



## REPORT TO CITY PLAN COMMISSION

**Plan Commission Informal Public Hearing Date:** December 12, 2017

**Common Council Public Hearing Date:** January 3, 2018

**Item:** Zoning Ordinance Text and Map Amendment – Floodplain Zoning relating to Section 23-206(b) Official Maps and Revisions and Flood Insurance Rate Map Panel Number 55087C0319D

**Case Manager:** Don Harp

### STAFF ANALYSIS

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#### **Background:**

The City has received notification from the Federal Emergency Management Agency (FEMA) the Flood Insurance Rate Map (FIRM) Panel No. 55087C0319D (see attached) was revised and will go into effect February 16, 2018 by Letter of Map Revision (LOMR). The revisions to this panel were based on additional study information prior to approval of a Neenah Papers redevelopment project located along the south bank of the Fox River between Lawe Street and Olde Oneida Street. The affected area includes the Fox River from Olde Oneida Street to approximately 600 feet east of Lawe Street. Changes to the Base Flood Elevation range from an increase of 0.1 feet to a decrease of 0.4 feet. *(The base flood plain elevation is commonly referred to as a 100-year flood, which is also the same as the 1% annual change flood)*

Pursuant to Section 1361 of the National Flood Insurance Act of 1968, as amended, the City is required to adopt and enforce the new FIRM Panel No. 55087C0319D and provide evidence that its floodplain ordinance meets the standards of Paragraph 60.3(d) in the National Flood Insurance Program (NFIP) before February 16, 2018. The attached Ordinance revisions and FIRM Panel will accomplish this FEMA directive.

#### **PROPOSED ZONING ORDINANCE TEXT AMENDMENTS**

The text recommended to be added is underlined.

#### **ARTICLE X. FLOODPLAIN ZONING**

##### **DIVISION 1. STATUTORY AUTHORIZATION, FINDING OF FACT, STATEMENT OF PURPOSE, TITLE AND GENERAL PROVISIONS.**

**Sec. 23-206. General provisions.**

(b) *Official maps and revisions.* The boundaries of all floodplain districts are designated as floodplains or A-Zones on the maps listed below and the revisions in the City of Appleton Floodplain Appendix. Any change to the base flood elevations (BFE) in the Flood Insurance Study (FIS) or on the Flood Insurance Rate Map (FIRM) must be reviewed and approved by the DNR and FEMA before it is effective. No changes to regional flood elevations (RFE's) on non-FEMA maps shall be effective until approved by the DNR. These maps and revisions are on file in the office of the Division of Inspections of the Department of Public Works for the City of Appleton. If more than one map or revision is referenced, the most restrictive information shall apply.

(1) *Official maps based on the FIS:*

- a. Calumet County Flood Insurance Rate Map (FIRM), panel numbers 55015C0007E, 55015C0026E and 55015C0027E dated February 4, 2009; with corresponding profiles that are based on the Calumet County Flood Insurance Study (FIS), dated February 2009, volume number 55015CV000A.
- b. Outagamie County Flood Insurance Rate Map (FIRM) panel numbers 55087C0304E, and 55087C0308E dated January 20, 2016; with corresponding profiles that are based on the Flood Insurance Study (FIS) dated January 20, 2016, volume number 55087CV000B.
- c. Outagamie County Flood Insurance Rate Map (FIRM) panel numbers 55087C0309D, 55087C0314D, 55087C0316D, 55087C0317D, 55087C0318D, 55087C0319D, 55087C0330, 55087C0338D, 55087C0427D, 55087C0431D and 55087C451D dated July 22, 2010; with corresponding profiles that are based on the Outagamie County Flood Insurance Study (FIS) dated July 22, 2010 volume number 55087CV000A.
- d. Outagamie County Flood Insurance Rate Map (FIRM) panel numbers 55087C0328D, 55087C0329D, 55087C0336D, 55087C0337D dated July 22, 2010 and revised August 23, 2013 with corresponding profiles that are based on the Outagamie County Flood Insurance Study (FIS) dated July 22, 2010 volume number 55087CV000A, all revised and annotated pursuant to FEMA Letter of Map Revision Determination Document Case No: 12-05-6032P, Issue Date April 10, 2013, Effective Date August 23, 2013.

- e. LOMR – Case #11-05-7670P, Floodway and Floodplain revisions between Flood Insurance Study (FIS) Cross Section AW to BA, Outagamie County Flood Insurance Rate Map (FIRM) panels 55087C0318D and 55087C0319D, dated July 22, 2010. This reflects changes on the Fox River from just downstream of the Private Middle Dam to approximately 250 feet upstream of the Appleton Upper Dam.
- f. LOMR – Case #13-05-7920P, Floodplain revisions between Flood Insurance Study (FIS) Cross Section AN to AM, Outagamie County Flood Insurance Rate panels 55087C0319D, dated July 22, 2010. This reflects changes along the south side of the Fox River from the College Avenue Bridge to approximately 850 feet downstream.
- g. City of Appleton Kensington Pond Dam Break Analysis Hydraulic Shadow, Per Figure F-9 of Dam Failure Analysis and Assignment of the Hazard Rating for Kensington Pond Dam, by Earth Tech, dated January 2008, on file with City of Appleton Department of Public Works.
- h. LOMR – Case #17-05-1963P. Floodplain revisions on Outagamie County Flood Insurance Study (FIS) AAL Tributary Cross Section C, Outagamie County Flood Insurance Rate Map (FIRM) panel 55087C0336D, effective September 29, 2017. This reflects changes along the AAL Tributary from just downstream of Lightning Drive to approximately 200 feet upstream of East Glenhurst Lane.
- i. LOMR – Case #17-05-3854P. Floodplain revisions to Outagamie County Flood Insurance Study (FIS) Fox River Cross Section AS through AW, Outagamie County Flood Insurance Rate Map (FIRM) panel 55087C0319D, effective February 16, 2018. This reflects changes along the Fox River from just upstream of railroad to just downstream of South Oneida Street.

**Proposed Amendment to Flood Insurance Rate Map Panel Number 55087C0319D:**

See attached maps.

**Technical Review Group Report (TRG):** This item was reviewed at the November 21, 2017 Technical Review Group meeting. No negative comments were received from participating departments.

**RECOMMENDATION PENDING INFORMAL PUBLIC HEARING TESTIMONY:**

The proposed text and map amendments to Article X Floodplain Zoning of Chapter 23 of the Municipal Code, Section 23-206 (b) (1) i. Official maps and revisions, as identified in this staff report, **BE APPROVED.**



# Federal Emergency Management Agency

Washington, D.C. 20472

October 3, 2017

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

The Honorable Timothy Hanna  
Mayor, City of Appleton  
Appleton City Hall  
100 North Appleton Street  
Appleton, WI 54911

IN REPLY REFER TO:

Case No.: 17-05-3854P  
Community Name: City of Appleton, WI  
Community No.: 555542  
Effective Date of  
This Revision: **February 16, 2018**

Dear Mayor Hanna:

The Flood Insurance Study Report and Flood Insurance Rate Map for your community have been revised by this Letter of Map Revision (LOMR). Please use the enclosed annotated map panel(s) revised by this LOMR for floodplain management purposes and for all flood insurance policies and renewals issued in your community.

Additional documents are enclosed which provide information regarding this LOMR. Please see the List of Enclosures below to determine which documents are included. Other attachments specific to this request may be included as referenced in the Determination Document. If you have any questions regarding floodplain management regulations for your community or the National Flood Insurance Program (NFIP) in general, please contact the Consultation Coordination Officer for your community. If you have any technical questions regarding this LOMR, please contact the Director, Mitigation Division of the Department of Homeland Security's Federal Emergency Management Agency (FEMA) in Chicago, Illinois, at (312) 408-5500, or the FEMA Map Information eXchange (FMIX) toll free at 1-877-336-2627 (1-877-FEMA MAP). Additional information about the NFIP is available on our website at <http://www.fema.gov/business/nfip>.

Sincerely,

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

List of Enclosures:

Letter of Map Revision Determination Document  
Annotated Flood Insurance Rate Map  
Annotated Flood Insurance Study Report

cc: Mr. Kurt Craanen  
Inspection Supervisor  
City of Appleton

Mr. Peter J. Diemer, P.E., C.H.  
Project Engineer  
AECOM

Ms. Michelle Staff, CFM  
State NFIP Coordinator  
Wisconsin Department of Natural Resources



**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 Appleton Outagamie County Wisconsin	EXCAVATION FILL	FLOODWAY HYDRAULIC ANALYSIS NEW TOPOGRAPHIC DATA
	COMMUNITY NO.: 555542		
IDENTIFIER	Neenah Paper LOMR 2017	APPROXIMATE LATITUDE & LONGITUDE: 44.259, -88.400 SOURCE: Other      DATUM: NAD 83	
ANNOTATED MAPPING ENCLOSURES		ANNOTATED STUDY ENCLOSURES	
TYPE: FIRM*	NO.: 55087C0319D      DATE: July 22, 2010	DATE OF EFFECTIVE FLOOD INSURANCE STUDY: February 04, 2009 PROFILE: 31P FLOODWAY DATA TABLE: 10	

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

**FLOODING SOURCE & REVISED REACH**

Fox River - from just upstream of Railroad to just downstream of South Olde Oneida street

**SUMMARY OF REVISIONS**

Flooding Source	Effective Flooding	Revised Flooding	Increases	Decreases
Fox River	Zone AE	Zone AE	NONE	YES
	BFEs*	BFEs	YES	NONE
	Floodway	Floodway	NONE	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. Sacbbit, 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**

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.

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 revision has met our criteria for removing an area from the 1-percent-annual-chance floodplain to reflect the placement of fill. However, we encourage you to require that the lowest adjacent grade and lowest floor (including basement) of any structure placed within the subject area be elevated to or above the Base (1-percent-annual-chance) Flood Elevation.

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>.

A handwritten signature in black ink, appearing to read "Rick Sacibit".

Patrick "Rick" F. Sacibit, 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)**

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:

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 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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Patrick "Rick" F. Sacbbit, 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)**

**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](https://www.floodmaps.fema.gov/fhm/bfe_status/bfe_main.asp)

LOCAL NEWSPAPER

Name: *Post Crescent*

Dates: October 13, 2017 and October 20, 2017

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 (FEET NAVD 88)			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	WIDTH REDUCED FROM PRIOR STUDY (FEET)	REGULATORY	WITHOUT FLOODWAY	WITH FLOODWAY	INCREASE	
FOX RIVER (CONTINUED)										
AC	150,691	735	10,922	2.4	0	701.6	701.6	701.6	0.0	
AD	152,136	598	7,680	3.4	0	701.8	701.8	701.8	0.0	
AE	154,148	497	6,360	4.0	0	702.2	702.2	702.2	0.0	
AF	155,040	750	9,837	2.6	0	702.6	702.6	702.6	0.0	
AG	156,387	649	8,615	3.0	30	702.8	702.8	702.8	0.0	
AH	158,411	600	9,228	2.8	40	703.1	703.1	703.1	0.0	
AI	160,529	644	9,446	2.7	47	703.3	703.3	703.3	0.0	
AJ	162,890	364	3,427	7.5	0	703.4	703.4	703.4	0.0	
AK	163,990	681	9,740	2.6	0	704.6	704.6	704.6	0.0	
AL	166,116	676	10,174	2.5	0	704.9	704.9	704.9	0.0	
AM	167,400	702	8,818	2.9	0	705.0	705.0	705.0	0.0	
AN	168,457	469	5,683	4.5	0	705.1	705.1	705.1	0.0	
AO	168,776	491	4,245	6.0	0	705.5	705.5	705.5	0.0	
AP	169,308	474	5,556	4.6	68	711.2	711.2	711.2	0.0	
AQ	170,140	655	9,519	2.7	46	711.7	711.7	711.7	0.0	
AR	170,687	480	5,730	4.5	0	711.7	711.7	711.7	0.0	
AS	171,156	550	5,663	4.5	0	711.9	711.9	711.9	0.0	
AT	171,841	396	3,589	7.1	0	713.2	713.2	713.2	0.0	
AU	172,458	485	5,173	5.0	41	714.5	714.5	714.5	0.0	
AV	173,503	549	5,001	5.1	0	715.5	715.5	715.5	0.0	
AW	173,834	387	5,054	6.8	0	715.6	715.6	715.6	0.0	
AX	174,450	676	4,307	5.9	0	721.3	721.3	721.3	0.0	
AY	175,192	829	4,800	5.3	0	722.7	722.7	722.7	0.0	
AZ	176,057	377	2,867	8.8	0	727.0	727.0	727.0	0.0	

REVISED DATA →

<sup>1</sup> FEET ABOVE MOUTH AT GREEN BAY

REVISED BY LOMR EFFECTIVE: MAY 9, 2012

TABLE 10

FEDERAL EMERGENCY MANAGEMENT AGENCY

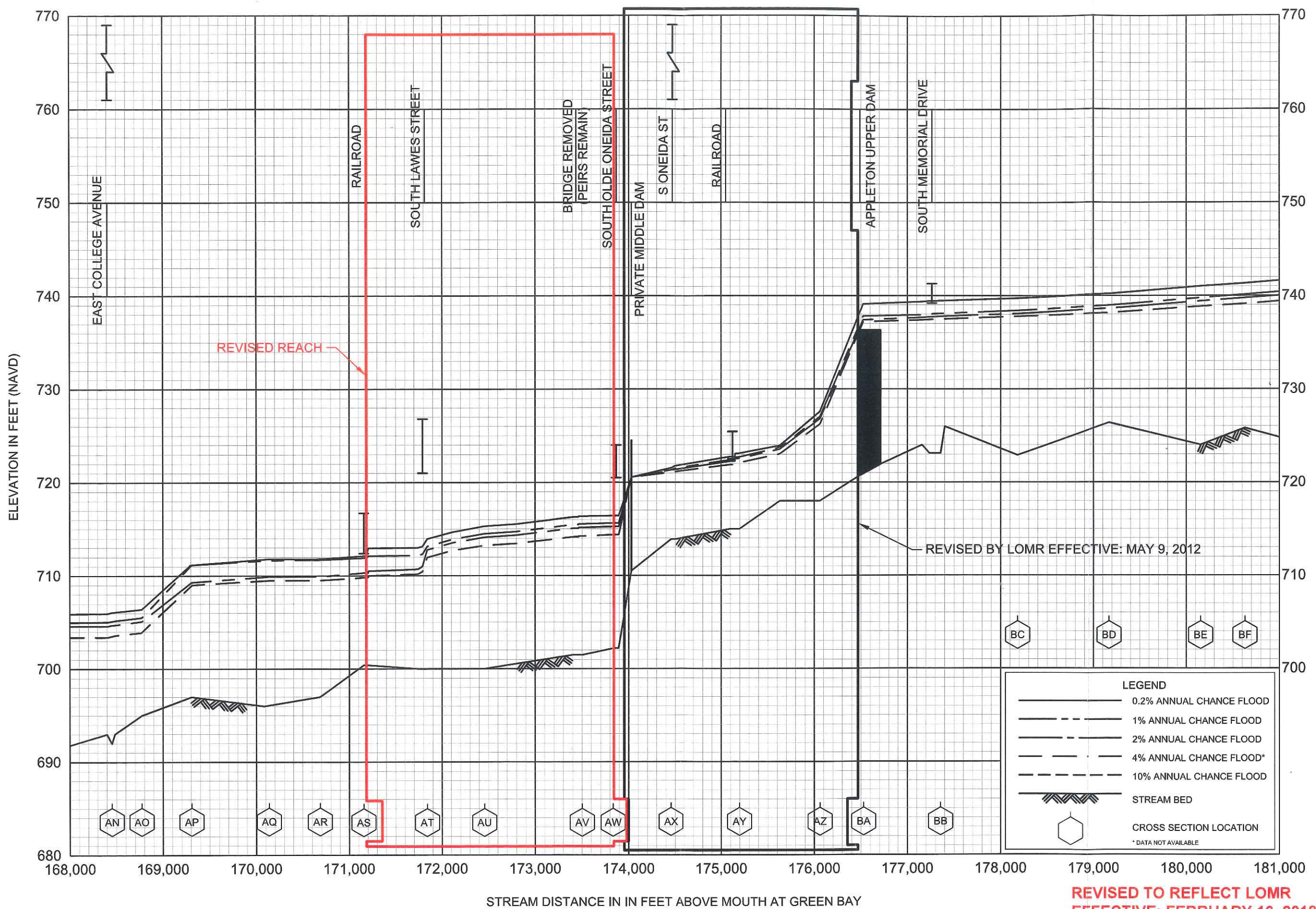
**OUTAGAMIE COUNTY, WI AND INCORPORATED AREAS**

**FLOODWAY DATA**

**FOX RIVER**

REVISED TO REFLECT LOMR EFFECTIVE: FEBRUARY 16, 2018





**REVISED TO REFLECT LOMR  
EFFECTIVE: FEBRUARY 16, 2018**

**FLOOD PROFILES  
FOX RIVER**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**OUTAGAMIE COUNTY, WI**  
AND INCORPORATED AREAS



NOTE: MAP AREA SHOWN ON THIS PANEL IS LOCATED WITHIN TOWNSHIP 21 NORTH, RANGE 17 EAST AND TOWNSHIP 21 NORTH, RANGE 18 EAST.

49°02'00"N

JOINS PANEL 0318

FLOODING EFFECTS FROM FOX RIVER

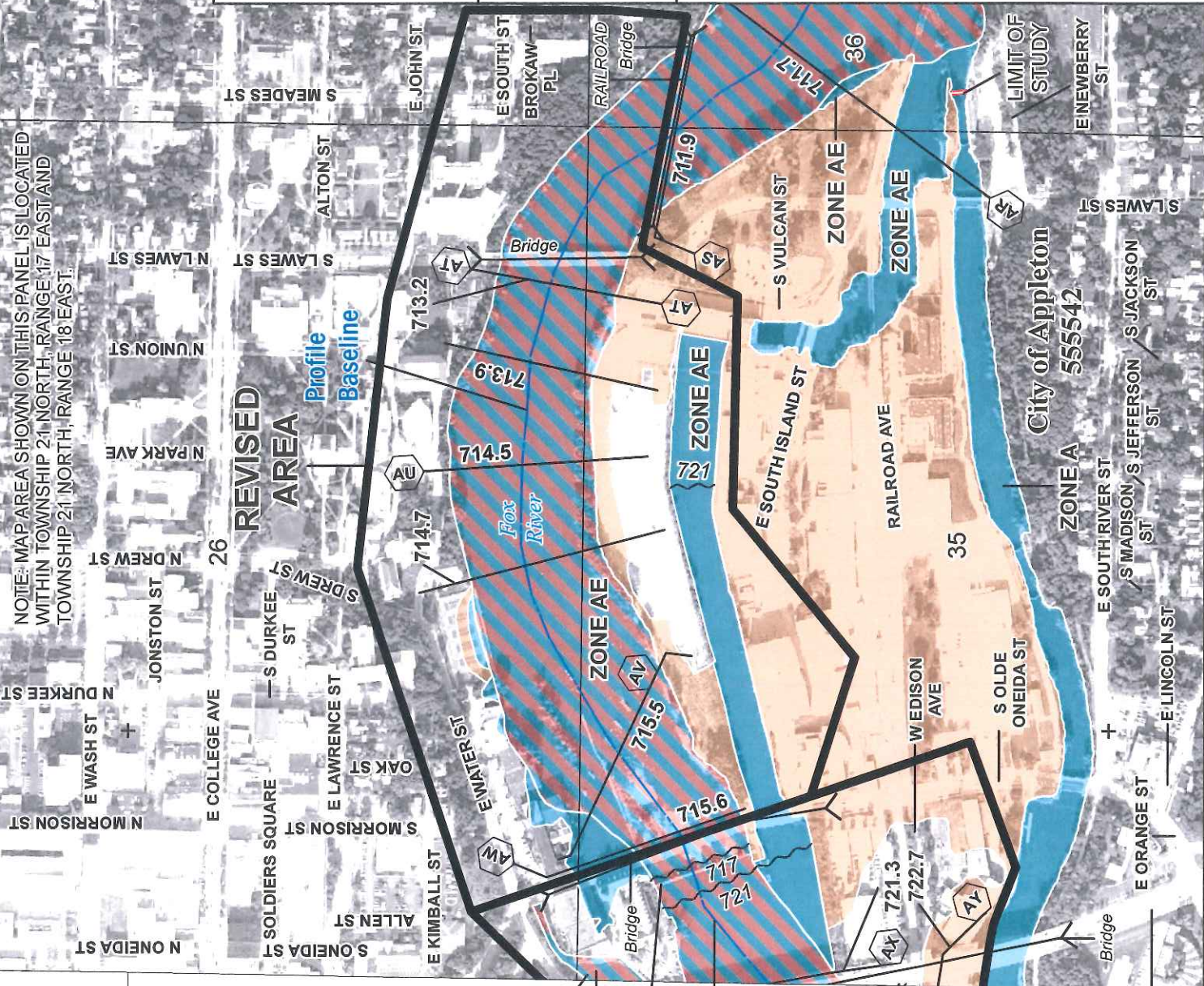
ZONE AE (EL 720)

FLOODING EFFECTS FROM FOX RIVER

ZONE AE AREA REVISED BY LOMR EFFECTIVE MAY 9, 2012

49°01'00"N

S ONEIDA ST



REVISED AREA

Profile  
Baseline

26

25

25

25

25

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25

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25

25



**Without Base Flood Elevation (BFE)**  
Zone A.V, A.B, A.C, A.D, A.E, A.F

**With BFE or Depth** Zone A.E, A.O, A.H, V.E, A.F

**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

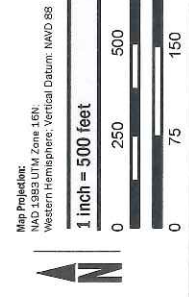
**Future Conditions 1% Annual Chance Flood Hazard** Zone X

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

**SPECIAL FLOOD HAZARD AREAS**

**OTHER AREAS OF FLOOD HAZARD**

SCALE



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

**OUTAGAMIE COUNTY, WISCONSIN**  
and Incorporated Areas

**PANEL 319 OF 500**

Panel Contains:  
COMMUNITY NUMBER 555542  
APPLETON, CITY OF

PANEL SUFFIX 0319 D

**REVISED TO REFLECT LOMR EFFECTIVE: FEBRUARY 16, 2018**

VERSION NUMBER 1.1.1.0  
MAP NUMBER 55087C0319D  
EFFECTIVE DATE JULY 22, 2010