



*"...meeting community needs...enhancing quality of life."*

## MEMORANDUM

---

TO: City Plan Commission

FROM: Jeff Towne, Principal Planner

DATE: July 29, 2013

COMMON COUNCIL MEETING DATE: August 21, 2013

RE: Text Amendments - Article X of Chapter 23 of the Municipal Code, Floodplain Zoning relating to Sec. 23-206(b) Official maps and revisions.

---

In July 2010, the Federal Emergency Management Agency (FEMA) republished the Flood Insurance Rate Map (FIRM) Panels for the City of Appleton. Subsequently, the Flood Insurance Study Report and Flood Insurance Rate Map for the City of Appleton have been revised by a Letter of Map Revision (LOMR), Case No: 12-05-6032P, for map panels 55087C0328D, 55087C0329D, 55087C0336D and 5087C0337D.

### **Definition/Description of a (LOMR)**

A Letter of Map Revision (LOMR) is FEMA's modification to an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both. LOMRs are generally based on the implementation of physical measures that affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing regulatory floodway, the effective Base Flood Elevations (BFEs), or the Special Flood Hazard Area (SFHA). The LOMR officially revises the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM), and sometimes the Flood Insurance Study (FIS) report and, when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report.

As a result, the Appleton Public Works Department has requested Article X of Chapter 23 of the Municipal Code, Floodplain Zoning relating to Sec. 23-206(b) Official maps and revisions be amended to reflect the Letter of Map Revision.

**Text Amendments**  
**Floodplain Official maps and revisions**  
**July 29, 2013**

**TEXT AMENDMENTS:**

The proposed text to be added within the ordinance will be underlined. Deleted text will be shown in ~~strikethrough~~. Staff commentary will be identified in *italics* to provide insight regarding that specific amendment/change.

**Section 23-206 (b) Official maps and revisions.**

(2) Outagamie County Flood Insurance Rate Map (FIRM) panel numbers (55087C0304D, 55087C0308D, 55087C0309D, 55087C0314D, 55087C0316D, 55087C0317D, 55087C0318D, 55087C0319D, 55087C0328D, 55087C0329D, 55087C0330, 55087C0336D, 55087C0337D, 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

(2) ~~(3) Outagamie County Flood Storage District Map Panel 1 of 2 approved by Wisconsin Department of Natural Resources and dated July 22, 2010. 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.~~

~~(3) (4) Outagamie County Flood Storage District Map Panel 1 of 2 approved by Wisconsin Department of Natural Resources and dated July 22, 2010.~~

~~(4) (5) 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.~~

~~(5) (6) Conditional Letter of Map Revision (CLOMR) for Apple Creek North Floodplain Lowering and Channel Re-Alignment approved by Wisconsin Department of Natural Resources on December 17, 2010 and Federal Emergency Management Agency (Case Number 11-05-2095R) on June 21, 2011.~~

*Comments: Letter of Map Revision (LOMR) application prepared by AE Com on behalf of the City of Appleton Department of Public Works. The LOMR application was prepared to complete a project related to a bridge, culvert, channel relocation and storage area which resulted in the Apple Creek North floodplain lowering and channel re-alignment shown on the Flood Insurance Rate Map (FIRM) panels referenced in the amendment language. The Federal Emergency Management Agency (FEMA) approved the LOMR in April, 2013. The LOMR revises the panels showing Apple Creek from just upstream of County Highway N to approximately 550 feet upstream of North French Road.*

**RECOMMENDATION PENDING INFORMAL PUBLIC HEARING TESTIMONY:**

The proposed text amendments to Article X of Chapter 23 of the Municipal Code, Floodplain Zoning relating to Sec. 23-206(b) Official maps and revisions as identified in this memorandum, **BE APPROVED**.

**LEGEND**

- SPECIAL FLOOD HAZARD AREAS (SFHA) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD**  
 This area is the area of the community that is at a 1% chance of being opened or exceeded in any given year. This Special Flood Hazard Area is shown on the Flood Insurance Rate Map (FIRM) in the following categories: Zone A, Zone AE, Zone AH, Zone AO, Zone AR, Zone AV, Zone VE, Zone V, Zone X, Zone Y, and Zone XY. The Base Flood Elevation is the water surface elevation of the 1% Annual Chance Flood.
- ZONE A**  
No Base Flood Elevation determination.
  - ZONE AE**  
Base Flood Elevation determination.
  - ZONE AH**  
Flood depths of 1 to 2 feet (usually areas of piling); Base Flood Elevation determination.
  - ZONE AO**  
Flood depths of 3 to 5 feet (usually sheet flow on sloping terrain); average depth determination. For areas of special concern, water surface elevation determination.
  - ZONE AR**  
Special Flood Hazard Areas formerly protected from the 1% Annual Chance Flood by a levee system. The Special Flood Hazard Area is shown on the Flood Insurance Rate Map (FIRM) in Zone AE. All structures in the former flood control system is being removed to provide protection from the 1% Annual Chance or greater flood.
  - ZONE AV**  
Coastal flood zone with velocity hazard (wave action); no Base Flood Elevation determination.
  - ZONE VE**  
Coastal flood zone with velocity hazard (wave action); no Base Flood Elevation determination.
- FLOODWAY AREAS IN ZONE AE**  
 The floodway is the area of the channel plus the adjacent flood plain which must be kept free of encroachment to maintain the annual chance flood flow. The annual chance flood flow can be carried without substantial increases in flood heights.
- ZONE X**  
Other Flood Areas
  - ZONE Y**  
Other Flood Areas
  - ZONE XY**  
Other Flood Areas
- OTHER FLOOD AREAS**  
 Areas of 0.2% Annual Chance Flood: areas of 0.2% Annual Chance Flood with average depths of less than 2 feet or with drainage areas less than 1 square mile. Areas of 0.2% Annual Chance Flood with average depths of 2 feet or more.
- OTHER AREAS**  
 Areas in which flood hazards are determined, but potential.
- COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
 Areas determined to be suitable for 0.2% Annual Chance Flood heights.
- OTHERWISE PROTECTED AREAS (OPA)**  
 Areas determined to be suitable for 0.2% Annual Chance Flood heights.
- CBS AREAS AND OPAs ARE NORMALLY LOCATED WITHIN OR ADJACENT TO SPECIAL FLOOD HAZARD AREAS.**  
 1% Annual Chance Floodway Boundary  
 0.2% Annual Chance Floodway Boundary  
 Floodway Boundary  
 Zone D Boundary  
 CBS and OPA Boundary  
 Zone A and AE Boundary  
 Zone X and Y Boundary  
 Zone V and VE Boundary  
 Zone AE Boundary  
 Floodway Boundary  
 Zone A and AE Boundary  
 Zone X and Y Boundary  
 Zone V and VE Boundary  
 Zone AE Boundary

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**OUTAGAMIE COUNTY,**  
**WISCONSIN**  
**AND INCORPORATED AREAS**

PANEL 328 OF 500  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

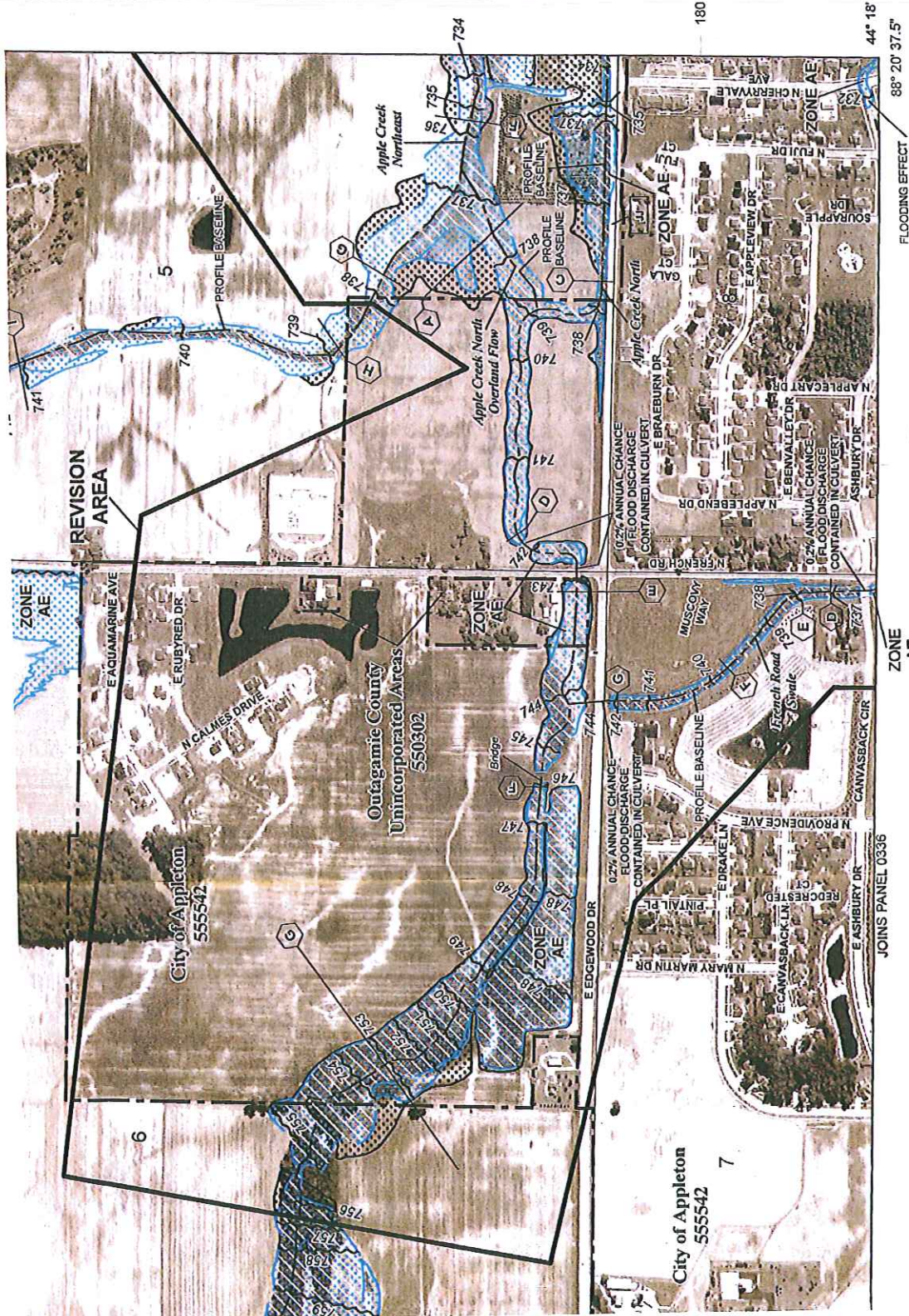
COMMUNITY: APPLETON CITY OF  
 COUNTY: OUTAGAMIE COUNTY  
 PANEL: 55542  
 SHEET: 0328

**REVISION TO REFLECT LOMR EFFECTIVE: August 23, 2013**

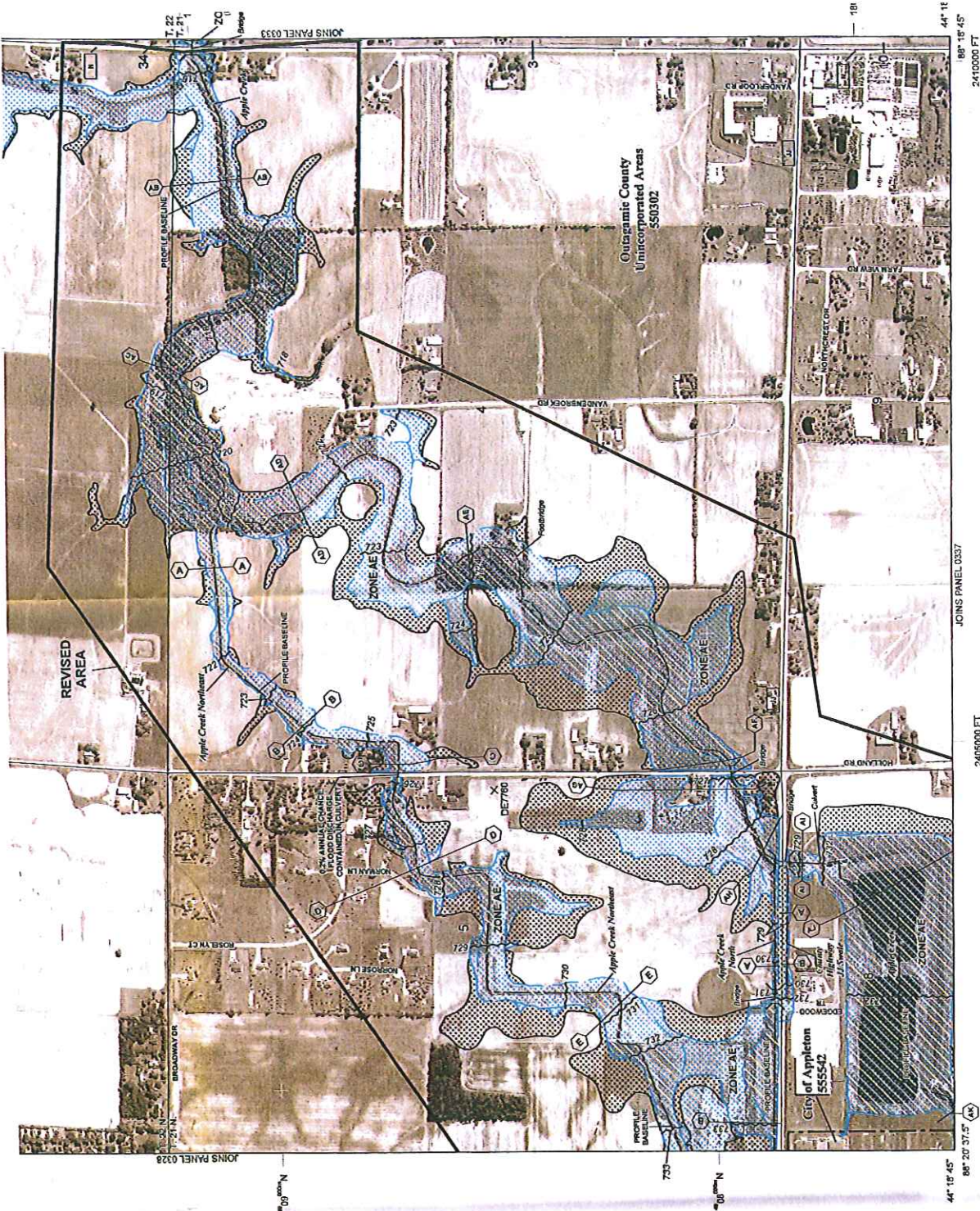
Notes to Users: The Map Number shown below should be used when posting map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
 55087C0328D  
**EFFECTIVE DATE**  
 JULY 22, 2010

Federal Emergency Management Agency



Revisions to Flood Insurance Rate Map (FIRM) Panels  
 55087C0328D, 55087C0329D, 55087C0336D, 55087C0337D



WITH THIS PANEL SURVIVING ON THIS PANEL IS LOCATED  
 WITHIN TOWNSHIP 22 NORTH, RANGE 18 EAST AND  
 TOWNSHIP 21 NORTH, RANGE 18 EAST.

JOINS PANEL 0327

2405000 FT

2410000 FT

44° 10' 45"

88° 15' 45"

44° 11'

### LEGEND

**SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO FLOOD INSURANCE PREMIUM DISCOUNTS**  
 The 1% annual chance flood (100-year flood) also known as the base flood is the minimum flood depth to which structures are required to be elevated. The Special Flood Hazard Area is the area subject to the 1% annual chance flood.

**NO FIRM FLOOD ELEVATIONS DETERMINED:**  
 Zone AE  
 Zone AO  
 Zone A  
 Zone X  
 Zone D  
 Zone VE

**FLOODWAY AREAS IN ZONE AE**  
 The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights or flood velocities.

**OTHER FLOOD AREAS**  
 Zone X  
 Zone AO  
 Zone A  
 Zone D  
 Zone VE

**OTHER AREAS**  
 Areas determined to be outside the 0.2% annual chance floodplain.  
 Areas in which flood hazards are undetermined, but possible.

**COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS**  
 Other areas and other features normally located within or adjacent to flood hazard areas.

**OTHERWISE PROTECTED AREAS (OPAs)**  
 0.2% Annual Chance Floodplain Boundary  
 1% Annual Chance Floodplain Boundary  
 Floodway boundary  
 Zone D boundary  
 CBRS and OPA boundary

**BOUNDARY DEFINITIONS**  
 Boundaries between Special Flood Hazard Areas, Zones, and Floodways showing Special Flood Hazard Areas of different Base Flood Elevations, Flood depths, or flood velocities.

**NFIP** **PANEL 0329D**

**FIRM**  
**FLOOD INSURANCE RATE MAP**  
**OUTAGAMIE COUNTY,**  
**WISCONSIN**  
**AND INCORPORATED AREAS**

PANEL 329 OF 500  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

COMMUNITY: \_\_\_\_\_ PANEL: 0329  
 APPLICATION CITY OF: Appleton COUNTY: Outagamie COUNTY: 0329

**REVISION TO REFLECT LOMR EFFECTIVE: August 23, 2013**

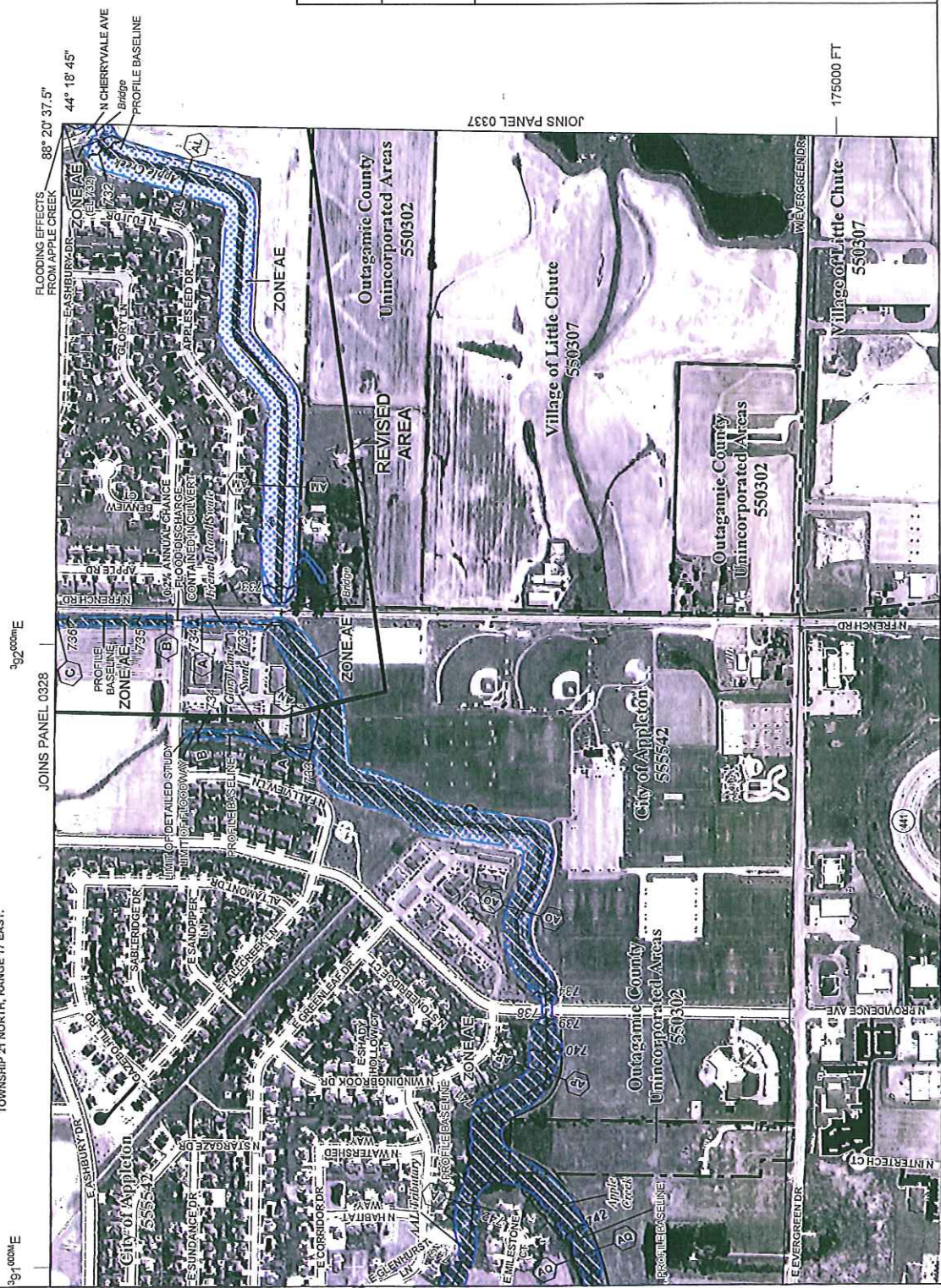
Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER 55087C0329D  
 EFFECTIVE DATE JULY 22, 2010

Federal Emergency Management Agency

Revisions to Flood Insurance Rate Map (FIRM) Panels  
 55087C0328D, 55087C0329D, 55087C0336D, 55087C0337D

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



88° 20' 37.5"  
 44° 18' 45"  
 FLOODING EFFECTS FROM APPLE CREEK  
 N CHERRYVALE AVE  
 Bridge  
 PROFILE BASELINE

JOINS PANEL 0328

JOINS PANEL 0337

175000 FT

**NFIP** NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0338D

**FIRM**  
 FLOOD INSURANCE RATE MAP  
 OUTAGAMIE COUNTY,  
 WISCONSIN  
 AND INCORPORATED AREAS

PANEL 338 OF 500  
 (SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CREATED: 08/23/2013  
 COMMUNITY: 55087C0338D  
 FIRM NUMBER: 55087C0338D  
 EFFECTIVE DATE: JULY 22, 2010

**REVISION TO REFLECT LOMR EFFECTIVE: August 23, 2013**

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used when making insurance applications for the subject community.

MAP NUMBER: 55087C0338D  
 EFFECTIVE DATE: JULY 22, 2010

Federal Emergency Management Agency

Legend:  
 1% annual chance (100-year) Floodplain  
 100-year Floodway  
 0.2% annual chance (500-year) Floodplain

MAP SCALE 1" = 600'



Revisions to Flood Insurance Rate Map (FIRM) Panels  
 55087C0328D, 55087C0329D, 55087C0336D, 55087C0337D

**Legend**

- 1% annual chance (100-Year) Floodplain
- 1% annual chance (100-Year) Floodway
- 0.2% annual chance (500-Year) Floodplain

MAP SCALE 1" = 500'

250 0 500 FEET  
150 0 150 METERS

**NFIP** NATIONAL FLOOD INSURANCE PROGRAM

**FIRM**  
FLOOD INSURANCE RATE MAP  
OUTAGAMIE COUNTY,  
WISCONSIN  
AND INCORPORATED AREAS

PANEL 337 OF 500  
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

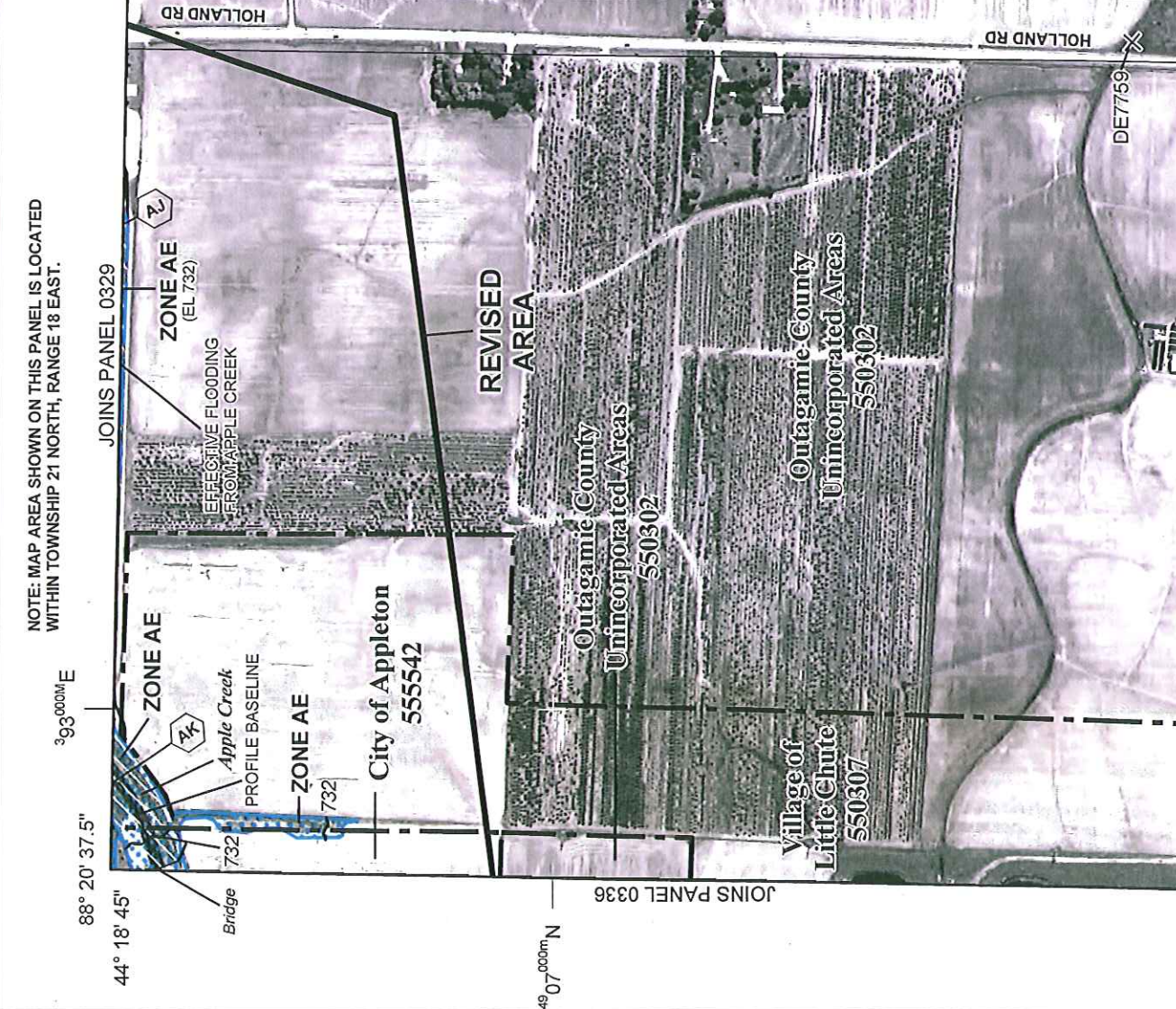
COMMUNITY	NUMBER	PANEL	SUFFIX
APPLETON, CITY OF	555542	0337	D
LITTLE CHUTE, VILLAGE OF	550307	0337	D
OUTAGAMIE COUNTY	550302	0337	D

**REVISION TO REFLECT LOMR EFFECTIVE: August 23, 2013**

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

**MAP NUMBER**  
55087C0337D  
**EFFECTIVE DATE**  
JULY 22, 2010

Federal Emergency Management Agency



Revisions to Flood Insurance Rate Map (FIRM) Panels  
55087C0328D, 55087C0329D, 55087C0336D, 55087C0337D