Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	City of Spearfish Lawrence County South Dakota	BRIDGE	BASE MAP CHANGES FLOODWAY 1D/2D HYDRAULIC ANALYSIS HYDROLOGIC ANALYSIS UPDATED TOPOGRAPHIC DATA
	COMMUNITY NO.: 460046		
IDENTIFIER	Spearfish Creek 2019 Remapping (2022 Wrap Up)	APPROXIMATE LATITUDE AND LONGITUDE: 44.497, -103.867 SOURCE: Other DATUM: NAD 83	

ANNOTATED MAPPING ENCLOSURES			ANNOTATED STUDY ENCLOSURES
TYPE: FIRM*	NO.: 46081C0044F	DATE: April 17, 2012	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: April 17, 2012
TYPE: FIRM	NO.: 46081C0063F	DATE: April 17, 2012	FLOODWAY DATA TABLE: 3
TYPE: FIRM	NO.: 46081C0176F	DATE: April 17, 2012	SUMMARY OF DISCHARGE TABLE: 1
			PROFILES: 14P, 22P-26P, 27P, 27P(a), 32P, 47P, 48P, 49P(REMOVED), AND 53P-55P

Enclosures reflect changes to flooding sources affected by this revision.
* FIRM - Flood Insurance Rate Map

FLOODING SOURCES AND REVISED REACHES See Page 2 for Additional Flooding Sources

Spearfish Creek - from approximately 810 feet downstream of Brookview Road to approximately 2,840 feet upstream of Winterville Drive

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Spearfish Creek	BFEs*	BFEs	YES	YES
	Floodway	Floodway	YES	YES
	Zone AE	Zone AE	YES	YES
	Zone A	Zone A	NONE	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES

* BFEs - Base Flood Elevations

DETERMINATION

This document provides the determination from the Department of Homeland Security's Federal Emergency Management Agency (FEMA) regarding a request for a Letter of Map Revision (LOMR) for the area described above. Using the information submitted, we have determined that a revision to the flood hazards depicted in the Flood Insurance Study (FIS) report and/or National Flood Insurance Program (NFIP) map is warranted. This document revises the effective NFIP map, as indicated in the attached documentation. Please use the enclosed annotated map panels revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals in your community.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1 877 336 2627 (1 877 FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

Patrick "Rick" F. Sacbibit, P.E., Branch Chief
Engineering Services Branch
Federal Insurance and Mitigation Administration

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

OTHER FLOODING SOURCES AFFECTED BY THIS REVISION

FLOODING SOURCES AND REVISED REACHES

Spearfish Creek Old Channel - from the confluence with Spearfish Creek to the divergence from Spearfish Creek
Spearfish Creek Old US 14 Breakout Flow – from the confluence with Cook Ditch to approximately 340 feet upstream of U.S. Highway 14
Spearfish Creek Breakout Flow – from the confluence with Spearfish Creek to the divergence from Spearfish Creek
Spearfish Creek Grant-Jackson Breakout – from the confluence with Spearfish Creek to the divergence from Spearfish Creek
Evans-Tonn Ditch – from approximately 260 feet downstream of Swan Lane to the divergence from Spearfish Creek
Hungry Hollow Gulch – from the confluence with Spearfish Creek to approximately 480 feet upstream of the confluence with Spearfish Creek
West Chipmunk Gulch – from the confluence with Spearfish Creek to approximately 70 feet downstream of Saint Joe Street
Riggs Gulch - from the confluence with Spearfish Creek to approximately 350 feet upstream of the confluence with Spearfish Creek

SUMMARY OF REVISIONS

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Spearfish Creek Old Channel	BFEs	BFEs	YES	YES
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
Spearfish Creek Old US 14 Breakout Flow	BFEs	BFEs	NONE	YES
	Zone AE	Zone AE	YES	YES
	Zone AE	Zone X (shaded)	NONE	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
Spearfish Creek Breakout Flow	No BFEs	BFEs	YES	NONE
	BFEs	BFEs	NONE	YES
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
Spearfish Creek Grant-Jackson Breakout	No BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone X (shaded)	Zone X (shaded)	YES	YES
Evans-Tonn Ditch	No BFEs	BFEs	YES	NONE
	Zone AE	Zone AE	YES	YES
	Zone X (unshaded)	Zone AE	YES	NONE
	Zone X (shaded)	Zone AE	YES	NONE
	Zone X (shaded)	Zone X (shaded)	YES	YES
	Zone X (unshaded)	Zone X (shaded)	YES	NONE
Hungry Hollow Gulch	BFEs	BFEs	YES	NONE
West Chipmunk Gulch	BFEs	BFEs	YES	NONE
	Floodway	Floodway	NONE	YES
Riggs Gulch	Zone AE	Zone A	NONE	YES
	Zone X (shaded)	Zone A	YES	NONE

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1 877 336 2627 (1 877 FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

COMMUNITY INFORMATION

APPLICABLE NFIP REGULATIONS/COMMUNITY OBLIGATION

We have made this determination pursuant to Section 206 of the Flood Disaster Protection Act of 1973 (P.L. 93-234) and in accordance with the National Flood Insurance Act of 1968, as amended (Title XIII of the Housing and Urban Development Act of 1968, P.L. 90-448), 42 U.S.C. 4001-4128, and 44 CFR Part 65. Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, communities participating in the NFIP are required to adopt and enforce floodplain management regulations that meet or exceed NFIP criteria. These criteria, including adoption of the FIS report and FIRM, and the modifications made by this LOMR, are the minimum requirements for continued NFIP participation and do not supersede more stringent State/Commonwealth or local requirements to which the regulations apply.

We provide the floodway designation to your community as a tool to regulate floodplain development. Therefore, the floodway revision we have described in this letter, while acceptable to us, must also be acceptable to your community and adopted by appropriate community action, as specified in Paragraph 60.3(d) of the NFIP regulations.

NFIP regulations Subparagraph 60.3(b)(7) requires communities to ensure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained. This provision is incorporated into your community's existing floodplain management ordinances; therefore, responsibility for maintenance of the altered or relocated watercourse, including any related appurtenances such as bridges, culverts, and other drainage structures, rests with your community. We may request that your community submit a description and schedule of maintenance activities necessary to ensure this requirement.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance discharges computed in the submitted hydrologic model. Future development of projects upstream could cause increased discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on discharges and could, therefore, indicate that greater flood hazards exist in this area.

Your community must regulate all proposed floodplain development and ensure that permits required by Federal and/or State/Commonwealth law have been obtained. State/Commonwealth or community officials, based on knowledge of local conditions and in the interest of safety, may set higher standards for construction or may limit development in floodplain areas. If your State/Commonwealth or community has adopted more restrictive or comprehensive floodplain management criteria, those criteria take precedence over the minimum NFIP requirements.

We will not print and distribute this LOMR to primary users, such as local insurance agents or mortgage lenders; instead, the community will serve as a repository for the new data. We encourage you to disseminate the information in this LOMR by preparing a news release for publication in your community's newspaper that describes the revision and explains how your community will provide the data and help interpret the NFIP maps. In that way, interested persons, such as property owners, insurance agents, and mortgage lenders, can benefit from the information.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1 877 336 2627 (1 877 FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

We have designated a Consultation Coordination Officer (CCO) to assist your community. The CCO will be the primary liaison between your community and FEMA. For information regarding your CCO, please contact:

Jeanine D. Petterson
Director, Mitigation Division
Federal Emergency Management Agency, Region VIII
Denver Federal Center, Building 710
P.O. Box 25267
Denver, CO 80225-0267
(303) 235 4830

STATUS OF THE COMMUNITY NFIP MAPS

We will not physically revise and republish the FIRM and FIS report for your community to reflect the modifications made by this LOMR at this time. When changes to the previously cited FIRM panels and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

Although a portion of the proposed area of revision is shown on the effective FIRM as located within the City of Spearfish Joint Powers Jurisdiction, the City of Spearfish is responsible for floodplain management within Lawrence County.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1 877 336 2627 (1 877 FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

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LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)

PUBLIC NOTIFICATION OF REVISION

A notice of changes will be published in the *Federal Register*. This information also will be published in your local newspaper on or about the dates listed below, and through FEMA's Flood Hazard Mapping website at https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp

LOCAL NEWSPAPER

Name: *Black Hills Pioneer*

Dates: November 15, 2022 and November 22, 2022

Within 90 days of the second publication in the local newspaper, any interested party may request that we reconsider this determination. Any request for reconsideration must be based on scientific or technical data. Therefore, this letter will be effective only after the 90-day appeal period has elapsed and we have resolved any appeals that we receive during this appeal period. Until this LOMR is effective, the revised flood hazard determination presented in this LOMR may be changed.

This determination is based on the flood data presently available. The enclosed documents provide additional information regarding this determination. If you have any questions about this document, please contact the FEMA Mapping and Insurance eXchange (FMIX) toll free at 1 877 336 2627 (1 877 FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at https://www.fema.gov/flood-insurance.

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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
SPEARFISH CREEK								
A	0	420	1,137	8.8	3,387.8	3,387.8	3,387.8	0.0
B	1,668	671	1,222	8.2	3,402.4	3,402.4	3,402.9	0.5
C	1,693	654	2,153	4.6	3,403.5	3,403.5	3,403.9	0.4
D	1,913	391	1,226	8.2	3,405.1	3,405.1	3,405.8	0.7
E	6,723	844	1,309	7.6	3,444.4	3,444.4	3,444.5	0.1
F	12,233	697	4,802	2.1	3,471.4	3,471.4	3,471.4	0.0
REVISED DATA → G	15,759	258	656	7.2	3,485.0	3,485.0	3,485.6	0.6
H	16,467	77	410	11.5	3,492.3	3,492.3	3,492.3	0.0
I	17,225	81	487	9.7	3,500.5	3,500.5	3,500.5	0.0
J	17,619	64	353	13.3	3,503.1	3,503.1	3,503.1	0.0
K	17,662	99	736	6.4	3,511.1	3,511.1	3,511.1	0.0
L	17,952	623	3,352	1.4	3,514.4	3,514.4	3,514.4	0.0
M	19,225	285	716	6.6	3,518.9	3,518.9	3,519.3	0.4
N	20,766	87	400	11.8	3,533.3	3,533.3	3,533.3	0.0
O	21,688	179	575	8.2	3,540.9	3,540.9	3,540.9	0.0
P	22,974	144	448	10.5	3,553.8	3,553.8	3,553.8	0.0
Q	24,213	135	596	7.9	3,567.4	3,567.4	3,567.4	0.0
R	24,718	75	438	10.7	3,572.9	3,572.9	3,572.9	0.0
S	24,920	128	837	5.6	3,575.7	3,575.7	3,575.7	0.0
T	26,080	259	833	5.6	3,584.8	3,584.8	3,584.8	0.0
U	26,512	325	756	6.2	3,589.7	3,589.7	3,589.8	0.1
V	27,554	233	725	6.5	3,599.8	3,599.8	3,599.8	0.0
W	28,121	281	703	6.7	3,605.9	3,605.9	3,605.9	0.0
X	28,735	343	932	5.0	3,616.6	3,616.6	3,616.7	0.1
Y	29,219	109	706	6.7	3,620.2	3,620.2	3,620.2	0.0
Z	30,622	129	487	9.7	3,634.0	3,634.0	3,634.0	0.0

[1] Feet Above North Extraterritorial Jurisdictional Limits

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD
(And Incorporated Areas)

FLOODWAY DATA

REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

SPEARFISH 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
SPEARFISH CREEK (cont'd)								
AA	30,985	73	399	11.8	3,637.9	3,637.9	3,637.9	0.0
AB	31,835	74	386	12.2	3,648.0	3,648.0	3,648.0	0.0
AC	32,801	111	555	8.5	3,661.2	3,661.2	3,661.2	0.0
AD	33,201	267	900	5.2	3,667.6	3,667.6	3,667.6	0.0
AE	34,198	111	788	6.0	3,682.1	3,682.1	3,682.1	0.0
AF	35,620	177	579	8.1	3,692.1	3,692.1	3,692.3	0.2
AG	36,338	174	661	7.1	3,699.4	3,699.4	3,699.8	0.4
AH	37,281	92	417	11.3	3,710.4	3,710.4	3,710.5	0.1
AI	37,737	100	412	11.4	3,716.1	3,716.1	3,716.1	0.0
AJ	38,722	58	341	13.8	3,729.9	3,729.9	3,729.9	0.0
AK	39,786	47	377	12.5	3,741.2	3,741.2	3,741.7	0.5

[1] Feet Above North Extraterritorial Jurisdictional Limits

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD
(And Incorporated Areas)

FLOODWAY DATA

REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

SPEARFISH 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
WEST-CHIPMUNK GULCH								
A	630	108	139	7.0	3,576.5[2]	3,576.2	3,576.2	0.0
B	820	41	109	8.9	3,578.5	3,578.5	3,578.5	0.0
C	1,020	45	109	8.9	3,582.4	3,582.4	3,582.4	0.0
D	1,180	45	110	8.8	3,585.2	3,585.2	3,585.2	0.0
E	1,830	53	116	8.4	3,600.3	3,600.3	3,600.3	0.0
F	2,018	71	131	7.4	3,604.6	3,604.6	3,604.6	0.0
G	2,246	163	168	5.8	3,608.9	3,608.9	3,608.9	0.0
H	2,623	46	99	8.3	3,614.4	3,614.4	3,614.6	0.2
I	2,970	160	221	3.7	3,617.0	3,617.0	3,617.5	0.5
J	3,234	166	151	5.4	3,631.0	3,631.0	3,631.0	0.0
K	3,533	89	122	6.7	3,636.1	3,636.1	3,636.1	0.0
L	4,534	30	86	9.6	3,659.2	3,659.2	3,659.2	0.0

REVISED DATA

[1] Feet Above Confluence With Spearfish Creek

[2] Flooding Controlled By Backwater From Spearfish Creek

TABLE 3

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD
(And Incorporated Areas)

FLOODWAY DATA

REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

WEST-CHIPMUNK GULCH

creek in the city park in Spearfish, 500 feet downstream from the fish hatchery and 9.8 miles upstream from the mouth (Reference 26). The period of record of this gage is from October 1946 to the present. Included in the log-Pearson Type III analyses (Reference 7) to develop the specific discharge-frequency data was the use of the regional skew coefficient from the USGS gaging station to form a weighted skew coefficient.

The discharge-frequency data from Higgins Gulch, Hungry Hollow Gulch, and False Bottom Creek were defined using the results of a COE hydraulic analysis for Rapid City and a specific regional area of the Black Hills around Rapid City (Reference 27). This study was a COE in-house study (Reference 5), prepared to check the results of the original Rapid City Flood Plain Information report after the disastrous June 1972 floods. These base regional data were used in a log-Pearson Type III analysis (Reference 7) to develop specific regional flood discharge-frequency relationships.

Peak discharge-drainage area relationships for Spearfish Creek north, Higgins Gulch, False Bottom Creek, and Spearfish Creek South are shown in Table 1.

TABLE 1– SUMMARY OF DISCHARGES

Flooding Source / Location	Drainage Area (Square Miles)	Peak Discharges (Cubic Feet per Second) 10-Year	50-Year	100-Year	500-Year
Chipmunk Gulch					
At Confluence With Spearfish Creek	1.7	90	485	970	4,550
East Chipmunk Gulch					
At Confluence With West Chipmunk Gulch	0.4	35	210	445	2,300
At King Avenue	0.3	30	180	385	2,050
West Chipmunk Gulch					
At Confluence With East Chipmunk Gulch	1.2	70	400	820	3,930
Deadwood Creek					
At upstream corporate limits	8.4	240	1,325	2,475	10,800
REVISED DATA → Evans-Tonn Ditch					
At Swan Lane	--[1]	0	3	11	69
False Bottom					
At Southern Section Line Section 18 T6N, R3E, B.H.M.	14.6	360	1,800	3,420	14,230
At Northern Section Line					

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Section 18 T6N, R3E, B.H.M.	15.2	370	1,840	3,490	14,430

Flooding Source / Location	Drainage Area (Square Miles)	Peak Discharges (Cubic Feet per Second) 10-Year	50-Year	100-Year	500-Year
Higgins Gulch					
At Southern Section Line Section 13 T6N, R1E, B.H.M.	13.3	340	1,700	3,240	13,540
At Confluence With Johnson Gulch	21.5	470	2,275	4,285	17,435
At Northern Section Line Section 28 T7N, R2E, B.H.M.	26.5	540	2,600	4,870	19,625
Hungry Hollow Gulch					
At Confluence With Spearfish Creek	2.7	120	650	1,290	5,920
Ice House Creek – at confluence with Spearfish Creek	0.3	74	194	238	488
Spearfish Creek					
At Downstream Study Limit	172.2	1,280	4,510	7,460	22,800
REVISED DATA → At North City Limits	165	1,030	2,910[2]	4,700	7,160[2]
At USGS Gage 06431500	165	1,030	3,080	4,700	11,750
Spearfish Creek Breakout Flow					
At Confluence w/ Spearfish Creek	--[1]	0	274	673	3,452
Spearfish Creek Old US 14 Breakout Flow					
At Confluence with Cook Ditch	--[1]	11	187	700	4,350
Spearfish Creek Old Channel					
At Confluence w/ Spearfish Creek	--[1]	275	603	617	875
Spearfish Creek Grant-Jackson Breakout					
At Confluence w/ Spearfish Creek	--[1]	0	12	137	1,217
Spring Creek					
At confluence w/ Whitewood Ck	0.5	[1]- -	[1]- -	476	[1]- -
Whitewood Creek					
Southern section Line Section 27 T5N, R3E, B.H.M.	27.2	540	2,500	4,650	18,000
At upstream corporate limits	29.6	570	2,700	5,030	19,900
At confluence with Deadwood Creek	38.4	690	3,260	6,060	23,900
At confluence with City Creek	39.6	720	3,370	6,260	24,700
At confluence with Spruce Gulch	40.3	730	3,430	6,380	25,200
At downstream corporate limits	43.4	760	3,540	6,560	25,800

Footnote: [1]Data not available

REVISED DATA → [2]Flows decreasing in downstream direction due to breakout flows

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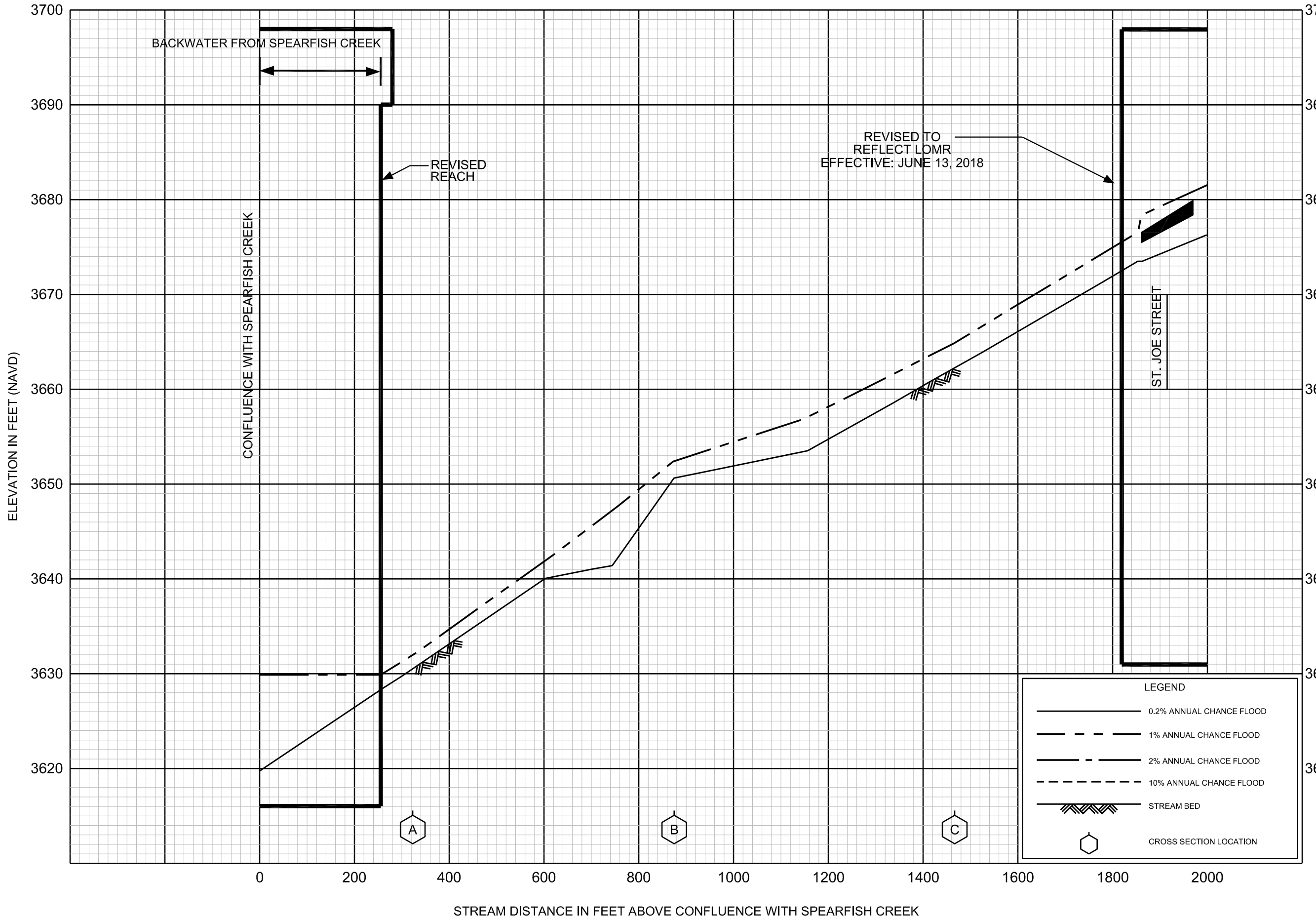


REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

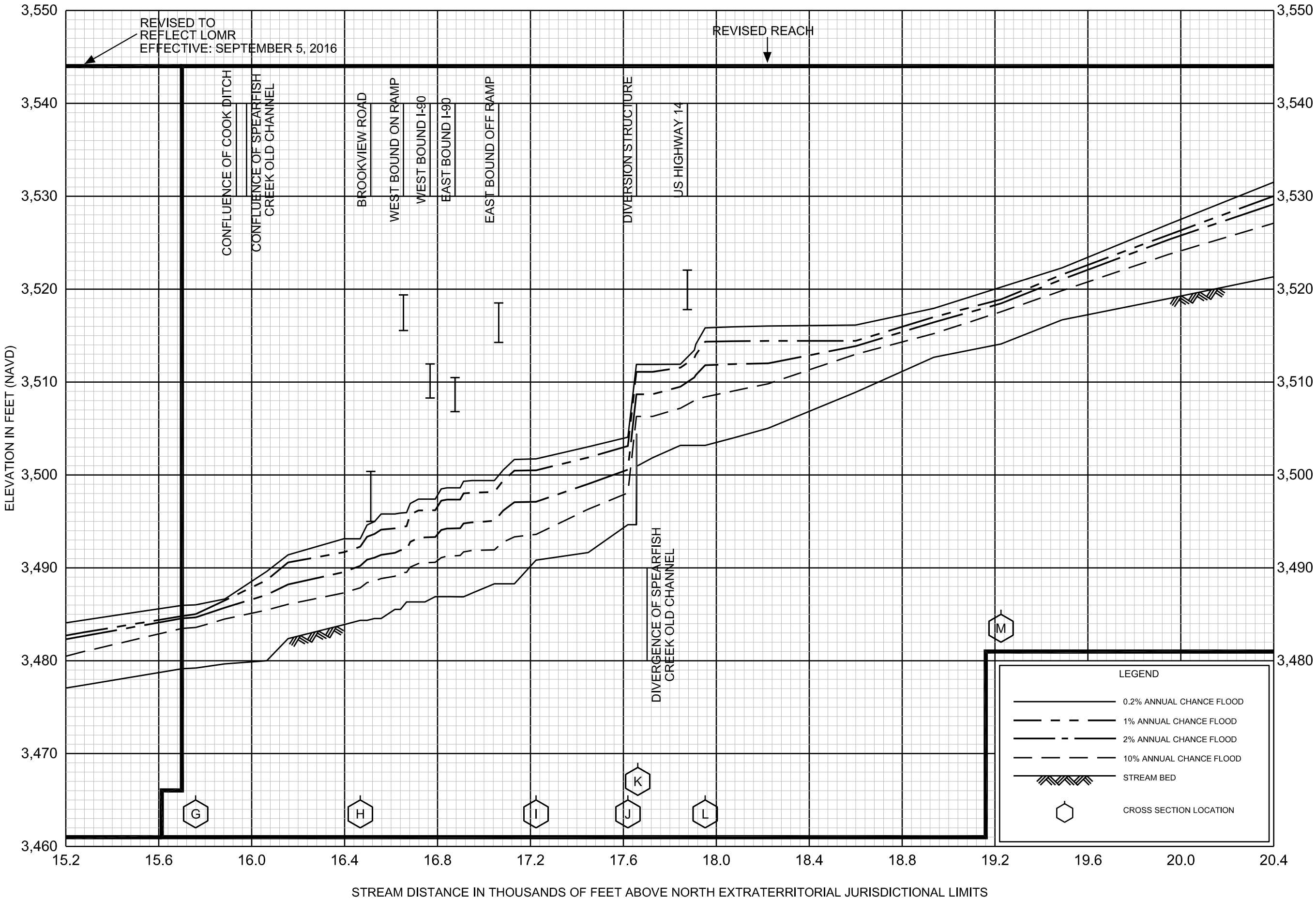
FLOOD PROFILES

HUNGRY HOLLOW GULCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO
REFLECT LOMR
EFFECTIVE: March 22, 2023

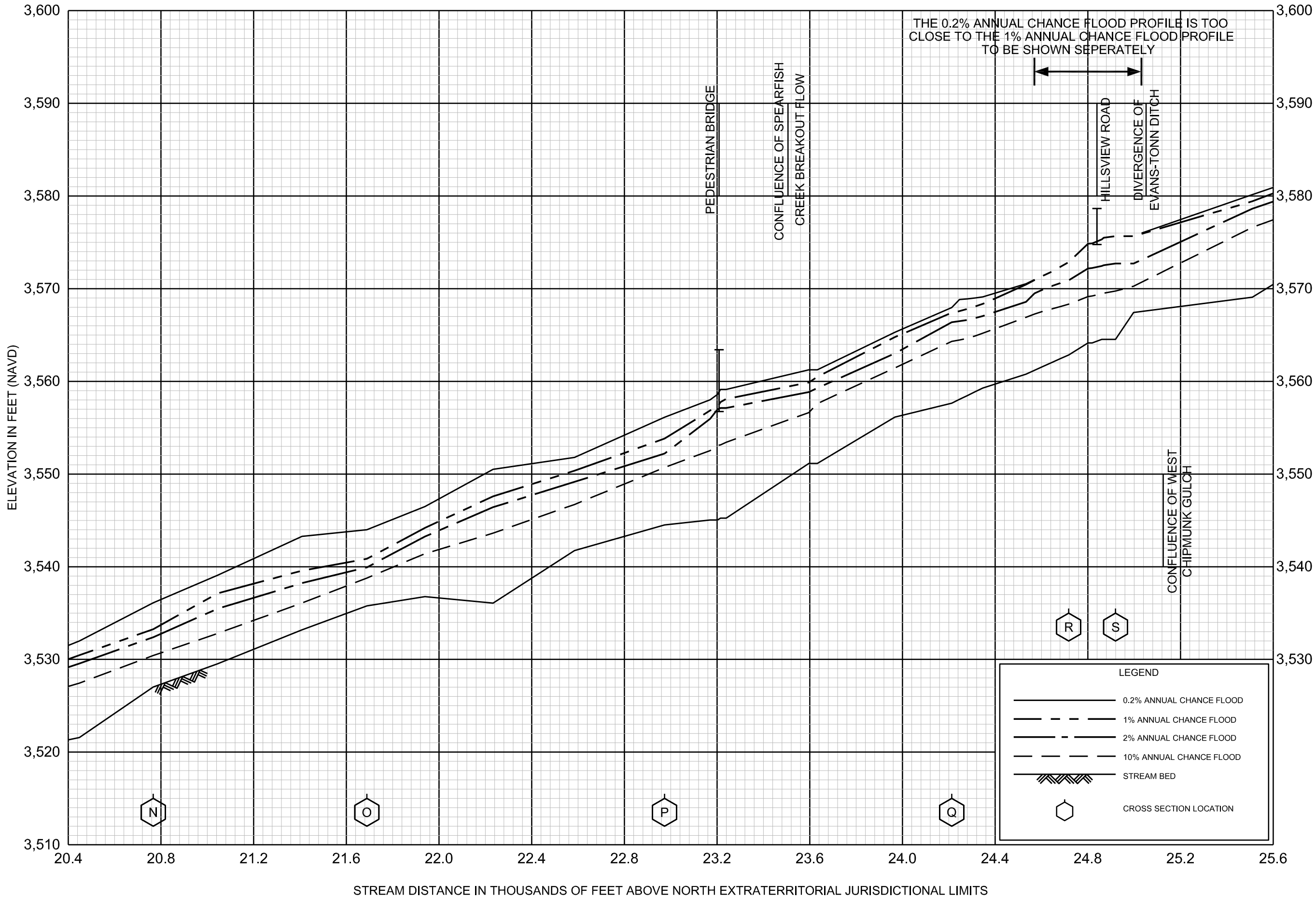
FLOOD PROFILES

SPEARFISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



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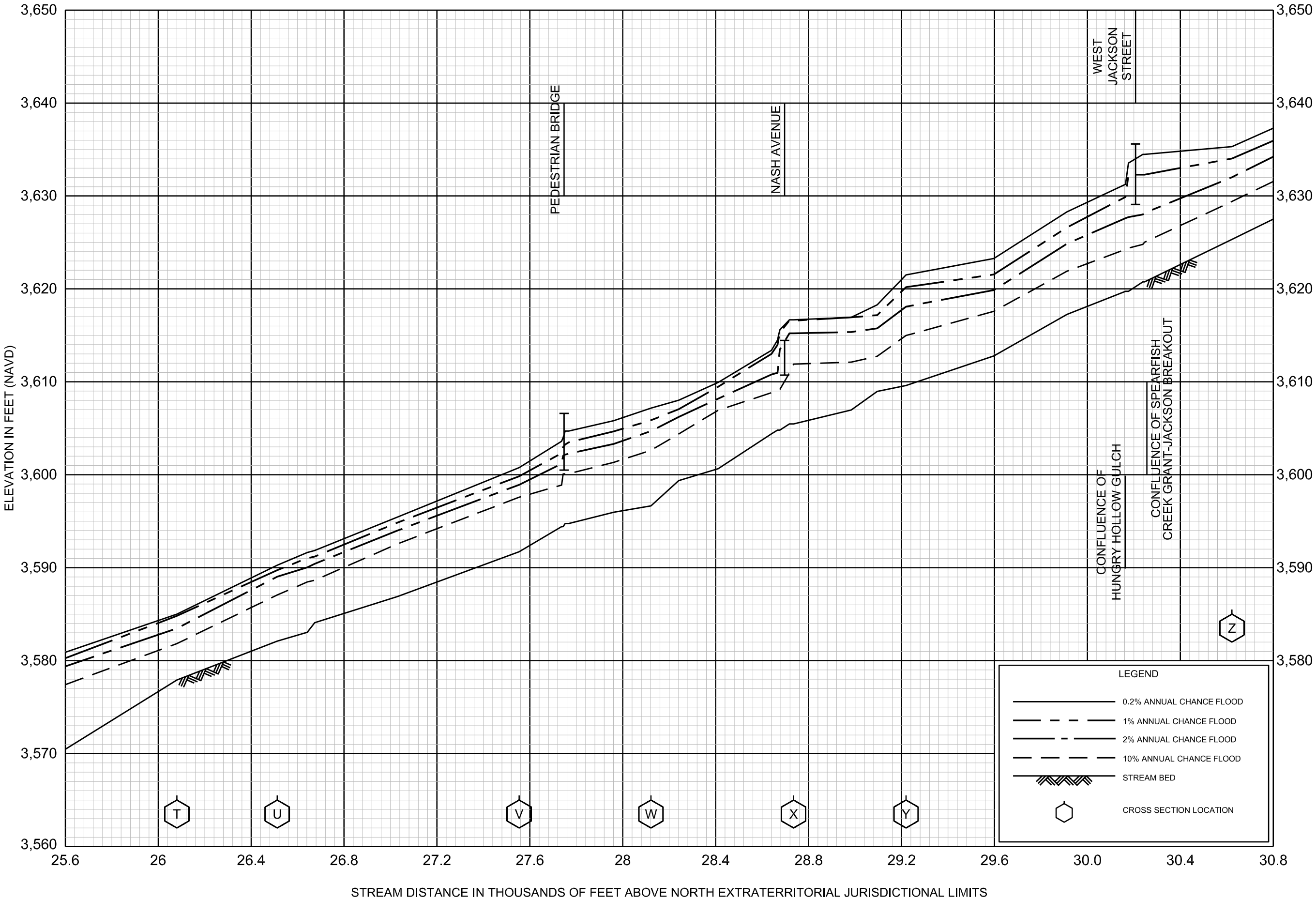
FLOOD PROFILES

SPEARFISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO REFLECT LOMR
EFFECTIVE: March 22, 2023

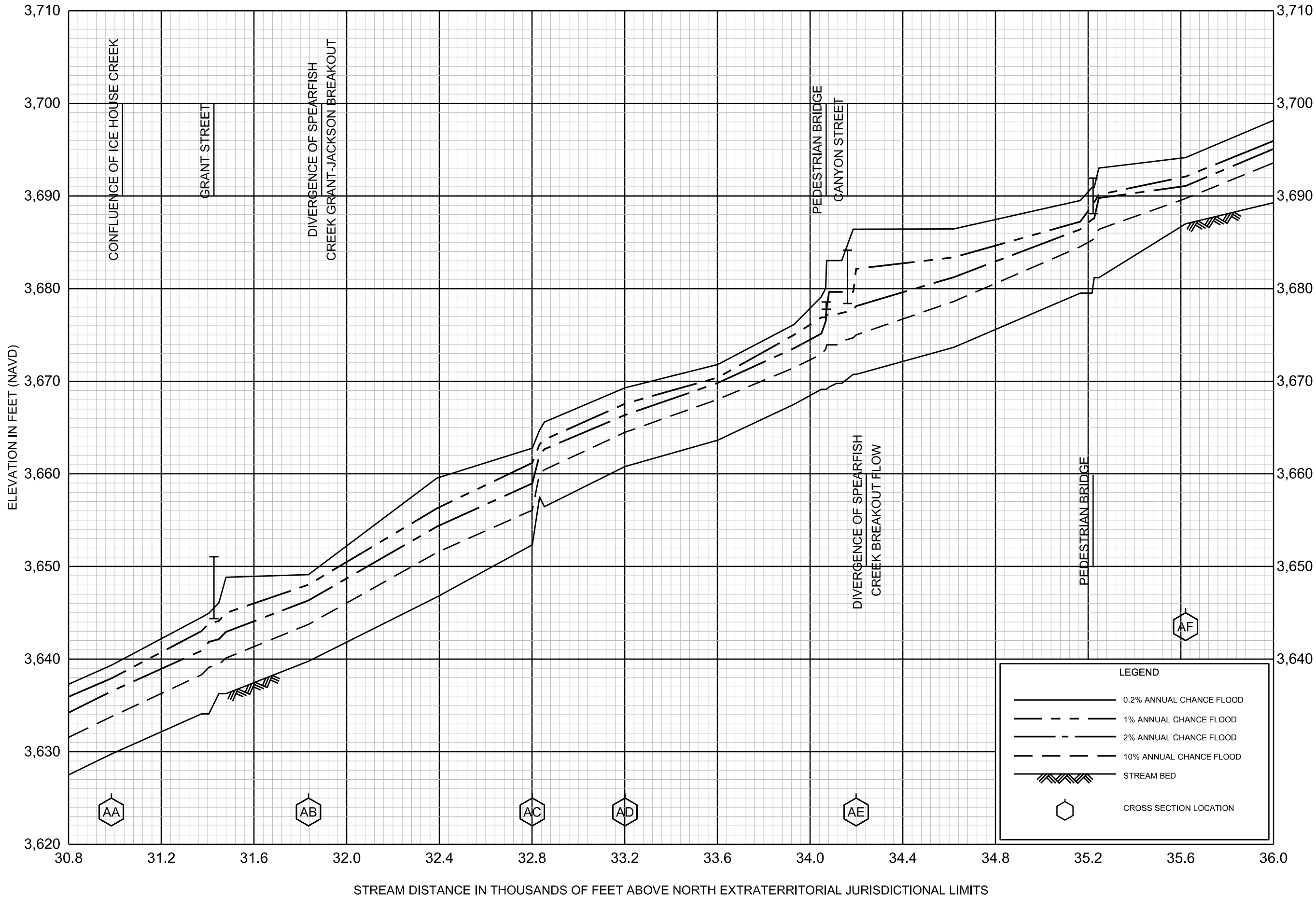
FLOOD PROFILES

SPEARFISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

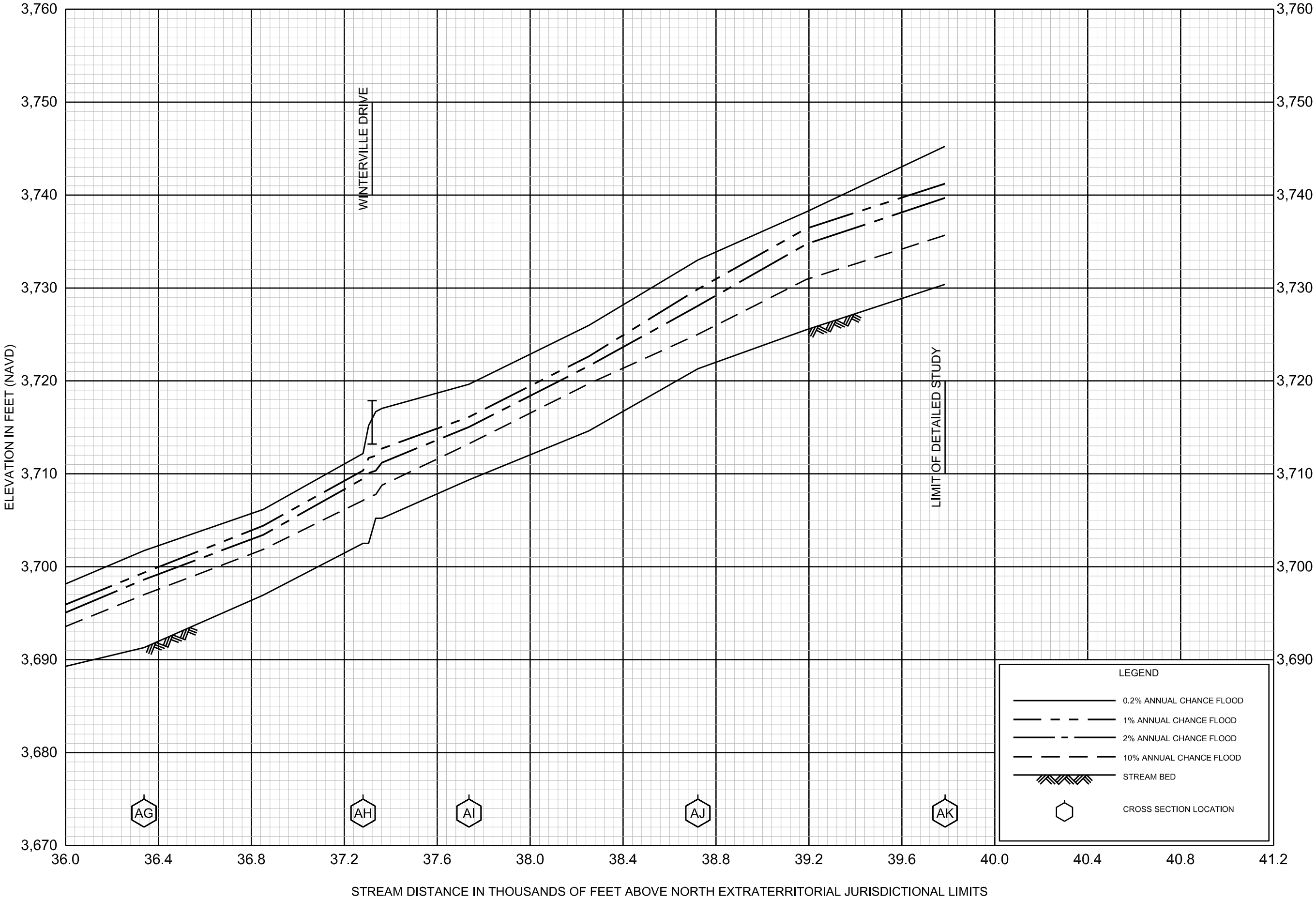
FLOOD PROFILES

SPEARFISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



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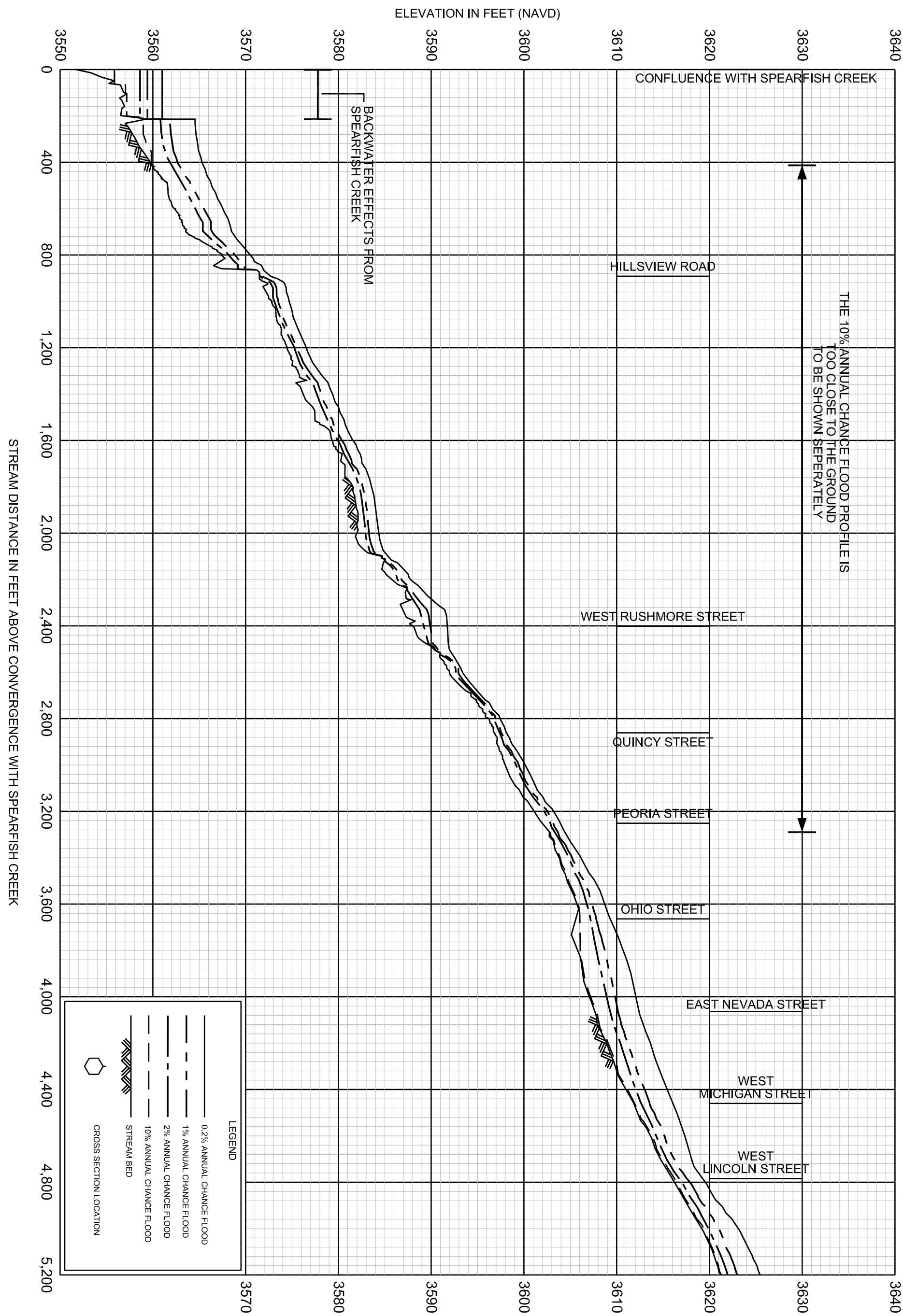
FLOOD PROFILES

SPEARFISH CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



FEDERAL EMERGENCY MANAGEMENT AGENCY

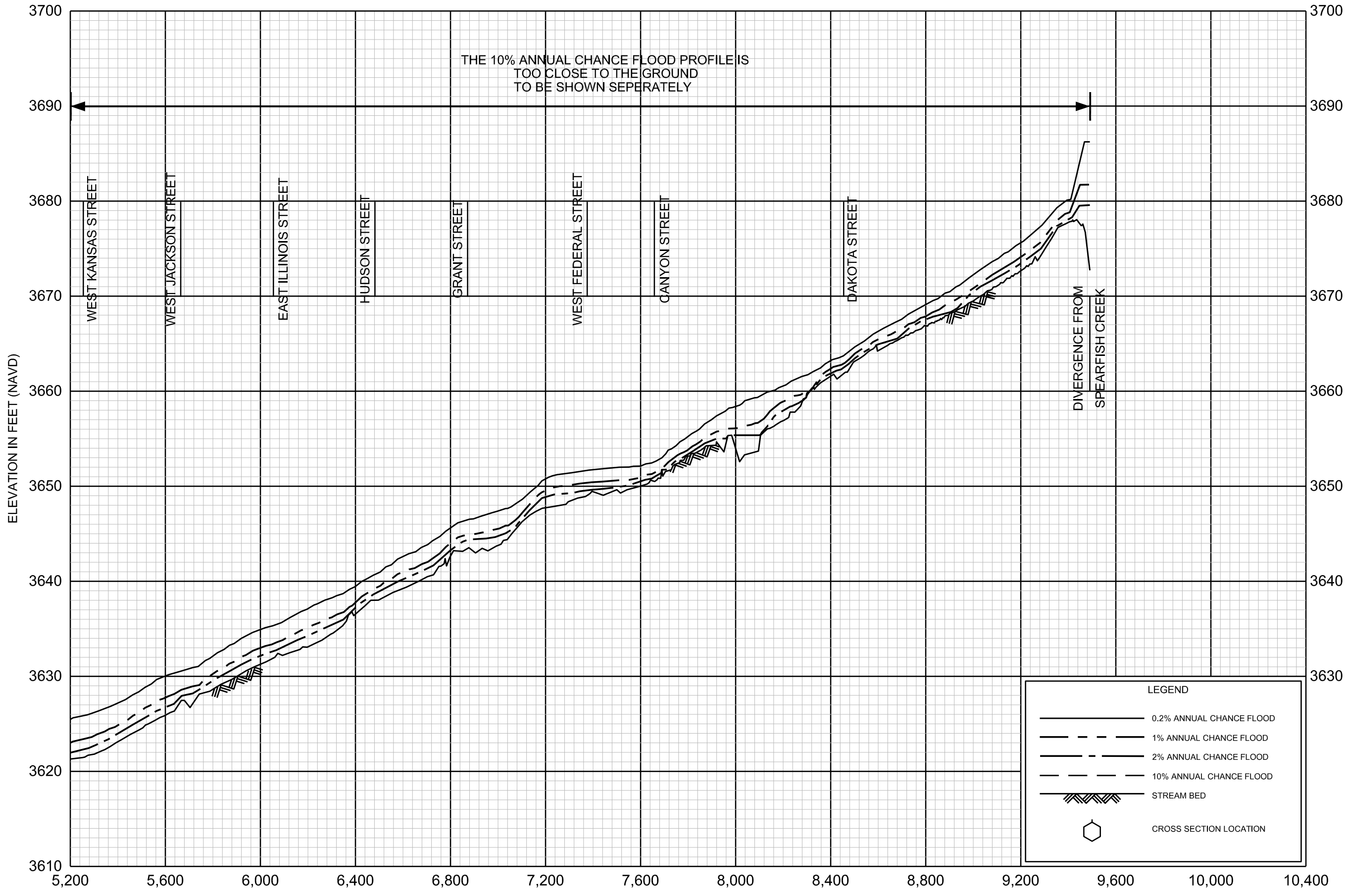
LAWRENCE COUNTY, SD

AND INCORPORATED AREAS

FLOOD PROFILES

REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

SPEARFISH CREEK BREAKOUT FLOW



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EFFECTIVE: March 22, 2023

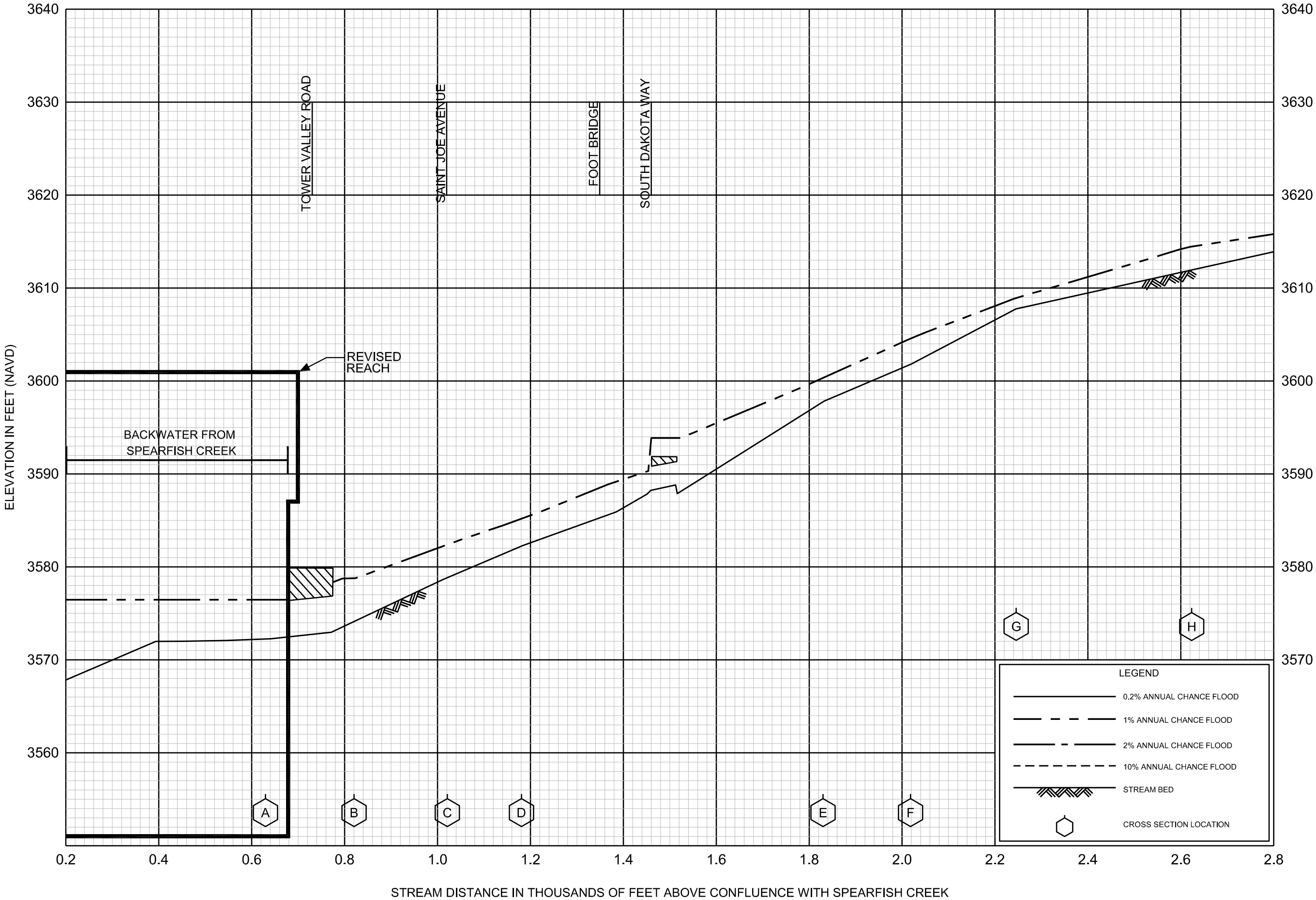
FLOOD PROFILES

SPEARFISH CREEK BREAKOUT FLOW

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

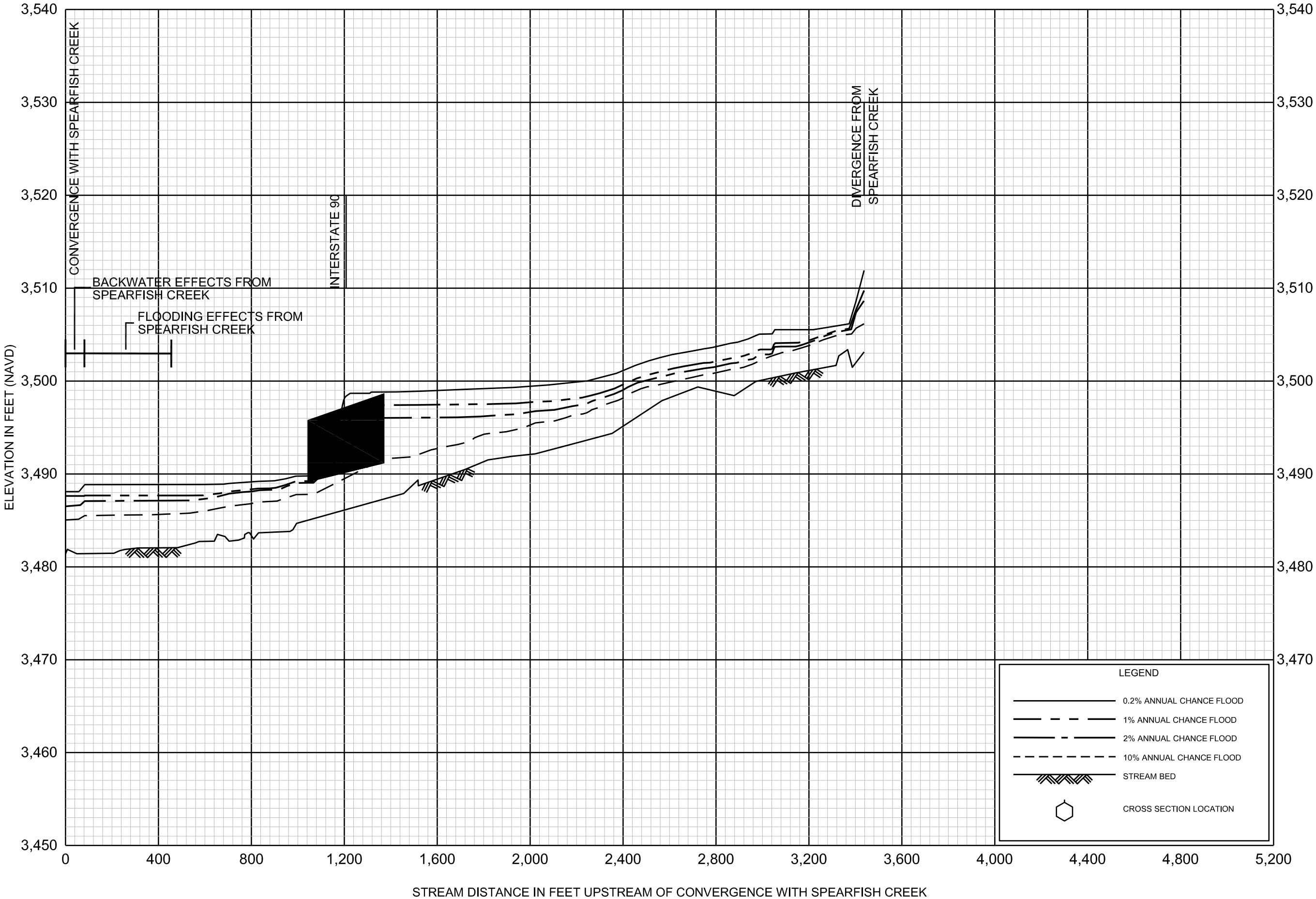
FLOOD PROFILES

WEST CHIPMUNK GULCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

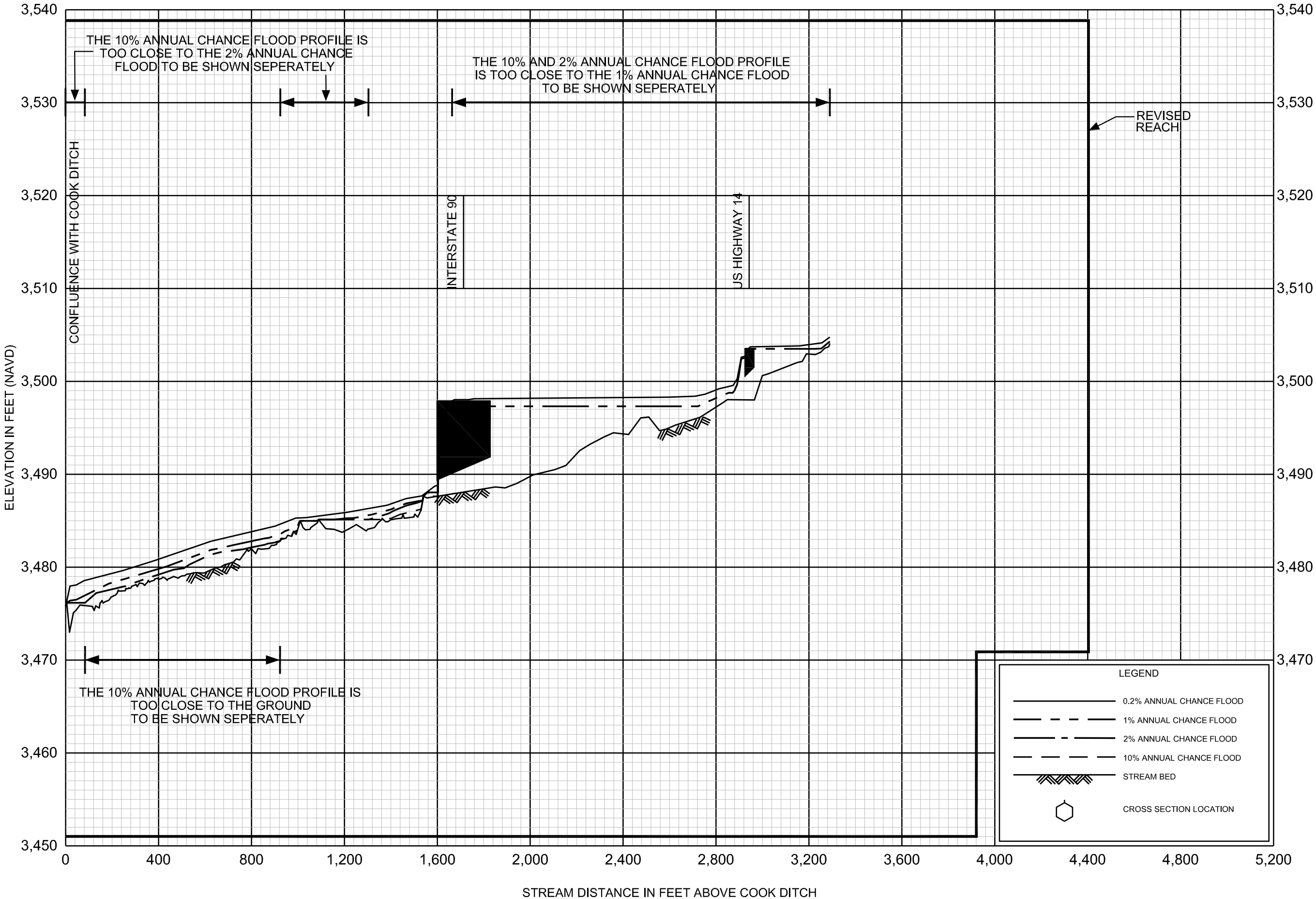
FLOOD PROFILES

SPEARFISH CREEK OLD CHANNEL

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

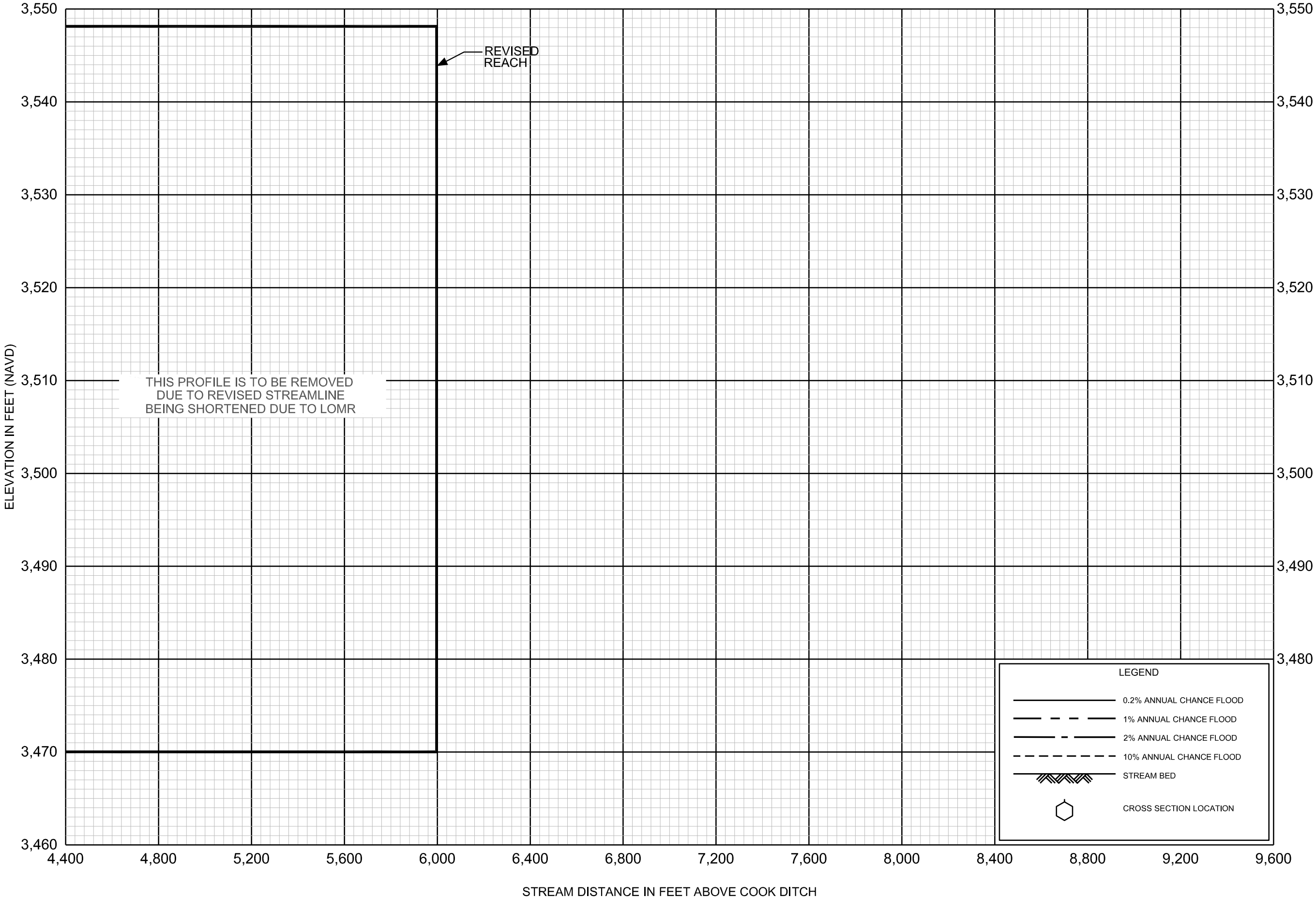
FLOOD PROFILES

SPEARFISH CREEK OLD US 14 BREAKOUT FLOW

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO
REFLECT LOMR
EFFECTIVE: March 22, 2023

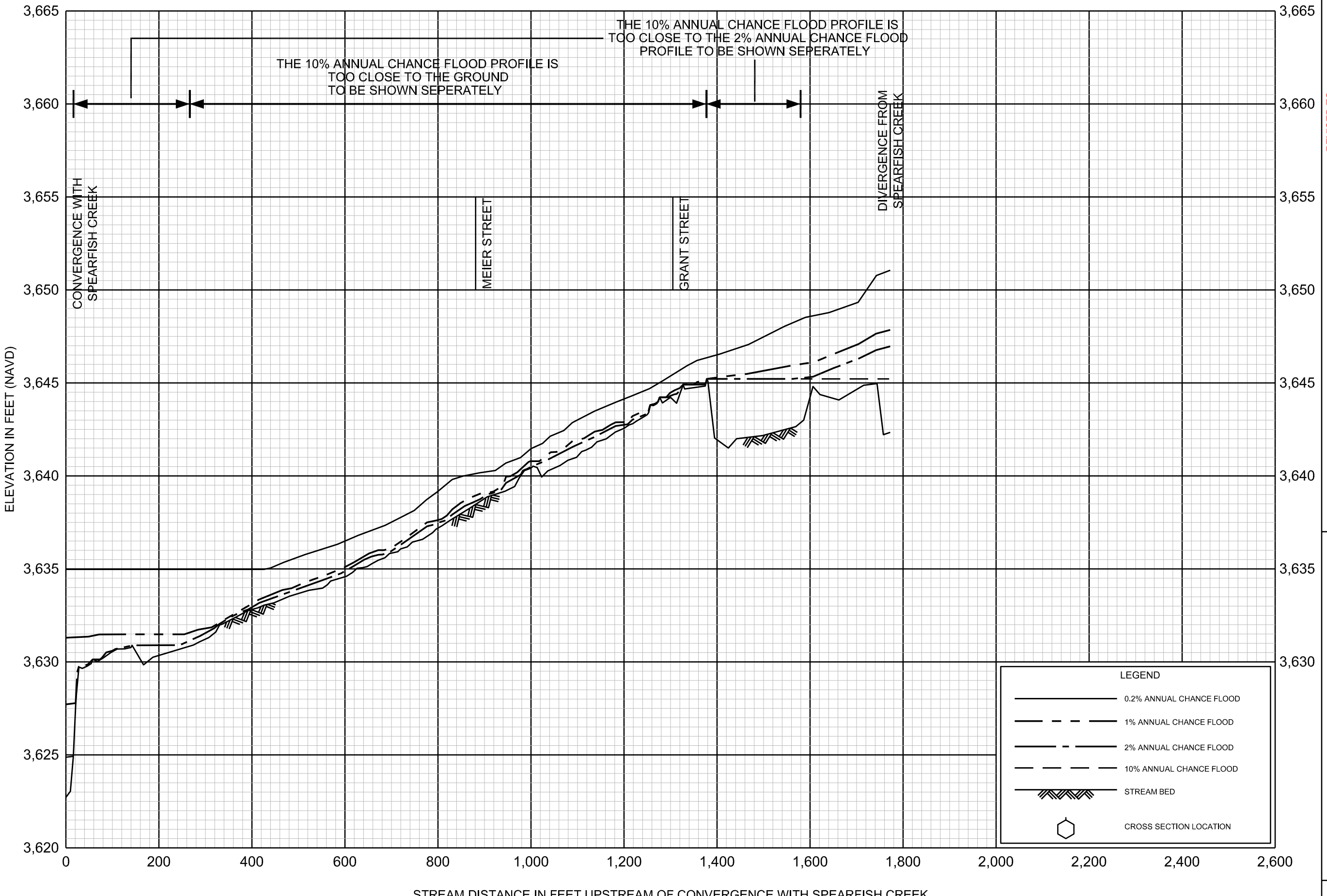
FLOOD PROFILES

SPEARFISH CREEK OLD US 14 BREAKOUT FLOW

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

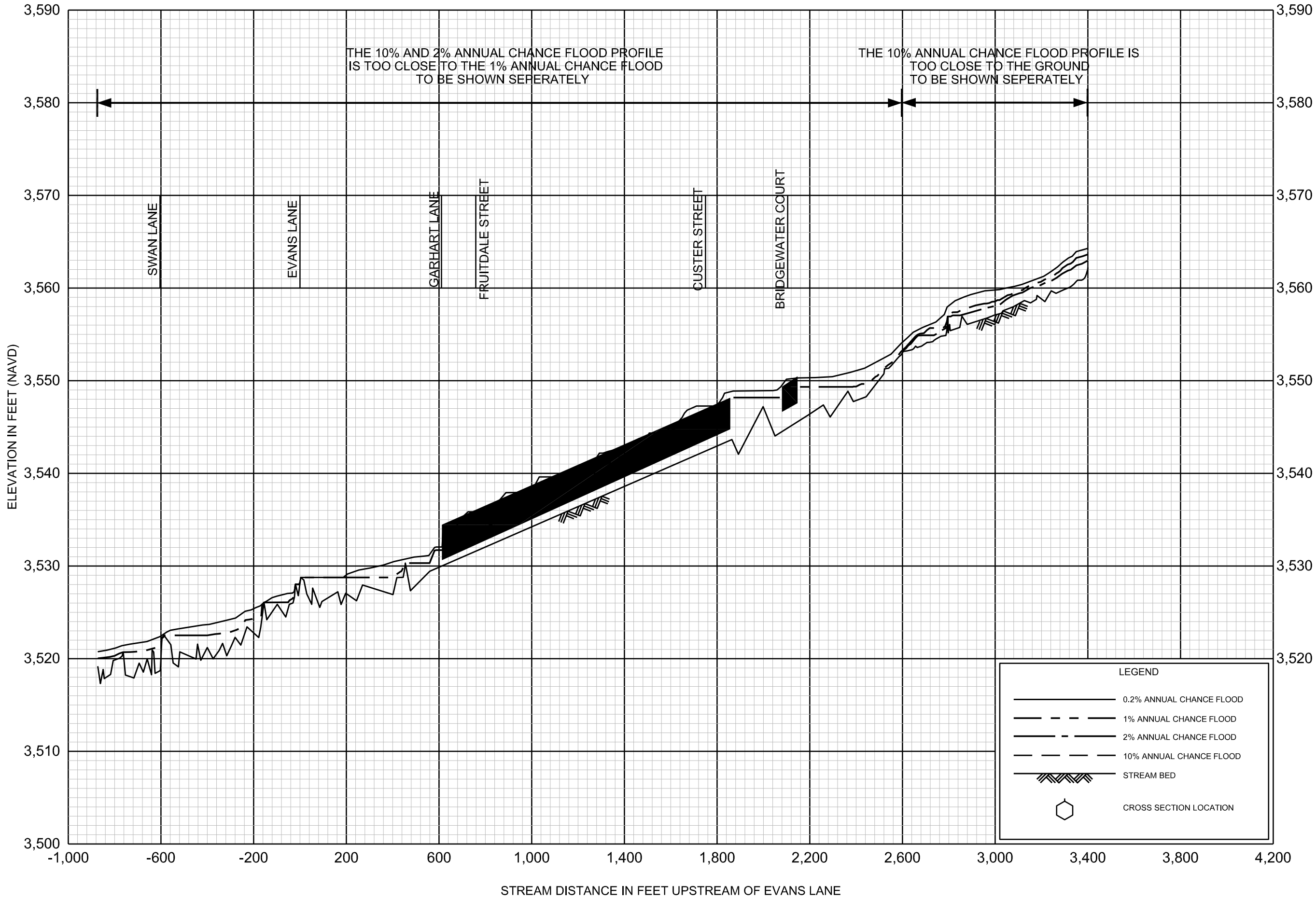
FLOOD PROFILES

SPEARFISH CREEK GRANT-JACKSON BREAKOUT

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

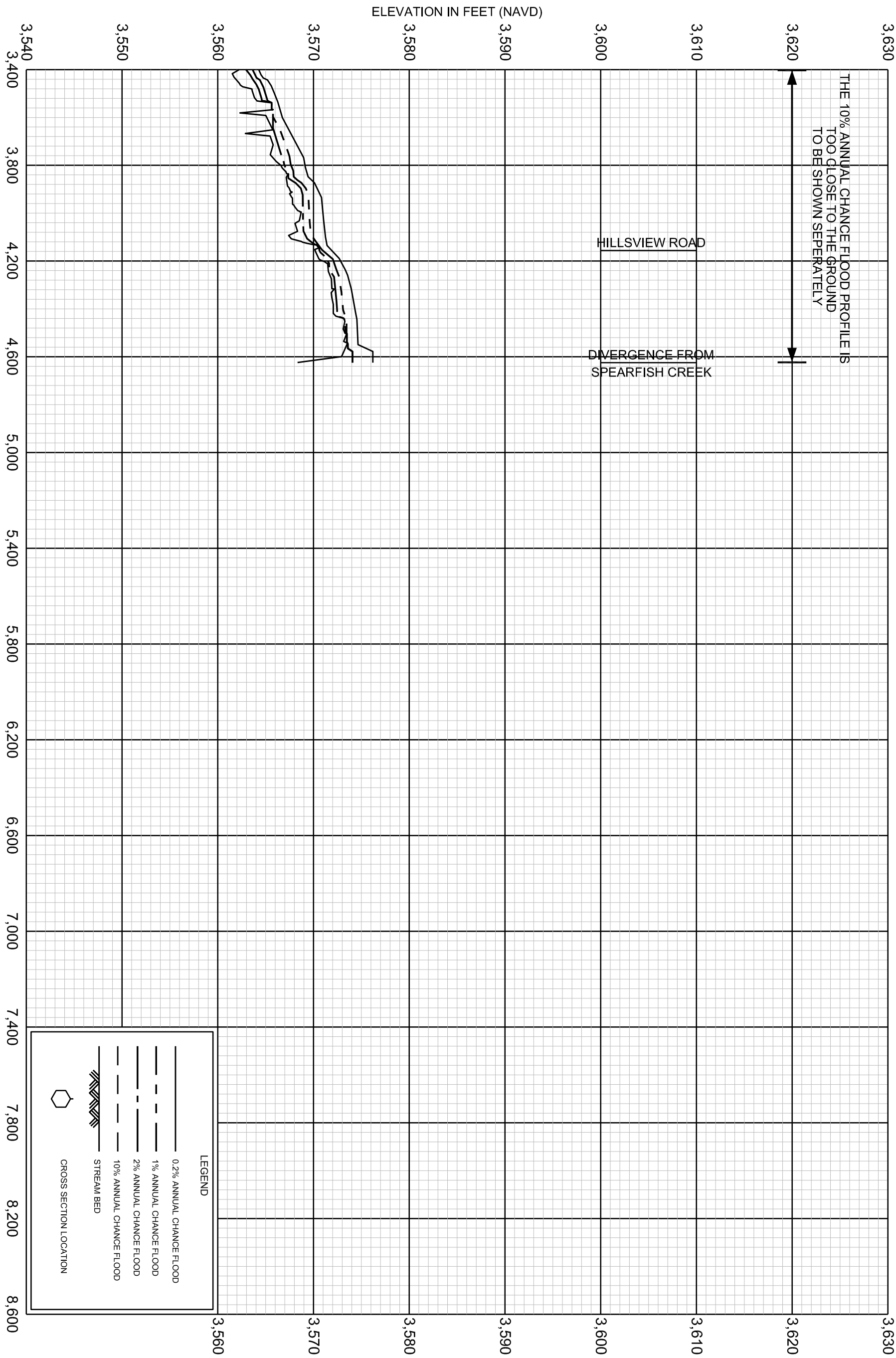
FLOOD PROFILES

EVANS-TONN DITCH

FEDERAL EMERGENCY MANAGEMENT AGENCY

LAWRENCE COUNTY, SD

AND INCORPORATED AREAS



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FEDERAL EMERGENCY MANAGEMENT AGENCY

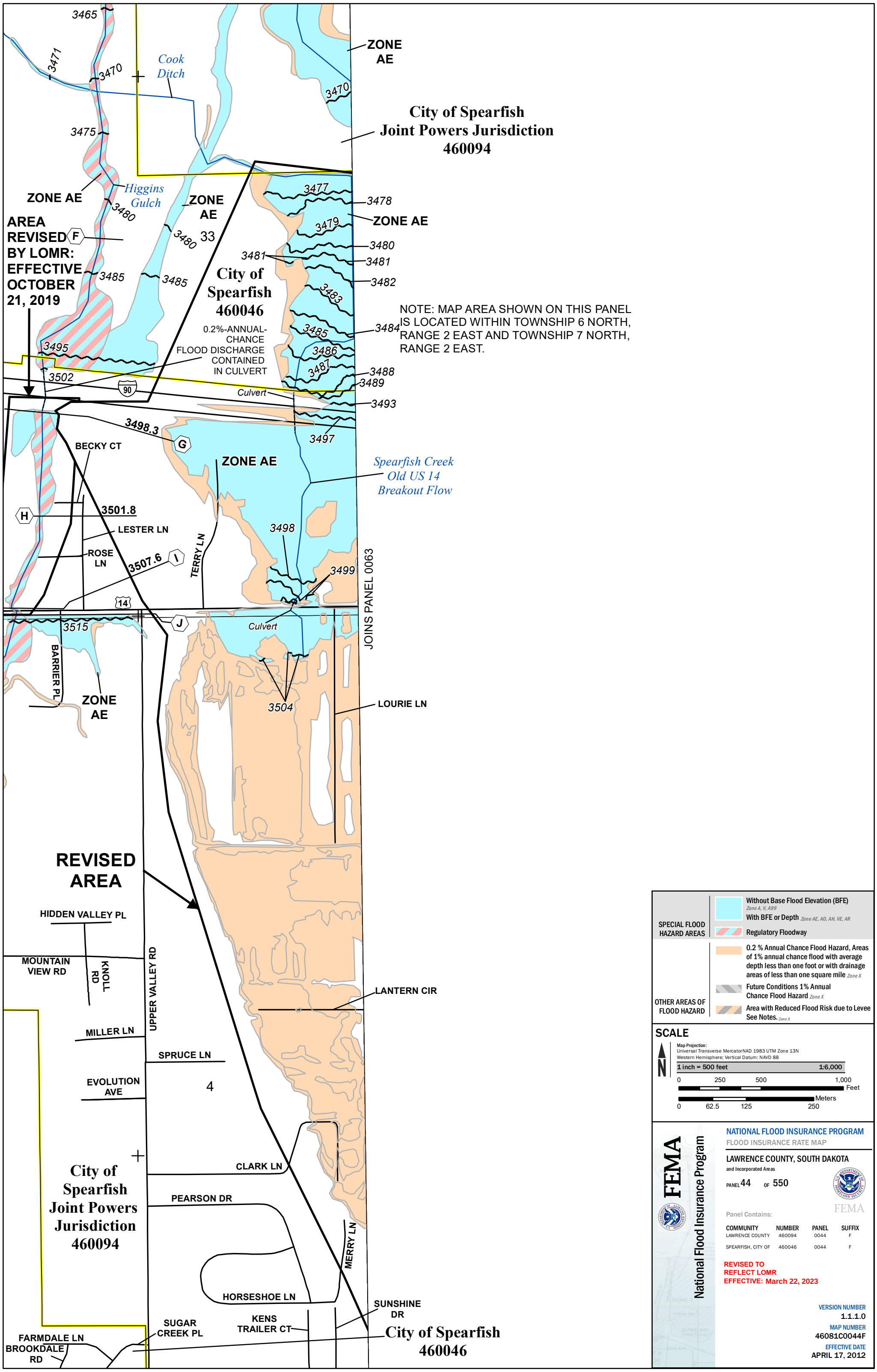
LAWRENCE COUNTY, SD

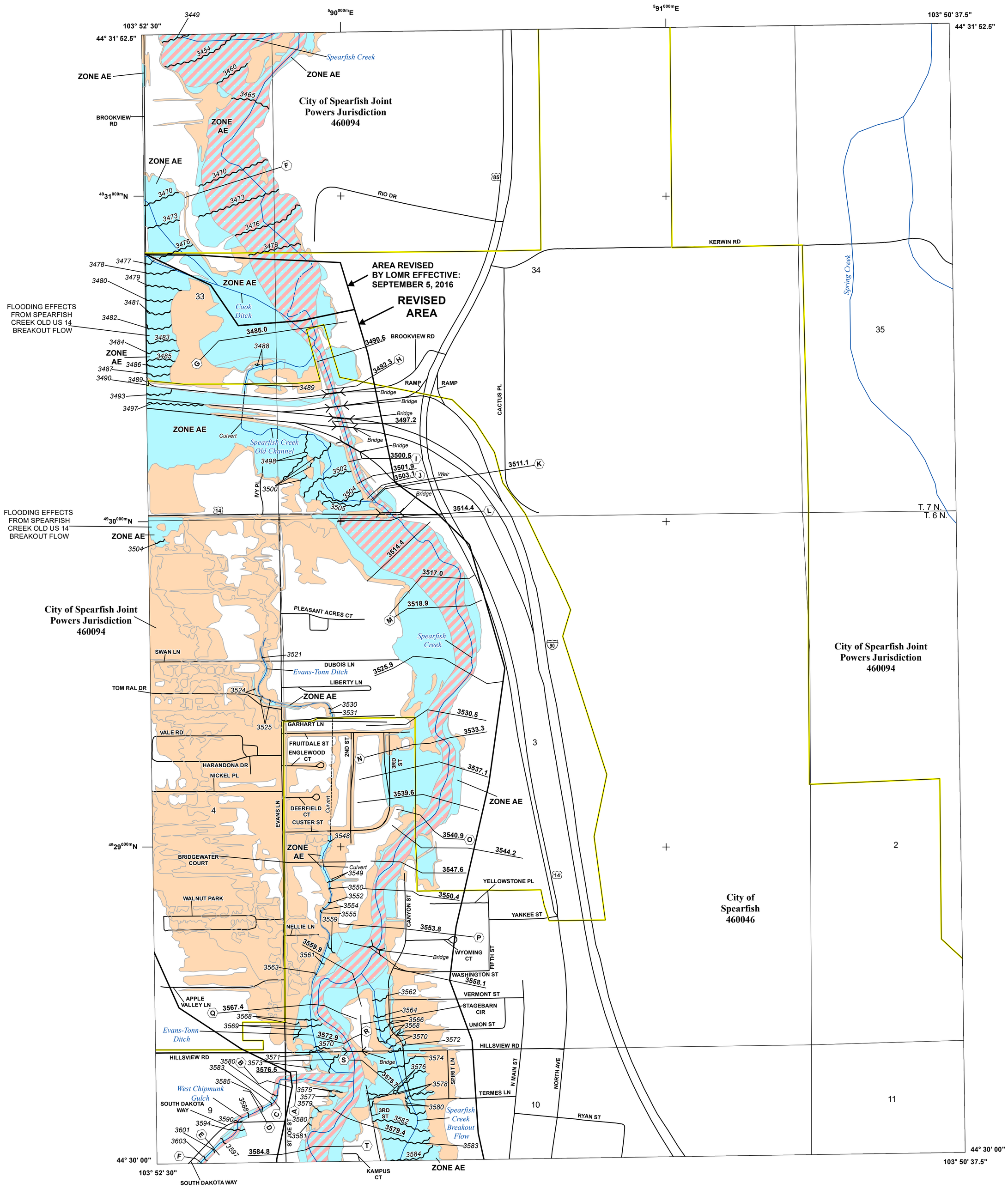
AND INCORPORATED AREAS

FLOOD PROFILES

REVISED TO
REFLECT LOMR
EFFECTIVE: March 22, 2023

EVANS-TONN DITCH


3465
3471
3470
Cook Ditch
ZONE AE
3470
City of Spearfish
Joint Powers Jurisdiction
460094
3475
ZONE AE
Higgins Gulch
3480
ZONE AE
33
3480
AREA REVISED BY LOMR: EFFECTIVE OCTOBER 21, 2019
F
3485
3485
City of Spearfish
460046
0.2%-ANNUAL-CHANCE FLOOD DISCHARGE CONTAINED IN CULVERT
3477
3478
ZONE AE
3479
3480
3481
3481
3482
3483
3484
3485
3486
3487
3488
3489
3493
3497
NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 6 NORTH, RANGE 2 EAST AND TOWNSHIP 7 NORTH, RANGE 2 EAST.
3495
3502
90
Culvert
3498.3
G
BECKY CT
ZONE AE
Spearfish Creek
Old US 14
Breakout Flow
H
3501.8
LESTER LN
ROSE LN
3507.6
I
TERRY LN
3498
3499
JOINS PANEL 0063
14
3515
J
Culvert
BARRIER PL
ZONE AE
3504
LOURIE LN
REVISED AREA
HIDDEN VALLEY PL
MOUNTAIN VIEW RD
KNOLL RD
UPPER VALLEY RD
LANTERN CIR
MILLER LN
SPRUCE LN
EVOLUTION AVE
4
City of Spearfish
Joint Powers Jurisdiction
460094
CLARK LN
PEARSON DR
MERRY LN
HORSESHOE LN
SUNSHINE DR
SUGAR CREEK PL
KENS TRAILER CT
FARMDALE LN
BROOKDALE RD
City of Spearfish
460046
SPECIAL FLOOD HAZARD AREAS
Without Base Flood Elevation (BFE) Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR
Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD
0.2 % Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
Future Conditions 1% Annual Chance Flood Hazard Zone X
Area with Reduced Flood Risk due to Levee See Notes. Zone X
SCALE
N
Map Projection:
Universal Transverse Mercator NAD 1983 UTM Zone 13N
Western Hemisphere; Vertical Datum: NAVD 88
1 inch = 500 feet 1:6,000
0 250 500 1,000 Feet
0 62.5 125 250 Meters
FEMA
National Flood Insurance Program
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
LAWRENCE COUNTY, SOUTH DAKOTA
and Incorporated Areas
PANEL 44 OF 550
FEMA
Panel Contains:
COMMUNITY NUMBER PANEL SUFFIX
LAWRENCE COUNTY 460094 0044 F
SPEARFISH, CITY OF 460046 0044 F
REVISED TO REFLECT LOMR
EFFECTIVE: March 22, 2023
VERSION NUMBER
1.1.1.0
MAP NUMBER
46081C0044F
EFFECTIVE DATE
APRIL 17, 2012



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) *Zone A,V, A99*
	With BFE or Depth *Zone AE, AO, AH, VE, AR*
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
	Future Conditions 1% Annual Chance Flood Hazard *Zone X*
	Area with Reduced Flood Risk due to Levee See Notes. *Zone X*
	Area with Flood Risk due to Levee *Zone D*
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard *Zone X*
	Area of Undetermined Flood Hazard *Zone D*
GENERAL STRUCTURES	Channel, Culvert, or Storm Sewer
	Levee, Dike, or Floodwall
	E 18.2 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
	8 Coastal Transect
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	513 Base Flood Elevation Line (BFE)
OTHER FEATURES	Limit of Study
	Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Mapping and Insurance eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from U.S. Census Bureau TIGER files, dated 2010, and digital data provided by Flood County Geospatial Coordinator, dated 2010.

Local vertical monuments were used to create this map. To obtain current monument information, please contact the [community contact information, phone number] or visit the website at [website address].

SCALE

N

Map Projection:
Universal Transverse MercatorNAD 1983 UTM Zone 13N
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet **1:6,000**

0 500 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

LAWRENCE COUNTY, SOUTH DAKOTA
and Incorporated Areas

PANEL 63 OF 550

FEMA

Panel Contains:

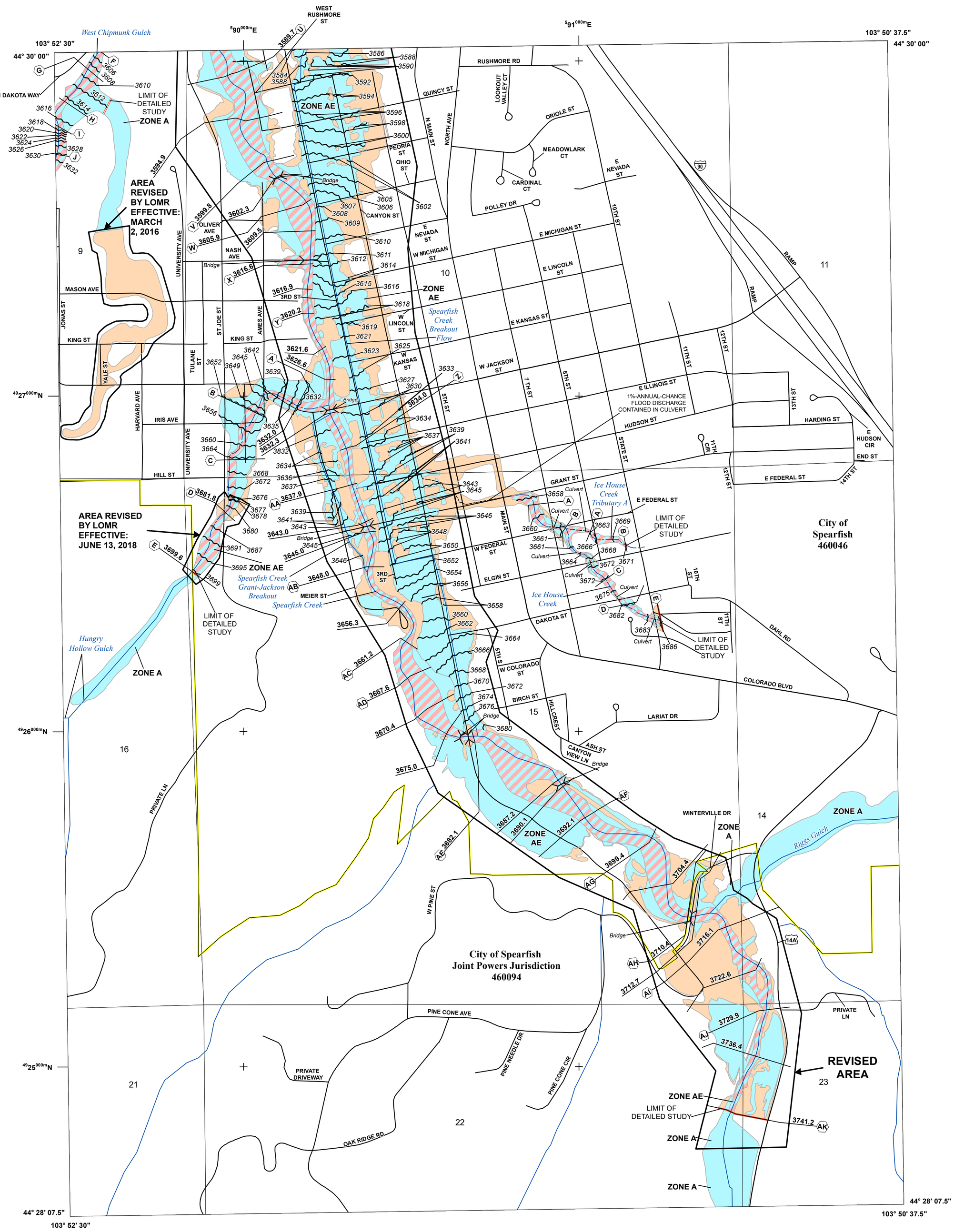
COMMUNITY	NUMBER	PANEL	SUFFIX
LAWRENCE COUNTY	460094	0063	F
SPEARFISH, CITY OF	460046	0063	F

REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

VERSION NUMBER
1.1.1.0

MAP NUMBER
46081C0063F

EFFECTIVE DATE
APRIL 17, 2012



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	Coastal Transect Baseline
	Profile Baseline
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	513 Base Flood Elevation Line (BFE)
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SCALE

N

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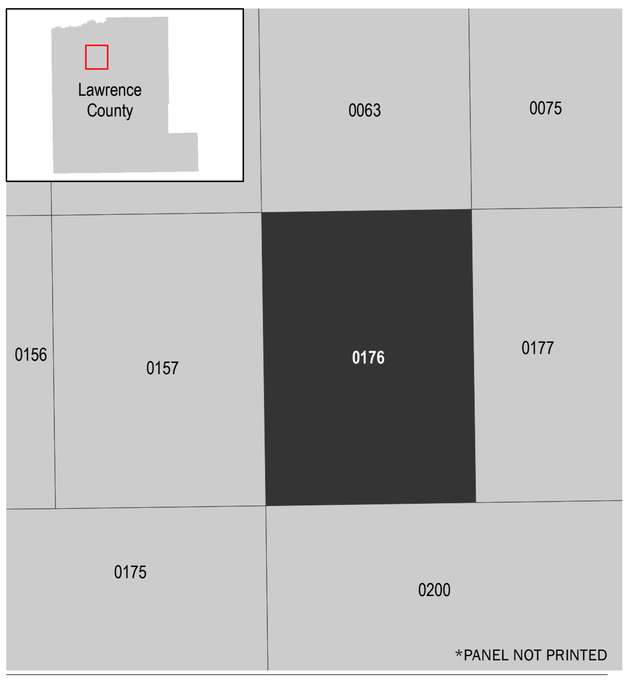
1 inch = 500 feet **1:6,000**

0 500 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

LAWRENCE COUNTY, SOUTH DAKOTA
and Incorporated Areas

PANEL 176 OF 550

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
LAWRENCE COUNTY	460094	0176	F
SPEARFISH, CITY OF	460046	0176	F

REVISED TO REFLECT LOMR EFFECTIVE: March 22, 2023

VERSION NUMBER
1.1.1.0

MAP NUMBER
46081C0176F

EFFECTIVE DATE
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