



# **ILLINOIS SAMPLE FLOOD DAMAGE PREVENTION ORDINANCE**

## **DOWNSTATE COMMUNITIES w/ MAPPED FLOODWAYS COUNTY-WIDE FIRMs MODEL 44 CFR 60.3(d)**

**Illinois Department of Natural Resources  
Office of Water Resources  
Statewide Programs**

**Revised January 14, 2025**

# **SAMPLE FLOOD DAMAGE PREVENTION ORDINANCE – DOWNSTATE IL**

## **DISCLAIMER**

### **Municipalities with Mapped Floodways 60.3(d)**

This sample ordinance has been prepared to help communities meet the requirements of:

- the National Flood Insurance Program (NFIP), more specifically, this ordinance contains all the provisions necessary to comply with the requirements of section 44 CFR 60.3(d) of the NFIP
- the 615 ILCS 5/18(g) Rivers, Lakes and Streams Act, including state floodway rules and dam safety

The State of Illinois and the Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR) or Federal Emergency Management Agency (FEMA) does not require the use of this sample floodplain ordinance. If a locally developed ordinance is used, it must be reviewed by the IDNR/OWR and FEMA for compliance with the minimum NFIP.

Prior to the enactment of any ordinance, a community should seek the advice of its legal counsel regarding its content and enactment. If the legal counsel is not involved in the actual preparation of the ordinance, legal counsel should review and comment upon the proposed ordinance prior to its enactment.

#### **HOW TO USE THIS SAMPLE ORDINANCE:**

1. Decide if your community will adopt a single purpose ordinance that contains all the necessary provisions, such as this ordinance, or if wish to amend another other existing code, such as a zoning code, development code, or building code.
2. Review this sample ordinance. Red text indicates edits are required including Inserting text, such as the name of the community, or places where a choice is required that will add higher restrictions or standards. IDNR/OWR urges communities to consider the unique flood conditions present in your community and consider adopting these higher regulatory standards to decrease the impact of flooding in your community. If your community is experiencing flooding that extends beyond the mapped floodplain, please consider adopting a higher flood protection elevation of two or three feet. Mapping of localized flooding may also be included to prevent flood damages outside of the mapped floodplains.
3. Submit a draft to IDNR/OWR for review to verify compliance with the NFIP.
4. State will return a reviewed/corrected draft ordinance for community adoption.
- 5.. Upon adoption submit a pdf copy of the signed ordinance to IDNR/OWR. IDNR/OWR will document receipt and forward a copy to FEMA.

If you have questions, contact Erin Conley at [erin.c.conley@illinois.gov](mailto:erin.c.conley@illinois.gov) or by phone at 217.782.4428

OPTIONAL COVER SHEET

**COUNTY OF** \_\_\_\_ (Add Community Name) \_\_\_\_\_

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ORDINANCE NO. \_\_\_\_\_

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AN ORDINANCE REGULATING DEVELOPMENT IN FLOODPLAIN AREAS

ADOPTED BY THE

**(COUNTY BOARD)**

OF THE

**(COUNTY OF \_\_\_\_\_)**

THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_.

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PUBLISHED IN PAMPHLET FORM BY THE AUTHORITY OF THE **COUNTY**  
**BOARD OF \_\_\_\_\_ ILLINOIS,**

THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_.

**Signature Line for County Clerk**

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OPTIONAL PAGE

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE REGULATING DEVELOPMENT IN FLOODPLAIN AREAS**

**WHEREAS**, the County of \_\_\_\_\_, pursuant to the police powers granted to by the County Statutory Authority in 55 ILCS 5/5-1041 and 5/5-1063, wishes to establish eligibility in the National Flood Insurance Program and in order to do so must meet the requirements of 60.3 (a) of the National Flood Insurance Program Regulations; and

**WHEREAS**, (County Board ) finds it to be in the best interest of the County to establish rules and regulations for floodplain management throughout the County and superseding any less restrictive municipal rules and regulations therein; and,

**WHEREAS**, the County Board of the County of \_\_\_\_\_ have previously adopted Ordinances No. \*\*\*\*\*, and \*\*\*\*\*.

**NOW, THEREFORE, BE IT ORDAINED** by the County Board of the County of \_\_\_\_\_, Illinois, the following measures shall be required within the corporate limits of the (County):

ORDINANCE NO. \_\_\_\_\_

AN ORDINANCE REGULATING DEVELOPMENT IN FLOODPLAIN AREAS

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## **Section 1. Purpose.**

This ordinance is enacted pursuant to the police powers granted to the (County) by the County Statutory Authority in 55 ILCS 5/5-1041 and 5/5-1063. This Ordinance is adopted in order to accomplish the following purposes:

- A. To meet the requirements of 615 ILCS 5/18(g) Rivers, Lakes and Streams Act;
- B. To prevent unwise developments from increasing flood or drainage hazards to others;
- C. To protect new buildings and major improvements to buildings from flood damage;
- D. To protect human life and health from the hazards of flooding;
- E. To promote and protect the public health, safety, and general welfare of the citizens from the hazards of flooding;
- F. To lessen the burden on the taxpayer for flood control, repairs to public facilities and utilities, and flood rescue and relief operations;
- G. To maintain property values and a stable tax base by minimizing the potential for creating blight areas;
- H. To comply with the rules and regulations of the National Flood Insurance Program codified as 44 CFR 59-79, as amended;
- I. To make federally subsidized flood insurance available by fulfilling the requirements of the National Flood Insurance Program, and
- J. To preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits, and enhance community and economic development.

## **Section 2. Definitions.**

Unless specifically defines below, all words used in this ordinance shall have their common meanings. The word “shall” mean the action is mandatory.

For the purposes of this ordinance, the following definitions are adopted:

**Accessory Structure** A non-habitable building, used only for parking of vehicles or storage, that is on the same parcel of property as the principal building and which is incidental to the use of the principal building.

**Agricultural Structure** A walled and roofed structure used exclusively for agricultural purposes or uses in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock, including aquatic organisms. Structures that house tools or equipment used in connection with these purposes or uses are also considered to have agricultural purposes or uses.

**Base Flood** The flood having a one percent (1%) probability of being equaled or exceeded in any given year. The base flood is often referred to as the 100-year flood. The base flood elevation at any location is as defined in Section 3 of this ordinance.

**Base Flood Elevation (BFE)** The height in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified) of the crest of the base flood.

**Basement** Any portion of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides.

**Building** A walled and roofed structure, including gas or liquid storage tank, that is principally above ground including manufactured homes and prefabricated buildings. The term also includes recreational vehicles and travel trailers installed on a site for more than one hundred eighty (180) days per year.

**Conditional Letter of Map Revision (CLOMR)** A letter providing FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing Floodway, the effective BFEs, or the SFHA.

**Critical Facility** Any facility which is critical to the health and welfare of the population and, if flooded, would create an added dimension to the disaster. Damage to these critical facilities can impact the delivery of vital services, can cause greater damage to other sectors of the community, or can put special populations at risk.

**Dam** All obstructions, wall embankments or barriers, together with their abutments and appurtenant works, if any, constructed for the purpose of storing or diverting water or creating a pool. Dams may also include weirs, restrictive culverts, or impoundment Structures. Underground water storage tanks are not included.

**Development** Development means 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 or storage of equipment or materials This includes, but is not limited to:

1. demolition, construction, reconstruction, repair, placement of a building, or any structural alteration to a building;
2. substantial improvement of an existing building;
3. installation of a manufactured home on a site, preparing a site for a manufactured home, or installing a travel trailer on a site for more than one hundred eighty (180) days per year;
4. installation of utilities, construction of roads, bridges, culverts or similar projects;
5. redevelopment of a site, clearing of land as an adjunct of construction
6. construction or erection of levees, dams, walls, or fences;

7. drilling, mining, filling, dredging, grading, excavating, paving, or other alterations of the ground surface;
8. storage of materials including the placement of gas and liquid storage tanks, and channel modifications or any other activity that might change the direction, height, or velocity of flood or surface waters.

**Elevation Certificate** A form published by FEMA that is used to certify the elevation to which a Building has been constructed.

**Existing Manufactured Home Park or Subdivision** A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed or buildings to be constructed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

**Expansion to an Existing Manufactured Home Park or Subdivision** The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

**FEMA** Federal Emergency Management Agency and its regulations at 44 CFR 59-79, as amended.

**Flood** A general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters, or from the unusual and rapid accumulation or runoff of surface waters from any source. Flood also includes the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters.

**Flood Fringe** That portion of the floodplain outside of the regulatory floodway.

**Flood Insurance Rate Map** A map prepared by the FEMA that depicts the floodplain or special flood hazard area (SFHA) within a community. This map includes insurance rate zones and may or may not depict floodways and show BFEs. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

**Flood Insurance Study**- An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

**Floodplain and Special Flood Hazard Area (SFHA)** These two terms are synonymous. SFHA is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. Those lands within the

jurisdiction of the community and the extraterritorial jurisdiction of the community, or that may be annexed into the community, that are subject to inundation by the base flood. The floodplains of the community are identified as such on panel number(s) of the countywide FIRM prepared by the FEMA. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. SFHA may also refer to areas identified by the community that are flood prone and designated from other federal state or local sources of data including but not limited to historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

**Floodproofing** Any combination of structural or nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate, property and their contents.

**Floodproofing Certificate** A form published by the FEMA that is used to certify that a building has been designed and constructed to be structurally dry flood proofed to the flood protection elevation.

**Flood Protection Elevation (FPE)** The elevation of the base flood plus one foot (or you can choose a higher standard of two feet or three feet) of freeboard at any given location in the floodplain. In an AO Zone the FPE is the depth of the zone shown on the FIRM plus one foot (or a higher standard of two or three feet). In Zone AO areas with no elevations specified on the FIRM, the structure shall have the lowest floor, including basement, elevated at least one foot (or you can choose a higher standard of two feet or three feet) above the highest adjacent natural grade.

**Floodway** Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The floodway for the floodplains shall be as delineated on the FIRM prepared by FEMA. The floodways for each of the remaining floodplains shall be according to the best data available from the Federal, State, or other sources. In no case shall the designated height be more than 0.1 foot at any point within the community.

**Freeboard** An increment of elevation added to the BFE to provide a factor of safety for uncertainties in calculations, future watershed development, unknown localized conditions, wave actions and unpredictable effects such as those caused by ice or debris jams.

**Historic Structure** Any structure that is:

1. Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register.

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district.
3. Individually listed on the state inventory of historic places by the Illinois Historic Preservation Agency.
4. Individually listed on a local inventory of historic places that has been certified by the Illinois Historic Preservation Agency.

**IDNR/OWR** Illinois Department of Natural Resources/Office of Water Resources.

**IDNR /OWR Jurisdictional Stream** IDNR/OWR has jurisdiction over any stream serving a tributary area of 640 acres or more in an urban area, or in the floodway of any stream serving a tributary area of 6,400 acres or more in a rural area. Construction on these streams requires a permit from the IDNR/OWR. (Il Admin. Code 17 Part 3700). The IDNR/OWR may grant approval for specific types of activities by issuance of a statewide permit which meets the standards defined in Section 6 of this ordinance.

**Letter of Map Amendment (LOMA)** Official determination by FEMA that a specific building, defined area of land, or a parcel of land, where there has not been any alteration of the topography since the date of the first NFIP map showing the property within the floodplain, was inadvertently included within the floodplain and that the building, defined area of land, or a parcel of land is removed from the floodplain.

**Letter of Map Revision (LOMR)** Letter that revises BFEs, floodplains or floodways as shown on an effective FIRM.

**Lowest Floor** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Section 6 of this ordinance.

**Manufactured Home** A building, transportable in one or more sections that is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities.

**Manufactured Home Park or Subdivision** A parcel (or contiguous parcels) of land divided into two or more lots for rent or sale.

**New Construction** Structures for which the start of construction commenced or after the effective date of floodplain management regulations adopted by a community and includes any subsequent improvements of such structures.

**New Manufactured Home Park or Subdivision** A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed or buildings to be constructed (including, at a minimum, the installation of utilities, the construction of streets, and either final site

grading or the pouring of concrete pads) is completed on or after the effective date of the floodplain management regulations adopted by a community.

**NFIP** National Flood Insurance Program.

**NAVD 88** North American Vertical Datum of 1988. NAVD 88 supersedes the National Geodetic Vertical Datum of 1929 (NGVD).

**Recreational Vehicle or Travel Trailer** A vehicle which is:

1. built on a single chassis;
2. four hundred (400) square feet or less in size, when measured at the largest horizontal projection;
3. designed to be self-propelled or permanently towable by a light duty truck; and
4. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

**Repetitive Loss**- Flood related damages sustained by a structure on two separate occasions during a ten year period for which the cost of repairs at the time of each such flood event on the average equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred.

**Special Flood Hazard Area (SFHA)** See definition of floodplain.

**Start of Construction** Includes substantial improvement and means the date the building permit was issued. This, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement, was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation or placement of a manufactured home on a foundation. For a substantial improvement, actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building whether or not that alteration affects the external dimensions of the building.

**Structure (see “Building”)** The results of a man-made change to the land constructed on or below the ground, including a building, as defined in Section 2, any addition to a building; installing utilities, construction of roads or similar projects; construction or erection of levees, walls, fences, bridges or culverts.

**Substantial Damage** Damage of any origin sustained by a structure whereby the (cumulative) percentage of damage (pick either: “subsequent to the adoption of this ordinance”, “during the life of the building” or “during a ten (10) year period”) equals or exceeds fifty percent (50%) of the market value of the structure before the damage occurred regardless of actual repair work performed. Volunteer labor and materials must

be included in this determination. The term includes “Repetitive Loss Buildings” (see definition).

**Substantial Improvement** Any reconstruction, rehabilitation, repair, addition or improvement of a structure taking place (pick either: “subsequent to the adoption of this ordinance”, “during the life of the building” or “during a ten (10) year period”) in which the (cumulative) percentage of improvements equals or exceeds fifty percent (50%) of the market value of the structure before the improvement or repair is started (, or increases the floor area by more than twenty percent (20%).

The term does not include:

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 the Illinois Register of Historic Places.

**Variance** A grant of relief by a community from the terms of a flood plain management regulation.

**Violation** The failure of a structure or other development to be fully compliant with this ordinance.

### **Section 3. Base Flood Elevation.**

This ordinance’s protection standard is the base flood. The best available base flood data are listed below. Whenever a party disagrees with the best available data, the party shall finance the detailed engineering study needed to replace the existing data with better data and submit it to the FEMA and IDNR/OWR for approval prior to any development of the site.

- A. The BFE for the floodplains shall be as delineated on the base flood profiles in the countywide Flood Insurance Study (FIS) of (Insert name of county) prepared by the FEMA and dated (date of Flood Insurance Study). Flood Insurance Rate Map (FIRM), panel number (fill in all community panel numbers here), dated (fill in map date(s) here)
- B. The BFE for each floodplain delineated as an “AH Zone” or “AO Zone” shall be that elevation (or depth) delineated on the FIRM.
- C. The BFE for each of the remaining floodplains delineated as an “A Zone” on the FIRM shall be according to the best data available from federal, state, or other sources. Should no other data exist, an engineering study must be financed by the applicant to determine BFEs.
- D. Establishing a BFE is required in a Zone A for all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser.

- E. The BFE for the floodplains of those parts of unincorporated County that are within the extraterritorial jurisdiction, or that may be annexed, shall be as delineated on the base flood profiles in the FIS and FIRM prepared by the FEMA.

#### **Section 4. Duties and Responsibilities of the Floodplain Administrator**

The **POSITION DESIGNATED BY COMMUNITY** is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator. The Floodplain Administrator shall be responsible for the general administration of this ordinance and ensure that all development activities within the floodplains meet the requirements of this ordinance. The Floodplain Administrator shall:

- A. Review all development permits to assure that the requirements of this ordinance have been fully met.
- B. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall:
  - (1) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy,
  - (2) be constructed with materials resistant to flood damage,
  - (3) be constructed by methods and practices that minimize flood damages, and
  - (4) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are located so as to prevent water from entering.
- C. Check all new development sites to determine if they are in the floodplain using the criteria listed in Section 3, Base Flood Elevation or for critical facilities, using the 0.2% annual chance flood elevation, if defined.
- D. Process development permits and any permit extensions in accordance with Section 5 and ensure all development activities happen in a timely manner.
- E. Ensure that the building protection requirements for all buildings subject to Section 6 are met and maintain a record of the “as-built” elevation of the lowest floor (including basement), elevation certificate, or floodproofing certificate.
- F. Review Elevation Certificates for accuracy and require incomplete or deficient certificates to be corrected.
- G. Assure that all subdivisions and annexations meet the requirements of Section 7 and notify FEMA in writing whenever the corporate boundaries have been modified by annexation.
- H. Ensure that water supply and waste disposal systems meet the Public Health standards of Section 8.

- I. If a variance is requested, ensure that the requirements of Section 10 are met and maintain documentation of any variances granted.
- J. Inspect all development projects and take any and all penalty actions outlined in Section 12 as a necessary to ensure compliance with this ordinance.
- K. The Floodplain Administrator shall review all floodplain development permit applications to assure that all necessary permits have been received from those federal, state or local governmental agencies from which prior approval is required. This includes, but is not limited to, permits pertaining to:
  - 1. Permits issued by the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, and the Illinois Environmental Protection Agency under Section 401 of the Clean Water Act, or permits from other Federal agencies.
  - 2. Permits issued for the work in an IDNR/OWR Jurisdictional Streams by IDNR/OWR (or written documentation is provided that an IDNR/OWR permit is not required). This would include any required permits from other state agencies.
  - 3. Within six (6) months, notify FEMA of physical changes in the Base Flood Elevation (increases or decreases) by submitting technical or scientific data through the Letter of Map Change (LOMC) process, so that insurance rates and floodplain management requirements will be based on current data.
- L. Notify IDNR/OWR and any neighboring communities prior to any alteration or relocation of a watercourse.
- M. Provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques.
- N. Cooperate with state and federal floodplain management agencies to coordinate base flood data and to improve the administration of this ordinance.
- O. Maintain for public inspection base flood data, floodplain maps, copies of state and federal permits, and any other documentation of compliance for development activities subject to this ordinance.
- P. Notify FEMA and IDNR/OWR of any proposed amendments to this ordinance.
- Q. Perform site inspections to ensure compliance with this ordinance and make substantial damage determinations for structures within the floodplain.
- R. Schedule an annual inspection of the floodplain and document the results of the inspection.
- S. Establish, procedures for administering and documenting determinations, as outlined below, of substantial improvement and substantial damage:
  - 1. Determine the market value or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building before the start of construction of the proposed work. In the case of repair, the market value of the building shall be the market value before the damage occurred and before any repairs are made.

2. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building. Substantial damage determinations take into account all damage sustained to the structure regardless if the structure is repair or not.
3. Determine and document whether the proposed work constitutes substantial improvement or substantial damage.
4. Notify property owner of all determinations and responsibilities for permitting and mitigation of the structure.

## **Section 5. Development Permit.**

### A. Development permits

1. No person, firm, corporation, or governmental body, not exempted by law, shall commence any development in the floodplain without first obtaining a development permit from the Floodplain Administrator.
2. No person, firm, corporation, or governmental body shall commence any development of a critical facility on land below the 0.2% annual chance flood elevation without first obtaining a Development permit from the Floodplain Administrator.
3. The Floodplain Administrator shall only issue a permit for development activities, including new construction and substantial improvements, which meet the requirements of this ordinance.

### B. The application for development permit shall be accompanied by:

1. A site plan or drawings, drawn to scale using NAVD 88, showing:
  - a. property lines and dimensions,
  - b. existing grade elevations,
  - c. all changes in grade resulting from excavation or filling,
  - d. description of the benchmark or source of survey elevation control
  - d. sewage disposal facilities,
  - e. water supply facilities,
  - f. floodplain limits based on elevation or depth, as applicable;
  - g. floodway limits, as applicable;
  - h. the location and dimensions of all buildings and additions to buildings;
  - i. the location and dimensions of all structures, including but not limited to fences, culverts, decks, gazebos, agricultural structures, and accessory structures;
  - j. the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 7 of this ordinance.

2. Cost of project or improvements, including all materials and labor, as estimated by a licensed engineer or architect. A signed estimate by a contractor may also meet this requirement.
- C. Upon receipt of an application for a development permit, the Floodplain Administrator shall compare the elevation of the site to the BFE.
1. Any development located on land that is shown by survey elevation to be below the current BFE is subject to the provisions of this ordinance.
  2. Any development located on land shown to be below the BFE and hydraulically connected to a flood source, but not identified as floodplain on the current FIRM, is subject to the provisions of this ordinance.
  3. Any development located on land that can be shown by survey data to be higher than the current BFE and which has not been filled after the date of the site's first flood map showing the site in the floodplain, is not located in a mapped floodway, or located in a Zone A, is not in the floodplain and therefore not subject to the provisions of this ordinance. A LOMR-Floodway is required before developing land inadvertently included in a mapped floodway. Unless a LOMR is obtained, all ordinance provisions apply if the land is located in a Zone A.
  4. Any development located on land that is above the current BFE but will be graded to an elevation below the BFE, is subject to the provisions of this ordinance.
  5. The Floodplain Administrator shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first FIRM identification.
  6. The Floodplain Administrator shall be responsible for obtaining from the applicant copies of all other federal, state, and local permits, approvals or permit-not-required letters that may be required for this type of activity. The Floodplain Administrator shall not issue a permit unless all other federal, state, and local permits have been obtained.
- D. Upon receipt of an application for a critical facility, the Floodplain Administrator shall compare the elevation of the site to the 0.2% annual chance flood elevation, if available. Refer to Section 8. A. 5. for critical facility site requirements.
- E. A development permit or approval shall become invalid unless the actual Start of Construction, as defined, for work authorized by such permit, is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. All permitted work shall be completed within (Insert twelve (12) months, eighteen (18) months or a local permit expiration period) after the date of issuance of the permit or the permit shall expire. Time extensions, of not more than 180 days each, may be granted, in writing, by the Floodplain Administrator. Time extensions shall be granted only if the original permit is compliant with this ordinance and the FIRM and FIS in effect at the time the extension is granted.

- F. Certification and As-Built Documentation. The applicant is required to submit certification by a licensed professional engineer or registered land surveyor that the finished fill and building elevations were accomplished in compliance with Section 6 of this ordinance. Floodproofing measures must be certified by a registered professional engineer or registered architect as being compliant with applicable floodproofing standards. FEMA Elevation Certificate and Floodproofing Certificate forms (Choose “are” or “may be”) required as documentation of compliance.

An as-built grading plan, prepared by a registered professional engineer (Choose “is” or “may be”) required to certify that any development in floodplain, such as grading or the construction of bridges or culverts, are in substantial conformance with the development permit.

No building, land or structure may be occupied or used in any manner until a letter or certificate has been issued by the Floodplain Administrator stating that the use of the building or land conforms to the requirements of this ordinance.

The Floodplain Administrator must maintain records in perpetuity documenting compliance with this ordinance, including the elevation to which structures and alterations to structures are constructed or floodproofed.

#### G. Application Fees and Engineering Review Fee

(This is optional language provided for your consideration. Check with your legal counsel if this fee may be charged. Also, if your community has an annual fee ordinance you would Insert language that refers to that ordinance in lieu of this language.)

A non-refundable application fee of \$ \_\_\_\_\_ shall be paid to the (Choose City/Village/County Clerk). An additional fee may be charged if the Floodplain Administrator requires the assistance of a professional engineer or other expert. The applicant will be contacted in writing before any outside review begins with the estimated engineering or expert review fee. The applicant must consent in writing before the outside review begins. The engineering review fee shall be paid in full by the applicant within 30 days after the applicant receives the bill.

### **Section 6. Protecting Buildings.**

- A. All buildings located in the floodplain shall be protected from flood damage below the FPE. This building protection requirement applies to the following situations:
1. Construction or placement of a new building or alteration or addition to an existing building.
  2. Value of improvements equals or exceeds the market value by fifty percent (50%) (For higher standards or may Insert “or structural alterations made to an existing building that increase the floor area by more than twenty percent (20%).” and “Improvements shall be figured cumulatively (pick either: “subsequent to the adoption of this ordinance”, “during the life of the

building” or “during a 10- year period”). If substantially improved, the existing structure and the addition must meet the flood protection standards of this section.

3. Repairs made to a substantially damaged building. (For higher standards or may Insert “These repairs shall be figured cumulatively (pick either: “subsequent to the adoption of this ordinance, “during the life of the building” or “during a 10-year period”). If substantially damaged, the entire structure must meet the flood protection standards of this section within 24 months of the date the damage occurred.
4. Installing a manufactured home on a new site or a new manufactured home on an existing site.
5. Installing a travel trailer or recreational vehicle on a site for more than one hundred eighty (180) days per year.
6. Repetitive loss to an existing building as defined in Section 2.

(Include 7. below if the community choses to allow homes with basements to be built in areas removed from the floodplain with a LOMR Based on Fill (LOMR-F). This refers to section 9E which will outline a community’s responsibility for determining if the site is reasonably safe from flooding. Although the area of fill has been removed from the floodplain any building with a basement built on the fill may be subject to damage from subsurface flooding caused by seepage through the fill.

7. Construction or placement of a new building or alteration or addition to an existing building with the low floor below BFE following a LOMR-F in accordance with the conditions outlined in Section 9. E. The structure must meet FEMA Technical Bulletin (TB) 10 Reasonably Safe from Flooding Requirement for Building on Filled Land.

B. Residential or non-residential buildings can meet the building protection requirements by one of the following methods:

1. The building may be constructed on permanent land fill with the lowest floor including basement at or above the FPE in accordance with the following conditions.:
  - a. The lowest floor (including basement) shall be at or above the FPE.
  - b. The fill shall be placed in layers no greater than six inches before compaction and should extend at least twenty (20) feet beyond the foundation before sloping below the FPE in lieu of a geotechnical report.
  - c. The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or other structural measure.
  - d. The fill shall be composed of rock or soil and not incorporated debris or refuse material.

- e. The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties and when necessary, stormwater management techniques, such as swales or basins, shall be incorporated.

Include (f) and (g) if your community has AO and AH Zone's.

- f. In AO Zone, require that new construction and substantially improved buildings have their lowest floor (including basement) to or above the highest adjacent grade at least as high the FPE for the Zone AO. In Zone AO areas with no elevations specified, the structure shall have the lowest floor, including basement, elevated at least two feet above the highest adjacent natural grade.
- g. In AO and AH Zones, new construction and substantially improved buildings shall have adequate drainage paths around buildings on slopes to guide floodwaters around and away from the structure.

- 2. The building may be elevated in accordance with the following:
  - a. The building or improvements shall be elevated on stilts, piles, solid walls, crawlspace, or other foundation that is permanently open to flood waters.
  - b. All components located below the FPE shall be constructed of materials resistant to flood damage.
  - c. The lowest floor and all electrical, heating, ventilating, plumbing, and air conditioning equipment shall be located at or above the FPE.
  - d. If walls are used, all enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. At least two (2) walls must have a minimum of one (1) permanent opening that is below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE, or the design must be certified by a Registered P.E, as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA Technical Bulletin 1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
  - e. The foundation and supporting members shall be anchored, designed, and certified so as to minimize exposure to hydrodynamic forces such as current, waves, ice, and floating debris.
    - i. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other service facilities may be located below the FPE provided they are waterproofed.
    - ii. The area below the FPE shall be used solely for parking or building access and not later modified or occupied as habitable space.

- iii. In lieu of the above criteria, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect.
3. The building may be constructed with a crawlspace located below the FPE provided that the following conditions and requirements of FEMA TB 11, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas, which ever are more restrictive, are met:
    - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
    - b. All enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. A minimum of one (1) permanent opening shall be provided on at least two walls that is below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE, or the design must be certified by a Registered P.E. as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA TB 1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
    - c. The interior height of the crawlspace measured from the interior grade of the crawl to the top of the foundations wall must not exceed four (4) feet at any point.
    - d. An adequate drainage system must be installed to remove floodwaters from the interior area of the crawlspace within a reasonable period of time after a flood event.
    - e. The velocity of floodwaters at the site should not exceed 5 feet per second for any crawlspace. For velocities in excess of 5 feet per second, other foundation types should be used.
    - f. Portions of the building below the FPE must be constructed with materials resistant to flood damage, and
    - g. Utility systems within the crawlspace must be elevated above the FPE.
  - C. Non-residential buildings may be structurally dry floodproofed (in lieu of elevation) provided a licensed professional engineer or architect certifies that:
    1. Below the FPE the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood.
    2. The building design accounts for flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and the impact from debris and ice.

3. Floodproofing measures will be incorporated into the building design and operable without human intervention and without an outside source of electricity.
4. Levees, berms, floodwalls, and similar works are not considered floodproofing for the purpose of this subsection.

D. Manufactured homes or travel trailers to be permanently installed on site shall be:

1. Elevated to or above the FPE in accordance with Section 6. B, and
2. Anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the rules and regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code § 870.

E. Travel trailers and recreational vehicles on site for more than one hundred eighty (180) days per year shall meet the elevation requirements of section 6. D unless the following conditions are met:

1. The vehicle must be either self-propelled or towable by a light duty truck.
2. The hitch must remain on the vehicle at all times.
3. The vehicle must not be attached to external structures such as decks and porches
4. The vehicle must be designed solely for recreation, camping, travel, or seasonal use rather than as a permanent dwelling.
5. The vehicles having a total area not exceeding four hundred (400) square feet measured when measured at the largest horizontal projection.
6. The vehicle's wheels must remain on axles and inflated.
7. Air conditioning units must be attached to the frame so as to be safe for movement of the floodplain.
8. Propane tanks as well as electrical and sewage connections must be quick-disconnect.
9. The vehicle must be licensed and titled as a recreational vehicle or park model, and must either:
  - a. entirely be supported by jacks, or
  - b. have a hitch jack permanently mounted, have the tires touching the ground and be supported by block in a manner that will allow the block to be easily removed by used of the hitch jack.

F. Detached accessory structures may be permitted provided the following conditions are met:

1. The structure must be non-habitable.

2. The structure must be used only for the parking and storage and cannot be modified later into another use.
3. The structure must be located outside of the floodway or must meet all requirements of this ordinance.
4. The exterior and interior building components and elements (i.e., foundation, wall framing, exterior and interior finishes, flooring, etc.) below the BFE, must be built with flood-resistant materials in accordance Section 6.
5. All utilities, mechanical, and electrical must be elevated above the FPE.
6. The structure must have at least one permanent opening on at least two walls not more than one (1) foot above grade with one (1) square inch of opening for every one (1) square foot of floor area. They shall meet the opening requirements of Section 6(B)(2)(d);
7. The structure must be no more than one story in height and no more than six hundred (600) square feet in size.
8. The structure shall be anchored to resist floatation, collapse, lateral movement, and overturning.
9. All flammable or toxic materials (gasoline, paint, insecticides, fertilizers, etc.) shall be stored above the FPE.
10. The lowest floor elevation should be documented, and the owner advised of the flood insurance implications.

### **Section 7. Subdivision Requirements**

The (Insert Board name) shall take into account hazards, to the extent that they are known, in all official actions related to land management use and development.

- A. New subdivisions, manufactured home parks, annexation agreements, planned unit developments, and additions to manufactured home parks and subdivisions shall meet the damage prevention and building protections standards of Section 6 of this ordinance. Assure that subdivision proposals and other development will be reasonably safe from flooding and minimize flood damage.
- B. Streets, blocks lots, parks and other public grounds shall be located and laid out in such a manner as to preserve and utilize natural streams and channels. Wherever possible the floodplains should be included within parks, open space parcels, or other public grounds.
- C. Any proposal for such development shall include the following data:
  1. The BFE and the boundary of the floodplain, where the BFE is not available from an existing study, the applicant shall be responsible for calculating the BFE.
  2. The boundary of the floodway, when applicable.

3. A signed statement by a Licensed Professional Engineer that the proposed plat or plan accounts for changes in the drainage of surface waters in accordance with the Plat Act (765 ILCS 205/2).

### **Section 8 . Public Health and Other Standards**

A. Public health standards must be met for all floodplain development. In addition to the requirements of Section 6 of this ordinance, the following standards apply:

1. No development in the floodplain shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the FPE unless such materials are stored in a floodproofed and anchored storage tank and certified by a professional engineer or floodproofed building constructed according to the requirements of Section 6 of this ordinance.
2. Public utilities and facilities such as sewer, gas and electric shall be located and constructed to minimize or eliminate flood damage.
3. Public sanitary sewer systems and water supply systems shall be located and constructed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
4. New and replacement on-site sanitary sewer lines or waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding. Manholes or other above ground openings located below the FPE shall be watertight.
5. Critical facilities, which are buildings, constructed or substantially improved within the floodplain or the 0.2 percent annual chance flood elevation when defined, shall have the lowest floor (including basement) elevated or structurally dry floodproofed to the 0.2 percent annual chance flood elevation or three feet above the BFE, whichever is greater. Adequate parking shall be provided for staffing of the critical facilities at or above the BFE or 0.2 percent chance flood, when defined. Access routes to all critical facilities should be reviewed and considered when permitting. Access routes should be elevated to or above the level of the BFE .

Floodproofing and sealing measures may also be used to provide protection, as described in Section 6, and must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.

Critical Facilities include emergency services facilities (such as fire and police stations), schools, hospitals, retirement homes, and senior care facilities. (A community may also choose to include one or more of the following: sewage treatment plants, water treatment plants, specific roads and bridges required for evacuation, critical utility sites (telephone switching stations or electrical transformers), and hazardous material storage facilities (chemicals, petrochemicals, hazardous or toxic substances) of a specified size or type.)

- B. All other activities defined as development shall be designed so as not to alter flood flows or increase potential flood damages.
- C. Dams are classified as to their size and their hazard/damage potential in the event of failure. Permits for dams may be required from IDNR/OWR. Contact IDNR/OWR to determine if a permit is required. If a permit is required, a permit application must be made to IDNR/OWR prior to the construction or major modification of jurisdictional dams. All construction activity for a dam must also meet the development requirements of this ordinance.
- D. In floodway areas, development shall cause no increase in flood levels during the occurrence of the base flood discharge. Prior to issuance of a floodplain development permit, the applicant must submit a hydrologic and hydraulic analysis, conducted by a registered professional engineer, demonstrating that the proposed development would not result in any increase in the base flood elevation.
- E. Notwithstanding any other provisions of this ordinance, a community may permit development within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community meets subsection (F) and fulfills any requirements for such revisions.
- F. Letters of Map Revision. The Floodplain Administrator shall require a CLOMR prior to issuance of a development permit for:
  1. Proposed floodway encroachments that will cause an increase in the BFE; and
  2. Proposed development which will increase the BFE by more than 0.1 feet in riverine area where FEMA has provided a BFE but no floodway.

Once a CLOMR has been issued by FEMA, the development permit may be issued for site grading and structures necessary in the area of the map change to achieve the final LOMR. Upon completion, the applicant shall submit as-built certifications, as required by FEMA, to achieve a final LOMR prior to the release of final development permits.

- G. When construction of a building following a FEMA issued LOMR Based on Fill (LOMR-F) is requested, the condition where a site in the floodplain is removed due to the use of fill to elevate the site above the BFE, the applicant may not **(or the community can chose to allow and insert “may”, see Section 6.A.& above)** apply for a permit from to construct the lowest floor of a building below the BFE in the floodplain.

**(If “may is chosen”, Insert the following:**

The Floodplain Administrator shall not issue such a permit unless the applicant has demonstrated that the building will be reasonable safe from flooding. The Floodplain Administrator shall require a professional certification from a qualified design professional that indicates the land or buildings are reasonably safe from flooding.

according to the criteria established in FEMA TB 10. Professional certification may come from a professional engineer, professional geologist, professional soil scientist, or other design professional qualified to make such evaluations.

The Floodplain Administrator shall maintain records, available upon request by FEMA, all supporting analysis and documentation used to make that determination, including but not limited to, all correspondence, professional certification, existing and proposed grading, sump pump sizing, foundation plans, Elevation Certificates, soil testing and compaction data.)

### **Section 9. Carrying Capacity and Notification.**

For all projects involving channel modification, fill, or stream maintenance (including levees), the flood carrying capacity of the watercourse shall be maintained. In addition, adjacent communities, Illinois Department of Natural Resources and FEMA, shall be notified thirty (30) days prior to issuance of a permit for any alteration or relocation of a watercourse.

### **Section 10. Variances.**

- A. No variances shall be granted within a floodway if any increases in the base flood elevation would result.
- B. Whenever the standards of this ordinance place undue hardship on a specific development proposal, the applicant may apply to the (Insert name of the elected or appointed board of appeals) for a variance. The (Insert the name of the elected or appointed board of appeals) shall review the applicant's request for a variance and shall submit its recommendation to the (Insert the name of the governing board). The (Insert the name of the governing board) may attach such conditions to granting of a variance as it deems necessary to further the purposes and objectives of this ordinance. The (Insert the name of the governing board) shall base the determination on:
  - 1. Technical justifications submitted by the applicant.
  - 2. The staff report, comments, and recommendations submitted by the floodplain administrator.
  - 3. The limitations, considerations, and conditions set forth in this section.
- C. The findings of fact and conclusions of law made by the (Insert name of board of review) according to Section 10. A, the notifications required by Section 10. B, and a record of hearings and evidence considered as justification for the issuance of all variances from this ordinance shall be maintained by the County in perpetuity.
- D. No variance shall be granted unless the applicant demonstrates and the (Insert name of Board of appeals) finds that all of the following conditions are met:
  - 1. The development activity cannot be located outside the floodplain.

2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. The variance granted is the minimum necessary, considering the flood hazard, to afford relief.
4. There will be no additional threat to public health, public safety, destruction of beneficial stream uses and functions including, aquatic habitat, causation of fraud on or victimization of the public, conflict with existing local laws or ordinances, or creation of a nuisance.
5. There will be no additional public expense for flood protection, rescue or relief operations, policing, lost environmental stream uses and functions, repairs to streambeds and banks, or repairs to roads, utilities, or other public facilities.
6. The circumstances of the property are unique and do not establish a pattern inconsistent with the intent of the NFIP.
7. Good and sufficient cause has been shown that the unique characteristics of the size, configuration, or topography of the site renders the requirements of this ordinance inappropriate.
8. All other state and federal permits have been obtained.

E. The (Insert the name of the elected or appointed board of appeals) shall notify an applicant in writing that a variance from the requirements of the building protections standards of Section 7 that would lessen the degree of protection to a building will:

1. Result in increased premium rates for flood insurance up to twenty-five dollars (\$25) per one hundred dollars (\$100) of insurance coverage.
2. Increase the risk to life and property.
3. Require that the applicant proceed with knowledge of these risks and that the applicant acknowledge in writing the assumption of the risk and liability.

F. Considerations for Review. In reviewing applications for variances, all technical evaluations, all relevant factors, all other portions of these regulations, and the following shall be considered:

1. The danger that materials and debris may be swept onto other lands resulting in further injury or damage.
2. The danger to life and property due to flooding or erosion damage.
3. The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners.
4. The importance of the services provided by the proposed development to the community.
5. The availability of alternate locations for the proposed development that are not subject to flooding or erosion.

6. The compatibility of the proposed development with existing and anticipated development.
7. The relationship of the proposed development to the comprehensive plan and floodplain management program for that area.
8. The safety of access to the property in times of flood for ordinary and emergency vehicles.
9. The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
10. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets, and bridges.

G. Historic Structures. Variances issued for the reconstruction, repair, or alteration of a historic site or historic structure as defined in "Historic Structures", may be granted using criteria more permissive than the requirements of Sections 6 and 7 of this ordinance subject to the conditions that:

1. The repair or rehabilitation is the minimum necessary to preserve the historic character and design of the structure.
2. The repair or rehabilitation will not preclude the structure's continued designation as a historic structure.

H. Agriculture Structures. Variances issued for the construction or substantial improvement of agricultural structures which do not meet the non-residential building requirements of Sections 6. B and 6. C, provided the requirements of Section 10. A through 10. G and the following are satisfied:

1. A determination that the proposed agricultural structure:
  - a. Is used exclusively in connection with the production, harvesting, storage, raising, or drying of agricultural commodities, or storage of tools or equipment used in connection with these purposes or uses, and will be restricted to such exclusive uses.
  - b. Has low damage potential (amount of physical damage, contents damage, and loss of function).
  - c. Does not increase risks and pose a danger to public health, safety, and welfare if flooded and contents are released, including but not limited to the effects of flooding on liquified natural gas terminals, and production and storage of highly volatile, toxic, or water-reactive materials.
  - e. Complies with the wet floodproofing construction requirements of Section H. 2.

2. Wet floodproofing construction requirements. Wet floodproofed structures shall:
  - a. The exterior and interior building components and elements (i.e., foundation, wall framing, exterior and interior finishes, flooring, etc.) below the BFE, must be built with flood-resistant materials in accordance with Section 6 of this ordinance.
  - b. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
  - c. All enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. A minimum of one (1) permanent opening shall be provided on at least two walls that is below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE, or the design must be certified by a Registered P.E. as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA TB 1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
  - d. Any mechanical, electrical, or other utility equipment must be located above the BFE or floodproofed so that they are contained within a watertight, floodproofed enclosure that is capable of resisting damage during flood conditions in accordance with Section 6 of this ordinance.
  - e. If located in a floodway, must be issued a state floodway permit or have a letter of determination that a permit is not required.
  - f. The building may not be used for manure storage or livestock confinement operations.

### **Section 11. Disclaimer of Liability.**

The degree of protection required by this ordinance is considered reasonable for regulatory purposes and is based on available information derived from engineering and scientific methods of study. Larger floods may occur or flood heights may be increased by man-made or natural causes. This ordinance does not imply that development either inside or outside of the floodplain will be free from flooding or damage. This ordinance does not create liability on the part of the **(Insert County name)** or any officer or employee thereof for any flood damage that results from proper reliance on this ordinance or any administrative decision made lawfully thereunder.

### **Section 12. Penalty.**

Failure to obtain a permit for development in the floodplain or failure to comply with the conditions of a permit or a variance shall be deemed to be a violation of this ordinance. Upon due investigation, the **(Insert the title of the Official, Office or Agency, or Municipal Attorney)** may determine that a violation of the minimum standards of this

ordinance exists. The (Insert the title of the Official, Office or Agency, or County Attorney) shall notify the owner in writing of such violation.

- A. If such owner fails after ten (10) days from the date the written notice is issued, to correct the violation:
1. The (Insert County name) shall make application to the circuit court for an injunction requiring conformance with this ordinance or make such other order as the court deems necessary to secure compliance with the ordinance.
  2. Any person who violates this ordinance shall upon conviction thereof be fined not less than fifty dollars (\$50) or more than seven hundred fifty (\$750) for each offense.
  3. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues, and
  4. The (Insert County name) shall record a notice of violation on the title of the property.
- B. The (Insert the title of the Official, Office or Agency, or County Attorney) shall inform the owner that any such violation is considered a willful act to increase flood damages and therefore may cause coverage by a Standard Flood Insurance Policy to be suspended.

The (Insert the title of the Official, Office or Agency, or County Attorney) is authorized to issue an order requiring the suspension of the subject development. The stop-work order shall be in writing, indicate the reason for the issuance, and shall order the action, if necessary, to resolve the circumstances requiring the stop-work order. The stop-work order constitutes a suspension of the permit.

No site development permit shall be permanently suspended or revoked until a hearing is held by the (Insert name of the elected or appointed board of appeals). Written notice of such hearing shall be served on the permittee and shall state the grounds for the complaint, reasons for suspension or revocation, and the time and place of the hearing.

At such hearing the permittee shall be given an opportunity to present evidence on their behalf. At the conclusion of the hearing, the (Insert name of the elected or appointed board of appeals) shall determine whether the permit shall be suspended or revoked.

- C. Nothing herein shall prevent the (Insert County name) from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

### **Section 13. Abrogation and Greater Restrictions.**

This ordinance repeals and replaces other ordinances adopted by the (Insert the name of the governing board) to fulfill the requirements of the NFIP. However, this ordinance does not repeal the original resolution or ordinance adopted to achieve eligibility in the program. Nor does this ordinance repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where this ordinance and other ordinance easements, covenants or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

**Section 14. Severability.**

The provisions and sections of this ordinance shall be deemed separable and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

**Section 15. Effective Date.**

This ordinance shall be in full force and effect from and after its passage, approval, and publication as required by law.

Passed by the County Board of the County of \_\_\_\_\_, Illinois, this (Insert date) day of (Insert month), 20(Insert year), the vote being taken by ayes and noes and entered upon the legislative records as follows:

AYES:

NOES:

Attested and filed in my office this (Insert date) day of (Insert month), 20(Insert year).

APPROVED:

\_\_\_\_\_  
County Board Chair

ATTEST

\_\_\_\_\_  
County Clerk





# **ILLINOIS SAMPLE FLOOD DAMAGE PREVENTION ORDINANCE**

**DOWNSTATE COMMUNITIES w/  
MAPPED FLOODWAYS  
COUNTY-WIDE FIRMs  
MODEL 44 CFR 60.3(d)**

**Illinois Department of Natural Resources  
Office of Water Resources  
Statewide Programs**

**Revised January 14, 2025**

# **SAMPLE FLOOD DAMAGE PREVENTION ORDINANCE – DOWNSTATE IL**

## **DISCLAIMER**

### **Municipalities with Mapped Floodways 60.3(d)**

This sample ordinance has been prepared to help communities meet the requirements of:

- the National Flood Insurance Program (NFIP), more specifically, this ordinance contains all the provisions necessary to comply with the requirements of section 44 CFR 60.3(d) of the NFIP
- the 615 ILCS 5/18(g) Rivers, Lakes and Streams Act, including state floodway rules and dam safety

The State of Illinois and the Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR) or Federal Emergency Management Agency (FEMA) does not require the use of this sample floodplain ordinance. If a locally developed ordinance is used, it must be reviewed by the IDNR/OWR and FEMA for compliance with the minimum NFIP.

Prior to the enactment of any ordinance, a community should seek the advice of its legal counsel regarding its content and enactment. If the legal counsel is not involved in the actual preparation of the ordinance, legal counsel should review and comment upon the proposed ordinance prior to its enactment.

#### **HOW TO USE THIS SAMPLE ORDINANCE:**

1. Decide if your community will adopt a single purpose ordinance that contains all the necessary provisions, such as this ordinance, or if wish to amend another other existing code, such as a zoning code, development code, or building code.
2. Review this sample ordinance. Red text indicates edits are required including Inserting text, such as the name of the community, or places where a choice is required that will add higher restrictions or standards. IDNR/OWR urges communities to consider the unique flood conditions present in your community and consider adopting these higher regulatory standards to decrease the impact of flooding in your community. If your community is experiencing flooding that extends beyond the mapped floodplain, please consider adopting a higher flood protection elevation of two or three feet. Mapping of localized flooding may also be included to prevent flood damages outside of the mapped floodplains.
3. Submit a draft to IDNR/OWR for review to verify compliance with the NFIP.
4. State will return a reviewed/corrected draft ordinance for community adoption.
- 5.. Upon adoption submit a pdf copy of the signed ordinance to IDNR/OWR. IDNR/OWR will document receipt and forward a copy to FEMA.

If you have questions, contact Erin Conley at [erin.c.conley@illinois.gov](mailto:erin.c.conley@illinois.gov) or by phone at 217.782.4428

OPTIONAL COVER SHEET

**CITY/VILLAGE** OF \_\_\_\_ (Add Community Name) \_\_\_\_\_

---

ORDINANCE NO. \_\_\_\_\_

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AN ORDINANCE REGULATING DEVELOPMENT IN FLOODPLAIN AREAS

ADOPTED BY THE

**(Choose PRESIDENT/MAYOR AND BOARD OF TRUSTEES/CITY COUNCIL)**

OF THE

**(CITY/VILLAGE OF \_\_\_\_\_)**

THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_.

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PUBLISHED IN PAMPHLET FORM BY THE AUTHORITY OF THE  
**PRESIDENT/MAYOR AND BOARD OF TRUSTEES/CITY COUNCIL OF THE**

**CITY/VILLAGE OF \_\_\_\_\_ ILLINOIS,**

THIS \_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_.

**Signature Line for Community Clerk**

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OPTIONAL PAGE

ORDINANCE NO. \_\_\_\_\_

**AN ORDINANCE REGULATING DEVELOPMENT IN FLOODPLAIN AREAS**

**WHEREAS**, the (Insert Village of, City of \_\_\_\_\_), pursuant to the police powers granted to by the Illinois Municipal Code (65 ILCS 5/1-2-1, 5/11-12-12, 5/11-30-2, 5/11-30-8 and 5/11-31-2), wishes to establish eligibility in the National Flood Insurance Program and in order to do so must meet the requirements of Title 44 of the Code of Federal Regulations (CFR) Sections 59 to 79 of the National Flood Insurance Program Regulations, necessary for such participation; and

**WHEREAS**, (choose President/Mayor and Board of Trustees/City Council of the City/Village of \_\_\_\_\_) find it to be in the best interest of the (Insert village, city) to establish rules and regulations for floodplain management throughout the (Insert village, city) and superseding any less restrictive municipal rules and regulations therein; and,

**WHEREAS**, the President/Mayor and Board of Trustees of the City/Village of \_\_\_\_\_ have previously adopted Ordinances No. \*\*\*\*\*, and \*\*\*\*\*.

**NOW, THEREFORE, BE IT ORDAINED** by the (choose President/Mayor and Board of Trustees/City Council of the City/Village of \_\_\_\_\_) County, Illinois, the following measures shall be required within the corporate limits of the (Insert the community's name):

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE REGULATING DEVELOPMENT IN FLOODPLAIN AREAS**

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## **Section 1. Purpose.**

This ordinance is enacted pursuant to the police powers granted to the (Insert village, city) by the Illinois Municipal Code (65 ILCS 5/1-2-1, 5/11-12-12, 5/11-30-2, 5/11-30-8 and 5/11-31-2). This Ordinance is adopted in order to accomplish the following purposes:

- A. To meet the requirements of 615 ILCS 5/18(g) Rivers, Lakes and Streams Act;
- B. To prevent unwise developments from increasing flood or drainage hazards to others;
- C. To protect new buildings and major improvements to buildings from flood damage;
- D. To protect human life and health from the hazards of flooding;
- E. To promote and protect the public health, safety, and general welfare of the citizens from the hazards of flooding;
- F. To lessen the burden on the taxpayer for flood control, repairs to public facilities and utilities, and flood rescue and relief operations;
- G. To maintain property values and a stable tax base by minimizing the potential for creating blight areas;
- H. To comply with the rules and regulations of the National Flood Insurance Program codified as 44 CFR 59-79, as amended;
- I. To make federally subsidized flood insurance available by fulfilling the requirements of the National Flood Insurance Program, and
- J. To preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits, and enhance community and economic development.

## **Section 2. Definitions.**

Unless specifically defines below, all words used in this ordinance shall have their common meanings. The word “shall” mean the action is mandatory.

For the purposes of this ordinance, the following definitions are adopted:

**Accessory Structure** A non-habitable building, used only for parking of vehicles or storage, that is on the same parcel of property as the principal building and which is incidental to the use of the principal building.

**Agricultural Structure** A walled and roofed structure used exclusively for agricultural purposes or uses in connection with the production, harvesting, storage, raising, or drying of agricultural commodities and livestock, including aquatic organisms. Structures that house tools or equipment used in connection with these purposes or uses are also considered to have agricultural purposes or uses.

**Base Flood** The flood having a one percent (1%) probability of being equaled or exceeded in any given year. The base flood is often referred to as the 100-year flood. The base flood elevation at any location is as defined in Section 3 of this ordinance.

**Base Flood Elevation (BFE)** The height in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified) of the crest of the base flood.

**Basement** Any portion of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides.

**Building** A walled and roofed structure, including gas or liquid storage tank, that is principally above ground including manufactured homes and prefabricated buildings. The term also includes recreational vehicles and travel trailers installed on a site for more than one hundred eighty (180) days per year.

**Conditional Letter of Map Revision (CLOMR)** A letter providing FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing Floodway, the effective BFEs, or the SFHA.

**Critical Facility** Any facility which is critical to the health and welfare of the population and, if flooded, would create an added dimension to the disaster. Damage to these critical facilities can impact the delivery of vital services, can cause greater damage to other sectors of the community, or can put special populations at risk.

**Dam** All obstructions, wall embankments or barriers, together with their abutments and appurtenant works, if any, constructed for the purpose of storing or diverting water or creating a pool. Dams may also include weirs, restrictive culverts, or impoundment Structures. Underground water storage tanks are not included.

**Development** Development means 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 or storage of equipment or materials This includes, but is not limited to:

1. demolition, construction, reconstruction, repair, placement of a building, or any structural alteration to a building;
2. substantial improvement of an existing building;
3. installation of a manufactured home on a site, preparing a site for a manufactured home, or installing a travel trailer on a site for more than one hundred eighty (180) days per year;
4. installation of utilities, construction of roads, bridges, culverts or similar projects;
5. redevelopment of a site, clearing of land as an adjunct of construction
6. construction or erection of levees, dams, walls, or fences;

7. drilling, mining, filling, dredging, grading, excavating, paving, or other alterations of the ground surface;
8. storage of materials including the placement of gas and liquid storage tanks, and channel modifications or any other activity that might change the direction, height, or velocity of flood or surface waters.

**Elevation Certificate** A form published by FEMA that is used to certify the elevation to which a Building has been constructed.

**Existing Manufactured Home Park or Subdivision** A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed or buildings to be constructed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

**Expansion to an Existing Manufactured Home Park or Subdivision** The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

**FEMA** Federal Emergency Management Agency and its regulations at 44 CFR 59-79, as amended.

**Flood** A general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters, or from the unusual and rapid accumulation or runoff of surface waters from any source. Flood also includes the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waters.

**Flood Fringe** That portion of the floodplain outside of the regulatory floodway.

**Flood Insurance Rate Map** A map prepared by the FEMA that depicts the floodplain or special flood hazard area (SFHA) within a community. This map includes insurance rate zones and may or may not depict floodways and show BFEs. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

**Flood Insurance Study**- An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.

**Floodplain and Special Flood Hazard Area (SFHA)** These two terms are synonymous. SFHA is the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. Those lands within the

jurisdiction of the community and the extraterritorial jurisdiction of the community, or that may be annexed into the community, that are subject to inundation by the base flood. The floodplains of the community are identified as such on panel number(s) of the countywide FIRM prepared by the FEMA. The area may be designated as Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. SFHA may also refer to areas identified by the community that are flood prone and designated from other federal state or local sources of data including but not limited to historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

**Floodproofing** Any combination of structural or nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate, property and their contents.

**Floodproofing Certificate** A form published by the FEMA that is used to certify that a building has been designed and constructed to be structurally dry flood proofed to the flood protection elevation.

**Flood Protection Elevation (FPE)** The elevation of the base flood plus one foot (or you can choose a higher standard of two feet or three feet) of freeboard at any given location in the floodplain. In an AO Zone the FPE is the depth of the zone shown on the FIRM plus one foot (or a higher standard of two or three feet). In Zone AO areas with no elevations specified on the FIRM, the structure shall have the lowest floor, including basement, elevated at least one foot (or you can choose a higher standard of two feet or three feet) above the highest adjacent natural grade.

**Floodway** Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. The floodway for the floodplains shall be as delineated on the FIRM prepared by FEMA. The floodways for each of the remaining floodplains shall be according to the best data available from the Federal, State, or other sources. In no case shall the designated height be more than 0.1 foot at any point within the community.

**Freeboard** An increment of elevation added to the BFE to provide a factor of safety for uncertainties in calculations, future watershed development, unknown localized conditions, wave actions and unpredictable effects such as those caused by ice or debris jams.

**Historic Structure** Any structure that is:

1. Listed individually in the National Register of Historic Places or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register.

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district.
3. Individually listed on the state inventory of historic places by the Illinois Historic Preservation Agency.
4. Individually listed on a local inventory of historic places that has been certified by the Illinois Historic Preservation Agency.

**IDNR/OWR** Illinois Department of Natural Resources/Office of Water Resources.

**IDNR /OWR Jurisdictional Stream** IDNR/OWR has jurisdiction over any stream serving a tributary area of 640 acres or more in an urban area, or in the floodway of any stream serving a tributary area of 6,400 acres or more in a rural area. Construction on these streams requires a permit from the IDNR/OWR. (Il Admin. Code 17 Part 3700). The IDNR/OWR may grant approval for specific types of activities by issuance of a statewide permit which meets the standards defined in Section 6 of this ordinance.

**Letter of Map Amendment (LOMA)** Official determination by FEMA that a specific building, defined area of land, or a parcel of land, where there has not been any alteration of the topography since the date of the first NFIP map showing the property within the floodplain, was inadvertently included within the floodplain and that the building, defined area of land, or a parcel of land is removed from the floodplain.

**Letter of Map Revision (LOMR)** Letter that revises BFEs, floodplains or floodways as shown on an effective FIRM.

**Lowest Floor** The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area is not considered a building's lowest floor. Provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Section 6 of this ordinance.

**Manufactured Home** A building, transportable in one or more sections that is built on a permanent chassis and is designed to be used with or without a permanent foundation when connected to required utilities.

**Manufactured Home Park or Subdivision** A parcel (or contiguous parcels) of land divided into two or more lots for rent or sale.

**New Construction** Structures for which the start of construction commenced or after the effective date of floodplain management regulations adopted by a community and includes any subsequent improvements of such structures.

**New Manufactured Home Park or Subdivision** A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed or buildings to be constructed (including, at a minimum, the installation of utilities, the construction of streets, and either final site

grading or the pouring of concrete pads) is completed on or after the effective date of the floodplain management regulations adopted by a community.

**NFIP** National Flood Insurance Program.

**NAVD 88** North American Vertical Datum of 1988. NAVD 88 supersedes the National Geodetic Vertical Datum of 1929 (NGVD).

**Recreational Vehicle or Travel Trailer** A vehicle which is:

1. built on a single chassis;
2. four hundred (400) square feet or less in size, when measured at the largest horizontal projection;
3. designed to be self-propelled or permanently towable by a light duty truck; and
4. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

**Repetitive Loss**- Flood related damages sustained by a structure on two separate occasions during a ten year period for which the cost of repairs at the time of each such flood event on the average equals or exceeds twenty-five percent (25%) of the market value of the structure before the damage occurred.

**Special Flood Hazard Area (SFHA)** See definition of floodplain.

**Start of Construction** Includes substantial improvement and means the date the building permit was issued. This, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement, was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation or placement of a manufactured home on a foundation. For a substantial improvement, actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building whether or not that alteration affects the external dimensions of the building.

**Structure (see “Building”)** The results of a man-made change to the land constructed on or below the ground, including a building, as defined in Section 2, any addition to a building; installing utilities, construction of roads or similar projects; construction or erection of levees, walls, fences, bridges or culverts.

**Substantial Damage** Damage of any origin sustained by a structure whereby the (cumulative) percentage of damage (pick either: “subsequent to the adoption of this ordinance”, “during the life of the building” or “during a ten (10) year period”) equals or exceeds fifty percent (50%) of the market value of the structure before the damage occurred regardless of actual repair work performed. Volunteer labor and materials must

be included in this determination. The term includes “Repetitive Loss Buildings” (see definition).

**Substantial Improvement** Any reconstruction, rehabilitation, repair, addition or improvement of a structure taking place (pick either: “subsequent to the adoption of this ordinance”, “during the life of the building” or “during a ten (10) year period”) in which the (cumulative) percentage of improvements equals or exceeds fifty percent (50%) of the market value of the structure before the improvement or repair is started(, or increases the floor area by more than twenty percent (20%).

The term does not include:

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 the Illinois Register of Historic Places.

**Variance** A grant of relief by a community from the terms of a flood plain management regulation.

**Violation** The failure of a structure or other development to be fully compliant with this ordinance.

### **Section 3. Base Flood Elevation.**

This ordinance’s protection standard is the base flood. The best available base flood data are listed below. Whenever a party disagrees with the best available data, the party shall finance the detailed engineering study needed to replace the existing data with better data and submit it to the FEMA and IDNR/OWR for approval prior to any development of the site.

- A. The BFE for the floodplains shall be as delineated on the base flood profiles in the countywide Flood Insurance Study (FIS) of (Insert name of county) prepared by the FEMA and dated (date of Flood Insurance Study). Flood Insurance Rate Map (FIRM), panel number (fill in all community panel numbers here), dated (fill in map date(s) here)
- B. The BFE for each floodplain delineated as an “AH Zone” or “AO Zone” shall be that elevation (or depth) delineated on the FIRM.
- C. The BFE for each of the remaining floodplains delineated as an “A Zone” on the FIRM shall be according to the best data available from federal, state, or other sources. Should no other data exist, an engineering study must be financed by the applicant to determine BFEs.
- D. Establishing a BFE is required in a Zone A for all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser.

- E. The BFE for the floodplains of those parts of unincorporated County that are within the extraterritorial jurisdiction, or that may be annexed, shall be as delineated on the base flood profiles in the FIS and FIRM prepared by the FEMA.

#### **Section 4. Duties and Responsibilities of the Floodplain Administrator**

The [POSITION DESIGNATED BY COMMUNITY] is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator. The Floodplain Administrator shall be responsible for the general administration of this ordinance and ensure that all development activities within the floodplains meet the requirements of this ordinance. The Floodplain Administrator shall:

- A. Review all development permits to assure that the requirements of this ordinance have been fully met.
- B. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall:
  - (1) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy,
  - (2) be constructed with materials resistant to flood damage,
  - (3) be constructed by methods and practices that minimize flood damages, and
  - (4) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are located so as to prevent water from entering.
- C. Check all new development sites to determine if they are in the floodplain using the criteria listed in Section 3, Base Flood Elevation or for critical facilities, using the 0.2% annual chance flood elevation, if defined.
- D. Process development permits and any permit extensions in accordance with Section 5 and ensure all development activities happen in a timely manner.
- E. Ensure that the building protection requirements for all buildings subject to Section 6 are met and maintain a record of the “as-built” elevation of the lowest floor (including basement), elevation certificate, or floodproofing certificate.
- F. Review Elevation Certificates for accuracy and require incomplete or deficient certificates to be corrected.
- G. Assure that all subdivisions and annexations meet the requirements of Section 7 and notify FEMA in writing whenever the corporate boundaries have been modified by annexation.
- H. Ensure that water supply and waste disposal systems meet the Public Health standards of Section 8.

- I. If a variance is requested, ensure that the requirements of Section 10 are met and maintain documentation of any variances granted.
- J. Inspect all development projects and take any and all penalty actions outlined in Section 12 as a necessary to ensure compliance with this ordinance.
- K. The Floodplain Administrator shall review all floodplain development permit applications to assure that all necessary permits have been received from those federal, state or local governmental agencies from which prior approval is required. This includes, but is not limited to, permits pertaining to:
  - 1. Permits issued by the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, and the Illinois Environmental Protection Agency under Section 401 of the Clean Water Act, or permits from other Federal agencies.
  - 2. Permits issued for the work in an IDNR/OWR Jurisdictional Streams by IDNR/OWR (or written documentation is provided that an IDNR/OWR permit is not required). This would include any required permits from other state agencies.
  - 3. Within six (6) months, notify FEMA of physical changes in the Base Flood Elevation (increases or decreases) by submitting technical or scientific data through the Letter of Map Change (LOMC) process, so that insurance rates and floodplain management requirements will be based on current data.
- L. Notify IDNR/OWR and any neighboring communities prior to any alteration or relocation of a watercourse.
- M. Provide information and assistance to citizens upon request about permit procedures and floodplain construction techniques.
- N. Cooperate with state and federal floodplain management agencies to coordinate base flood data and to improve the administration of this ordinance.
- O. Maintain for public inspection base flood data, floodplain maps, copies of state and federal permits, and any other documentation of compliance for development activities subject to this ordinance.
- P. Notify FEMA and IDNR/OWR of any proposed amendments to this ordinance.
- Q. Perform site inspections to ensure compliance with this ordinance and make substantial damage determinations for structures within the floodplain.
- R. Schedule an annual inspection of the floodplain and document the results of the inspection.
- S. Establish, procedures for administering and documenting determinations, as outlined below, of substantial improvement and substantial damage:
  - 1. Determine the market value or require the applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the building before the start of construction of the proposed work. In the case of repair, the market value of the building shall be the market value before the damage occurred and before any repairs are made.

2. Compare the cost to perform the improvement, the cost to repair a damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building. Substantial damage determinations take into account all damage sustained to the structure regardless if the structure is repair or not.
3. Determine and document whether the proposed work constitutes substantial improvement or substantial damage.
4. Notify property owner of all determinations and responsibilities for permitting and mitigation of the structure.

### **Section 5. Development Permit.**

#### A. Development permits

1. No person, firm, corporation, or governmental body, not exempted by law, shall commence any development in the floodplain without first obtaining a development permit from the Floodplain Administrator.
2. No person, firm, corporation, or governmental body shall commence any development of a critical facility on land below the 0.2% annual chance flood elevation without first obtaining a Development permit from the Floodplain Administrator.
3. The Floodplain Administrator shall only issue a permit for development activities, including new construction and substantial improvements, which meet the requirements of this ordinance.

#### B. The application for development permit shall be accompanied by:

1. A site plan or drawings, drawn to scale using NAVD 88, showing:
  - a. property lines and dimensions,
  - b. existing grade elevations,
  - c. all changes in grade resulting from excavation or filling,
  - d. description of the benchmark or source of survey elevation control
  - d. sewage disposal facilities,
  - e. water supply facilities,
  - f. floodplain limits based on elevation or depth, as applicable;
  - g. floodway limits, as applicable;
  - h. the location and dimensions of all buildings and additions to buildings;
  - i. the location and dimensions of all structures, including but not limited to fences, culverts, decks, gazebos, agricultural structures, and accessory structures;
  - j. the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 7 of this ordinance.

2. Cost of project or improvements, including all materials and labor, as estimated by a licensed engineer or architect. A signed estimate by a contractor may also meet this requirement.
- C. Upon receipt of an application for a development permit, the Floodplain Administrator shall compare the elevation of the site to the BFE.
1. Any development located on land that is shown by survey elevation to be below the current BFE is subject to the provisions of this ordinance.
  2. Any development located on land shown to be below the BFE and hydraulically connected to a flood source, but not identified as floodplain on the current FIRM, is subject to the provisions of this ordinance.
  3. Any development located on land that can be shown by survey data to be higher than the current BFE and which has not been filled after the date of the site's first flood map showing the site in the floodplain, is not located in a mapped floodway, or located in a Zone A, is not in the floodplain and therefore not subject to the provisions of this ordinance. A LOMR-Floodway is required before developing land inadvertently included in a mapped floodway. Unless a LOMR is obtained, all ordinance provisions apply if the land is located in a Zone A.
  4. Any development located on land that is above the current BFE but will be graded to an elevation below the BFE, is subject to the provisions of this ordinance.
  5. The Floodplain Administrator shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first FIRM identification.
  6. The Floodplain Administrator shall be responsible for obtaining from the applicant copies of all other federal, state, and local permits, approvals or permit-not-required letters that may be required for this type of activity. The Floodplain Administrator shall not issue a permit unless all other federal, state, and local permits have been obtained.
- D. Upon receipt of an application for a critical facility, the Floodplain Administrator shall compare the elevation of the site to the 0.2% annual chance flood elevation, if available. Refer to Section 8. A. 5. for critical facility site requirements.
- E. A development permit or approval shall become invalid unless the actual Start of Construction, as defined, for work authorized by such permit, is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences. All permitted work shall be completed within (Insert twelve (12) months, eighteen (18) months or a local permit expiration period) after the date of issuance of the permit or the permit shall expire. Time extensions, of not more than 180 days each, may be granted, in writing, by the Floodplain Administrator. Time extensions shall be granted only if the original permit is compliant with this ordinance and the FIRM and FIS in effect at the time the extension is granted.

- F. Certification and As-Built Documentation. The applicant is required to submit certification by a licensed professional engineer or registered land surveyor that the finished fill and building elevations were accomplished in compliance with Section 6 of this ordinance. Floodproofing measures must be certified by a registered professional engineer or registered architect as being compliant with applicable floodproofing standards. FEMA Elevation Certificate and Floodproofing Certificate forms (Choose “are” or “may be”) required as documentation of compliance.

An as-built grading plan, prepared by a registered professional engineer (Choose “is” or “may be”) required to certify that any development in floodplain, such as grading or the construction of bridges or culverts, are in substantial conformance with the development permit.

No building, land or structure may be occupied or used in any manner until a letter or certificate has been issued by the Floodplain Administrator stating that the use of the building or land conforms to the requirements of this ordinance.

The Floodplain Administrator must maintain records in perpetuity documenting compliance with this ordinance, including the elevation to which structures and alterations to structures are constructed or floodproofed.

#### G. Application Fees and Engineering Review Fee

(This is optional language provided for your consideration. Check with your legal counsel if this fee may be charged. Also, if your community has an annual fee ordinance you would Insert language that refers to that ordinance in lieu of this language.)

A non-refundable application fee of \$ \_\_\_\_\_ shall be paid to the (Choose City/Village/County Clerk). An additional fee may be charged if the Floodplain Administrator requires the assistance of a professional engineer or other expert. The applicant will be contacted in writing before any outside review begins with the estimated engineering or expert review fee. The applicant must consent in writing before the outside review begins. The engineering review fee shall be paid in full by the applicant within 30 days after the applicant receives the bill.

### **Section 6. Protecting Buildings.**

- A. All buildings located in the floodplain shall be protected from flood damage below the FPE. This building protection requirement applies to the following situations:
1. Construction or placement of a new building or alteration or addition to an existing building.
  2. Value of improvements equals or exceeds the market value by fifty percent (50%) (For higher standards or may Insert “or structural alterations made to an existing building that increase the floor area by more than twenty percent (20%).” and “Improvements shall be figured cumulatively (pick either: “subsequent to the adoption of this ordinance”, “during the life of the

building” or “during a 10- year period”). If substantially improved, the existing structure and the addition must meet the flood protection standards of this section.

3. Repairs made to a substantially damaged building. (For higher standards or may Insert “These repairs shall be figured cumulatively (pick either: “subsequent to the adoption of this ordinance, “during the life of the building” or “during a 10-year period”). If substantially damaged, the entire structure must meet the flood protection standards of this section within 24 months of the date the damage occurred.
4. Installing a manufactured home on a new site or a new manufactured home on an existing site.
5. Installing a travel trailer or recreational vehicle on a site for more than one hundred eighty (180) days per year.
6. Repetitive loss to an existing building as defined in Section 2.

(Include 7. below if the community choses to allow homes with basements to be built in areas removed from the floodplain with a LOMR Based on Fill (LOMR-F). This refers to section 9E which will outline a community’s responsibility for determining if the site is reasonably safe from flooding. Although the area of fill has been removed from the floodplain any building with a basement built on the fill may be subject to damage from subsurface flooding caused by seepage through the fill.

7. Construction or placement of a new building or alteration or addition to an existing building with the low floor below BFE following a LOMR-F in accordance with the conditions outlined in Section 9. E. The structure must meet FEMA Technical Bulletin (TB) 10 Reasonably Safe from Flooding Requirement for Building on Filled Land.

B. Residential or non-residential buildings can meet the building protection requirements by one of the following methods:

1. The building may be constructed on permanent land fill with the lowest floor including basement at or above the FPE in accordance with the following conditions.:
  - a. The lowest floor (including basement) shall be at or above the FPE.
  - b. The fill shall be placed in layers no greater than six inches before compaction and should extend at least twenty (20) feet beyond the foundation before sloping below the FPE in lieu of a geotechnical report.
  - c. The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or other structural measure.
  - d. The fill shall be composed of rock or soil and not incorporated debris or refuse material.

- e. The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties and when necessary, stormwater management techniques, such as swales or basins, shall be incorporated.

Include (f) and (g) if your community has AO and AH Zone's.

- f. In AO Zone, require that new construction and substantially improved buildings have their lowest floor (including basement) to or above the highest adjacent grade at least as high the FPE for the Zone AO. In Zone AO areas with no elevations specified, the structure shall have the lowest floor, including basement, elevated at least two feet above the highest adjacent natural grade.
- g. In AO and AH Zones, new construction and substantially improved buildings shall have adequate drainage paths around buildings on slopes to guide floodwaters around and away from the structure.

- 2. The building may be elevated in accordance with the following:
  - a. The building or improvements shall be elevated on stilts, piles, solid walls, crawlspace, or other foundation that is permanently open to flood waters.
  - b. All components located below the FPE shall be constructed of materials resistant to flood damage.
  - c. The lowest floor and all electrical, heating, ventilating, plumbing, and air conditioning equipment shall be located at or above the FPE.
  - d. If walls are used, all enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. At least two (2) walls must have a minimum of one (1) permanent opening that is below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE, or the design must be certified by a Registered P.E, as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA Technical Bulletin 1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
  - e. The foundation and supporting members shall be anchored, designed, and certified so as to minimize exposure to hydrodynamic forces such as current, waves, ice, and floating debris.
    - i. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other service facilities may be located below the FPE provided they are waterproofed.
    - ii. The area below the FPE shall be used solely for parking or building access and not later modified or occupied as habitable space.

- iii. In lieu of the above criteria, the design methods to comply with these requirements may be certified by a licensed professional engineer or architect.
  3. The building may be constructed with a crawlspace located below the FPE provided that the following conditions and requirements of FEMA TB 11, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas, which ever are more restrictive, are met:
    - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
    - b. All enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. A minimum of one (1) permanent opening shall be provided on at least two walls that is below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE, or the design must be certified by a Registered P.E. as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA TB 1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
    - c. The interior height of the crawlspace measured from the interior grade of the crawl to the top of the foundations wall must not exceed four (4) feet at any point.
    - d. An adequate drainage system must be installed to remove floodwaters from the interior area of the crawlspace within a reasonable period of time after a flood event.
    - e. The velocity of floodwaters at the site should not exceed 5 feet per second for any crawlspace. For velocities in excess of 5 feet per second, other foundation types should be used.
    - f. Portions of the building below the FPE must be constructed with materials resistant to flood damage, and
    - g. Utility systems within the crawlspace must be elevated above the FPE.
- C. Non-residential buildings may be structurally dry floodproofed (in lieu of elevation) provided a licensed professional engineer or architect certifies that:
  1. Below the FPE the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood.
  2. The building design accounts for flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and the impact from debris and ice.

3. Floodproofing measures will be incorporated into the building design and operable without human intervention and without an outside source of electricity.
4. Levees, berms, floodwalls, and similar works are not considered floodproofing for the purpose of this subsection.

D. Manufactured homes or travel trailers to be permanently installed on site shall be:

1. Elevated to or above the FPE in accordance with Section 6. B, and
2. Anchored to resist flotation, collapse, or lateral movement by being tied down in accordance with the rules and regulations for the Illinois Mobile Home Tie-Down Act issued pursuant to 77 Ill. Adm. Code § 870.

E. Travel trailers and recreational vehicles on site for more than one hundred eighty (180) days per year shall meet the elevation requirements of section 6. D unless the following conditions are met:

1. The vehicle must be either self-propelled or towable by a light duty truck.
2. The hitch must remain on the vehicle at all times.
3. The vehicle must not be attached to external structures such as decks and porches
4. The vehicle must be designed solely for recreation, camping, travel, or seasonal use rather than as a permanent dwelling.
5. The vehicles having a total area not exceeding four hundred (400) square feet measured when measured at the largest horizontal projection.
6. The vehicle's wheels must remain on axles and inflated.
7. Air conditioning units must be attached to the frame so as to be safe for movement of the floodplain.
8. Propane tanks as well as electrical and sewage connections must be quick-disconnect.
9. The vehicle must be licensed and titled as a recreational vehicle or park model, and must either:
  - a. entirely be supported by jacks, or
  - b. have a hitch jack permanently mounted, have the tires touching the ground and be supported by block in a manner that will allow the block to be easily removed by used of the hitch jack.

F. Detached accessory structures may be permitted provided the following conditions are met:

1. The structure must be non-habitable.

2. The structure must be used only for the parking and storage and cannot be modified later into another use.
3. The structure must be located outside of the floodway or must meet all requirements of this ordinance.
4. The exterior and interior building components and elements (i.e., foundation, wall framing, exterior and interior finishes, flooring, etc.) below the BFE, must be built with flood-resistant materials in accordance Section 6.
5. All utilities, mechanical, and electrical must be elevated above the FPE.
6. The structure must have at least one permanent opening on at least two walls not more than one (1) foot above grade with one (1) square inch of opening for every one (1) square foot of floor area. They shall meet the opening requirements of Section 6(B)(2)(d);
7. The structure must be no more than one story in height and no more than six hundred (600) square feet in size.
8. The structure shall be anchored to resist floatation, collapse, lateral movement. and overturning.
9. All flammable or toxic materials (gasoline, paint, insecticides, fertilizers, etc.) shall be stored above the FPE.
10. The lowest floor elevation should be documented, and the owner advised of the flood insurance implications.

### **Section 7. Subdivision Requirements**

The ( **Insert name of the village or city governing board** ) shall take into account hazards, to the extent that they are known, in all official actions related to land management use and development.

- A. New subdivisions, manufactured home parks, annexation agreements, planned unit developments, and additions to manufactured home parks and subdivisions shall meet the damage prevention and building protections standards of Section 6 of this ordinance. Assure that subdivision proposals and other development will be reasonably safe from flooding and minimize flood damage.
- B. Streets, blocks lots, parks and other public grounds shall be located and laid out in such a manner as to preserve and utilize natural streams and channels. Wherever possible the floodplains should be included within parks, open space parcels, or other public grounds.
- C. Any proposal for such development shall include the following data:
  1. The BFE and the boundary of the floodplain, where the BFE is not available from an existing study, the applicant shall be responsible for calculating the BFE.
  2. The boundary of the floodway, when applicable.

3. A signed statement by a Licensed Professional Engineer that the proposed plat or plan accounts for changes in the drainage of surface waters in accordance with the Plat Act (765 ILCS 205/2).

### **Section 8 . Public Health and Other Standards**

A. Public health standards must be met for all floodplain development. In addition to the requirements of Section 6 of this ordinance, the following standards apply:

1. No development in the floodplain shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants, or other hazardous or toxic materials below the FPE unless such materials are stored in a floodproofed and anchored storage tank and certified by a professional engineer or floodproofed building constructed according to the requirements of Section 6 of this ordinance.
2. Public utilities and facilities such as sewer, gas and electric shall be located and constructed to minimize or eliminate flood damage.
3. Public sanitary sewer systems and water supply systems shall be located and constructed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
4. New and replacement on-site sanitary sewer lines or waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding. Manholes or other above ground openings located below the FPE shall be watertight.
5. Critical facilities, which are buildings, constructed or substantially improved within the floodplain or the 0.2 percent annual chance flood elevation when defined, shall have the lowest floor (including basement) elevated or structurally dry floodproofed to the 0.2 percent annual chance flood elevation or three feet above the BFE, whichever is greater. Adequate parking shall be provided for staffing of the critical facilities at or above the BFE or 0.2 percent chance flood, when defined. Access routes to all critical facilities should be reviewed and considered when permitting. Access routes should be elevated to or above the level of the BFE .

Floodproofing and sealing measures may also be used to provide protection, as described in Section 6, and must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.

Critical Facilities include emergency services facilities (such as fire and police stations), schools, hospitals, retirement homes, and senior care facilities. (A community may also choose to include one or more of the following: sewage treatment plants, water treatment plants, specific roads and bridges required for evacuation, critical utility sites (telephone switching stations or electrical transformers), and hazardous material storage facilities (chemicals, petrochemicals, hazardous or toxic substances) of a specified size or type.)

- B. All other activities defined as development shall be designed so as not to alter flood flows or increase potential flood damages.
- C. Dams are classified as to their size and their hazard/damage potential in the event of failure. Permits for dams may be required from IDNR/OWR. Contact IDNR/OWR to determine if a permit is required. If a permit is required, a permit application must be made to IDNR/OWR prior to the construction or major modification of jurisdictional dams. All construction activity for a dam must also meet the development requirements of this ordinance.
- D. In floodway areas, development shall cause no increase in flood levels during the occurrence of the base flood discharge. Prior to issuance of a floodplain development permit, the applicant must submit a hydrologic and hydraulic analysis, conducted by a registered professional engineer, demonstrating that the proposed development would not result in any increase in the base flood elevation.
- E. Notwithstanding any other provisions of this ordinance, a community may permit development within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that the community meets subsection (F) and fulfills any requirements for such revisions.
- F. Letters of Map Revision. The Floodplain Administrator shall require a CLOMR prior to issuance of a development permit for:
  - 1. Proposed floodway encroachments that will cause an increase in the BFE; and
  - 2. Proposed development which will increase the BFE by more than 0.1 feet in riverine area where FEMA has provided a BFE but no floodway.

Once a CLOMR has been issued by FEMA, the development permit may be issued for site grading and structures necessary in the area of the map change to achieve the final LOMR. Upon completion, the applicant shall submit as-built certifications, as required by FEMA, to achieve a final LOMR prior to the release of final development permits.

- G. When construction of a building following a FEMA issued LOMR Based on Fill (LOMR-F) is requested, the condition where a site in the floodplain is removed due to the use of fill to elevate the site above the BFE, the applicant may not (or the community can chose to allow and insert “may”, see Section 6.A.& above) apply for a permit from to construct the lowest floor of a building below the BFE in the floodplain.

**(If “may is chosen”, Insert the following:**

The Floodplain Administrator shall not issue such a permit unless the applicant has demonstrated that the building will be reasonable safe from flooding. The Floodplain Administrator shall require a professional certification from a qualified design professional that indicates the land or buildings are reasonably safe from flooding,

according to the criteria established in FEMA TB 10. Professional certification may come from a professional engineer, professional geologist, professional soil scientist, or other design professional qualified to make such evaluations.

The Floodplain Administrator shall maintain records, available upon request by FEMA, all supporting analysis and documentation used to make that determination, including but not limited to, all correspondence, professional certification, existing and proposed grading, sump pump sizing, foundation plans, Elevation Certificates, soil testing and compaction data.)

### **Section 9. Carrying Capacity and Notification.**

For all projects involving channel modification, fill, or stream maintenance (including levees), the flood carrying capacity of the watercourse shall be maintained. In addition, adjacent communities, Illinois Department of Natural Resources and FEMA, shall be notified thirty (30) days prior to issuance of a permit for any alteration or relocation of a watercourse.

### **Section 10. Variances.**

- A. No variances shall be granted within a floodway if any increases in the base flood elevation would result.
- B. Whenever the standards of this ordinance place undue hardship on a specific development proposal, the applicant may apply to the (Insert name of the elected or appointed board of appeals) for a variance. The (Insert the name of the elected or appointed board of appeals) shall review the applicant's request for a variance and shall submit its recommendation to the (Insert the name of the village or city governing board). The (Insert the name of the village or city governing board) may attach such conditions to granting of a variance as it deems necessary to further the purposes and objectives of this ordinance. The (Insert the name of the village or city governing board) shall base the determination on:
  - 1. Technical justifications submitted by the applicant.
  - 2. The staff report, comments, and recommendations submitted by the floodplain administrator.
  - 3. The limitations, considerations, and conditions set forth in this section.
- C. The findings of fact and conclusions of law made by the (Insert name of City/ Village board of review) according to Section 10. A, the notifications required by Section 10. B, and a record of hearings and evidence considered as justification for the issuance of all variances from this ordinance shall be maintained by the (Insert City, Village) in perpetuity.
- D. No variance shall be granted unless the applicant demonstrates and the (Insert name of City/ Village Board of appeals) finds that all of the following conditions are met:
  - 1. The development activity cannot be located outside the floodplain.

2. A determination that failure to grant the variance would result in exceptional hardship by rendering the lot undevelopable.
3. The variance granted is the minimum necessary, considering the flood hazard, to afford relief.
4. There will be no additional threat to public health, public safety, destruction of beneficial stream uses and functions including, aquatic habitat, causation of fraud on or victimization of the public, conflict with existing local laws or ordinances, or creation of a nuisance.
5. There will be no additional public expense for flood protection, rescue or relief operations, policing, lost environmental stream uses and functions, repairs to streambeds and banks, or repairs to roads, utilities, or other public facilities.
6. The circumstances of the property are unique and do not establish a pattern inconsistent with the intent of the NFIP.
7. Good and sufficient cause has been shown that the unique characteristics of the size, configuration, or topography of the site renders the requirements of this ordinance inappropriate.
8. All other state and federal permits have been obtained.

E. The (Insert the name of the elected or appointed board of appeals) shall notify an applicant in writing that a variance from the requirements of the building protections standards of Section 7 that would lessen the degree of protection to a building will:

1. Result in increased premium rates for flood insurance up to twenty-five dollars (\$25) per one hundred dollars (\$100) of insurance coverage.
2. Increase the risk to life and property.
3. Require that the applicant proceed with knowledge of these risks and that the applicant acknowledge in writing the assumption of the risk and liability.

F. Considerations for Review. In reviewing applications for variances, all technical evaluations, all relevant factors, all other portions of these regulations, and the following shall be considered:

1. The danger that materials and debris may be swept onto other lands resulting in further injury or damage.
2. The danger to life and property due to flooding or erosion damage.
3. The susceptibility of the proposed development, including contents, to flood damage and the effect of such damage on current and future owners.
4. The importance of the services provided by the proposed development to the community.
5. The availability of alternate locations for the proposed development that are not subject to flooding or erosion.

6. The compatibility of the proposed development with existing and anticipated development.
7. The relationship of the proposed development to the comprehensive plan and floodplain management program for that area.
8. The safety of access to the property in times of flood for ordinary and emergency vehicles.
9. The expected heights, velocity, duration, rate of rise and debris and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
10. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets, and bridges.

G. Historic Structures. Variances issued for the reconstruction, repair, or alteration of a historic site or historic structure as defined in “Historic Structures”, may be granted using criteria more permissive than the requirements of Sections 6 and 7 of this ordinance subject to the conditions that:

1. The repair or rehabilitation is the minimum necessary to preserve the historic character and design of the structure.
2. The repair or rehabilitation will not preclude the structure’s continued designation as a historic structure.

H. Agriculture Structures. Variances issued for the construction or substantial improvement of agricultural structures which do not meet the non-residential building requirements of Sections 6. B and 6. C, provided the requirements of Section 10. A through 10. G and the following are satisfied:

1. A determination that the proposed agricultural structure:
  - a. Is used exclusively in connection with the production, harvesting, storage, raising, or drying of agricultural commodities, or storage of tools or equipment used in connection with these purposes or uses, and will be restricted to such exclusive uses.
  - b. Has low damage potential (amount of physical damage, contents damage, and loss of function).
  - c. Does not increase risks and pose a danger to public health, safety, and welfare if flooded and contents are released, including but not limited to the effects of flooding on liquified natural gas terminals, and production and storage of highly volatile, toxic, or water-reactive materials.
  - e. Complies with the wet floodproofing construction requirements of Section H. 2.

2. Wet floodproofing construction requirements. Wet floodproofed structures shall:
  - a. The exterior and interior building components and elements (i.e., foundation, wall framing, exterior and interior finishes, flooring, etc.) below the BFE, must be built with flood-resistant materials in accordance with Section 6 of this ordinance.
  - b. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
  - c. All enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. A minimum of one (1) permanent opening shall be provided on at least two walls that is below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding below the BFE, or the design must be certified by a Registered P.E. as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA TB 1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
  - d. Any mechanical, electrical, or other utility equipment must be located above the BFE or floodproofed so that they are contained within a watertight, floodproofed enclosure that is capable of resisting damage during flood conditions in accordance with Section 6 of this ordinance.
  - e. If located in a floodway, must be issued a state floodway permit or have a letter of determination that a permit is not required.
  - f. The building may not be used for manure storage or livestock confinement operations.

### **Section 11. Disclaimer of Liability.**

The degree of protection required by this ordinance is considered reasonable for regulatory purposes and is based on available information derived from engineering and scientific methods of study. Larger floods may occur or flood heights may be increased by man-made or natural causes. This ordinance does not imply that development either inside or outside of the floodplain will be free from flooding or damage. This ordinance does not create liability on the part of the (Insert village or city name) or any officer or employee thereof for any flood damage that results from proper reliance on this ordinance or any administrative decision made lawfully thereunder.

### **Section 12. Penalty.**

Failure to obtain a permit for development in the floodplain or failure to comply with the conditions of a permit or a variance shall be deemed to be a violation of this ordinance. Upon due investigation, the (Insert the title of the Official, Office or Agency, or Municipal Attorney) may determine that a violation of the minimum standards of this

ordinance exists. The (Insert the title of the Official, Office or Agency, or Municipal Attorney) shall notify the owner in writing of such violation.

- A. If such owner fails after ten (10) days from the date the written notice is issued, to correct the violation:
1. The (Insert village or city name) shall make application to the circuit court for an injunction requiring conformance with this ordinance or make such other order as the court deems necessary to secure compliance with the ordinance.
  2. Any person who violates this ordinance shall upon conviction thereof be fined not less than fifty dollars (\$50) or more than seven hundred fifty (\$750) for each offense.
  3. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues, and
  4. The (Insert village or city name) shall record a notice of violation on the title of the property.
- B. The (Insert the title of the Official, Office or Agency, or Municipal Attorney) shall inform the owner that any such violation is considered a willful act to increase flood damages and therefore may cause coverage by a Standard Flood Insurance Policy to be suspended.

The (Insert the title of the Official, Office or Agency, or Municipal Attorney) is authorized to issue an order requiring the suspension of the subject development. The stop-work order shall be in writing, indicate the reason for the issuance, and shall order the action, if necessary, to resolve the circumstances requiring the stop-work order. The stop-work order constitutes a suspension of the permit.

No site development permit shall be permanently suspended or revoked until a hearing is held by the (Insert name of the elected or appointed board of appeals). Written notice of such hearing shall be served on the permittee and shall state the grounds for the complaint, reasons for suspension or revocation, and the time and place of the hearing.

At such hearing the permittee shall be given an opportunity to present evidence on their behalf. At the conclusion of the hearing, the (Insert name of the elected or appointed board of appeals) shall determine whether the permit shall be suspended or revoked.

- C. Nothing herein shall prevent the (Insert village or city name) from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

### **Section 13. Abrogation and Greater Restrictions.**

This ordinance repeals and replaces other ordinances adopted by the (Insert the name of the village or city governing board) to fulfill the requirements of the NFIP. However, this ordinance does not repeal the original resolution or ordinance adopted to achieve eligibility in the program. Nor does this ordinance repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where this ordinance and other ordinance easements, covenants or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

**Section 14. Severability.**

The provisions and sections of this ordinance shall be deemed separable and the invalidity of any portion of this ordinance shall not affect the validity of the remainder.

**Section 15. Effective Date.**

This ordinance shall be in full force and effect from and after its passage, approval, and publication as required by law.

Passed by the (Insert the name of the village or city governing board) of the (Insert village or city name), Illinois, this (Insert date) day of (Insert month), 20(Insert year), the vote being taken by ayes and noes and entered upon the legislative records as follows:

AYES:

NOES:

APPROVED:

\_\_\_\_\_  
Name  
Mayor/President  
City/Village of \_\_\_\_\_  
\_\_\_\_\_ County, Illinois

ATTEST

\_\_\_\_\_  
Name  
City Clerk  
City/Village of \_\_\_\_\_  
\_\_\_\_\_ County, Illinois

