

## CHAPTER SEVEN - FLOOD DAMAGE PREVENTION

### I. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVE

#### A. Statutory Authorization

The Legislature of the State of North Dakota has in North Dakota Century Code, Chapter 11-33 delegated the responsibility to the County Commission to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

Therefore, the Board of County Commissions of Mercer County, North Dakota does ordain as follows:

#### B. Findings of Fact

1. The flood hazard areas of Mercer County are subject to periodic inundation which can endanger life, result in loss of property, create health and safety hazards, disrupt commerce and governmental services, cause extraordinary public expenditures for flood protection and relief, and impair the tax base, all of which adversely affect the public health, safety and general welfare.
2. Flood losses caused by the cumulative effect of obstructions in the special flood hazard areas cause increases in flood heights and velocities. Inadequately flood proofed, elevated or otherwise unprotected structures also contribute to the flood loss.

#### C. Methods of Reducing Flood Losses

In order to limit and prevent flood damage in Mercer County, this ordinance has provisions for restricting, prohibiting, and guiding development activities that can be subject to flood damage.

#### D. Disclaimer

This ordinance shall not create liability on the part of Mercer County, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damage that results from reliance on this ordinance or any administrative decision lawfully made hereunder.

E. Definitions

**AREA OF SPECIAL FLOOD HAZARD** - The land in the floodplain within a community or jurisdiction subject to a one percent or greater chance of flooding in any given year.

**BASE FLOOD** - The flood having a one percent chance of being equaled or exceeded in any given year.

**DEVELOPMENT** - Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

**FLOOD OR FLOODING** - A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of waters, and/or
2. The unusual and rapid accumulation or runoff of surface waters from any source.

**FLOOD INSURANCE RATE MAP (FIRM)** - The official map issued by the Federal Emergency Management Agency where areas of special flood hazard are designated as Zone A.

**LOWEST FLOOR** - The lowest floor of a structure including the basement.

**MANUFACTURED HOME** - A structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers unless placed on a site for 180 consecutive days or more.

**MANUFACTURED HOME PARK OR SUBDIVISION** - A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**NEW CONSTRUCTION** - Structures for which the "start of construction" commenced on or after the effective date of this Ordinance.

**STRUCTURE** - A walled and roofed building, including mobile homes and gas or liquid storage tanks above ground.

**SUBSTANTIAL IMPROVEMENT** - Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

1. Before the improvement or repair is started; or
2. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

1. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

#### F. Lands to Which This Ordinance Applies

This ordinance shall apply to all areas of special flood hazard within the jurisdiction of Mercer County as identified by the Federal Emergency Management Agency in its latest Flood Insurance Rate Map (FIRM), dated April 7, 1981 and all subsequent revisions thereto. This map is adopted by reference and declared to be a part of this ordinance. It is on file at the Mercer County Auditor's Office.

## II. PERMIT PROCEDURES

### A. Permits

Before any construction or development begins within an area of special flood hazard, a permit shall be obtained from the Mercer County Floodplain Administrator, hereinafter referred to as the responsible person. The permit shall include:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all proposed structures;
2. Elevation in relation to mean sea level to which any structure or portion of a structure will be flood proofed;

3. Certification by a registered professional engineer or architect that the flood proofing methods for any non-residential structure meet the flood proofing criteria in Section IIIIG(2)(c); and
4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

#### B. Use of Other Base Flood Data

When base flood elevation data has not been provided in accordance with Section I (F), LANDS TO WHICH THIS ORDINANCE APPLIES, the responsible person shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer this section and Section III, GENERAL STANDARDS.

#### C. Permit Review

All permit applications shall be reviewed (using the best available base flood elevation data from any federal, state, or local source) to: a) assure sites are reasonably safe from flooding; b) determine that all necessary permits have been obtained from those federal, state, or local agencies from which prior approval is required; and c) to determine if the proposed development adversely affects the flood carrying capacity of a flood-prone area. For the purposes of this ordinance, "adversely affects" means damage to adjacent properties because of rises in flood stages attributed to physical changes of the channel and the adjacent overbank areas.

1. If it is determined that there is no adverse effect and the development is not a building, then the permit shall be granted without further considerations.
2. If it is determined that there is an adverse effect, then technical justification (i.e., a registered professional engineer) for the proposed development shall be required.
3. If the proposed development is a building or structure, then the following provisions of this ordinance shall apply.

### III. GENERAL STANDARDS

#### A. General Standards

In all areas of special flood hazards, the following standards are required:

## B. Anchoring

1. All new construction and substantial improvements (including additions) shall be anchored to prevent flotation, collapse or lateral movement of the structure.
2. All manufactured homes must be elevated and anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.

## C. Construction Materials and Methods

1. All new construction and substantial improvements shall be constructed using methods and with materials and utility equipment that resist or minimize flood damage.
2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
3. All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities entered or accumulating within the components during conditions of flooding.

## D. Utilities

1. All new and replacement water supply systems and sanitary sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate discharge from the systems into flood waters.
3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

## E. Subdivision Proposals

1. All subdivision proposals shall be consistent with the need to minimize flood damage.
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.

3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
4. Base flood elevation data shall be provided for subdivision proposals and other proposed development.
5. Any portion of a subdivision located within a 100-year FEMA designated flood area shall be non-buildable area and set aside as park or public use area.

#### F. Encroachments

Encroachments, including fill, new construction, substantial improvements and other development shall be prohibited in any floodway unless a registered professional engineer or architect certifies that the encroachments will not result in any increase in flood levels during the occurrence of the base flood discharge.

#### G. Specific Standards

Where base flood elevation data is available, the following provisions are required:

##### 1. Residential Construction

- a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to one foot (1') or more above the base flood elevation.
- b. Manufactured homes shall be placed so that the lowest floor is elevated on fill to one foot (1") or more above the base flood elevation.

##### 2. Non-residential Construction

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated to one foot (1') or more above the base flood elevation or, together with attendant utility and sanitary facilities shall:

- a. Be flood proofed so that all area of the structure below one foot (1') above the base flood elevation is watertight with walls substantially impermeable to the passage of water. A registered professional engineer or architect shall develop, and/or review, and/or approve, structural design, specifications, and plans for the construction, and shall certify that the design methods of construction are in accordance with accepted standards of practice.

- b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- c. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certification shall be provided to the responsible person as set forth in Section IV (A).

#### **IV. ADMINISTRATIVE REQUIREMENTS**

##### **A. Information to be Obtained and Maintained**

The responsible person shall:

1. Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
2. For all new or substantially improved flood proofed structures:
  - a. Obtain and record the actual elevation (in relation to mean sea level) to which the structure has been flood proofed.
  - b. Maintain the flood proofing certifications required in Section IIIG (2) (c).
3. Maintain for public inspection all records pertaining to the provisions of this ordinance.

##### **B. Alteration of Watercourses**

The responsible person shall:

1. Notify nearby communities, water resource districts and the North Dakota State Engineer, as necessary, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency; and
2. Require that maintenance is provided within the altered or relocated portion of the watercourse so that the flood carrying capacity is not diminished.