



City Hall, 215 Sycamore St.  
Muscatine, IA 52761-3840  
(563) 262-4141  
Fax (563) 262-4142

---

**PLANNING, ZONING AND BUILDING SAFETY**

**Public Health,  
Housing Inspections &  
Inspection Services**

**MEMORANDUM**

**To:** Mayor and City Council Members  
**Cc:** Gregg Mandsager, City Administrator  
**From:** Andrew Fangman, City Planner  
**Date:** May 2, 2011  
**Re:** Floodplain Management Regulations Revision  
Resolution Setting Public Hearing

---

**INTRODUCTION:** The Federal Emergency Management Agency (FEMA) has completed a Flood Insurance Study and Flood Insurance Rate Map for Muscatine County, including the City of Muscatine which becomes effective on July 18, 2011. In order for City of Muscatine residents and businesses to be able to continue to participate in the National Flood Insurance Program, the City of Muscatine must by July 18th adopt legally enforceable floodplain management regulations that are compliant with Title 44 Code of Federal Regulations 60.3.

**BACKGROUND:** The City of Muscatine's current floodplain management regulations can be found in Chapters 4 and 5 of Title 10 of the City Code of Muscatine. The proposed ordinance will replace these chapters with a revised version that adopts the new floodplain rate insurance maps, and makes other minor changes to bring them up to date with Title 44 Code of Federal Regulations 60.3. The Iowa Department of Natural Resources has reviewed the proposed ordinance and has determined that when it is adopted the City of Muscatine will be compliant with Title 44 Code of Federal Regulations 60.3 and that residents will continue to be eligible to participate in the National Flood Insurance Program.

Below is a list of the most significant changes being proposed to the floodplain regulations. The most significant is adoption of new floodplain maps, these new maps are attached. All other changes are primarily designed to make it easier to demonstrate how the City of Muscatine floodplain management regulations comply with Title 44 Code of Federal Regulations 60.3 and not represent a significant policy change.

**"I remember Muscatine for its sunsets. I have never seen any  
on either side of the ocean that equaled them" — Mark Twain**



## Significant Changes Between Current and Proposed Floodplain Management Regulations

1. Adopt the revised Flood Insurance Rate Map released by FEMA.
2. Allow for industrial-commercial uses such as loading areas, parking areas, airport landing strips as an allowed use in the Floodplain District, as they are currently an allowed use in the more restrictive Floodway District.
3. In situations, involving new and substantially improved structures, where floodproofing a portion of structure is an allowed alternative to elevating one foot above the base flood elevation, floodproofing is now defined in greater detail, a requirement that a registered engineer certify that the structure meets the floodproofing requirements added, and the City is now required to maintain a record to what elevation the structure has been floodproofed.
4. For areas south of Hershey Avenue the most current study is now used for defining the base flood elevation
5. Consolidated three separate definitions of “substantial improvement” into one.
6. Added sections that spell out how the floodplain regulations are administered.
7. Added references to the portion of the Code of Iowa that grants the necessary regulatory authority to the City to implement these regulations.
8. Added disclaimers of liability stating that compliance with the floodplain regulations does not guarantee protection from possible flood damage.
9. Added statements clarifying that nothing in the floodplain regulations is intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. Where greater restrictions are imposed, the provisions of the floodplain regulations prevail.
10. Added a statement clarifying that no use shall affect the capacity or conveyance of the channel or floodway of any tributary to the main stream, drainage ditch or any other drainage facility or system.

**RECOMMENDATION/RATIONALE:** Please place the attached resolution on the agenda for City Council consideration during the May 19, 2011 meeting.



The Federal Emergency Management Agency (FEMA) has completed a Flood Insurance Study and Flood Insurance Rate Map for Muscatine County, including the City of Muscatine which become effective on July 18, 2011. In order for City of Muscatine residents and businesses to be able to continue to participate in the National Flood Insurance Program, the City of Muscatine must by July 18<sup>th</sup> adopt legally enforceable floodplain management regulations that are compliant with Title 44 Code of Federal Regulations 60.3.

The City of Muscatine's current floodplain management regulations can be found in Chapters 4 and 5 of Title 10 of the City Code of Muscatine. The proposed ordinance will replace these chapters with a revised version that adopts the new floodplain rate insurance maps, and makes other minor changes to bring them up to date with Title 44 Code of Federal Regulations 60.3. The Iowa Department of Natural Resources has reviewed the proposed ordinance and has determined that when it is adopted the City of Muscatine will be compliant with Title 44 Code of Federal Regulations 60.3 and that residents will continue to be eligible to participate in the National Flood Insurance Program.

Below is a list of the most significant changes being proposed to the floodplain regulations. The most significant is adoption of new floodplain maps, these new maps are attached. All other changes are primarily designed to make it easier to demonstrate how the City of Muscatine floodplain management regulations comply with Title 44 Code of Federal Regulations 60.3 and not represent a significant policy change.

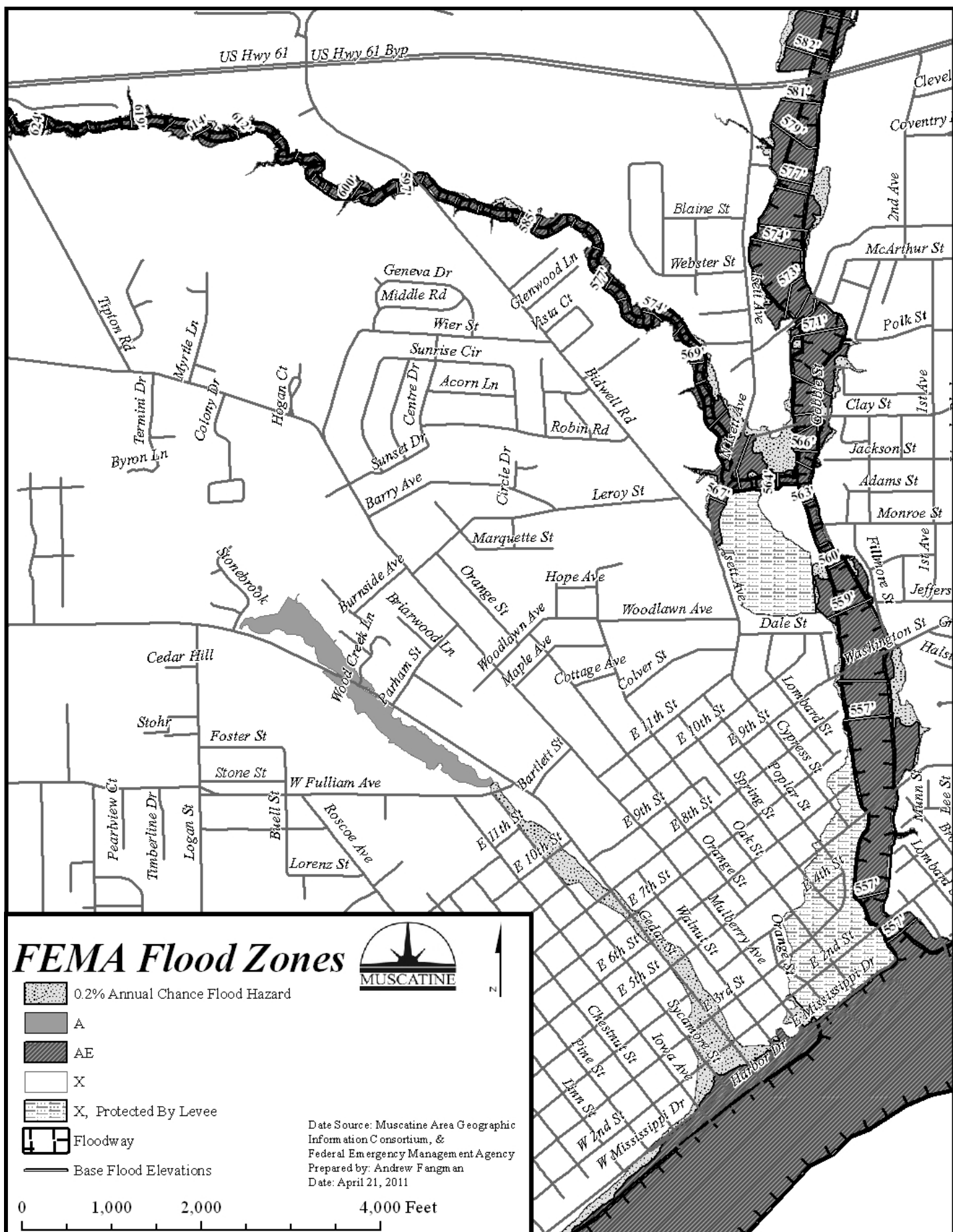
#### ***Significant Changes Between Current and Proposed Floodplain Management Regulations***

1. Adopt the revised Flood Insurance Rate Map released by FEMA.
2. Allow for industrial-commercial uses such as loading areas, parking areas, airport landing strips as an allowed use in the Floodplain District, as they are currently an allowed use in the more restrictive Floodway District.
3. In situations, involving new and substantially improved structures, where floodproofing a portion of structure is an allowed alternative to elevating one foot above the base flood elevation, floodproofing is now defined in greater detail, a requirement that a registered engineer certify that the structure meets the floodproofing requirements added, and the City is now required to maintain a record to what elevation the structure has been floodproofed.
4. For areas south of Hershey Avenue the most current study is now used for defining the base flood elevation
5. Consolidated three separate definitions of "substantial improvement" into one.
6. Added sections that spell out how the floodplain regulations are administered.
7. Added references to the portion of the Code of Iowa that grants the necessary regulatory authority to the City to implement these regulations.
8. Added disclaimers of liability stating that compliance with the floodplain regulations does not guarantee protection from possible flood damage.
9. Added statements clarifying that nothing in the floodplain regulations is intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions. Where greater restrictions are imposed, the provisions of the floodplain regulations prevail.
10. Added a statement clarifying that no use shall affect the capacity or conveyance of the channel or floodway of any tributary to the main stream, drainage ditch or any other drainage facility or system.











# FEMA Flood Zones



0.2% Annual Chance Flood Hazard

A

AE

X

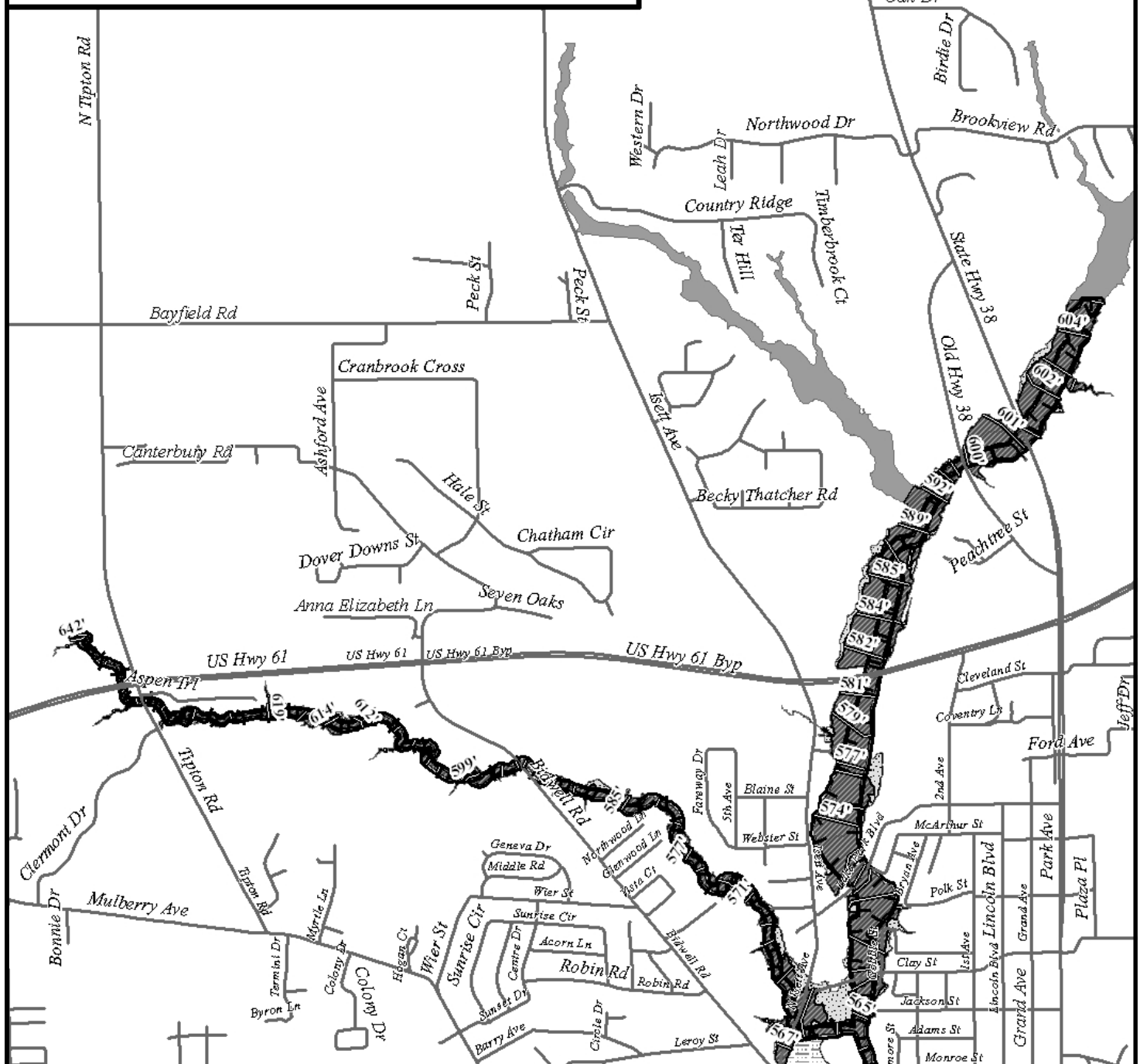
X, Protected By Levee

Floodway

Base Flood Elevations

Date Source: Muscatine Area Geographic Information Consortium, &  
Federal Emergency Management Agency  
Prepared by: Andrew Fangman  
Date: April 21, 2011

0 1,500 3,000 6,000 Feet





# FEMA Flood Zones



0.2% Annual Chance Flood Hazard

A

AE

X

X, Protected By Levee

Floodway

Base Flood Elevations

Date Source: Muscatine Area Geographic Information Consortium, & Federal Emergency Management Agency  
Prepared by: Andrew Fangman  
Date: April 21, 2011

0 1,000 2,000 4,000 Feet





# FEMA Flood Zones



0.2% Annual Chance Flood Hazard

A

AE

X

X, Protected By Levee

Floodway

Base Flood Elevations

Date Source: Muscatine Area Geographic  
Information Consortium, &  
Federal Emergency Management Agency  
Prepared by: Andrew Fangman  
Date: April 21, 2011

0 1,875 3,750 7,500 Feet

