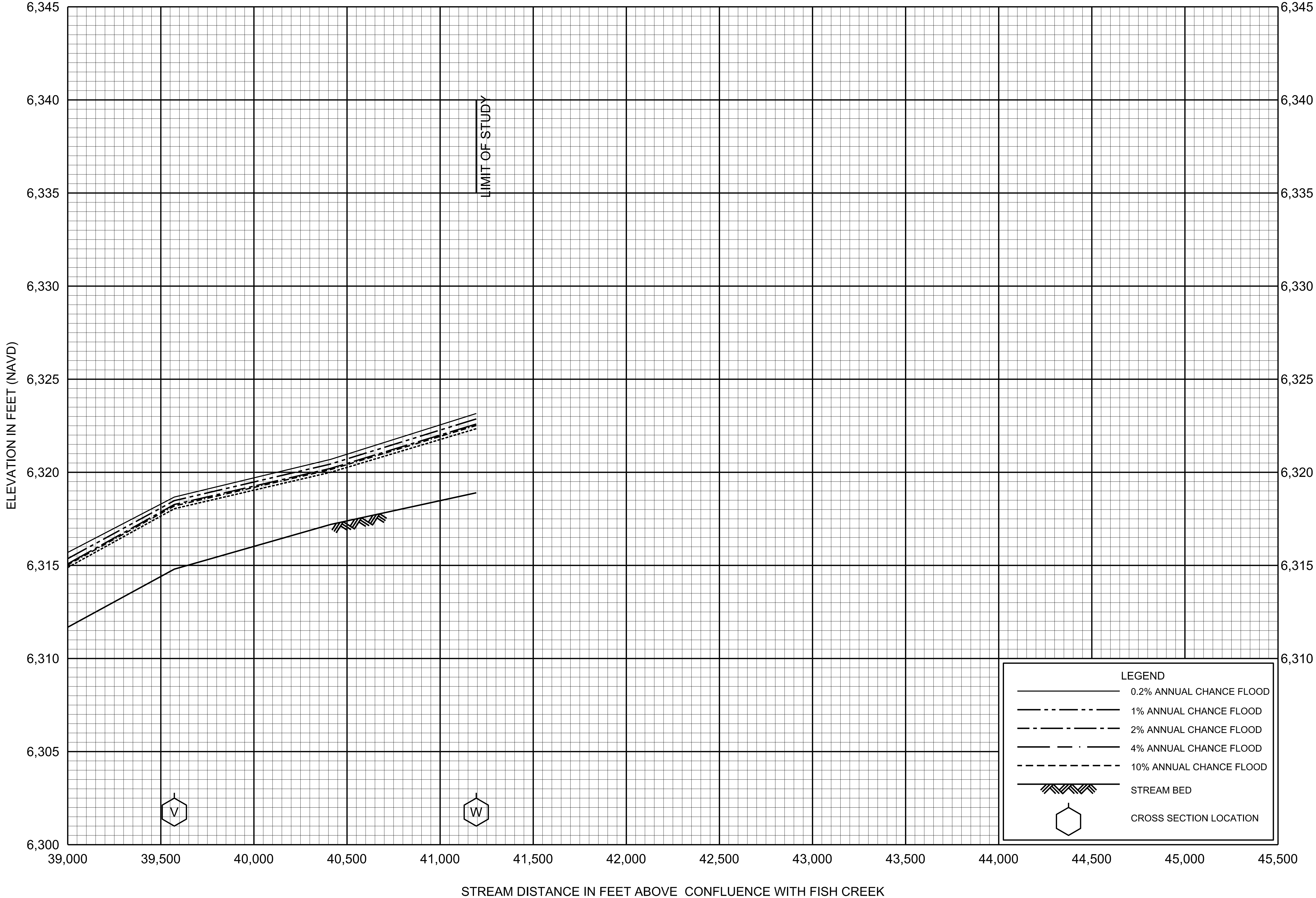
FLOOD PROFILES

LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



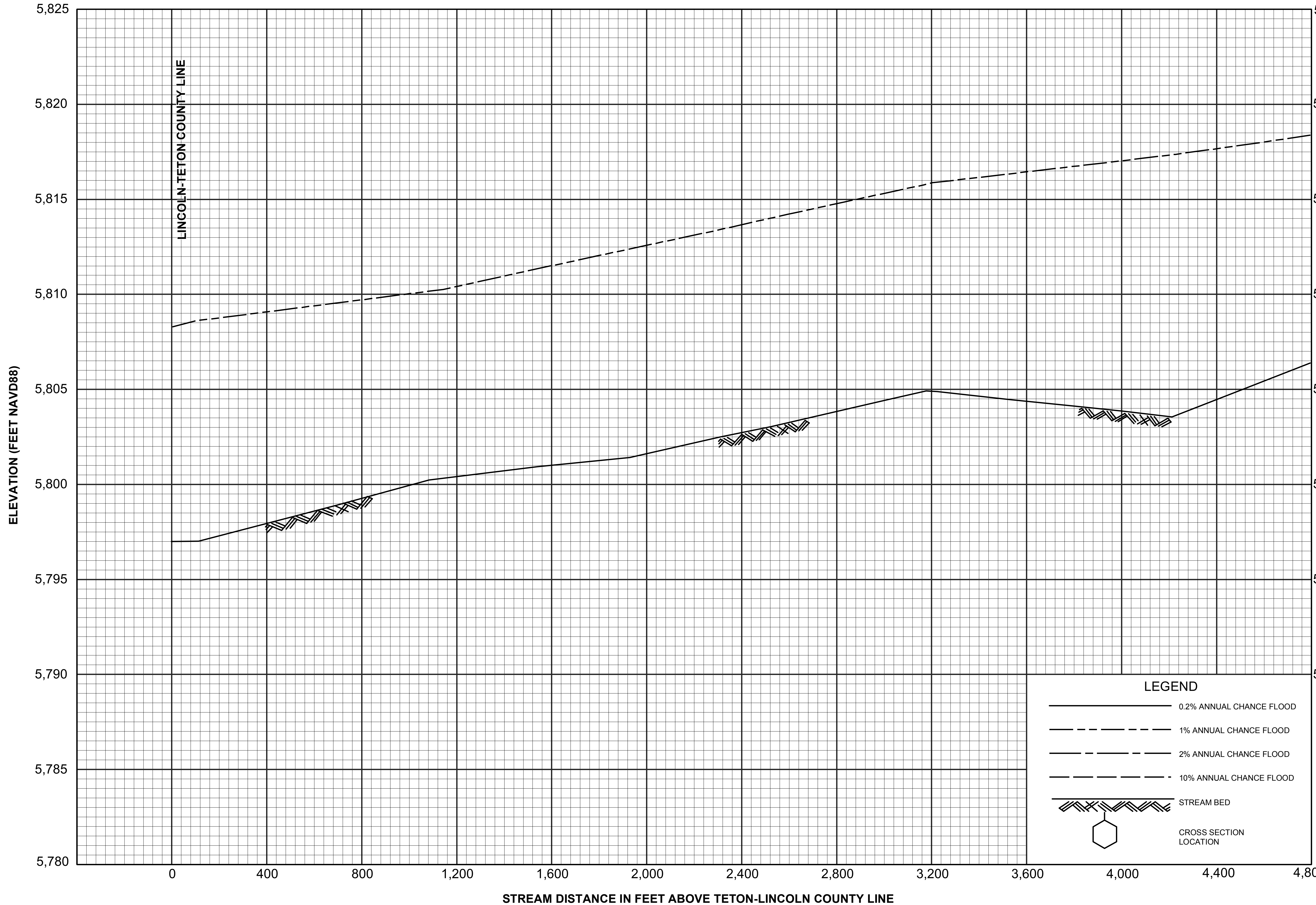
FLOOD PROFILES

LAKE CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS

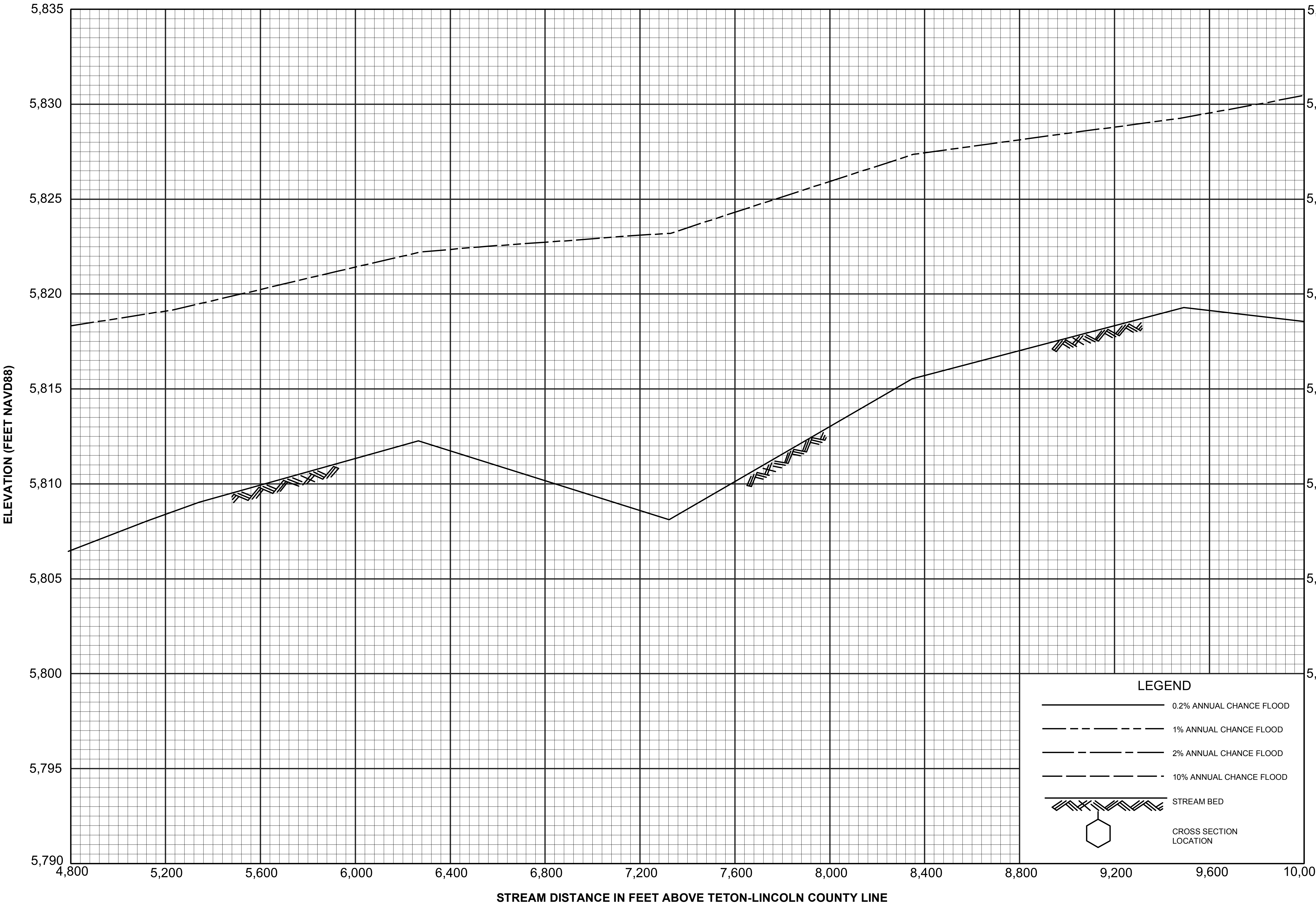


FLOOD PROFILES

SNAKE RIVER ABOVE TETON-LINCOLN COUNTY LINE

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

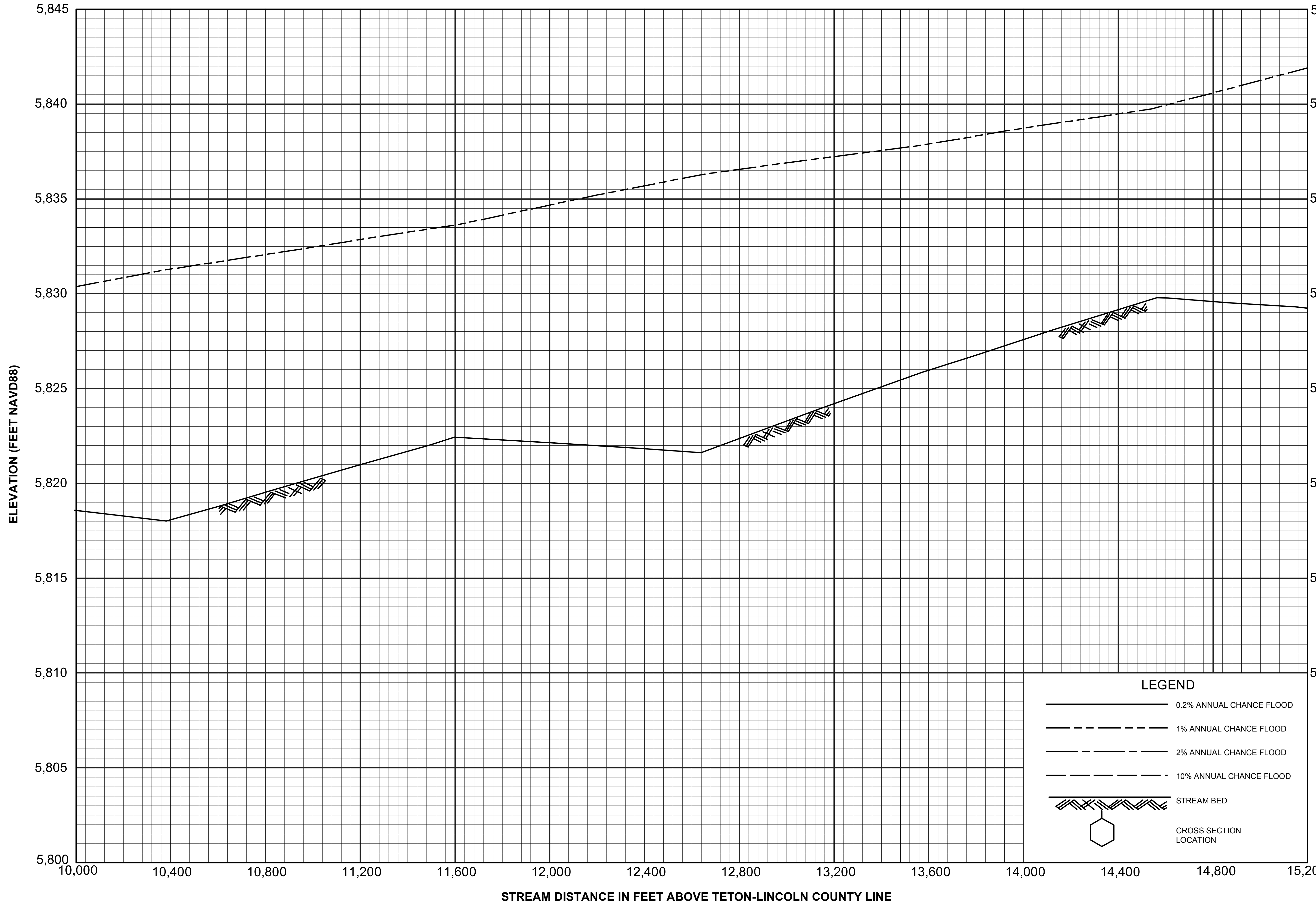


FLOOD PROFILES

SNAKE RIVER ABOVE TETON-LINCOLN COUNTY LINE

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



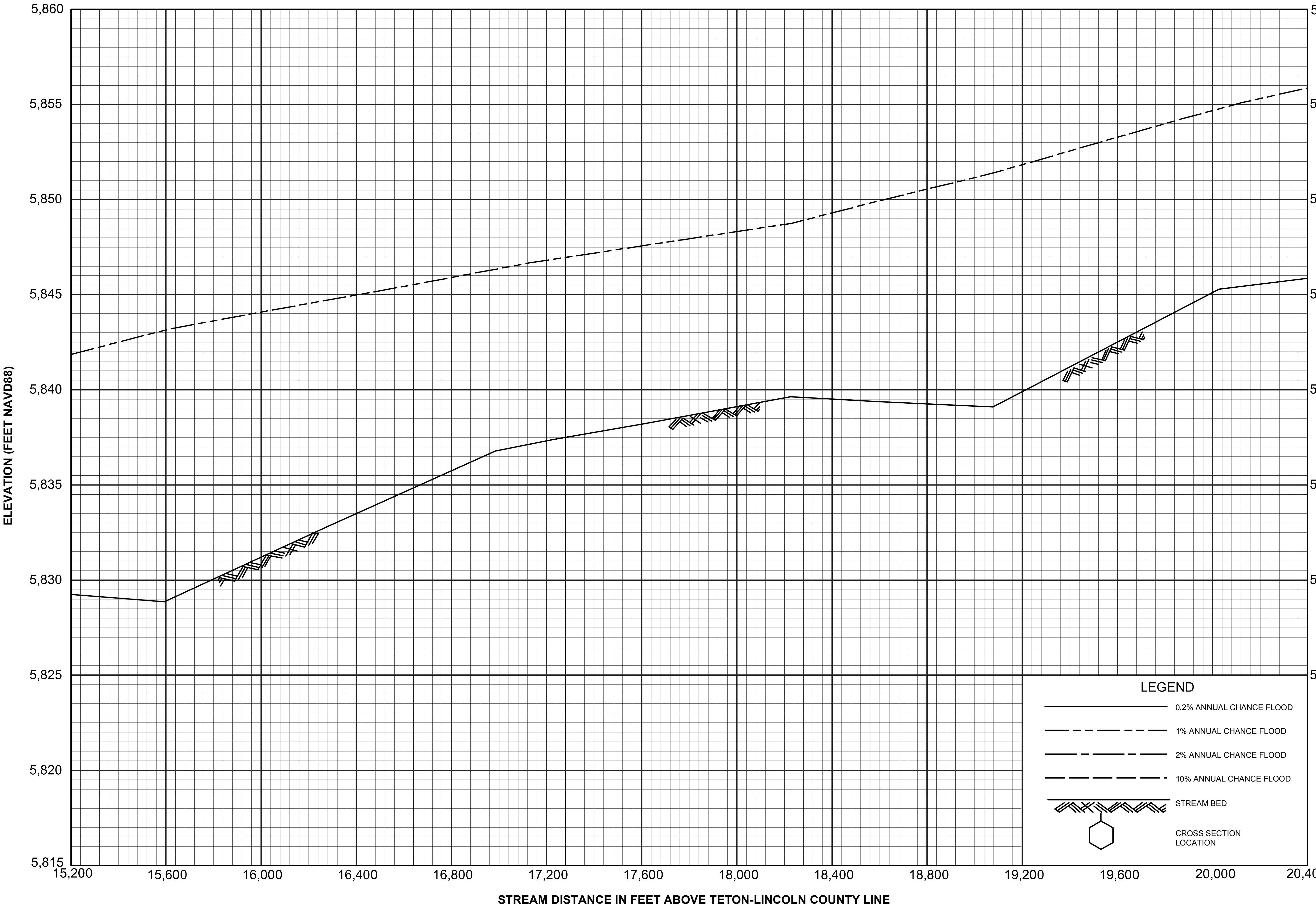
FLOOD PROFILES

SNAKE RIVER ABOVE TETON-LINCOLN COUNTY LINE

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



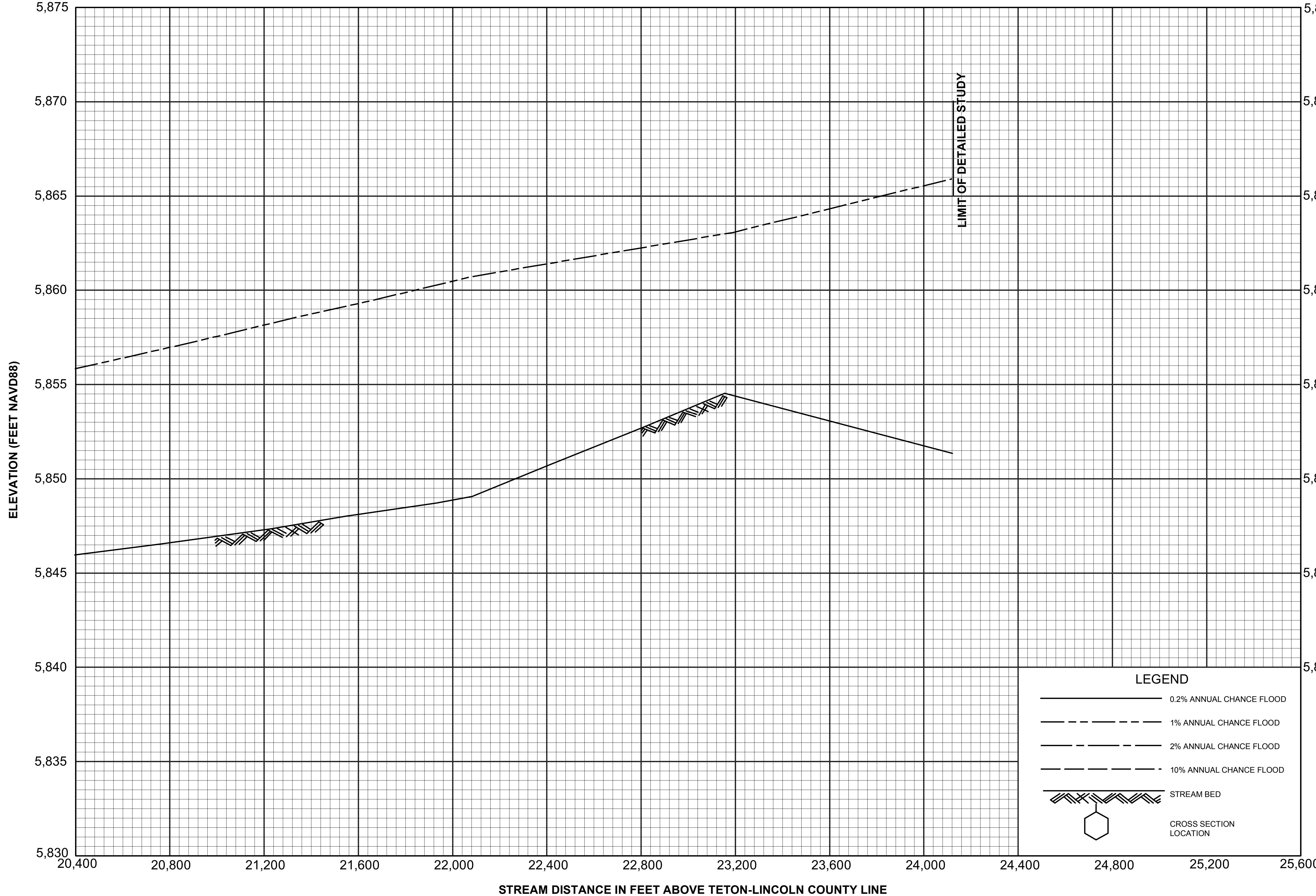
FLOOD PROFILES

SNAKE RIVER ABOVE TETON-LINCOLN COUNTY LINE

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

49P

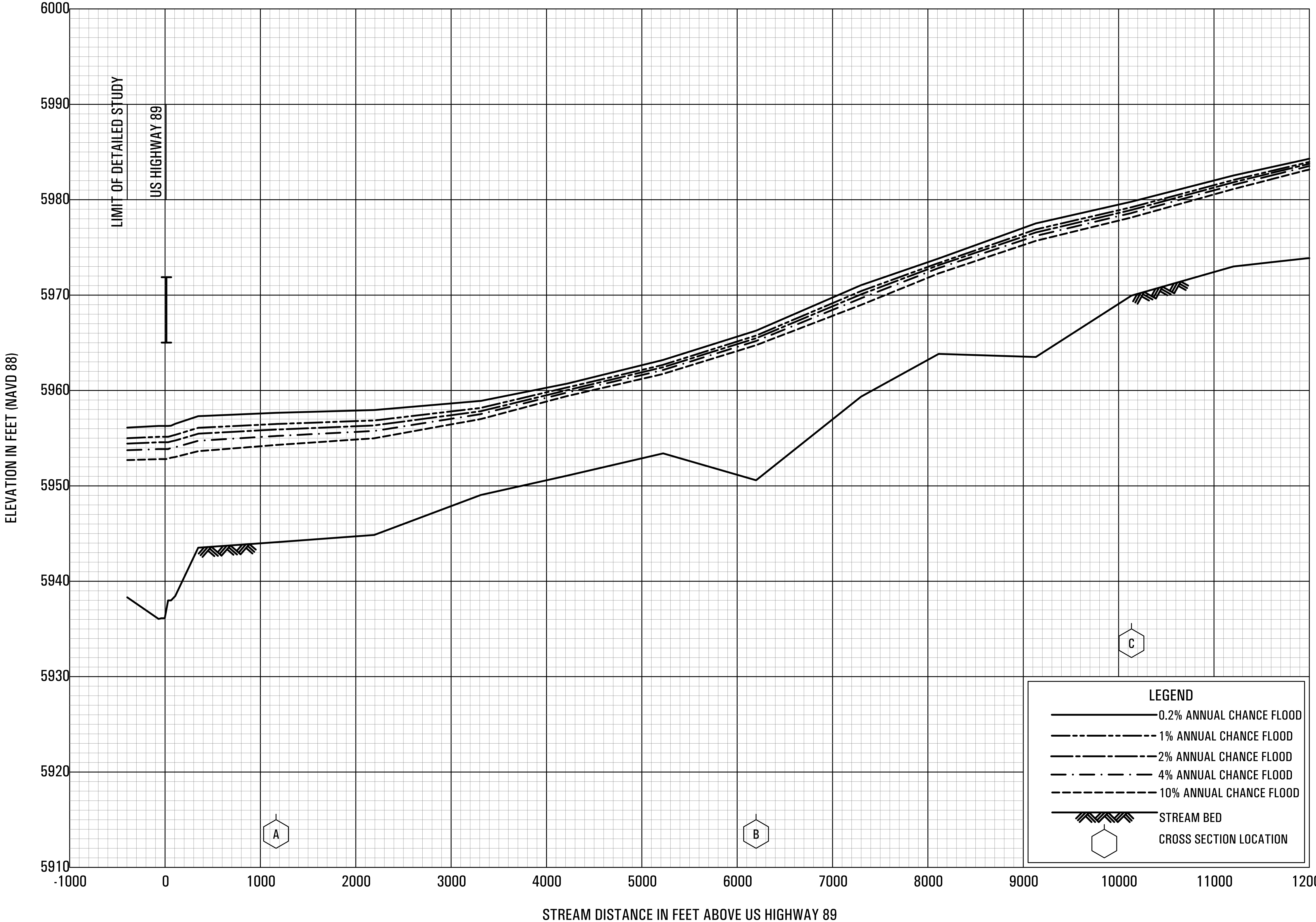


FLOOD PROFILES

SNAKE RIVER ABOVE TETON-LINCOLN COUNTY LINE

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



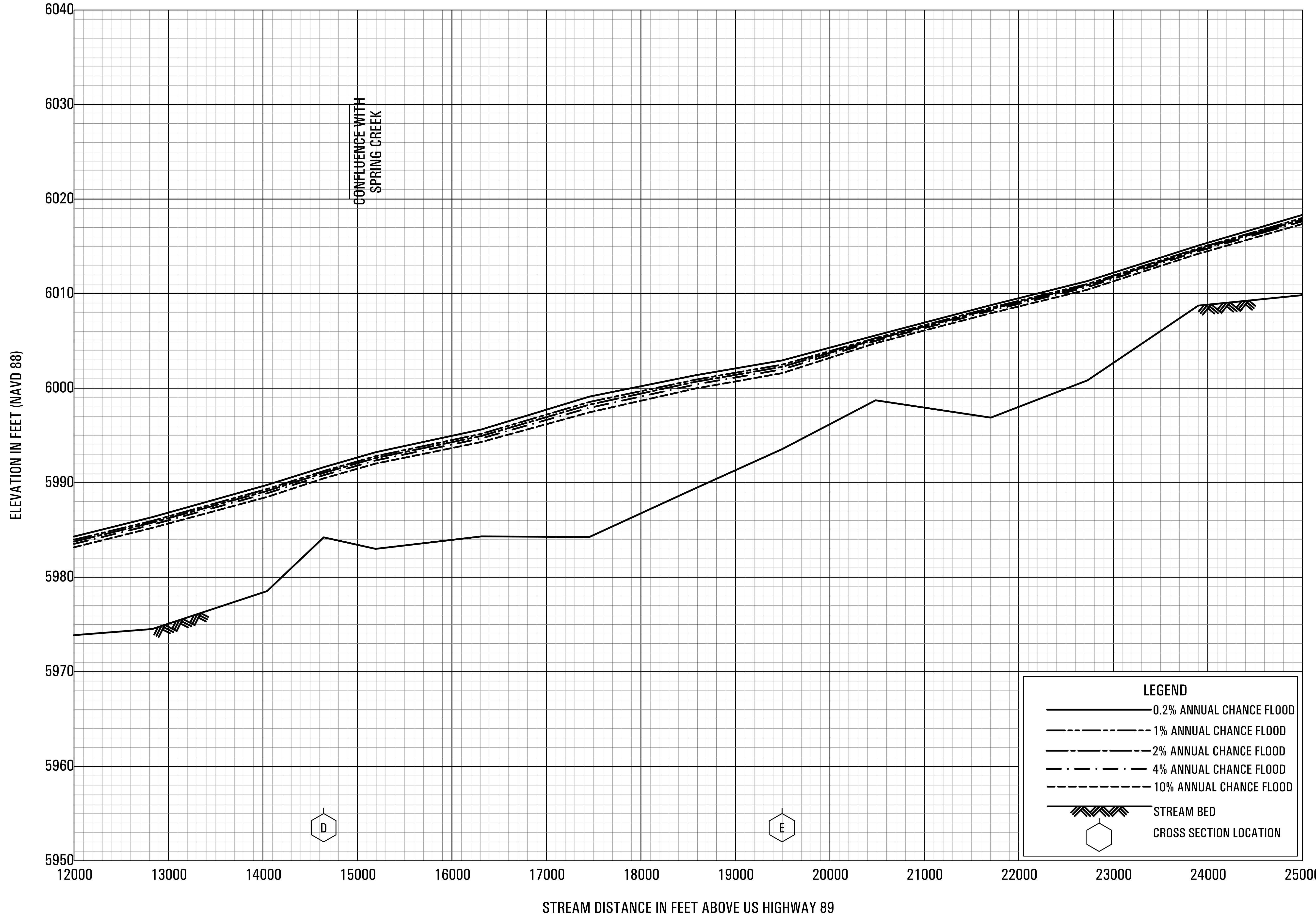
FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



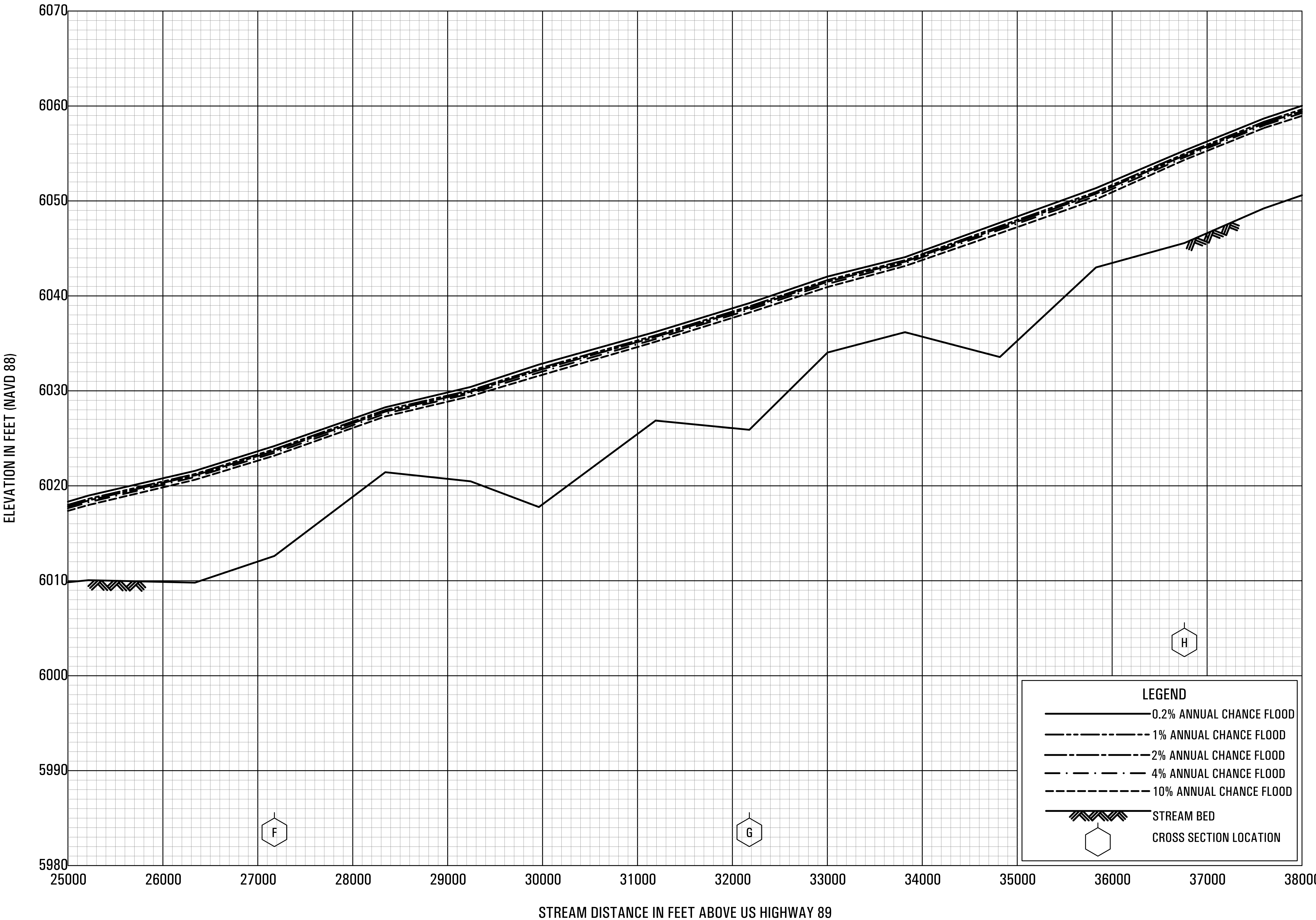
FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



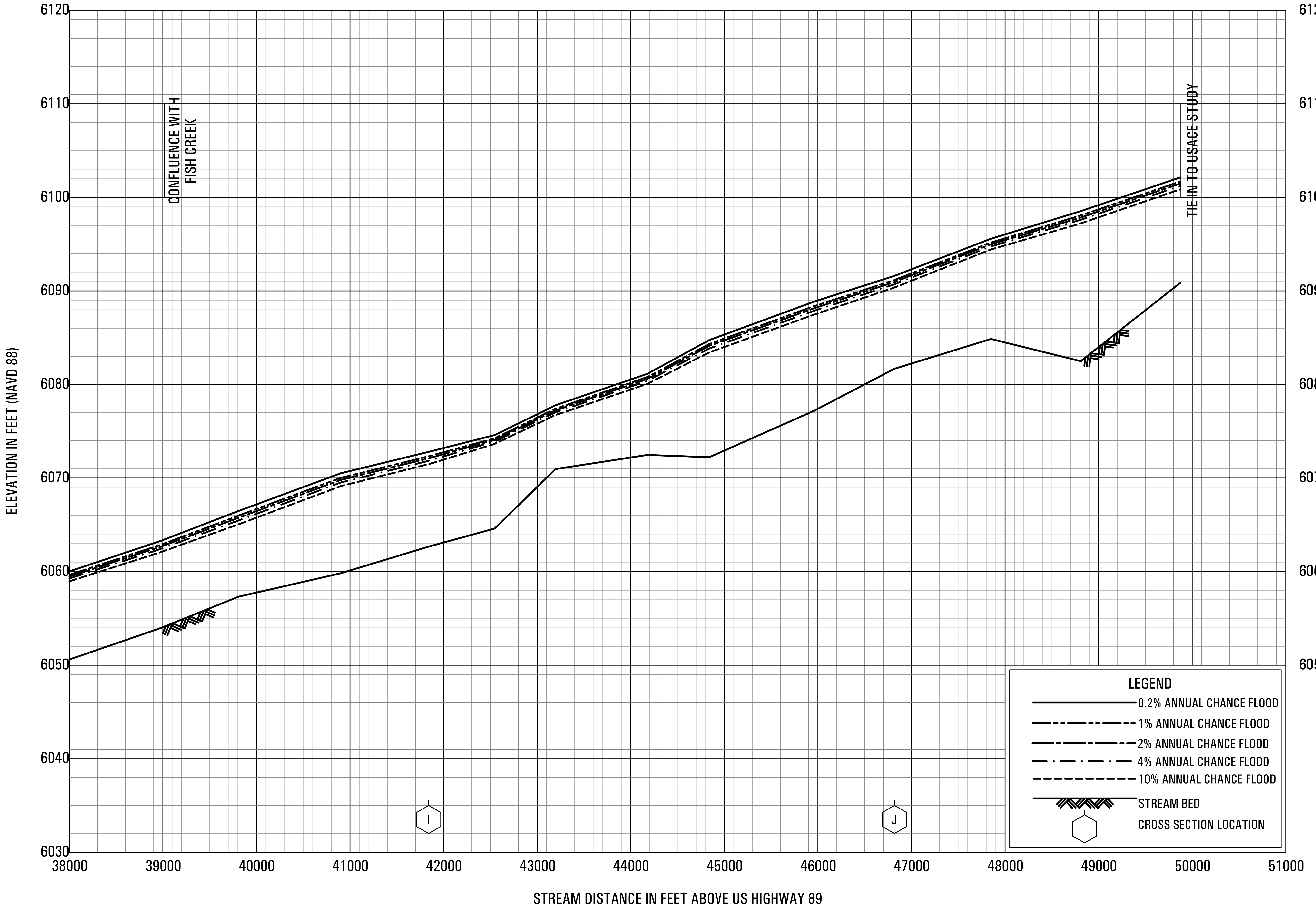
FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



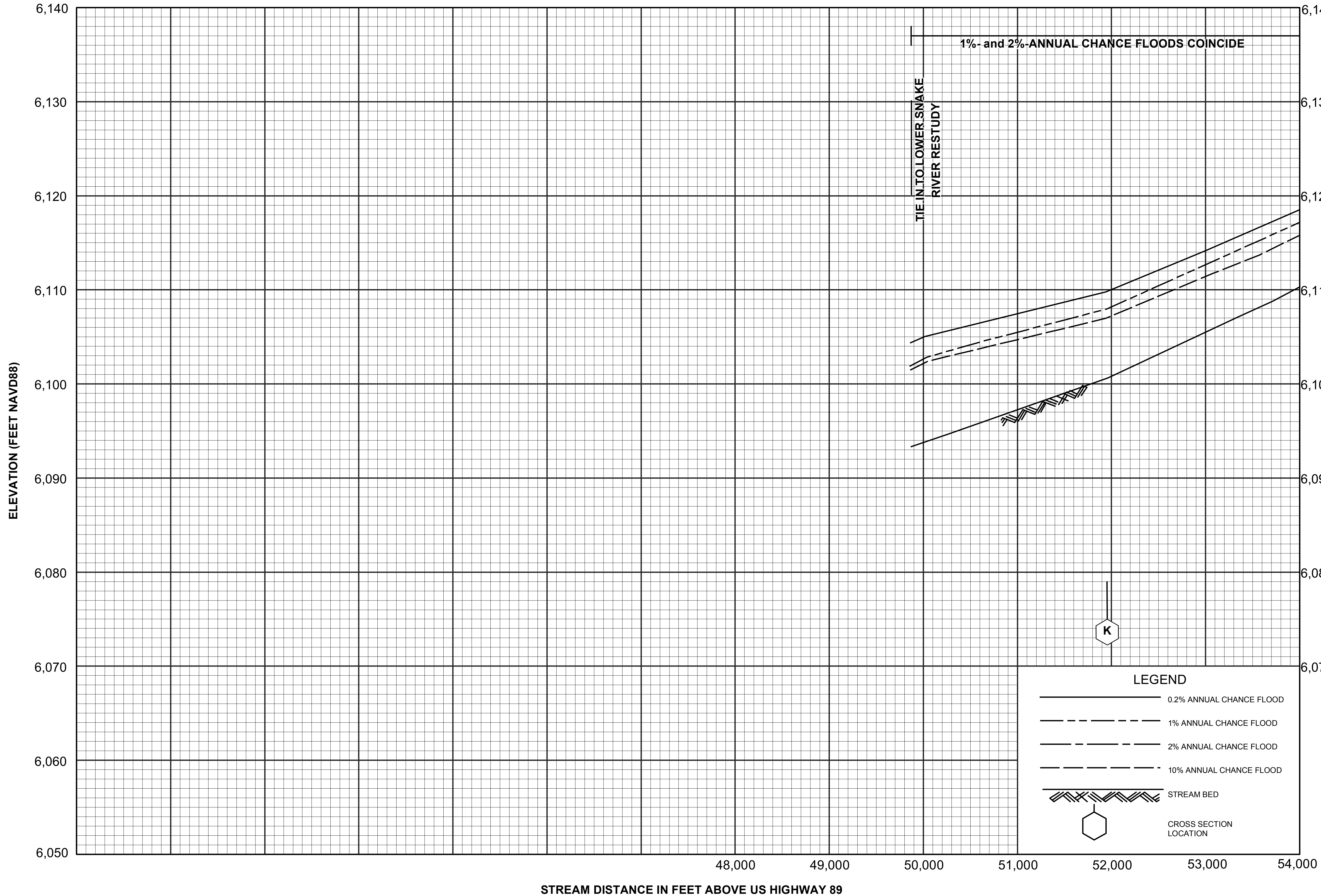
FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS

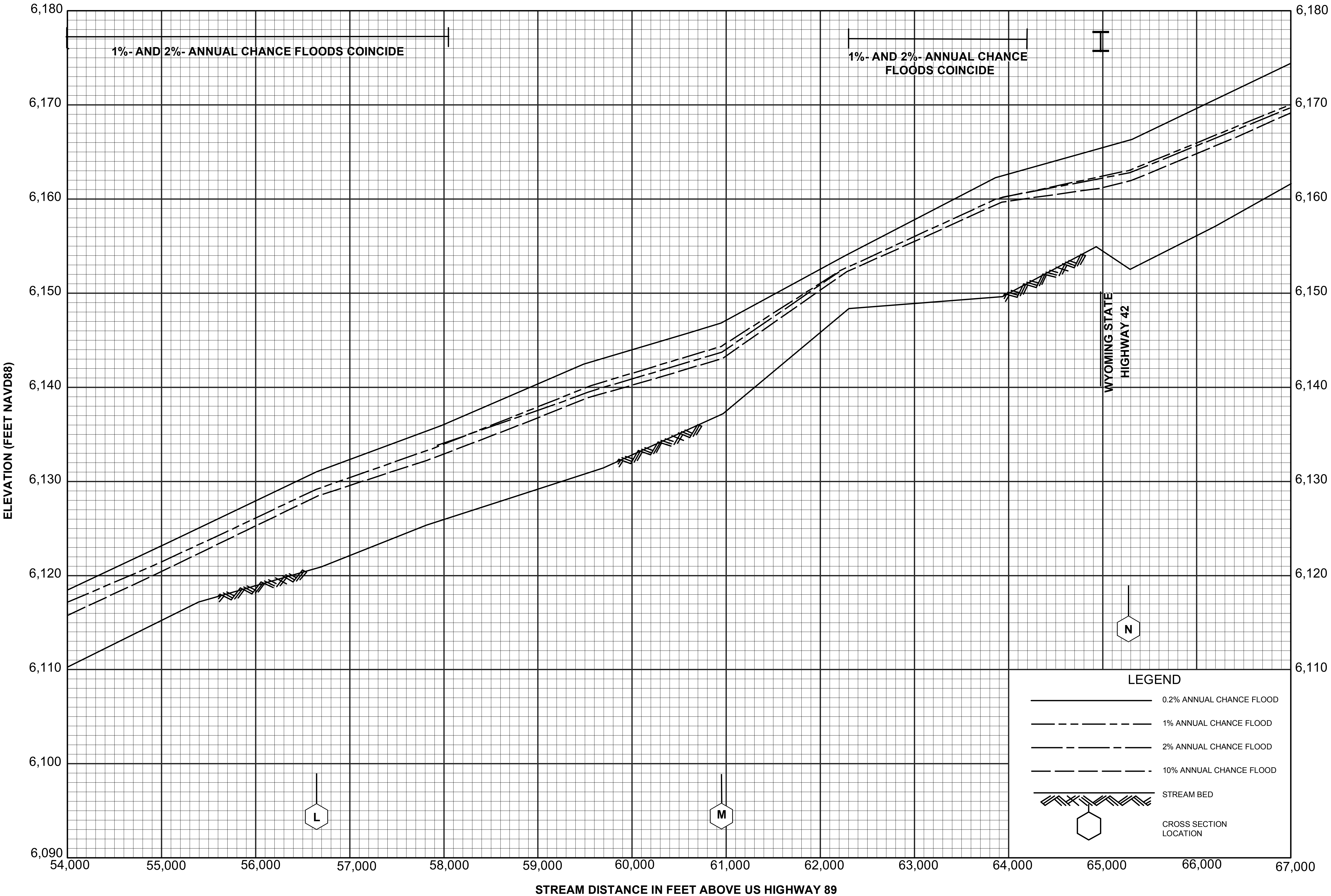


FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

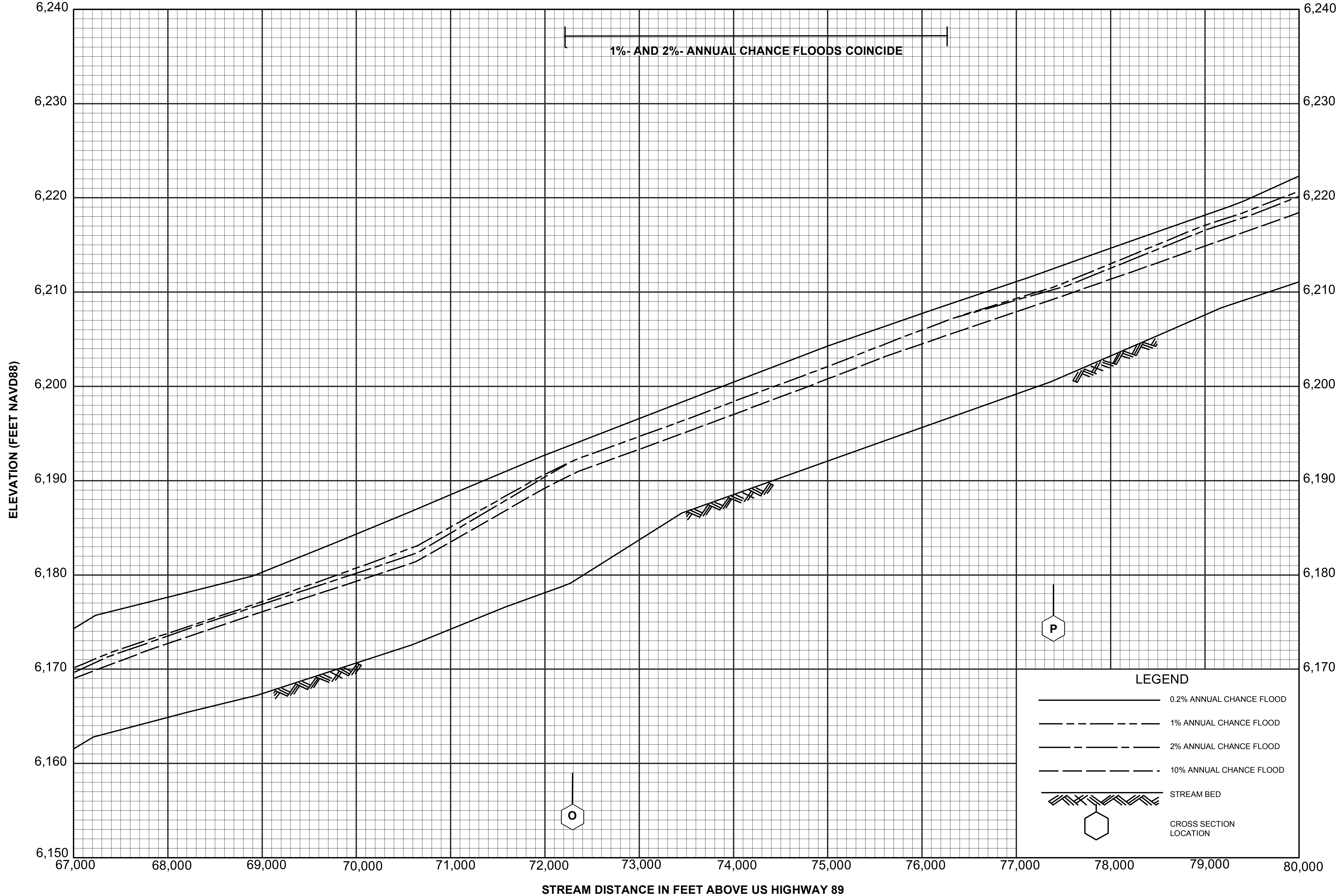


FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

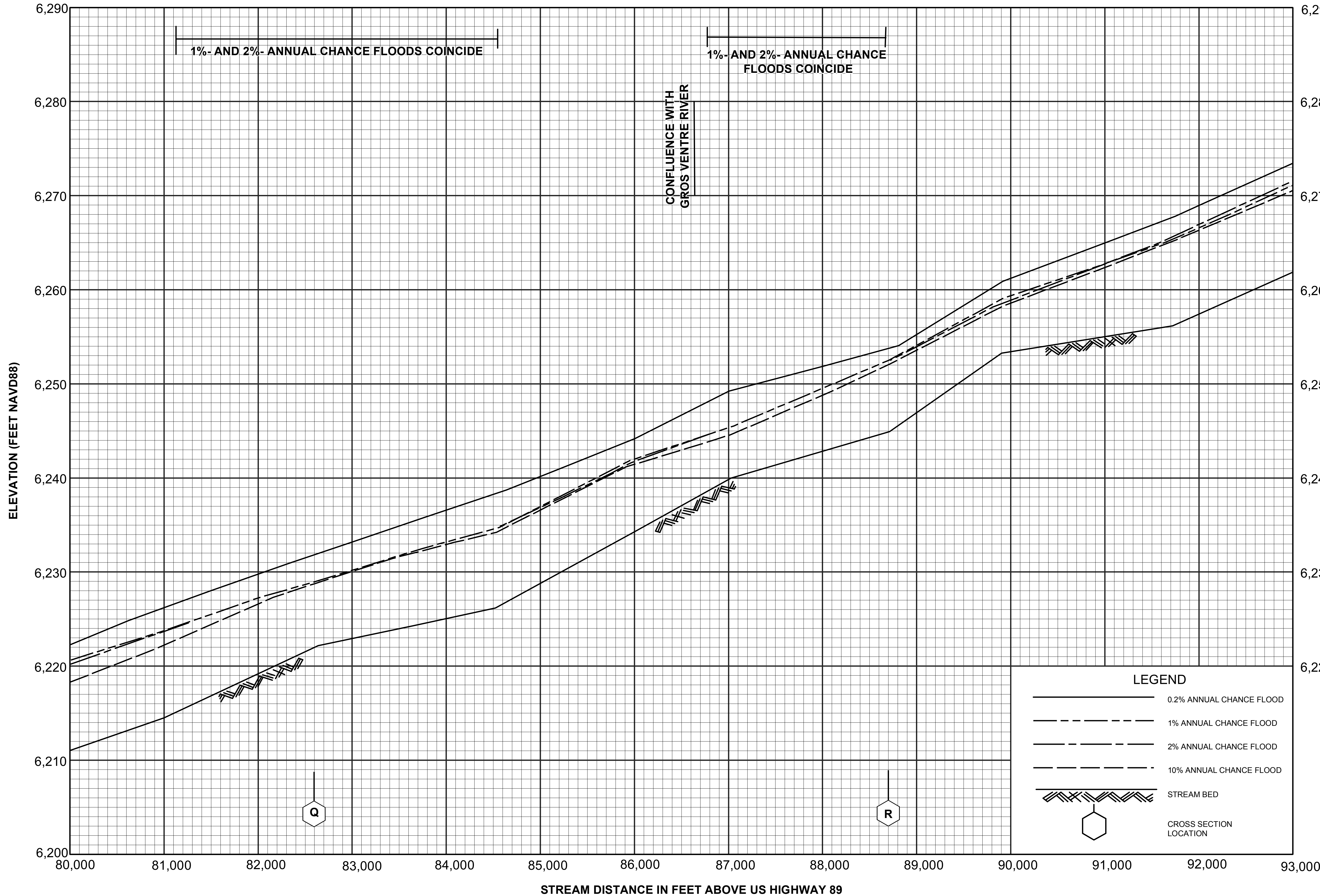


FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

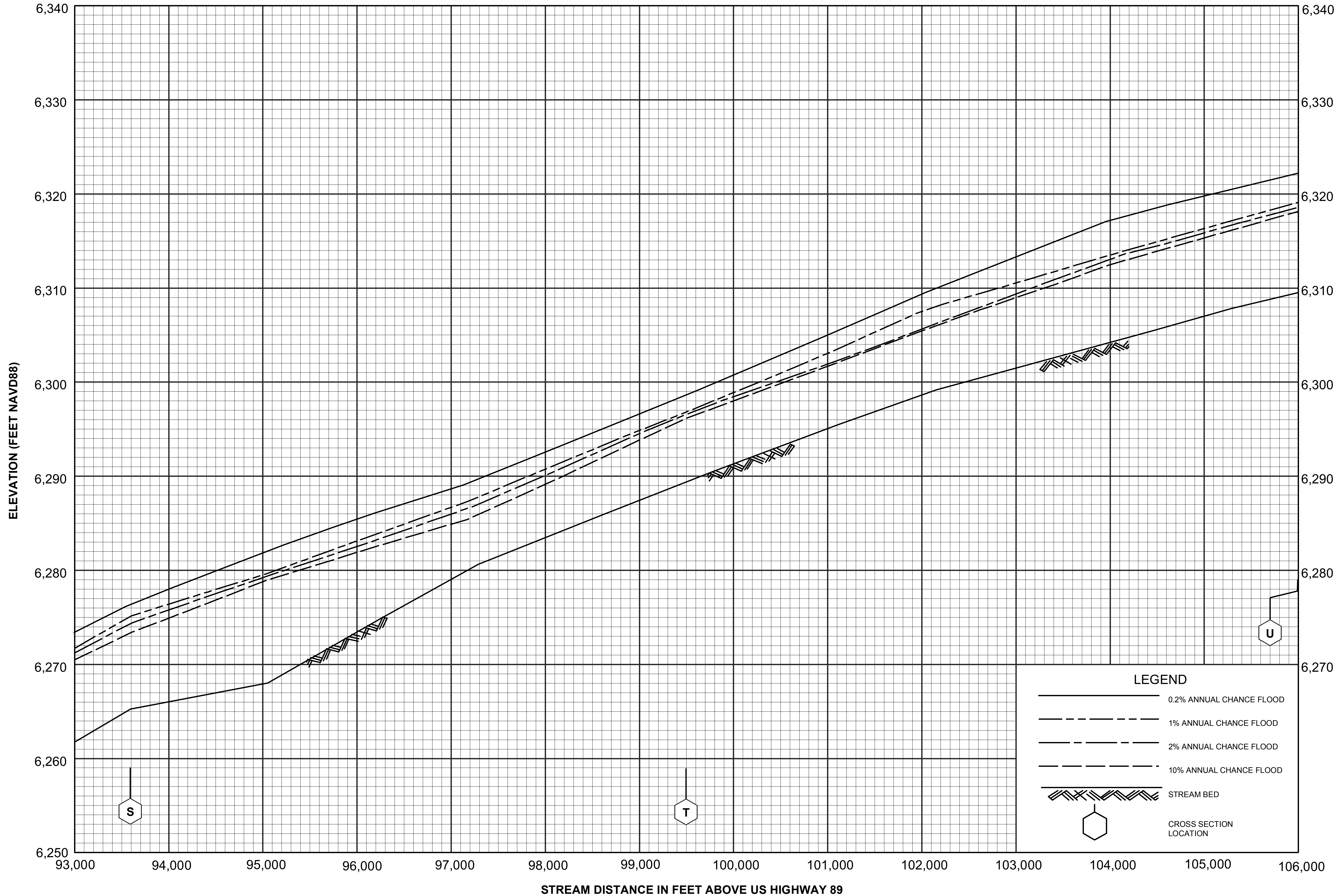


FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



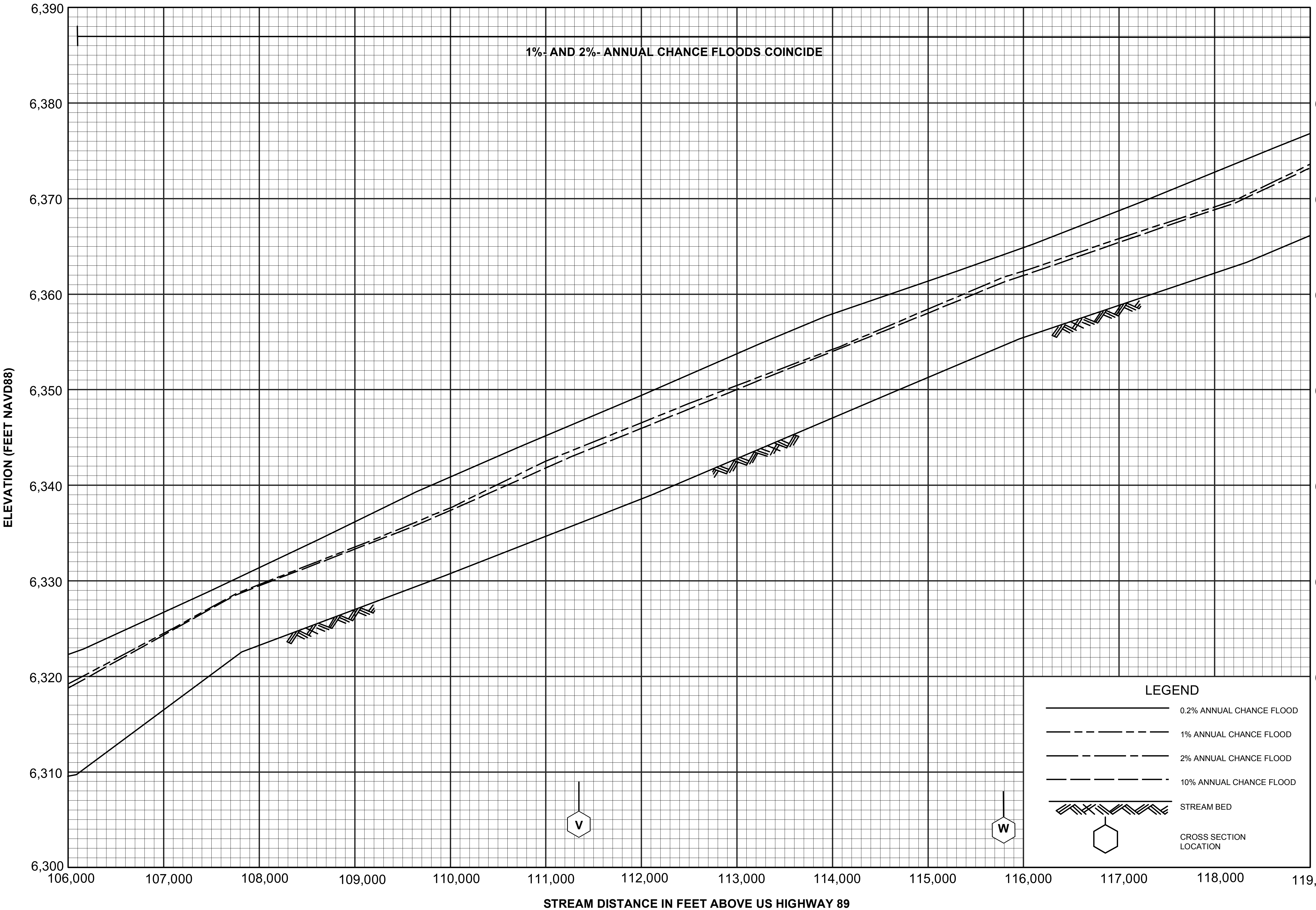
FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

59P

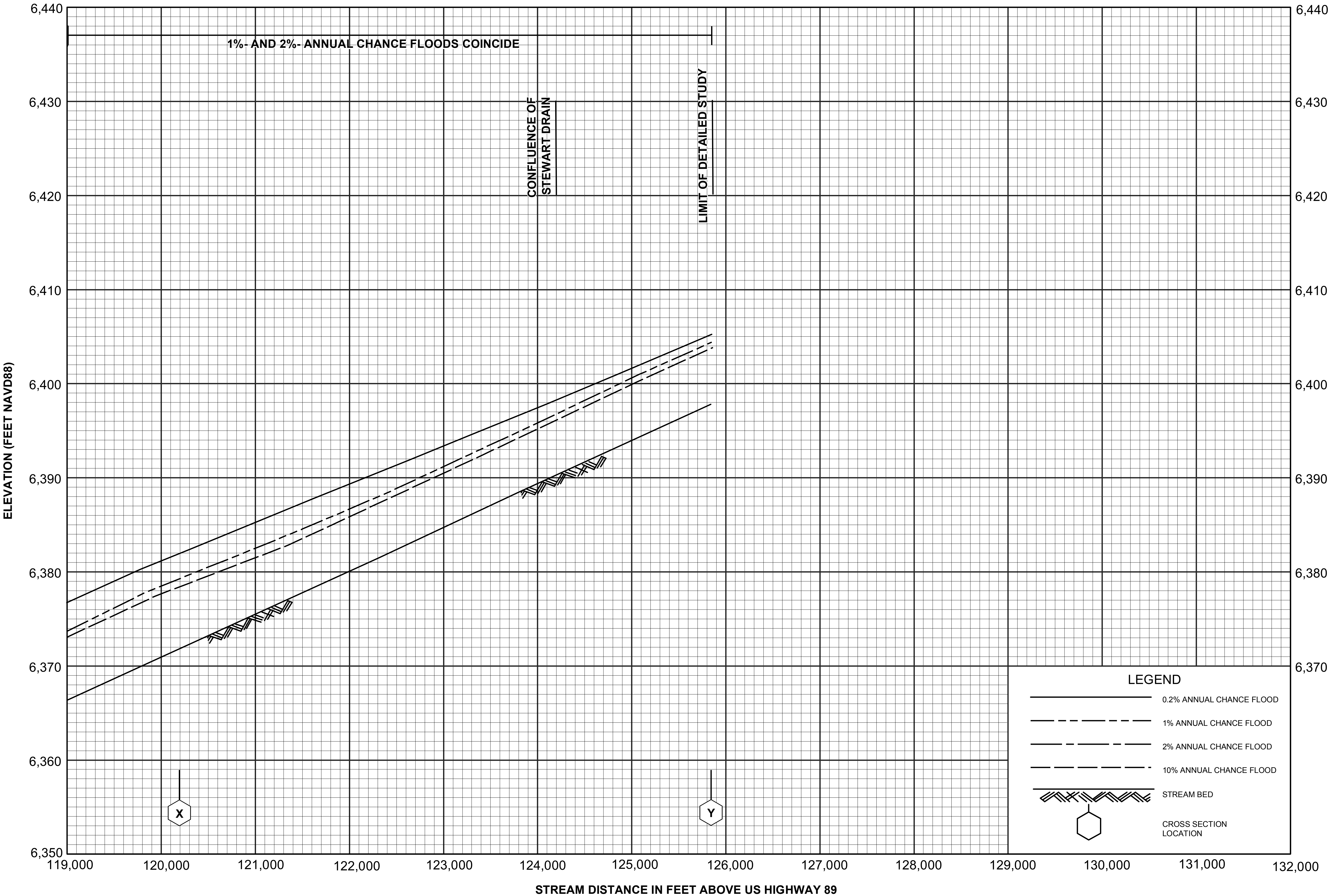


FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

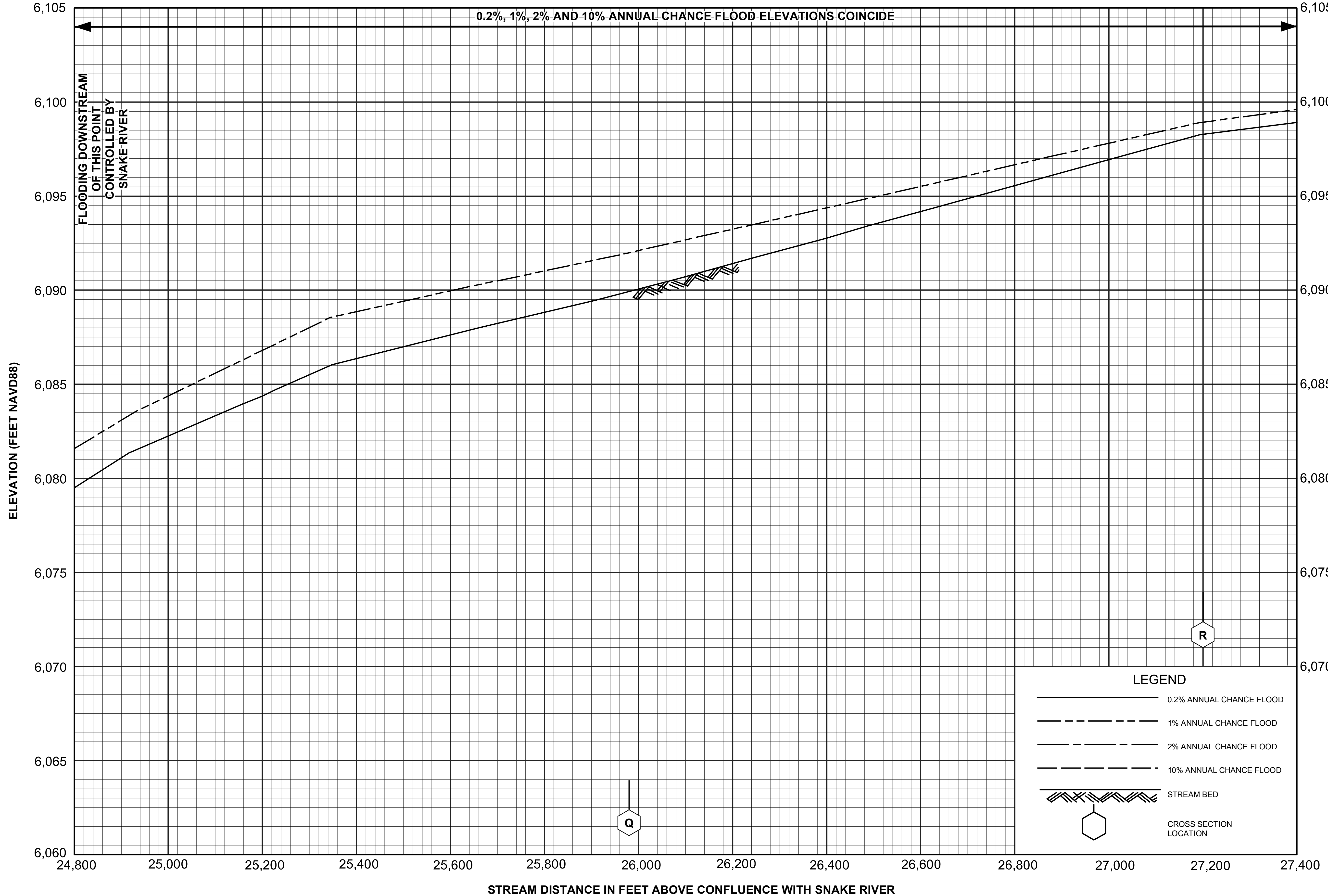


FLOOD PROFILES

SNAKE RIVER ABOVE US HIGHWAY 89

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



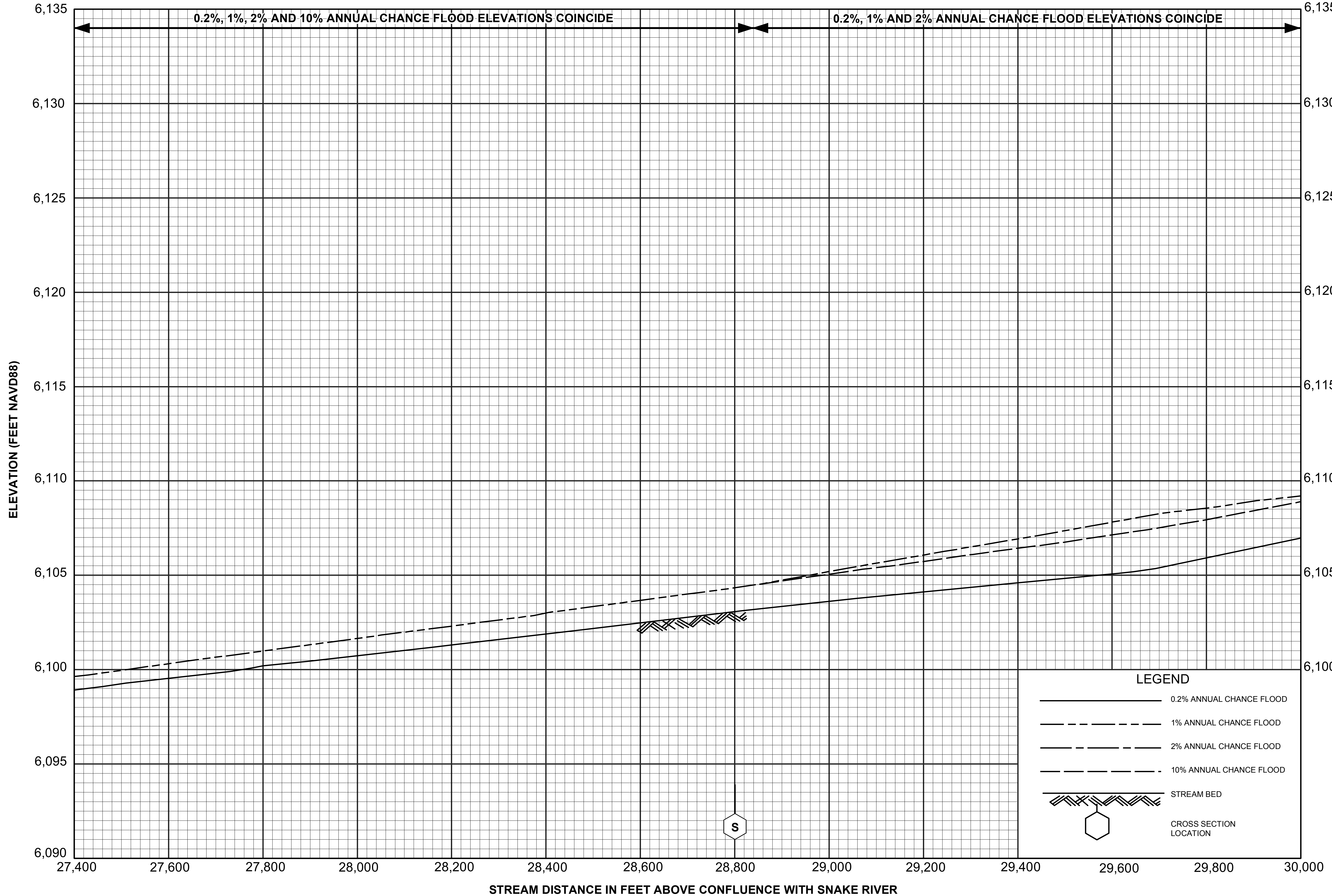
FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

62P

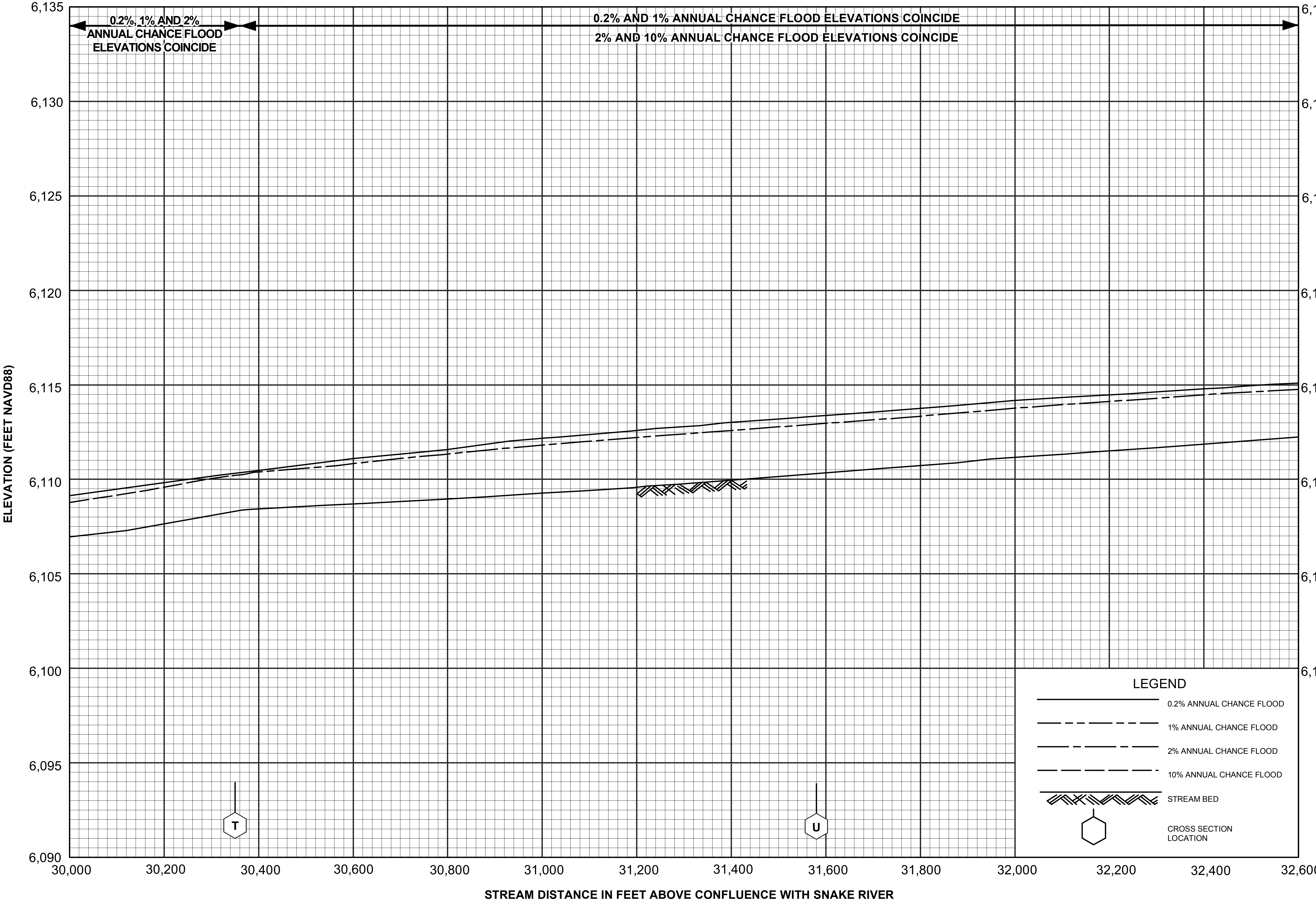


FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



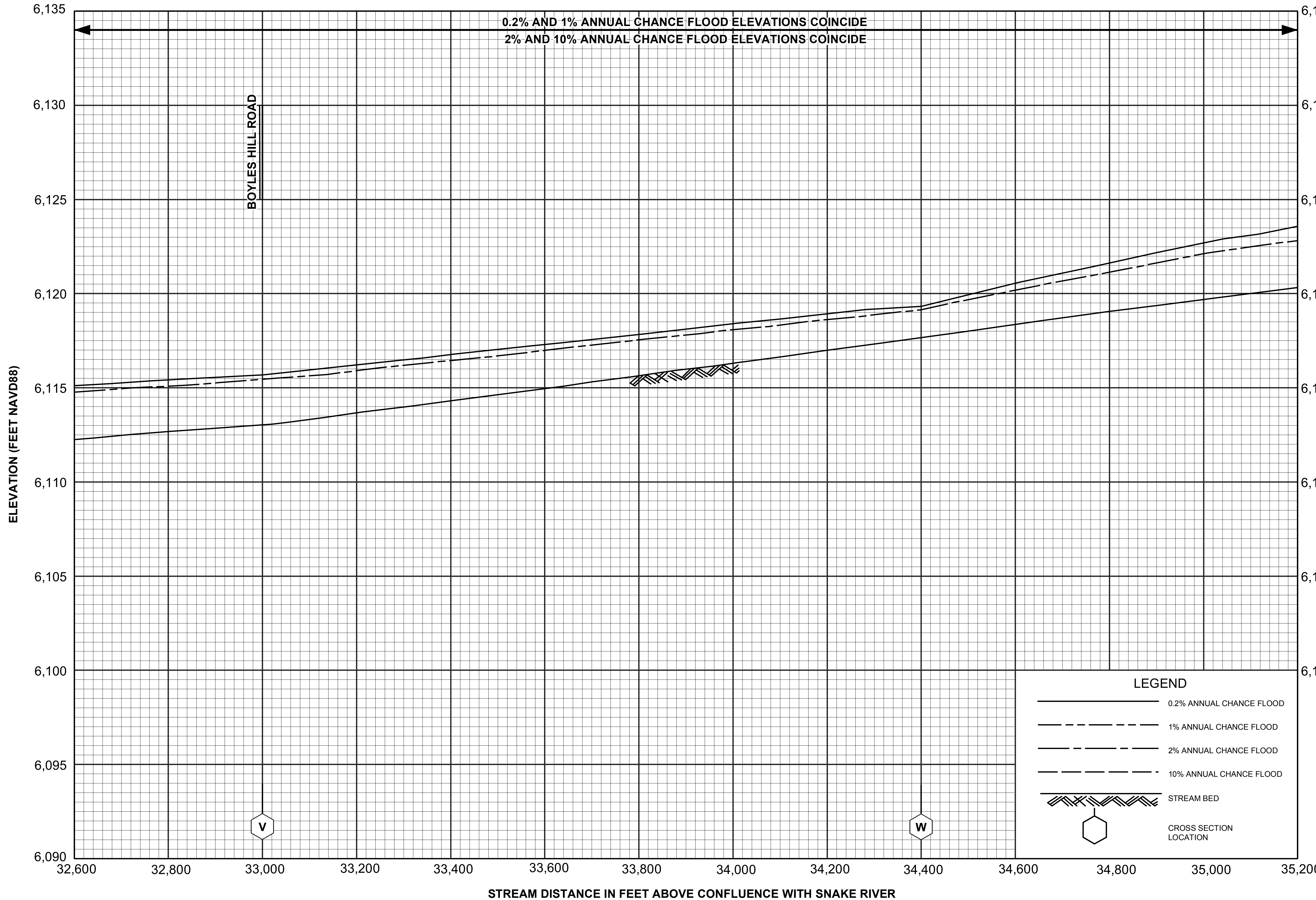
FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

64P



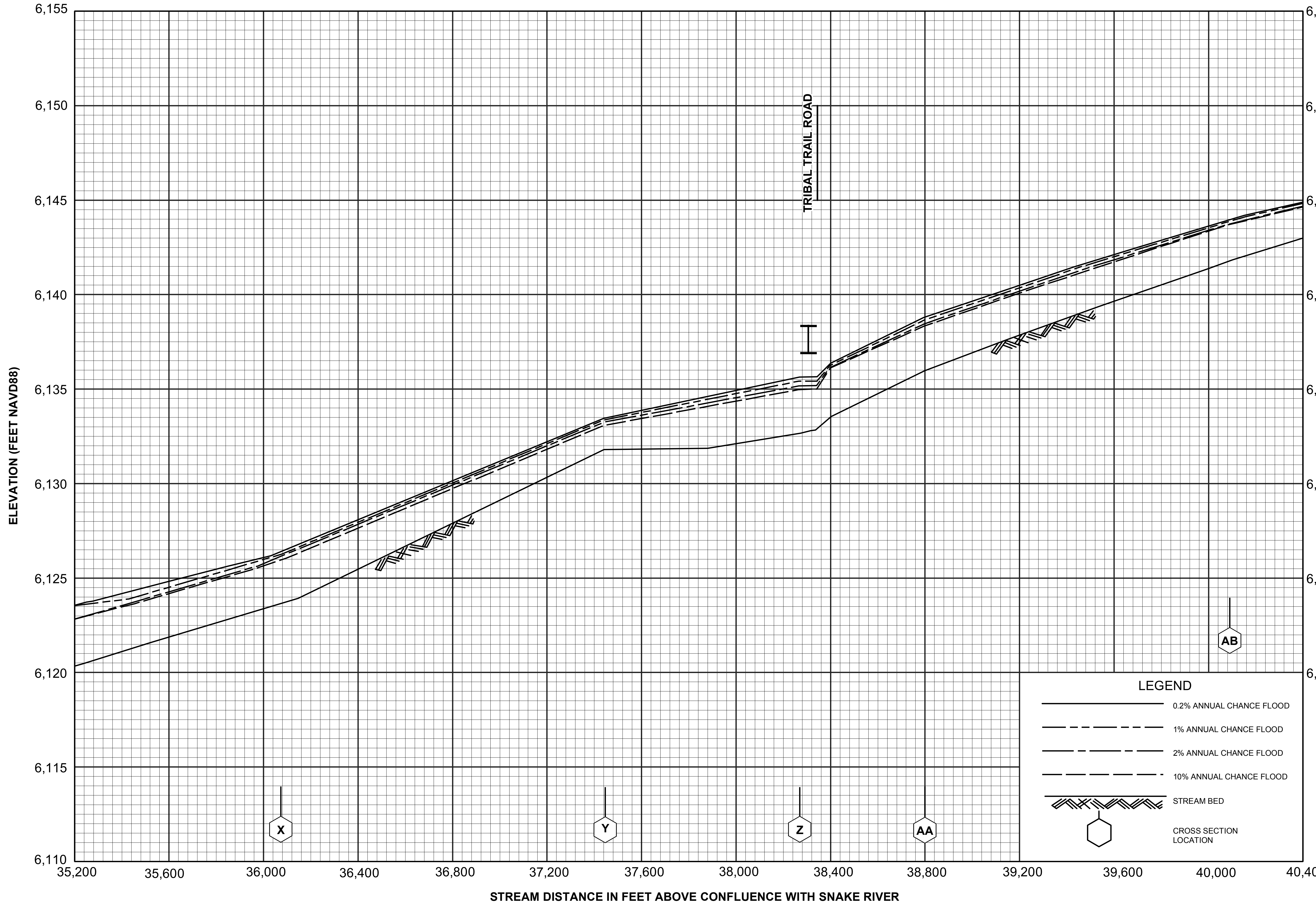
FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY

AND INCORPORATED AREAS



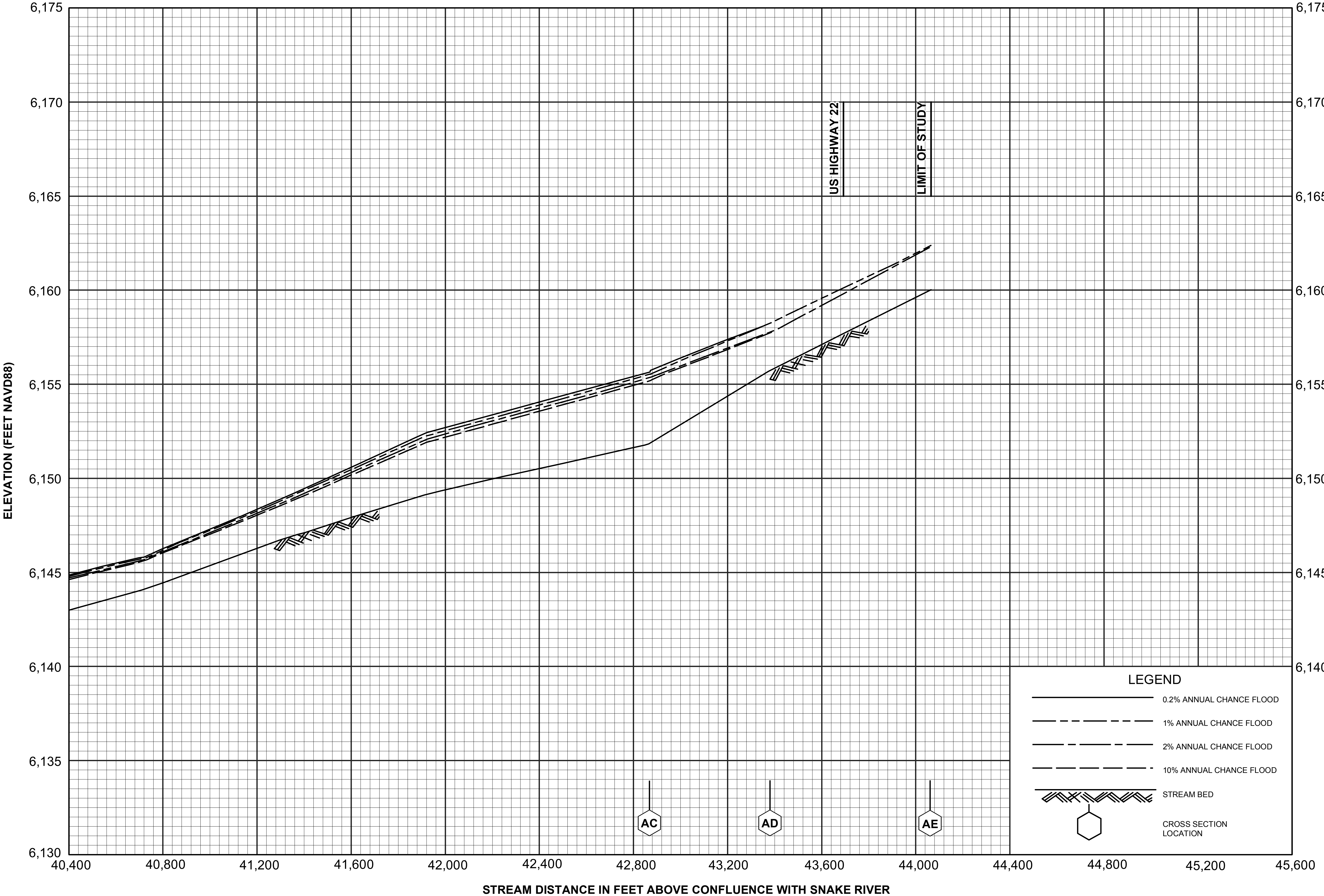
FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

66P

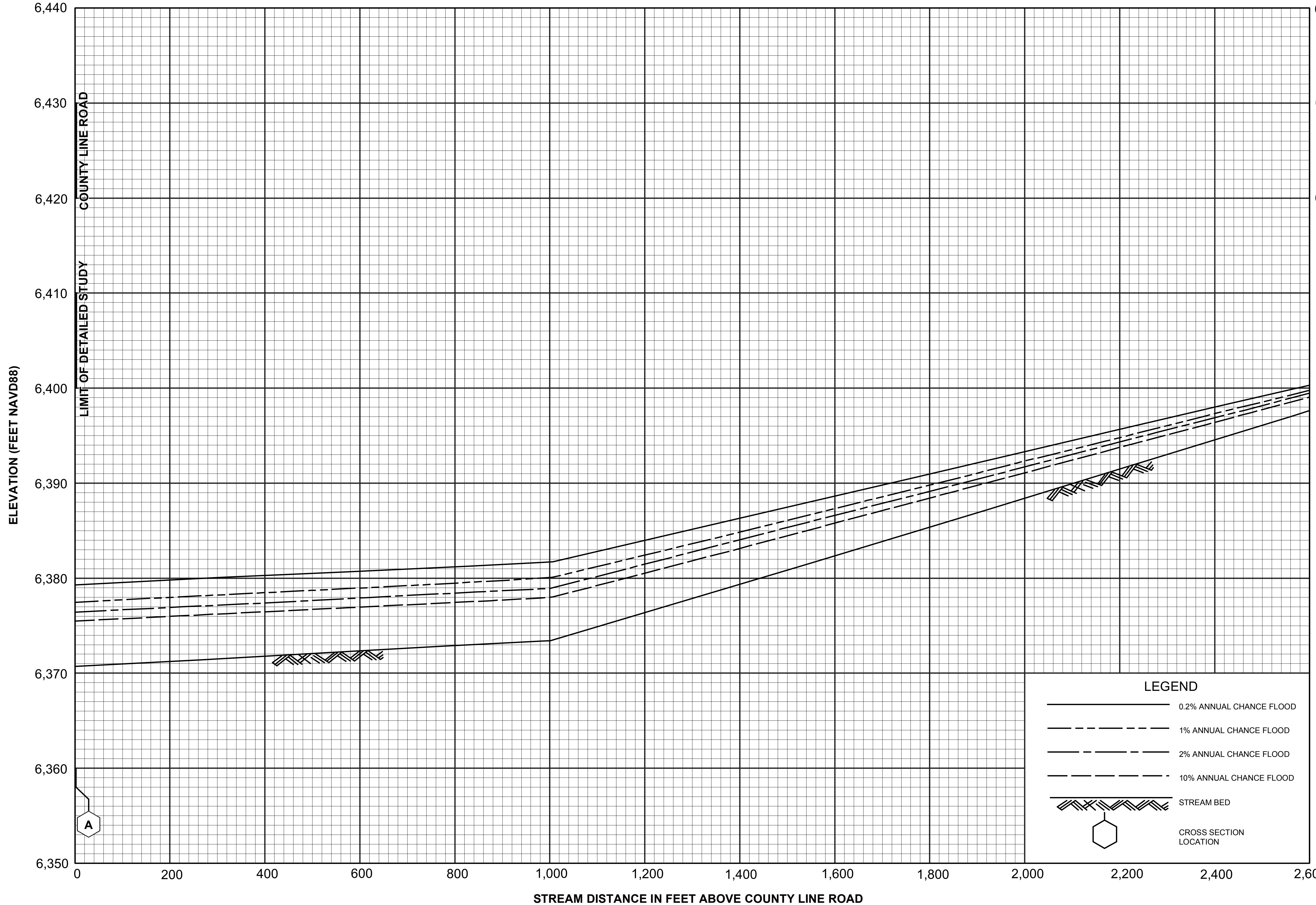


FLOOD PROFILES

SPRING CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

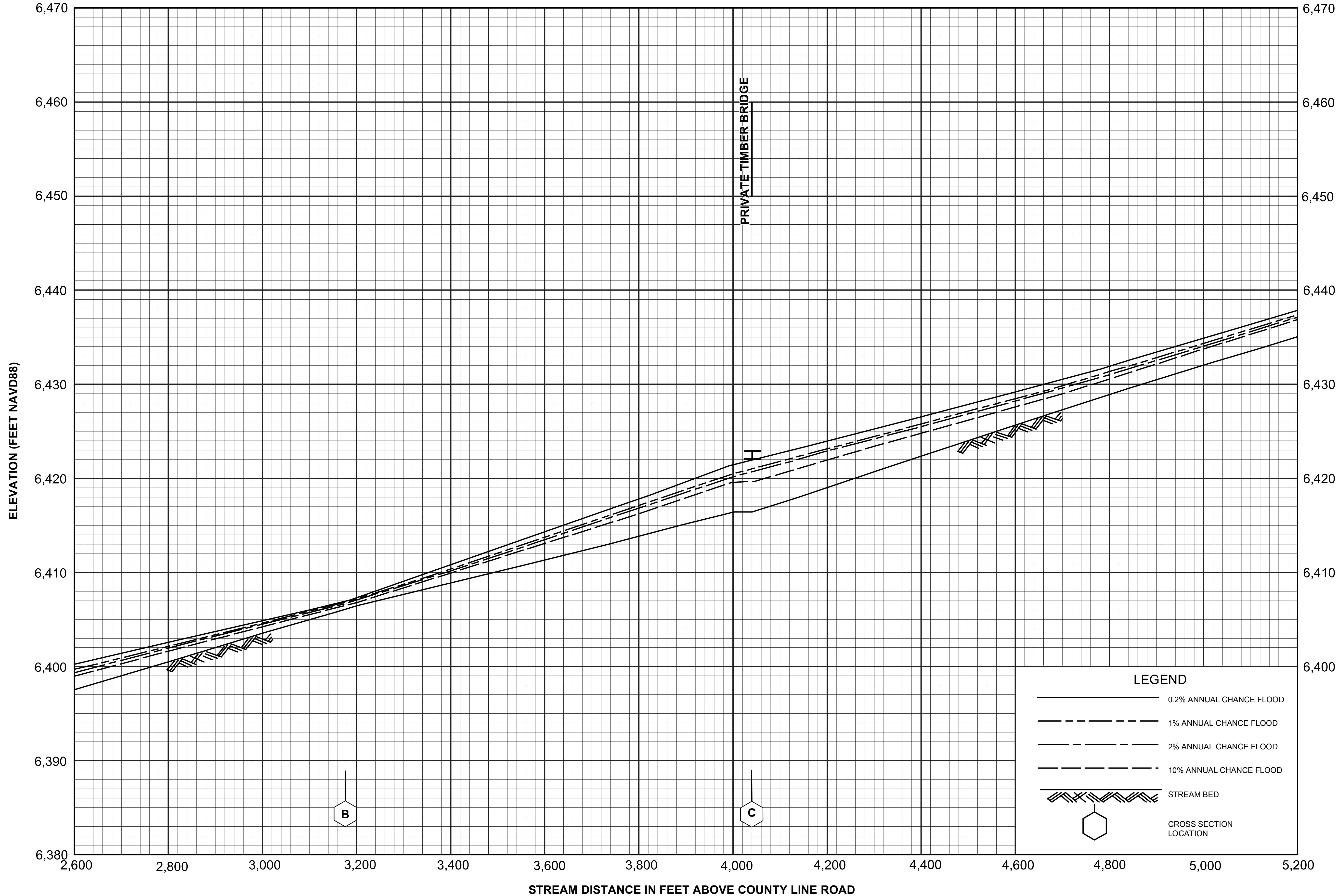


FLOOD PROFILES

TETON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS



FLOOD PROFILES

TETON CREEK

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TETON COUNTY, WY
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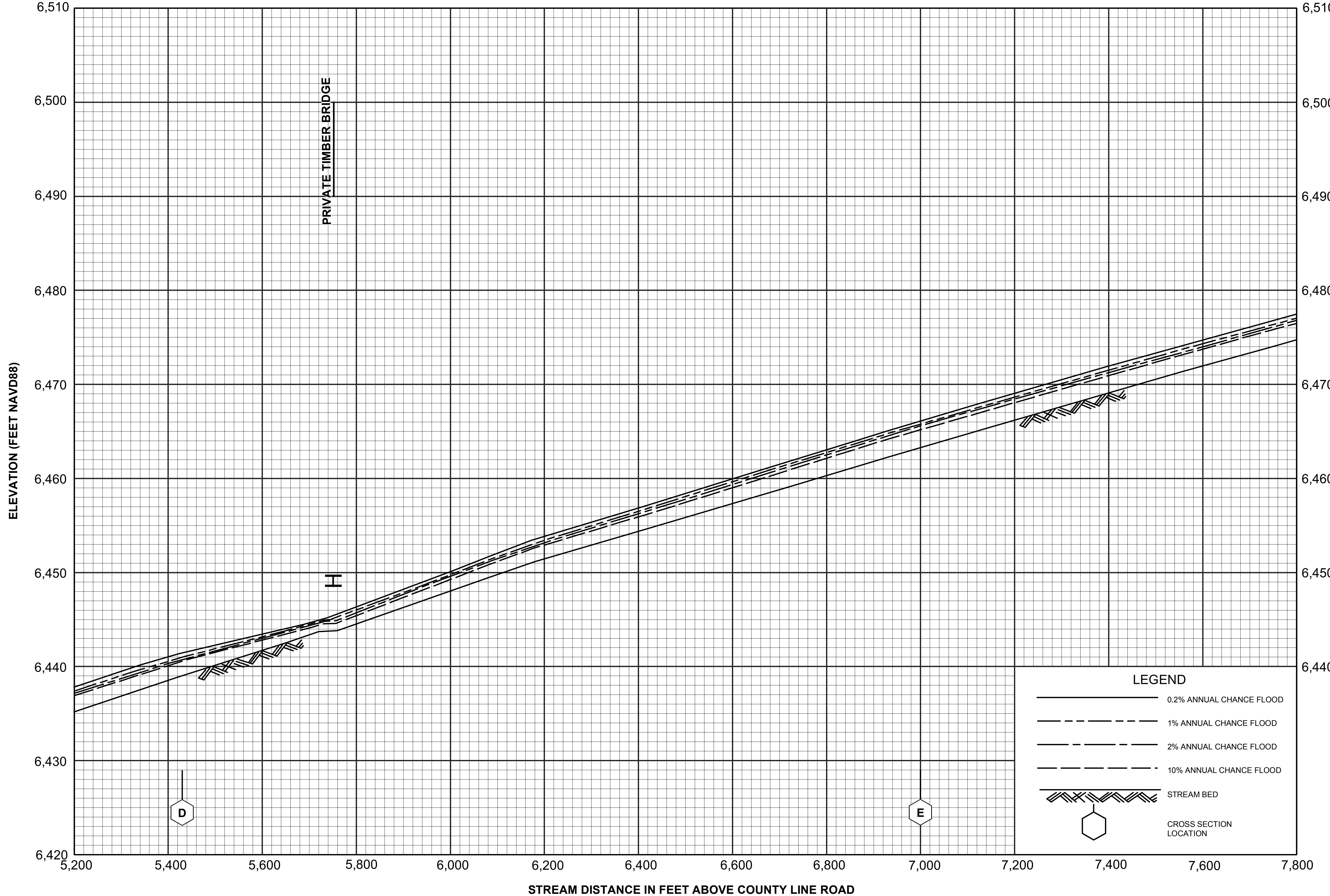

FLOOD PROFILES

TETON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
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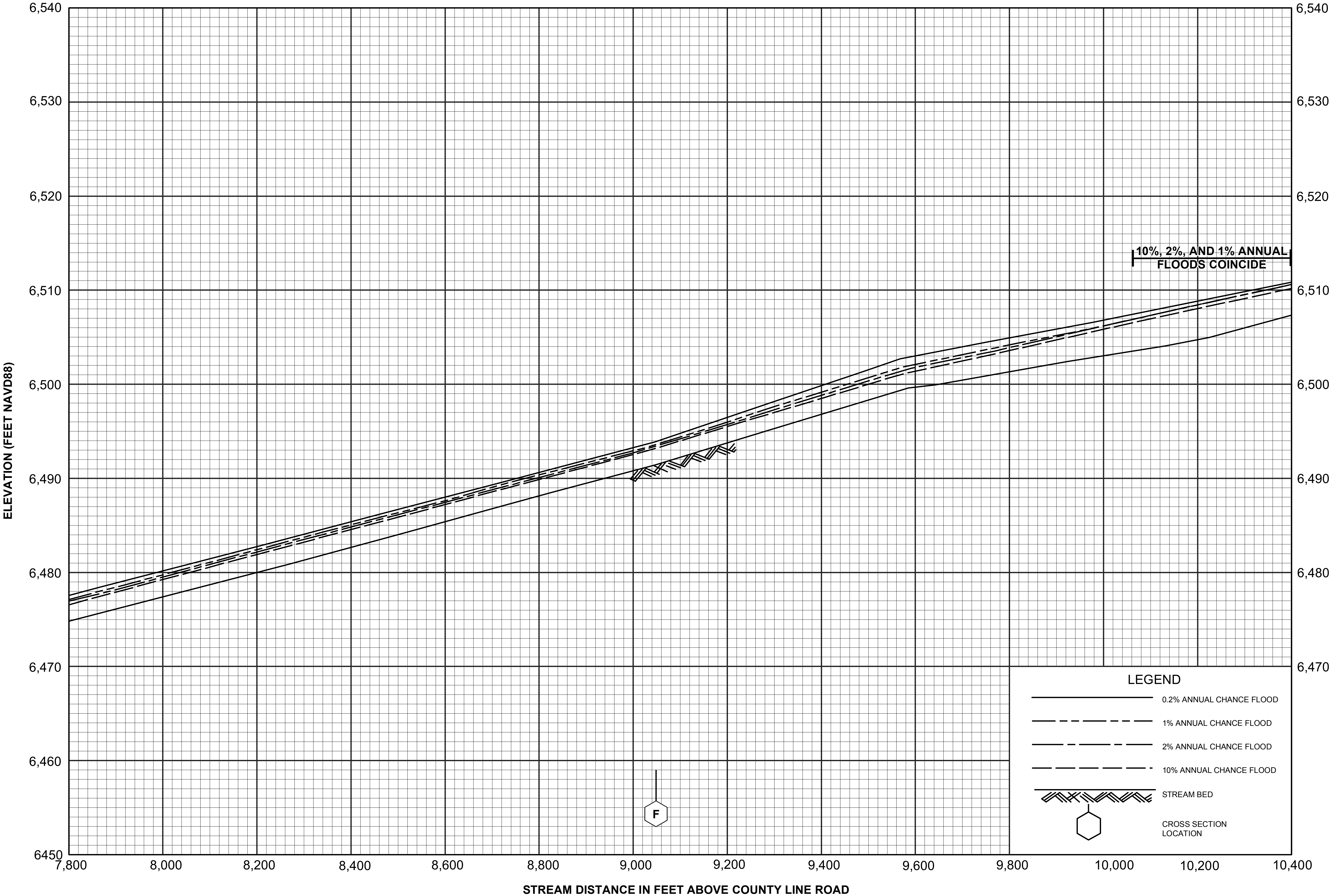

FLOOD PROFILES

TETON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
AND INCORPORATED AREAS

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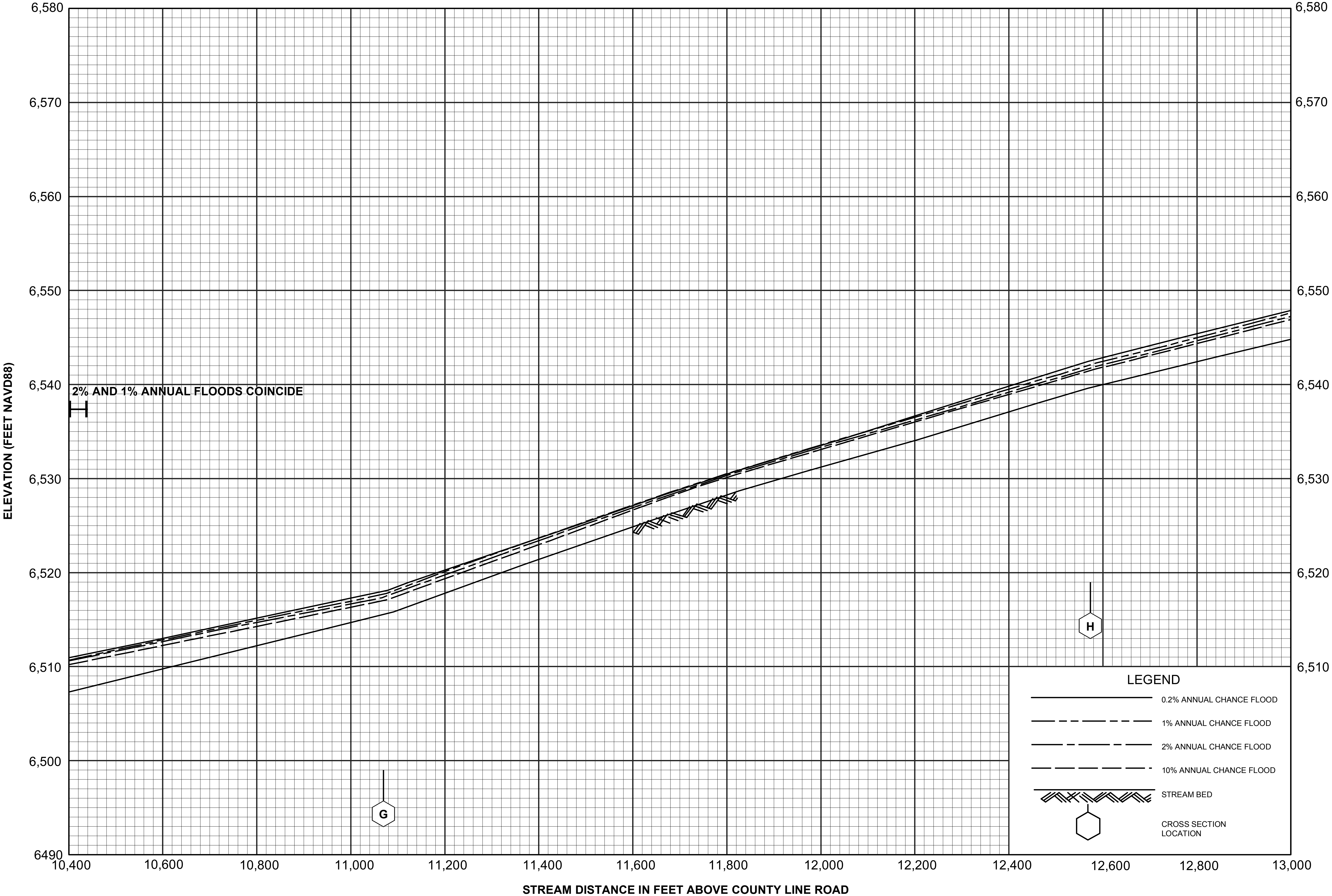

FLOOD PROFILES

TETON CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

TETON COUNTY, WY
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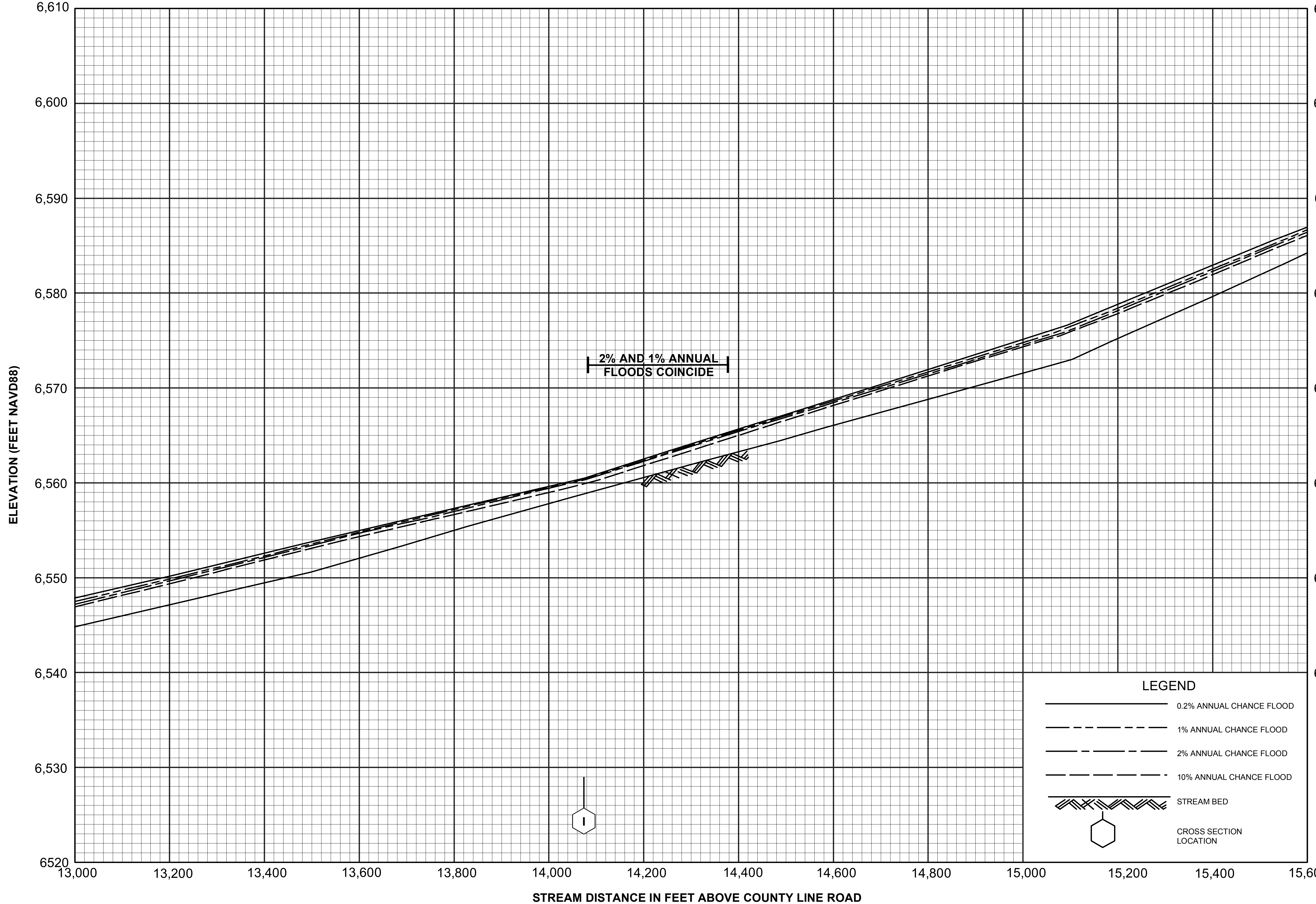

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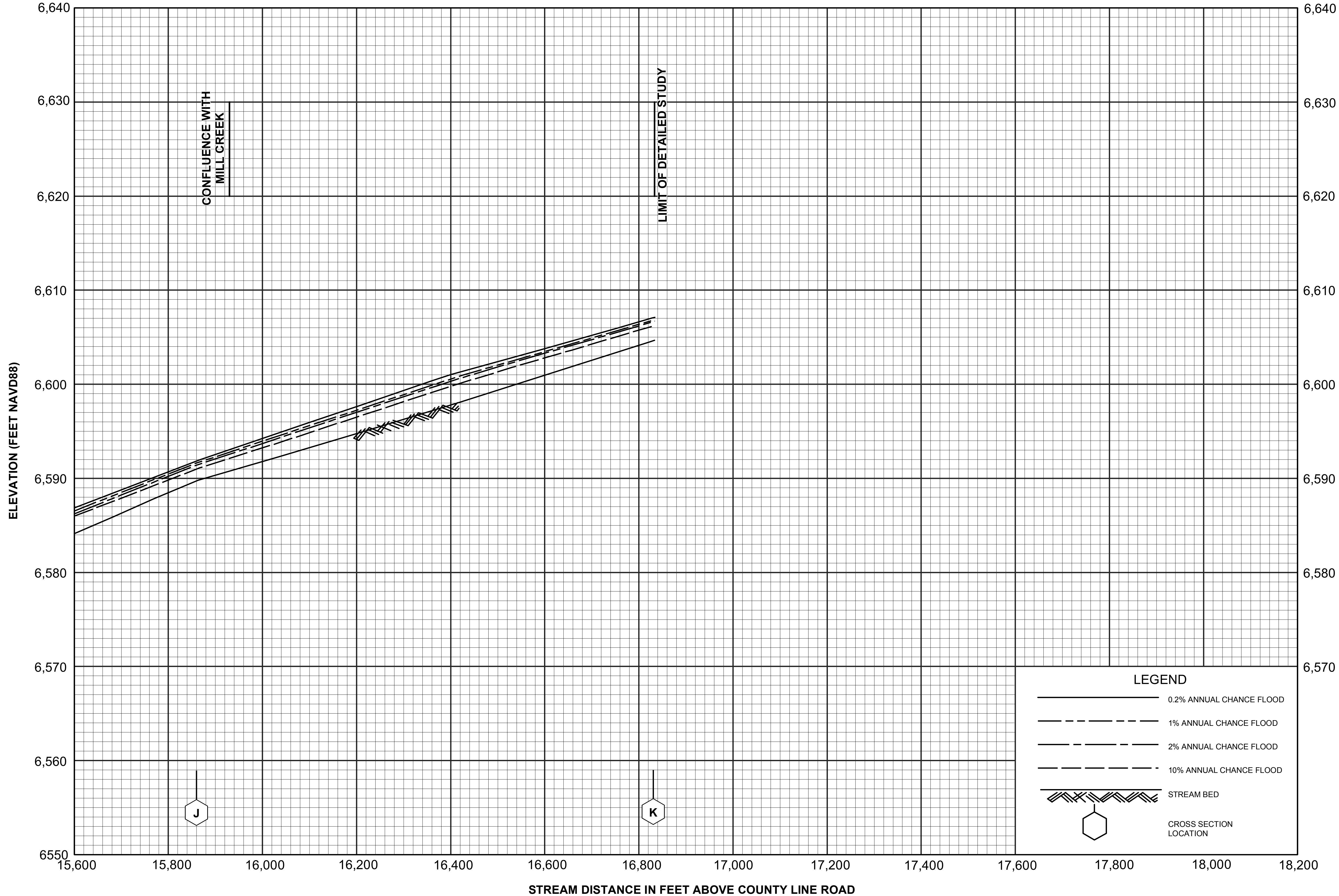

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