**Follows Conditional Case No.: 07-05-0191R**

# 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 Rochester<br>Olmsted County<br>Minnesota** | **CULVERT<br>FILL** | **FLOODWAY<br>HYDRAULIC ANALYSIS<br>NEW TOPOGRAPHIC DATA** |
| | **COMMUNITY NO.: 275246** | | |
| **IDENTIFIER** | Wildwood Meadow Phase 2 | **APPROXIMATE LATITUDE & LONGITUDE: 43.992, -92.406<br>SOURCE:** USGS QUADRANGLE **DATUM:** NAD 83 | |

| ANNOTATED MAPPING ENCLOSURES | ANNOTATED STUDY ENCLOSURES |
|---|---|
| TYPE: FIRM* NO.: 27109C0306F DATE: April 19, 2017<br>TYPE: FIRM NO.: 27109C0307E DATE: April 19, 2017 | DATE OF EFFECTIVE FLOOD INSURANCE STUDY: April 19, 2017<br>PROFILE(S): 05P AND 06P<br>FLOODWAY DATA TABLE: 8 |

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

**FLOODING SOURCE(S) & REVISED REACH(ES)**

Bear Creek - From approximately 3,065 feet upstream of Marion Road SE to approximately 5,720 feet upstream of 20 Street SE

**SUMMARY OF REVISIONS**

| Flooding Source | Effective Flooding | Revised Flooding | Increases | Decreases |
|---|---|---|---|---|
| Bear Creek | Zone AE | Zone AE | YES | YES |
| | Zone X (shaded) | Zone X (shaded) | YES | YES |
| | BFEs* | BFEs | YES | YES |
| | Floodway | Floodway | 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 Map Information eXchange 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 http://www.fema.gov/nfip.

Patrick “Rick” F. Sacbibit, P.E., Branch Chief
Engineering Services 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.

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 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.

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, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

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# LETTER OF MAP REVISION
# DETERMINATION DOCUMENT (CONTINUED)

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.

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. Mary Beth Caruso
Director, Mitigation Division
Federal Emergency Management Agency, Region V
536 South Clark Street, Sixth Floor
Chicago, IL 60605
(312) 408-5500

**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, 3601 Eisenhower Avenue, Suite 500, Alexandria, VA 22304-6426. Additional Information about the NFIP is available on our website at http://www.fema.gov/nfip.

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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: *Post Bulletin*
Date: June 13, 2018 and June 20, 2018

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 Map Information eXchange 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 http://www.fema.gov/nfip.

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Federal Insurance and Mitigation Administration

| 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) |
| BEAR CREEK | | | | | | | | |
| A | 106 | 144 | 1,204 | 7.4 | 986.1 | 982.2[2] | 982.5[2] | 0.0 |
| B | 792 | 133 | 1,107 | 8.0 | 986.1 | 983.6[2] | 983.6[2] | 0.0 |
| C | 1,267 | 101 | 866 | 10.3 | 988.4 | 988.4 | 988.4 | 0.0 |
| D | 2,006 | 115 | 1,067 | 8.3 | 992.6 | 992.6 | 992.6 | 0.0 |
| E | 2,587 | 122 | 1,029 | 8.7 | 994.0 | 994.0 | 994.0 | 0.0 |
| F | 3,326 | 154 | 1,213 | 7.3 | 996.0 | 996.0 | 996.0 | 0.0 |
| G | 4,858 | 178 | 1,307 | 6.8 | 998.7 | 998.7 | 998.7 | 0.0 |
| H | 5,861 | 178 | 1,306 | 6.8 | 1,000.7 | 1,000.7 | 1,000.7 | 0.0 |
| I | 6,706 | 171 | 1,252 | 7.1 | 1,001.5 | 1,001.5 | 1,001.5 | 0.0 |
| J | 8,870 | 799 | 3,173 | 3.0 | 1,006.9 | 1,006.9 | 1,006.9 | 0.0 |
| K | 10,613 | 808 | 3,555 | 2.9 | 1,007.8 | 1,007.8 | 1,007.9 | 0.1 |
| L | 14,000 | 936 | 4,287 | 2.1 | 1,011.2 | 1,011.2 | 1,011.2 | 0.0 |
| M | 14,337 | 851 | 3,959 | 2.3 | 1,011.6 | 1,011.6 | 1,011.8 | 0.2 |
| N | 17,369 | 738 | 3,276 | 1.6 | 1,017.0 | 1,017.0 | 1,017.4 | 0.4 |
| O | 19,559 | 459 | 2,134 | 2.4 | 1,019.1 | 1,019.1 | 1,019.4 | 0.3 |
| P | 20,775 | 641 | 2,061 | 2.5 | 1,021.5 | 1,021.5 | 1,021.8 | 0.3 |
| Q | 23,179 | 890 | 5,200 | 1.4 | 1,029.5 | 1,029.5 | 1,029.7 | 0.2 |
| R | 24,966 | 503 | 2,306 | 3.4 | 1,029.8 | 1,029.8 | 1,030.0 | 0.2 |
| S | 28,006 | 660 | 4,351 | 2.0 | 1,034.6 | 1,034.6 | 1,034.7 | 0.1 |
| T | 31,657 | 510 | 2,139 | 3.5 | 1,041.5 | 1,041.5 | 1,041.5 | 0.0 |
| U | 34,077 | 417 | 2,549 | 2.9 | 1,046.7 | 1,046.7 | 1,047.0 | 0.3 |

[1]Feet above confluence with South Fork Zumbro River

[2]Elevation computed without consideration of backwater effects from South Fork Zumbro River

TABLE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY

**OLMSTED COUNTY, MN**
**AND INCORPORATED AREAS**

**FLOODWAY DATA**

**BEAR CREEK**

**REVISED TO REFLECT LOMR EFFECTIVE: October 18, 2018**

REVISED DATA

REVISED REACH

CONFLUENCE OF WILLOW CREEK

20TH STREET SOUTHEAST

CONFLUENCE OF BADGER RUN

COUNTY HIGHWAY 36/ MARION ROAD SOUTHEAST

ELEVATION IN FEET (NAVD)

1040
1030
1020
1010
1000
990

13,000 14,000 15,000 16,000 17,000 18,000 19,000 20,000 21,000 22,000 23,000 24,000 25,000 26,000

STREAM DISTANCE IN FEET ABOVE CONFLUENCE WITH SOUTH FORK ZUMBRO RIVER

L M N O P Q R

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

REVISED TO REFLECT LOMR EFFECTIVE: October 18, 2018

FLOOD PROFILES

BEAR CREEK

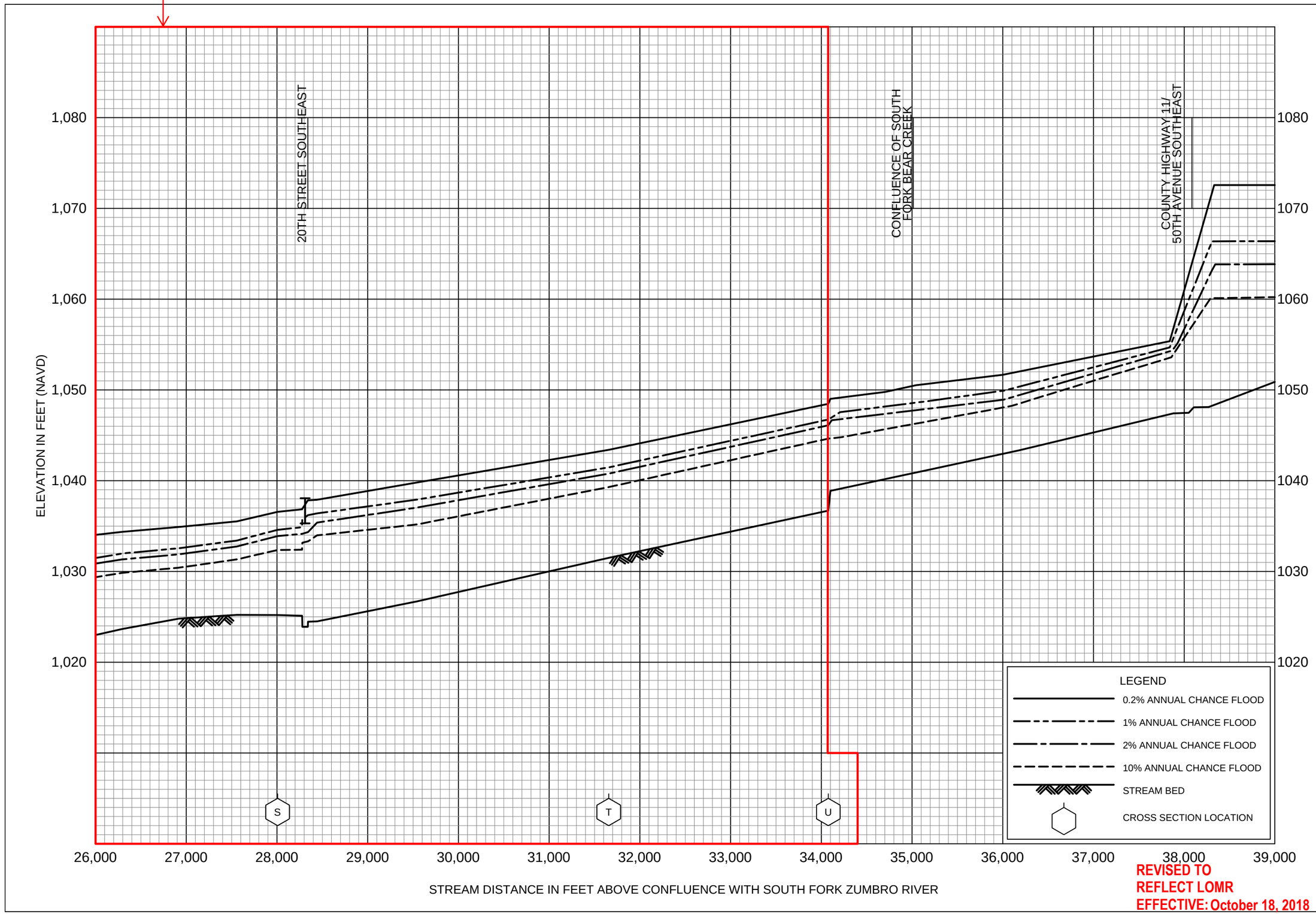
FEDERAL EMERGENCY MANAGEMENT AGENCY

OLMSTED COUNTY, MN

AND INCORPORATED AREAS

05P

REVISED REACH




REVISED TO
REFLECT LOMR
EFFECTIVE: October 18, 2018

FLOOD PROFILES

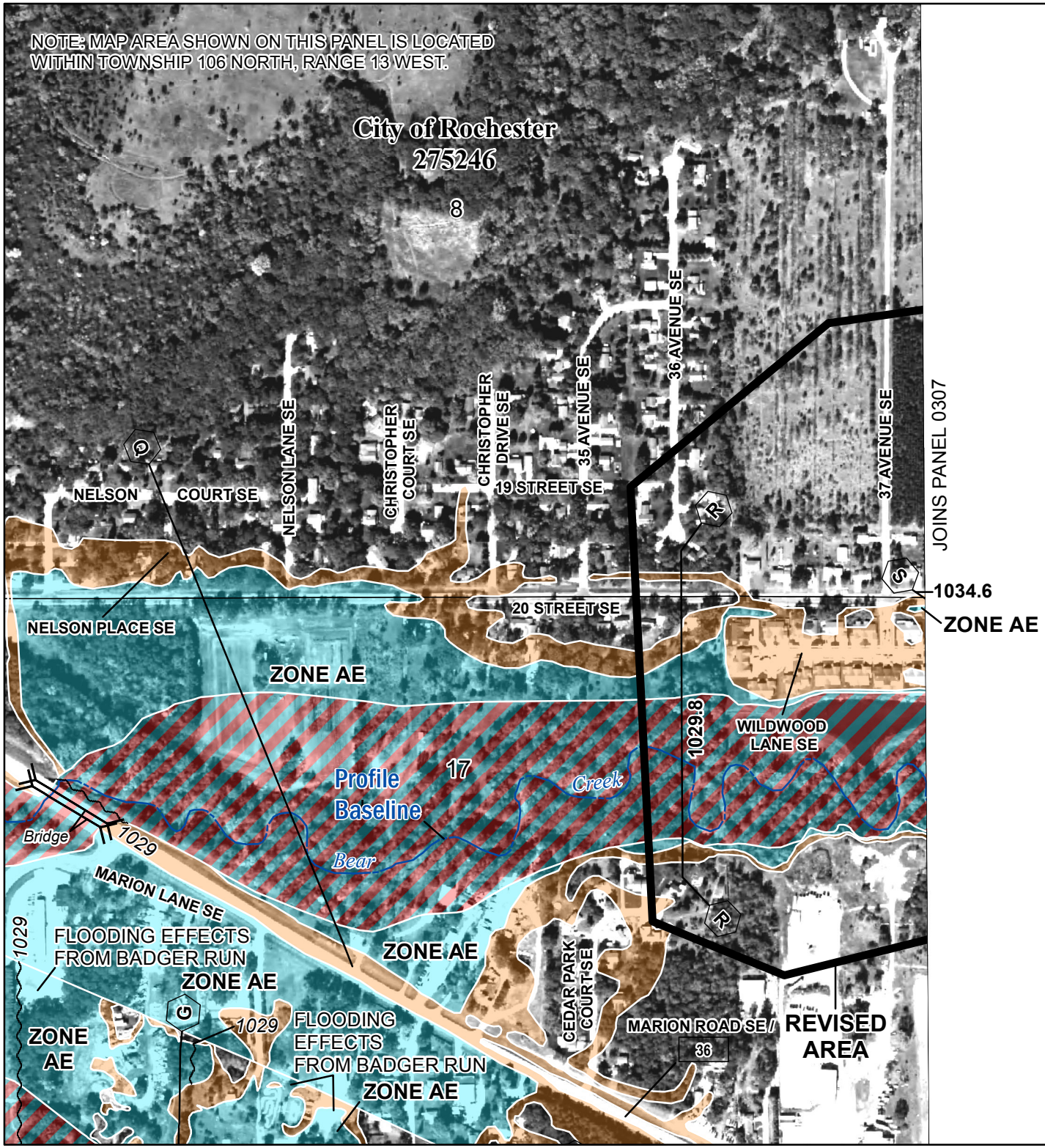
BEAR CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

OLMSTED COUNTY, MN

AND INCORPORATED AREAS

06P




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:
NAD 1983 UTM Zone 15N;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 250 500 1,000 Feet

0 75 150 300 Meters

FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

OLMSTED COUNTY, MINNESOTA
and Incorporated Areas

PANEL 306 OF 530

FEMA

Panel Contains:

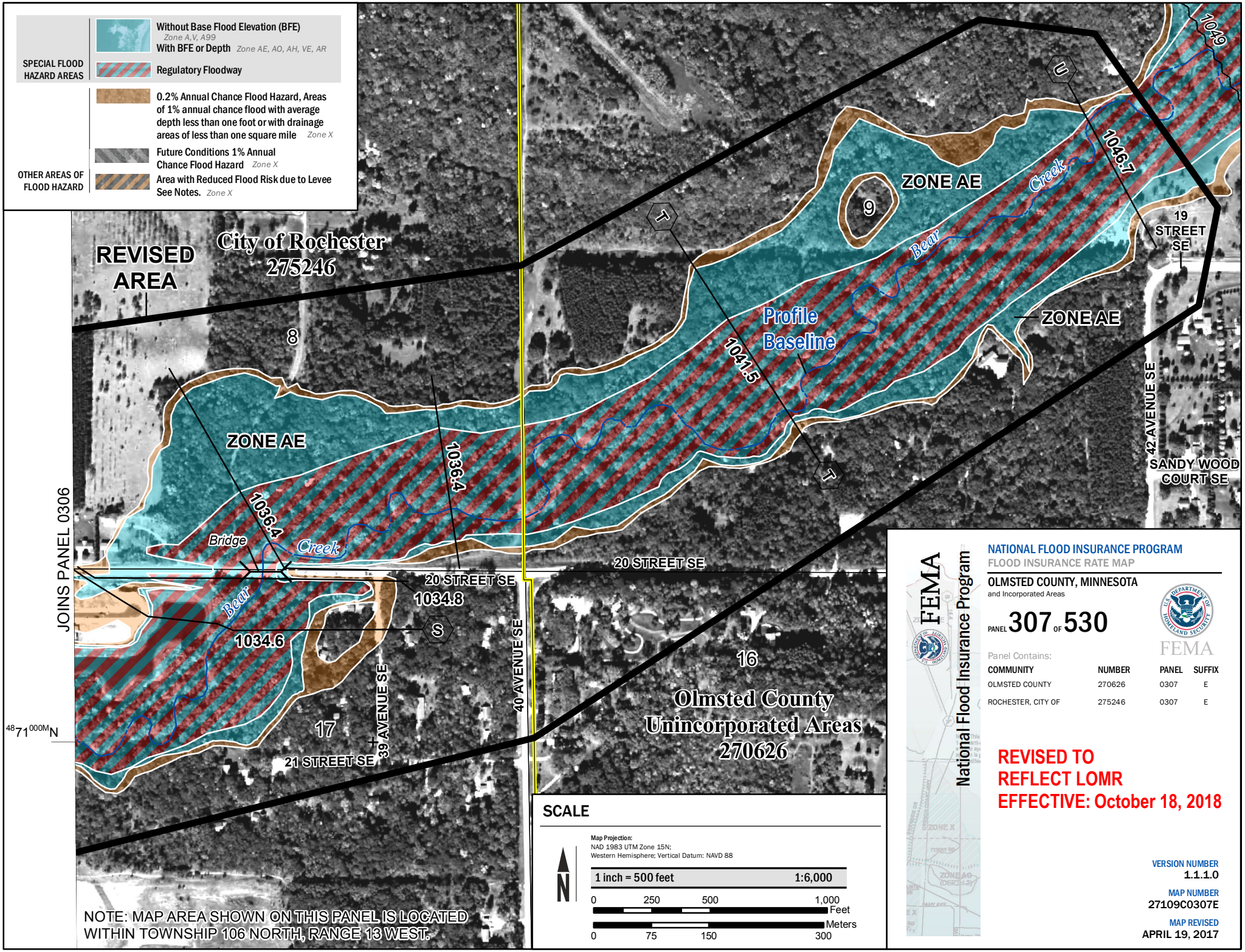
| COMMUNITY | NUMBER | PANEL | SUFFIX |
|---|---|---|---|
| OLMSTED COUNTY | 270626 | 0306 | F |
| ROCHESTER, CITY OF | 275246 | 0306 | F |

**REVISED TO REFLECT LOMR EFFECTIVE: October 18, 2018**

VERSION NUMBER
1.1.1.0

MAP NUMBER
27109C0306F

MAP REVISED
APRIL 19, 2017


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
REVISED AREA
City of Rochester
275246
ZONE AE
Profile Baseline
Bear Creek
1041.5
1046.7
1049
1036.4
1034.8
1034.6
19 STREET SE
42 AVENUE SE
SANDY WOOD COURT SE
20 STREET SE
21 STREET SE
39 AVENUE SE
40 AVENUE SE
Bridge
JOINS PANEL 0306
Olmsted County
Unincorporated Areas
270626
8
9
16
17
T
U
S
48 71 000M N
NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 106 NORTH, RANGE 13 WEST.
SCALE
Map Projection:
NAD 1983 UTM Zone 15N;
Western Hemisphere; Vertical Datum: NAVD 88
1 inch = 500 feet 1:6,000
0 250 500 1,000 Feet
0 75 150 300 Meters
FEMA
National Flood Insurance Program
NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP
OLMSTED COUNTY, MINNESOTA
and Incorporated Areas
PANEL 307 OF 530
Panel Contains:
COMMUNITY NUMBER PANEL SUFFIX
OLMSTED COUNTY 270626 0307 E
ROCHESTER, CITY OF 275246 0307 E
REVISED TO REFLECT LOMR EFFECTIVE: October 18, 2018
VERSION NUMBER
1.1.1.0
MAP NUMBER
27109C0307E
MAP REVISED
APRIL 19, 2017