



Federal Emergency Management Agency

Washington, D.C. 20472

LETTER OF MAP REVISION DETERMINATION DOCUMENT

COMMUNITY AND REVISION INFORMATION		PROJECT DESCRIPTION	BASIS OF REQUEST
COMMUNITY	Missoula County Montana (Unincorporated Areas)	NO PROJECT	UPDATE
	COMMUNITY NO.: 300048		
IDENTIFIER	Missoula County, Montana	APPROXIMATE LATITUDE & LONGITUDE: 48.862, -113.887 SOURCE: USGS QUADRANGLE DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM* NO.: 30063C1220E DATE: July 6, 2015 TYPE: FIRM* NO.: 30063C1240E DATE: July 6, 2015 TYPE: FIRM* NO.: 30063C1485E DATE: July 6, 2015 TYPE: FIRM* NO.: 30063C1505E DATE: July 6, 2015		DATE OF EFFECTIVE FLOOD INSURANCE STUDY: July 6, 2015 PROFILE(S): 10P-11P, 29P-31P FLOODWAY DATA TABLE: 5	

Enclosures reflect changes to flooding sources affected by this revision.

* FIRM - Flood Insurance Rate Map; ** FBFM - Flood Boundary and Floodway Map; *** FHBM - Flood Hazard Boundary Map

FLOODING SOURCE(S) & REVISED REACH(ES)

Blackfoot River - from the confluence with the Clark Fork to approximately 13,270 feet upstream of State Highway 200

Clark Fork - from approximately 2,120 feet downstream to approximately 19,700 feet upstream of Burlington Northern Railroad Bridge

SUMMARY OF REVISIONS

This Letter of Map Revision (LOMR) is a reissuance of a LOMR dated March 13, 2015 (Case No. 14-08-0395P). The March 13 LOMR was not incorporated into the updated FIRM and FIS report for Missoula County, Montana and Incorporated Areas dated July 6, 2015. This LOMR does not revise the base floodplain, regulatory floodway, or BFEs* along the Blackfoot River and Clark Fork presented in the March 13 LOMR; however the datum has been updated.

* 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 Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency

Washington, D.C. 20472

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.

COMMUNITY REMINDERS

We based this determination on the 1-percent-annual-chance flood discharges computed in the FIS for your community without considering subsequent changes in watershed characteristics that could increase flood discharges. Future development of projects upstream could cause increased flood discharges, which could cause increased flood hazards. A comprehensive restudy of your community's flood hazards would consider the cumulative effects of development on flood discharges subsequent to the publication of the FIS report for your community and could, therefore, establish greater flood hazards 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 Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

A handwritten signature in black ink, appearing to read "Luis Rodriguez".

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency

Washington, D.C. 20472

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:

Ms. 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 panel(s) and FIS report warrant physical revision and republication in the future, we will incorporate the modifications made by this LOMR at that time.

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 Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

A handwritten signature in black ink, appearing to read "Luis Rodriguez".

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration



Federal Emergency Management Agency
Washington, D.C. 20472

**LETTER OF MAP REVISION
DETERMINATION DOCUMENT (CONTINUED)**

COMMUNITY INFORMATION (CONTINUED)


This revision is effective as of the date of this letter. Any requests to review or alter this determination should be made within 30 days and must be based on scientific or technical data.

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 Map Information eXchange toll free at 1-877-336-2627 (1-877-FEMA MAP) or by letter addressed to the LOMC Clearinghouse, 847 South Pickett Street, Alexandria, VA 22304-4605. Additional Information about the NFIP is available on our website at <http://www.fema.gov/nfip>.

A handwritten signature in black ink, appearing to read "Luis Rodriguez".

Luis Rodriguez, P.E., Chief
Engineering Management Branch
Federal Insurance and Mitigation Administration

Revised
Data



FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
BLACKFOOT RIVER								
A	785	121	2,838	9.6	3,253.3	3,253.3	3,253.3	0.0
B	909	204	3,443	7.3	3,255.0	3,255.0	3,255.0	0.0
C	995	230	4,123	6.1	3,255.5	3,255.5	3,255.5	0.0
D	1,084	215	4,239	6.1	3,255.6	3,255.6	3,255.6	0.0
E	1,222	227	4,483	5.9	3,255.9	3,255.9	3,255.9	0.0
F	1,399	280	4,337	5.8	3,255.9	3,255.9	3,255.9	0.0
G	1,764	224	4,203	6.2	3,256.6	3,256.6	3,256.6	0.0
H	1,837	258	4,299	6.0	3,256.6	3,256.6	3,256.6	0.0
I	2,218	251	4,078	6.1	3,257.3	3,257.3	3,257.3	0.0
J	3,556	249	3,536	7.1	3,257.9	3,257.9	3,257.9	0.0
K	4,123	235	3,198	7.8	3,258.1	3,258.1	3,258.1	0.0
L	4,633	229	3,134	8.0	3,258.5	3,258.5	3,258.5	0.0
M	5,406	207	2,661	9.4	3,259.3	3,259.3	3,259.3	0.0
N	5,689	295	3,831	6.5	3,260.7	3,260.7	3,260.7	0.0
O	6,823	174	2,455	10.2	3,262.0	3,262.0	3,262.0	0.0
P	7,834	215	2,827	8.8	3,264.4	3,264.4	3,264.4	0.0
Q	8,677	212	2,389	10.5	3,265.8	3,265.8	3,265.8	0.0
R	10,636	157	2,208	11.3	3,271.5	3,271.5	3,271.9	0.4
S	13,166	162	2,319	10.8	3,279.9	3,279.9	3,280.2	0.3
T	14,368	157	2,525	9.9	3,283.6	3,283.6	3,283.9	0.3
U	15,054	284	3,469	7.2	3,286.0	3,286.0	3,286.4	0.4
V	16,145	193	2,522	9.9	3,288.3	3,288.3	3,288.6	0.3
W	17,256	250	3,261	7.7	3,291.1	3,291.1	3,291.2	0.1
X	18,456	223	2,917	8.6	3,292.7	3,292.7	3,293.0	0.3
Y	22,611	187	2,006	12.5	3,304.3	3,304.3	3,304.8	0.5

¹ Feet Above Mouth

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY
**MISSOULA COUNTY, MT
AND INCORPORATED AREAS**

**REVISED TO
REFLECT LOMR
DATED: July 29, 2015**

FLOODWAY DATA

BLACKFOOT RIVER

Revised
Data

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET)
CLARK FORK (cont.)								
DL	214,167	335	5,003	8.5	3,214.1	3,214.1	3,214.1	0.0
DM	214,217	339	5,226	8.1	3,214.2	3,214.2	3,214.7	0.5
DN	214,337	323	4,348	9.8	3,214.3	3,214.3	3,214.8	0.5
DO	214,427	324	4,379	9.7	3,214.4	3,214.4	3,214.9	0.5
DP	215,177	286	3,734	11.4	3,215.7	3,215.7	3,216.1	0.4
DQ	217,327	212	3,324	12.8	3,219.6	3,219.6	3,219.7	0.1
DR	217,377	215	3,463	12.3	3,219.9	3,219.9	3,220.4	0.5
DS	219,177	371	5,225	8.1	3,223.6	3,223.6	3,223.8	0.2
DT	221,677	274	4,183	10.2	3,225.9	3,225.9	3,226.1	0.2
DU	224,200	314	3,659	11.6	3,230.8	3,230.8	3,230.9	0.1
DV	225,875	211	2,937	14.5	3,234.4	3,234.4	3,234.4	0.0
DW	225,925	215	3,139	13.5	3,234.8	3,234.8	3,235.3	0.5
DX	227,720	250	4,280	9.9	3,239.4	3,239.4	3,239.5	0.1
DY	230,307	563	6,421	7.9	3,243.1	3,243.1	3,243.4	0.3
DZ	231,212	636	5,609	9.1	3,244.8	3,244.8	3,244.8	0.0
EA	231,509	942	8,285	6.2	3,246.3	3,246.3	3,246.4	0.1
EB	232,103	1,290	8,842	3.0	3,247.7	3,247.7	3,247.8	0.1
EC	232,292	1,227	8,393	3.6	3,247.8	3,247.8	3,247.9	0.1
ED	232,595	1,280	7,636	4.0	3,248.1	3,248.1	3,248.2	0.1
EE	233,048	996	4,497	6.0	3,249.1	3,249.1	3,249.1	0.0
EF	235,229	863	4,891	5.6	3,255.5	3,255.5	3,255.7	0.2
EG	235,849	849	3,891	6.7	3,257.2	3,257.2	3,257.4	0.2
EH	237,262	2,922	7,057	4.1	3,262.4	3,262.4	3,262.4	0.0

¹ Feet Above Missoula County/Mineral County Line

REVISED TO

REFLECT LOMR

DATED: July 29, 2015

FLOODWAY DATA

CLARK FORK

TABLE 5

FEDERAL EMERGENCY MANAGEMENT AGENCY

**MISSOULA COUNTY, MT
AND INCORPORATED AREAS**

FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD)	WITHOUT FLOODWAY (FEET NAVD)	WITH FLOODWAY (FEET NAVD)	INCREASE (FEET NAVD)
CLARK FORK (cont.)								
EI	239,948	2,813	7,182	3.6	3,268.3	3,268.3	3,268.5	0.2
EJ	243,602	1,644	5,401	4.8	3,280.7	3,280.7	3,280.9	0.2
EK	245,919	1,357	4,907	5.3	3,289.1	3,289.1	3,289.4	0.3
EL	248,556	1,508	5,666	4.6	3,296.4	3,296.4	3,296.6	0.2
EM	251,747	1,159	4,081	6.4	3,302.5	3,302.5	3,302.8	0.3
EN	255,277	784	4,009	6.5	3,314.0	3,314.0	3,314.2	0.2
EO	258,077	1,632	5,746	4.5	3,321.4	3,321.4	3,321.4	0.0
EP	260,327	240	1,904	13.7	3,329.0	3,329.0	3,329.0	0.0
EQ	260,377	260	2,236	11.6	3,329.9	3,329.9	3,330.4	0.5
ER	261,857	420	3,354	7.8	3,336.0	3,336.0	3,336.1	0.1
ES	264,497	344	2,469	10.5	3,342.1	3,342.1	3,342.6	0.5
ET	266,757	492	3,374	7.7	3,350.5	3,350.5	3,350.5	0.0
EU	269,777	601	3,356	7.7	3,358.9	3,358.9	3,359.3	0.4
EV	270,817	366	3,494	7.4	3,361.7	3,361.7	3,362.0	0.3
EW	270,867	367	3,600	7.2	3,361.9	3,361.9	3,362.4	0.5
EX	271,827	1,566	2,368	11.0	3,365.2	3,365.2	3,365.2	0.0
EY	275,837	1,624	5,919	4.4	3,382.4	3,382.4	3,382.4	0.0
EZ	278,297	1,191	4,299	6.0	3,387.9	3,387.9	3,388.0	0.1
FA	282,797	768	3,716	7.0	3,403.9	3,403.9	3,404.4	0.5
FB	286,777	1,174	5,474	4.7	3,415.4	3,415.4	3,415.6	0.2
FC	290,317	1,932	3,725	7.0	3,427.5	3,427.5	3,427.5	0.0
FD	294,077	1,039	4,606	5.6	3,441.0	3,441.0	3,441.5	0.5
FE	296,227	830	3,913	6.6	3,446.2	3,446.2	3,446.7	0.5

¹ Feet above Missoula County/Mineral County Line

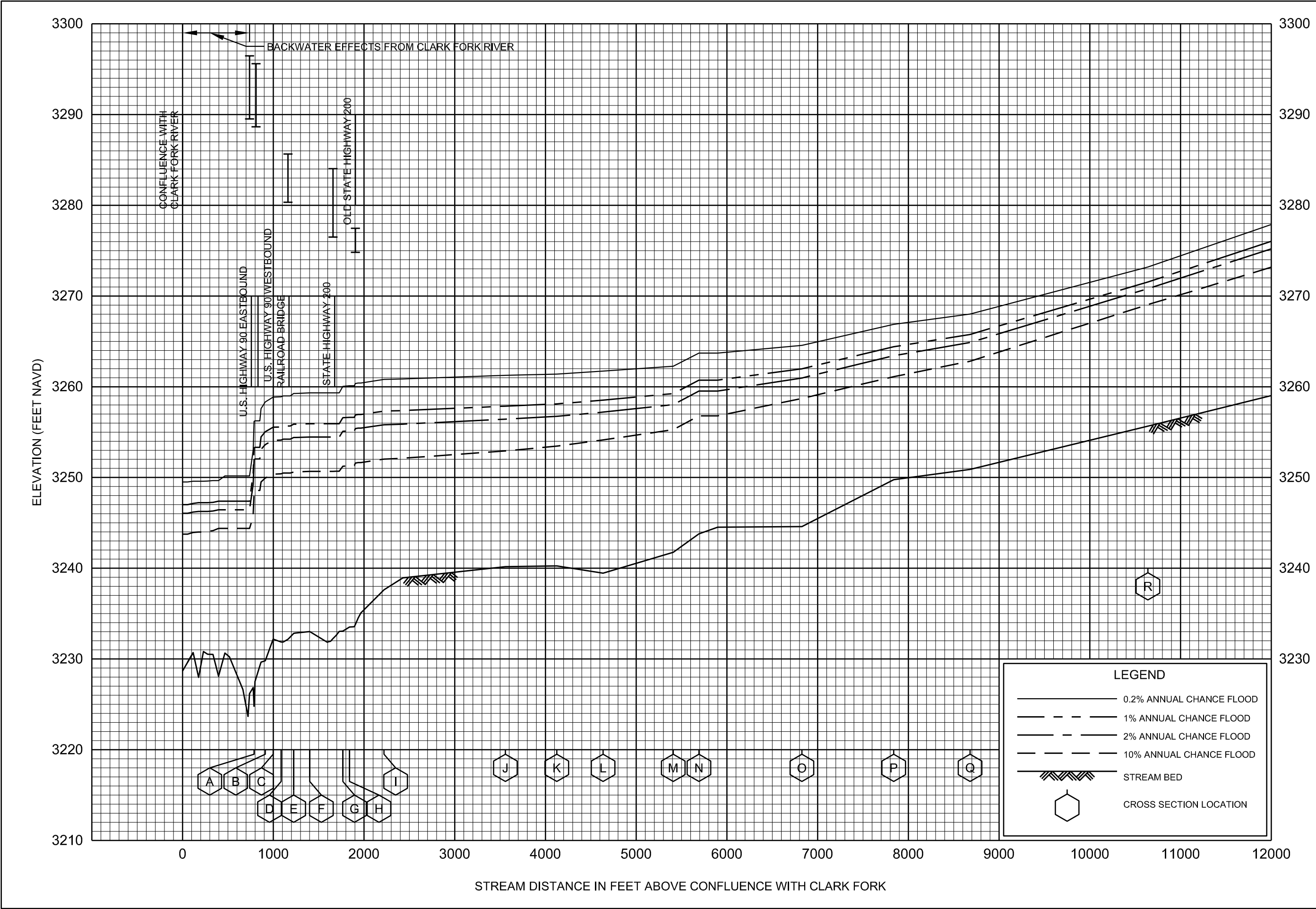
REVISED TO
REFLECT LOMR
DATED: July 29, 2015

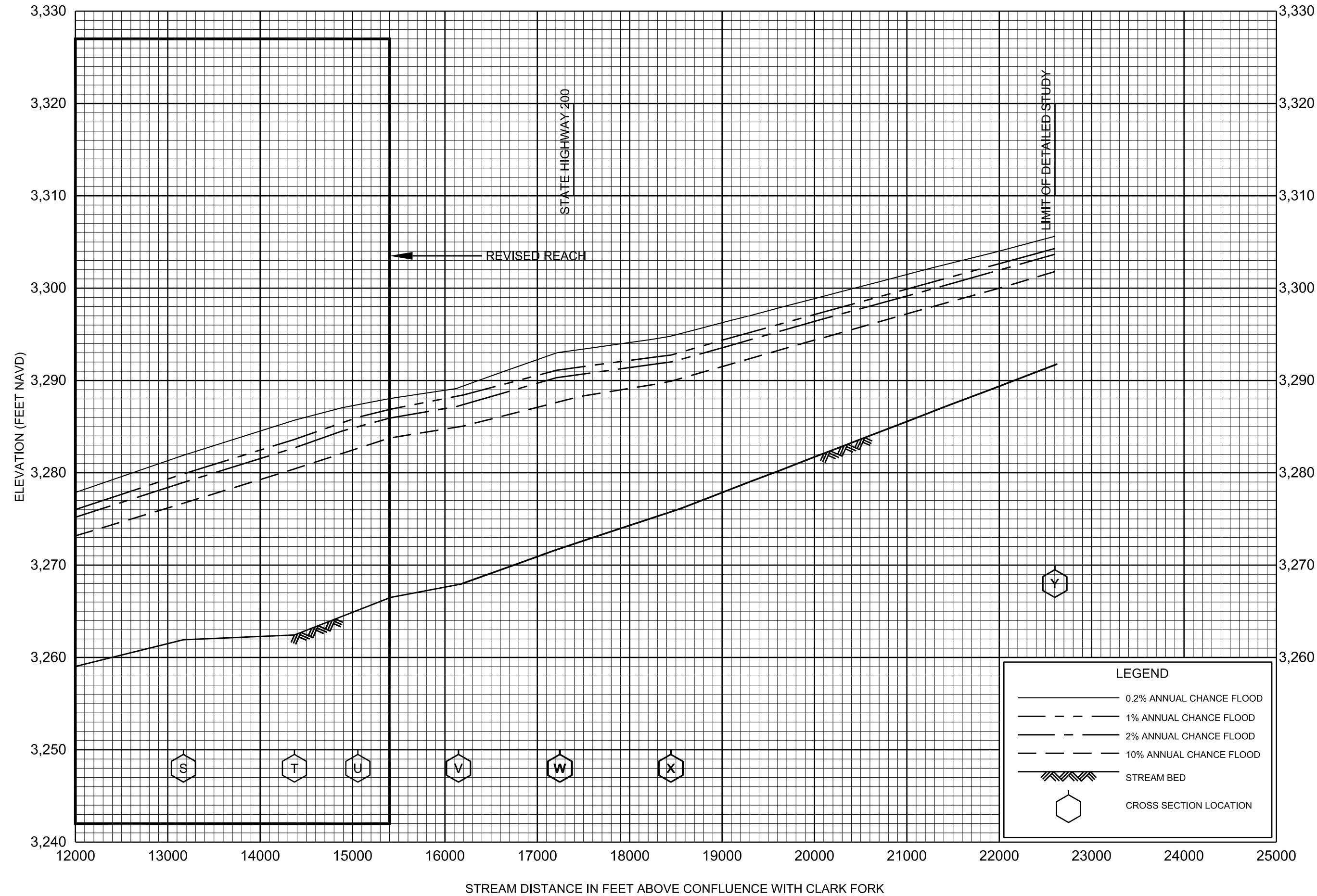
FLOODWAY DATA

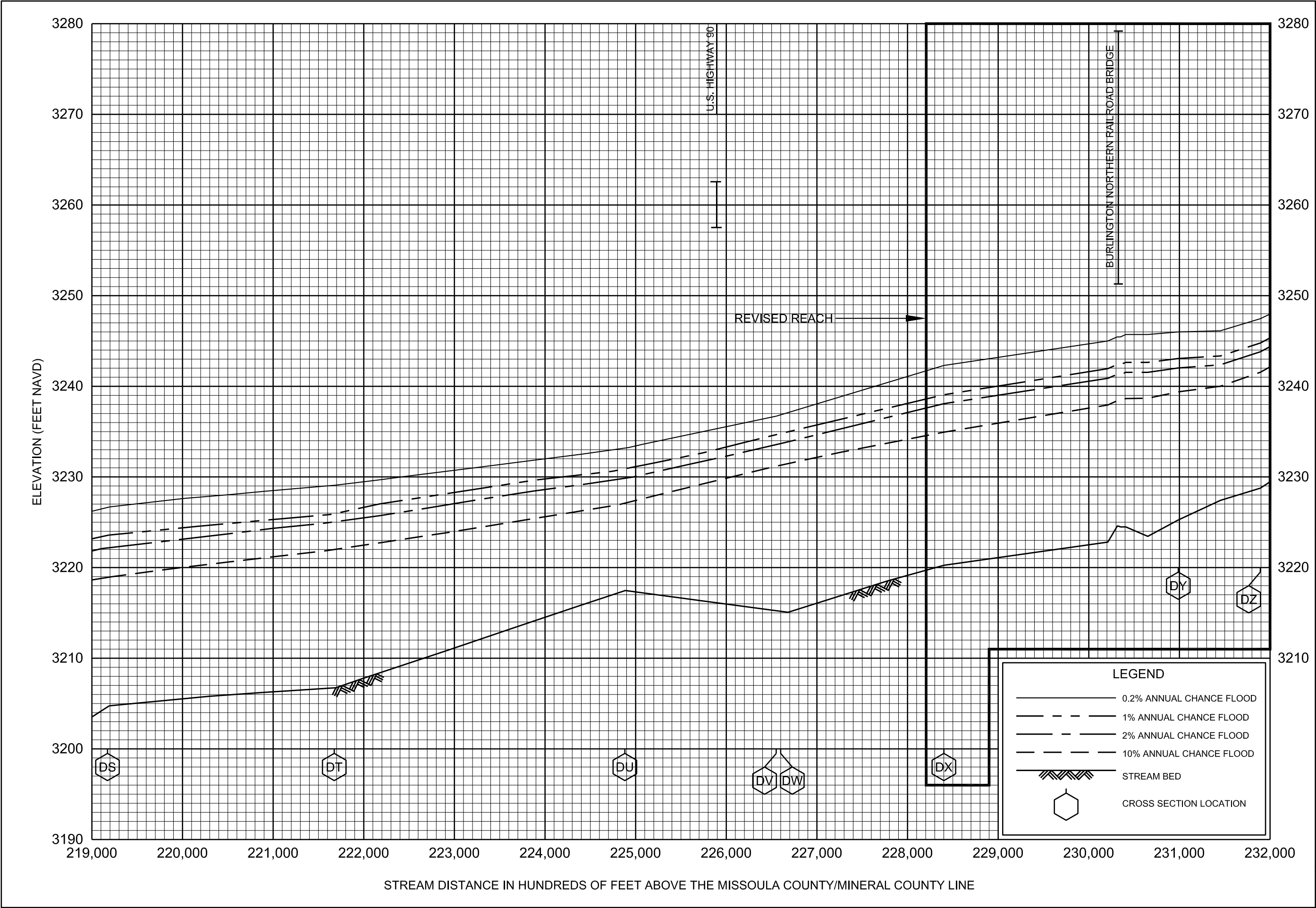
CLARK FORK

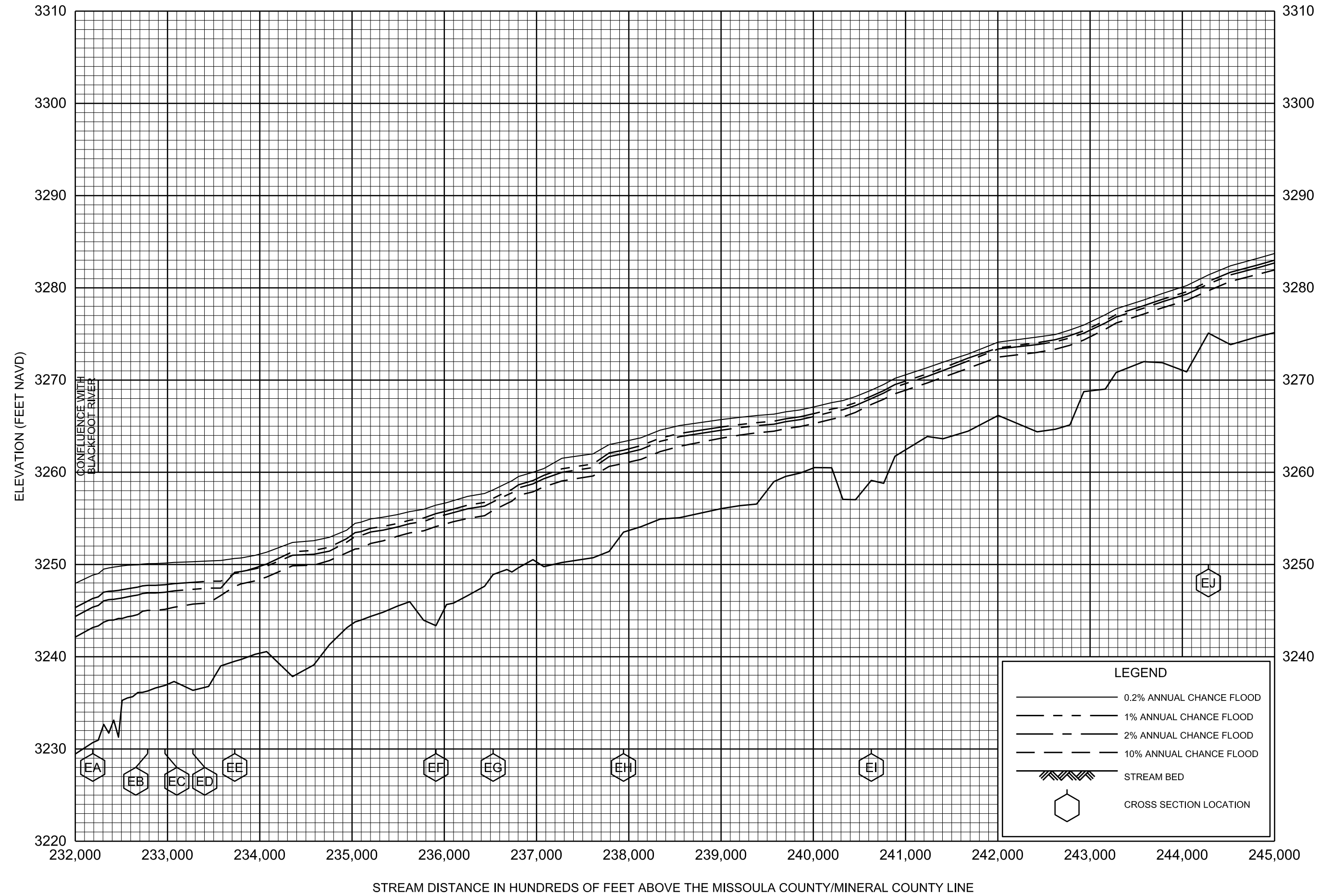
TABLE 5

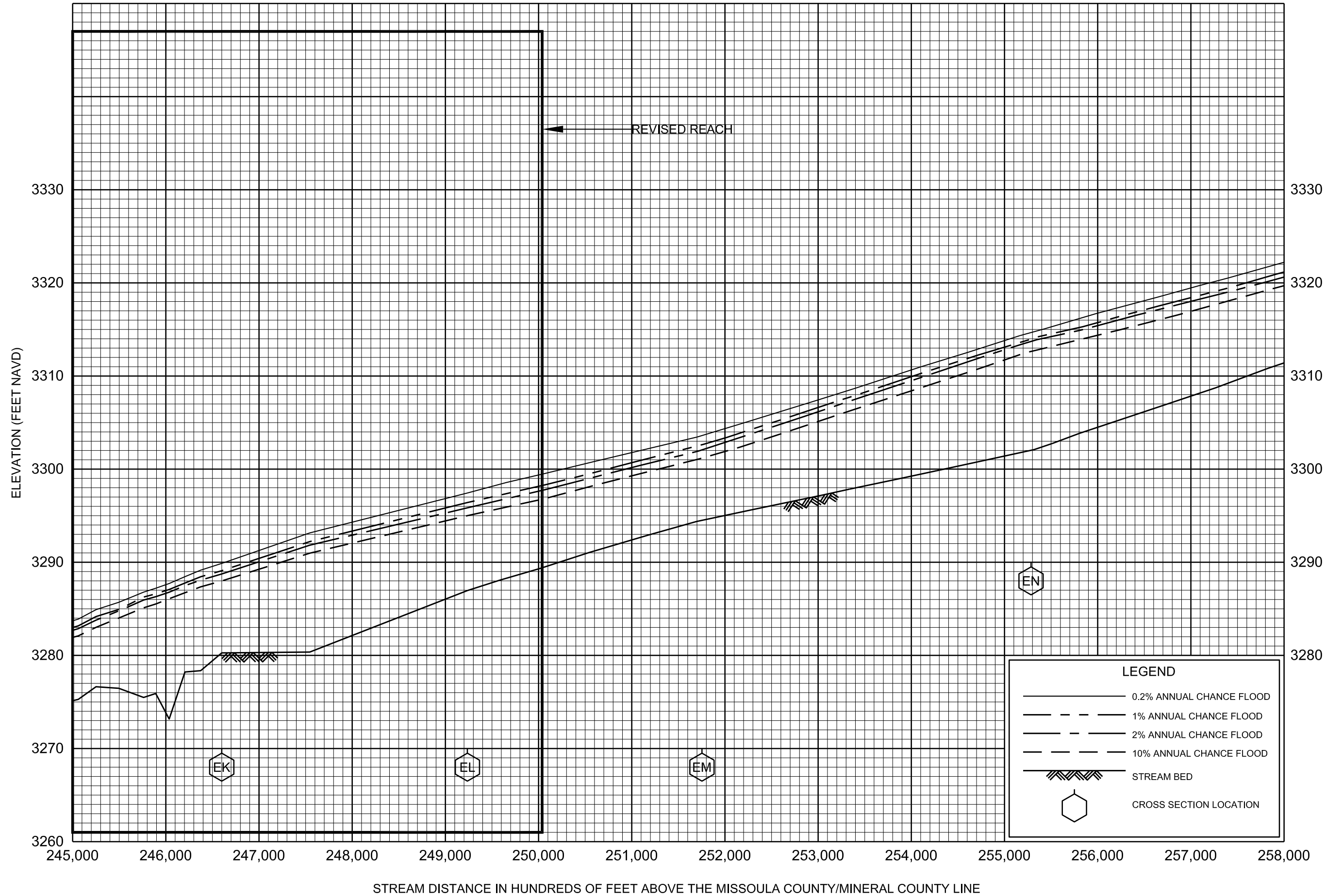
FEDERAL EMERGENCY MANAGEMENT AGENCY
MISSOULA COUNTY, MT
AND INCORPORATED AREAS











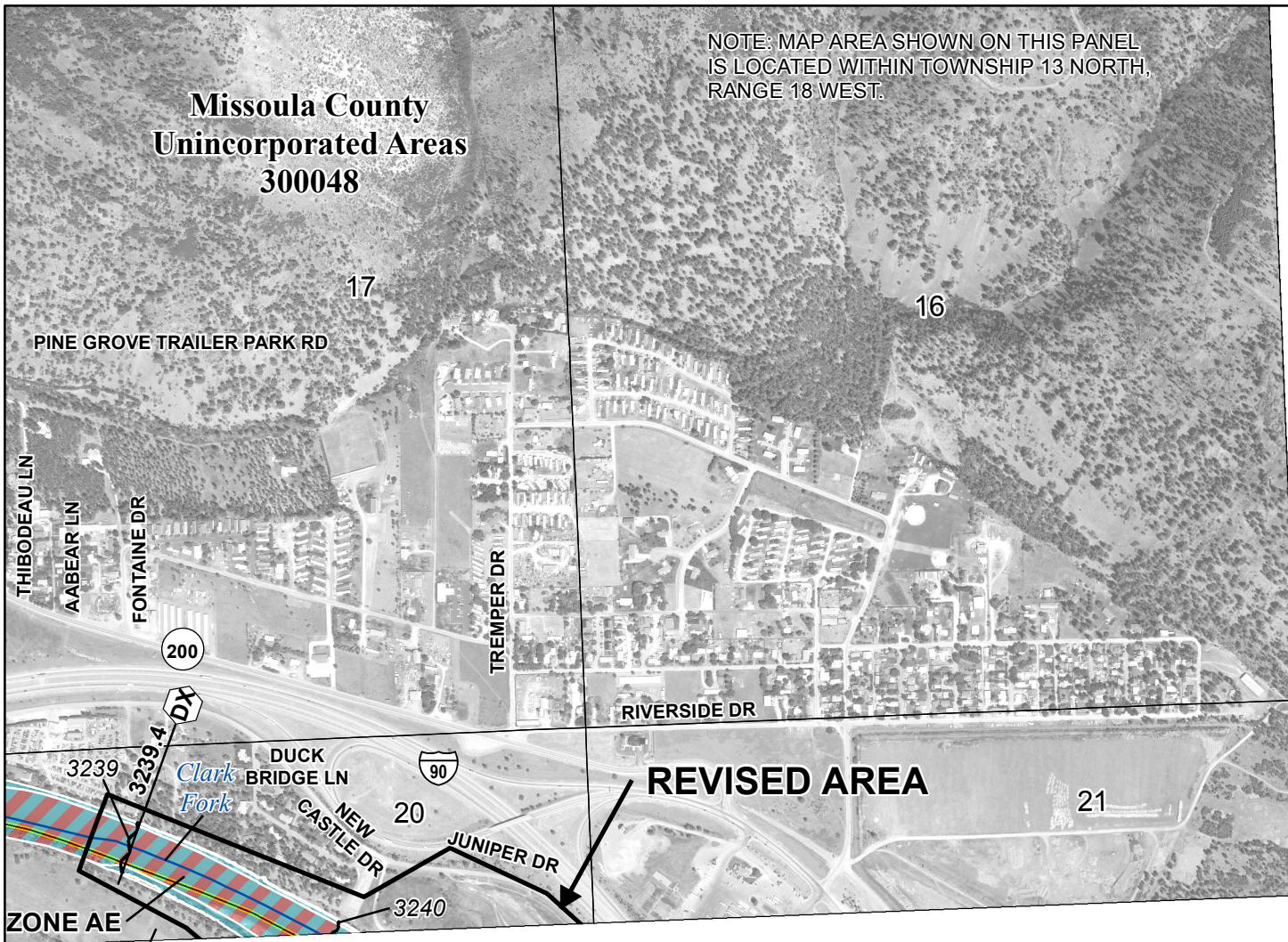
FLOOD PROFILES

REVISED TO
REFLECT LOMR
DATED: July 29, 2015

CLARK FORK

FEDERAL EMERGENCY MANAGEMENT AGENCY

MISSOULA COUNTY, MT
AND INCORPORATED AREAS



Joins Panel 1485

Joins Panel 1240

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

Map Projection:
Universal Transverse Mercator NAD 1983 UTM Zone 11N
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

FEMA
National Flood Insurance Program

**NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP**

**MISSOULA COUNTY, MONTANA
and Incorporated Areas**

PANEL 1220 OF 1900

Panel Contains:

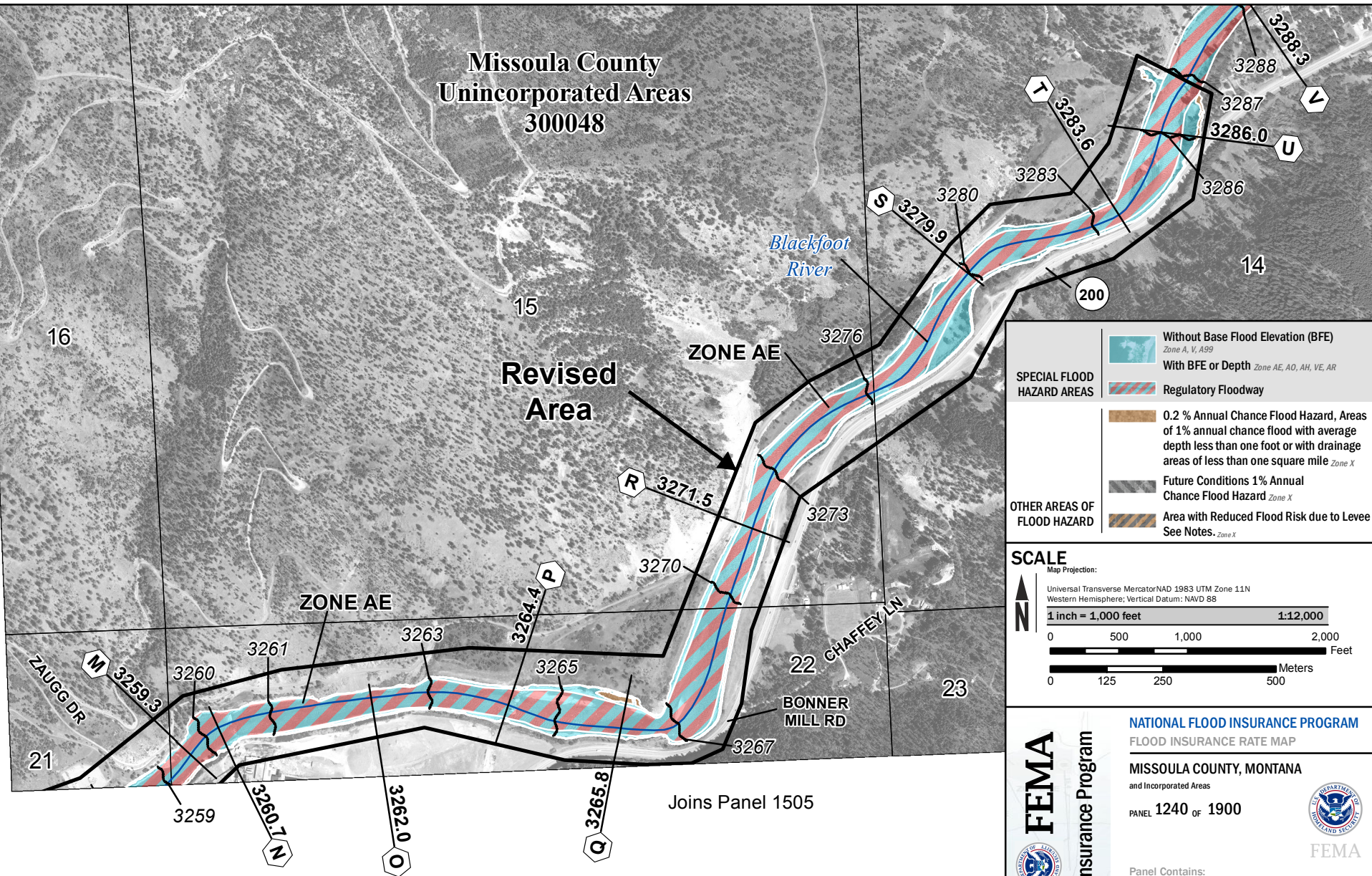
COMMUNITY	NUMBER	PANEL	SUFFIX
MISSOULA, CITY OF	300049	1220	E
MISSOULA COUNTY, UNINCORPORATED AREAS	300048	1220	E

**REVISÉD TO REFLECT LOMR
DATED: July 29, 2015**

VERSION NUMBER
1.1.1.0
MAP NUMBER
30063C1220E
MAP REVISED
JULY 6, 2015

Joins Panel 1220

Missoula County Unincorporated Areas 300048



Joins Panel 1505

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 14 NORTH RANGE 18 WEST, AND TOWNSHIP 13 NORTH, RANGE 18 WEST.



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP

MISSOULA COUNTY, MONTANA
and Incorporated Areas

PANEL 1240 OF 1900



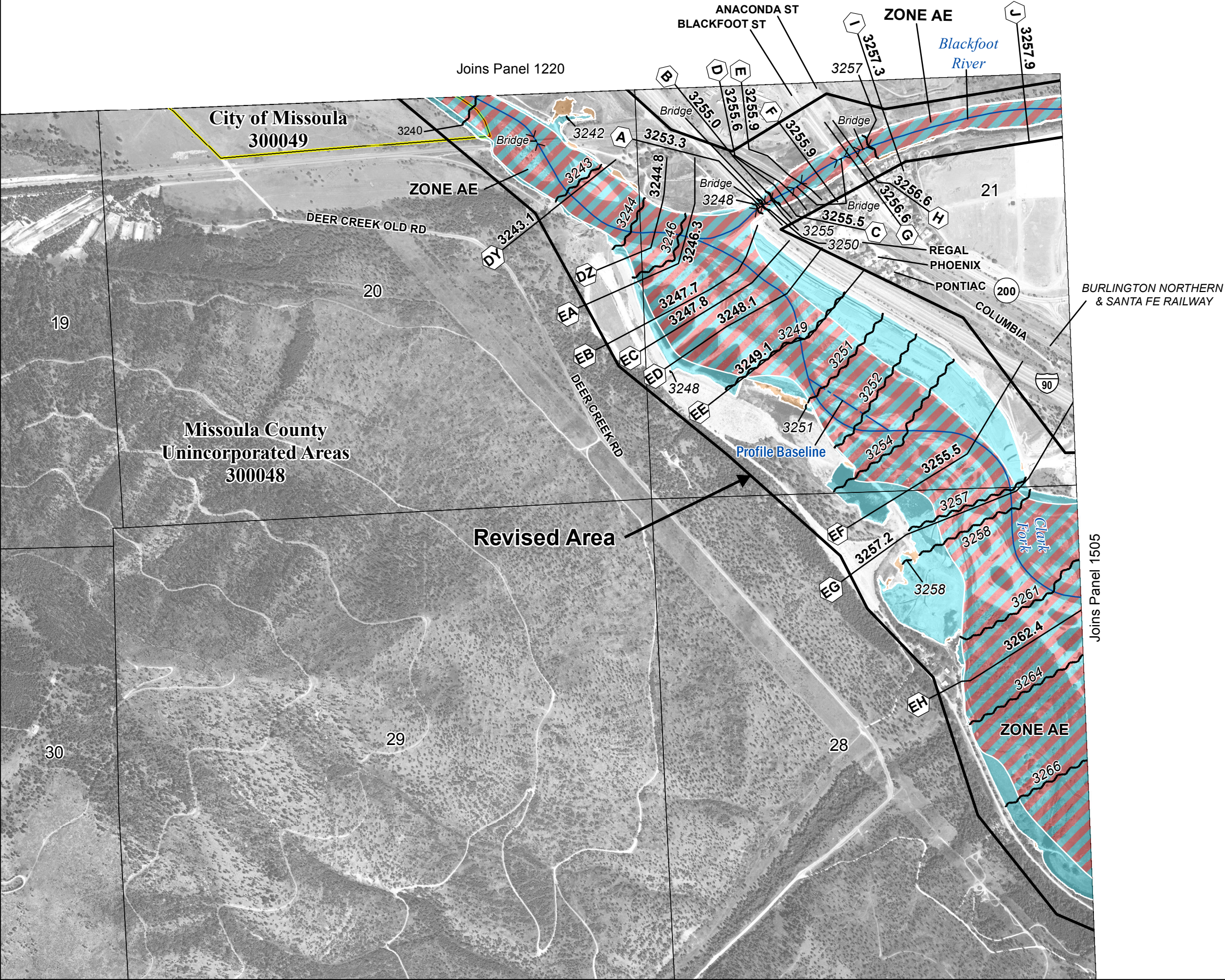
Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
MISSOULA COUNTY, UNINCORPORATED AREAS	30048	1240	E

**REVISED TO
REFLECT LOMR
DATED: July 29, 2015**

VERSION NUMBER
1.1.1.0
MAP NUMBER
30063C1240E
MAP REVISED
JULY 6, 2015

NOTE: MAP AREA SHOWN ON THIS PANEL
IS LOCATED WITHIN TOWNSHIP 13 NORTH,
RANGE 18 WEST.



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

Map Projection:
Universal Transverse Mercator NAD 1983 UTM Zone 11N
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

FEMA
National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

MISSOULA COUNTY, MONTANA
and Incorporated Areas

PANEL 1485 OF 1900

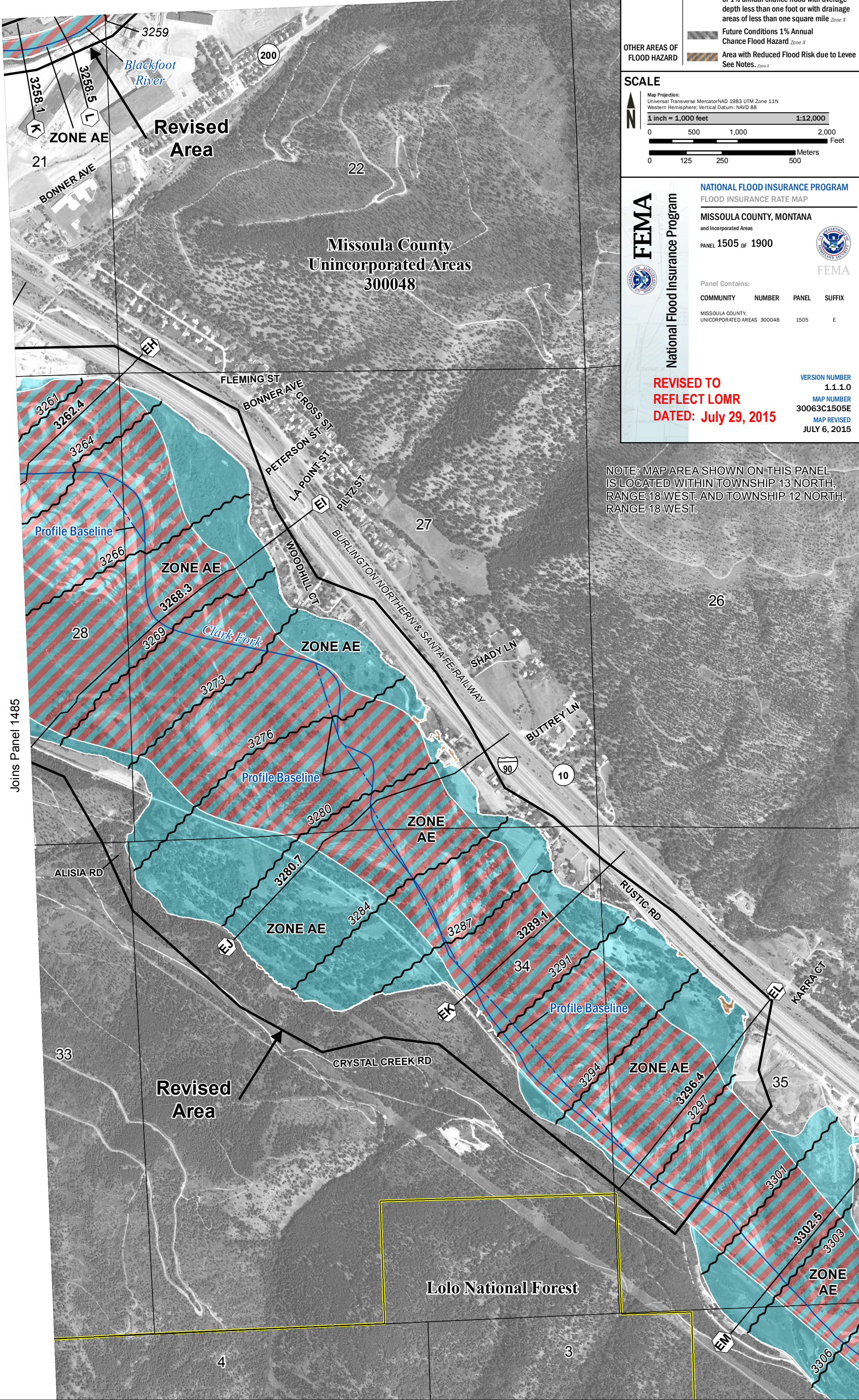
Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
MISSOULA, CITY OF	300049	1485	E
MISSOULA COUNTY, UNINCORPORATED AREAS	300048	1485	E

REVISED TO REFLECT LOMR DATED: July 29, 2015

VERSION NUMBER
1.1.1.0
MAP NUMBER
30063C1485E
MAP REVISED
JULY 6, 2015

Joins Panel 1240



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
- 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*

OTHER AREAS OF FLOOD HAZARD

- Area with Reduced Flood Risk due to Levee
See Notes- *Zone X*

SCALE

Map Projection:
Universal Transverse MercatorNAD 1983 UTM Zone 11N
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 1,000 feet 1:12,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

MISSOULA COUNTY, MONTANA
and Incorporated Areas

PANEL 1505 OF 1900

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
MISSOULA COUNTY, UNINCORPORATED AREAS	300048	1505	E

REVISED TO REFLECT LOMR
DATED: July 29, 2015

VERSION NUMBER 1.1.1.0
MAP NUMBER 30063C1505E
MAP REVISED JULY 6, 2015

NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 13 NORTH, RANGE 18 WEST, AND TOWNSHIP 12 NORTH, RANGE 18 WEST.