

## Chapter 106 FLOODPLAINS

### Sec. 106-1. Purpose.

The purpose of this chapter is to maintain this County's eligibility in the National Flood Insurance Program; to minimize potential losses due to periodic flooding including loss of life, loss of property, health and safety hazards, disruption of commerce and government services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare; and to preserve and enhance the quality of surface waters, conserve economic and natural values and provide for the wise utilization of water and related land resources. This chapter is adopted in order to accomplish the following specific purposes:

- (1) To meet the requirements of 615 ILCS 5/18g (Rivers, Lakes and Streams Act—construction in 100-year floodway);
- (2) To ensure that new development does not increase the flood or drainage hazards to others, or create unstable conditions susceptible to erosion;
- (3) To protect new buildings and major improvements to buildings from flood damage;
- (4) To protect human life and health from the hazards of flooding;
- (5) To lessen the burden on the taxpayer for flood control projects, repairs to flood-damaged public facilities and utilities, and flood rescue and relief operations;
- (6) To make Federally subsidized flood insurance available for property in the County by fulfilling the requirements of the National Flood Insurance Program;
- (7) To comply with the rules and regulations of the National Flood Insurance Program codified as 44 CFR Pts. 59—79, as amended;
- (8) To protect, conserve, and promote the orderly development of land and water resources; and
- (9) To preserve the natural characteristics and functions of watercourses and floodplains in order to moderate flood and storm water impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits and enhance community and economic development.

(Ord. No. 00-O-30, § 200.0, 11-2-2000; Ord. No. 04-O-10, § 200.0, 2-3-2004.)

### Sec. 106-2. Definitions.

The following words, terms and phrases, when used in this chapter shall have the meanings ascribed to them in this section:

*Accessory Structure* means 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 the use of which is incidental to the use of the principal building.

*Act* means the Rivers, Lakes and Streams Act (615 ILCS 5/4.9 et seq.).

*Applicant* means any person that submits an application.

*Appropriate use* means only uses of the designated floodway that are permissible and will be considered for permit issuance. The only uses that will be allowed are as specified in Section 106-7(2).

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ASCE means the American Society of Civil Engineers.

*Base flood* means the flood having a one-percent probability of being equaled or exceeded in any given year. The base flood is also known as the 100-year, or 1% annual chance, -frequency flood event.

*Base Flood Elevation (BFE)* means 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. Application of the base flood elevation at any location is as defined in Section 106-5.

*Breakaway wall* means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

*Building* means a structure that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a manufactured home, mobile home or a prefabricated building. This term also includes recreational vehicles and travel trailers to be installed on a site for more than 180 days, unless fully licensed and ready for highway use.

*Channel* means any river, stream, creek, brook, branch, natural or artificial depression, ponded area, flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or manmade drainageway, which has a definite bed and banks or shoreline, in or into which surface water or groundwater flows, either perennially, intermittently or seasonally.

*Channel modification* means alteration of a channel by changing the physical dimensions or materials of its bed or banks. Channel modification includes damming, rip-rapping (or other armoring), widening, heightening, deepening, straightening, relocating, lining and significant removal of native vegetation from the bottom or banks. Channel modification does not include the clearing of dead or dying vegetation, debris, or trash from the channel. Channelization is a severe form of channel modification involving a significant change in the channel cross-section and typically involving relocation of the existing channel (e.g., straightening).

*Coastal High Hazard Area* means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast, and any other area subject to high velocity wave action from storms or seismic sources. A coastal high hazard area is identified on a community's FIRM by the designation of zone VE. Cook County only has jurisdiction over the portions of the Cook County FIRM that are unincorporated as defined pursuant to 65 ILCS 5/7-4-4 and 55 ILCS 5/1-1004.

*Compensatory storage* means an artificially excavated, hydraulically equivalent volume of storage within the special flood hazard area (SFHA) used to balance the loss of natural flood storage capacity when artificial fill or structures are placed within the floodplain. The uncompensated loss of natural floodplain storage can increase off-site floodwater elevations and flows.

*Conditional approval of a designated floodway map change* means preconstruction approval by IDNR/OWR and FEMA of a proposed change to the floodway map. This preconstruction approval, pursuant to this chapter, gives assurances to the property owner that once an appropriate use is constructed according to permitted plans, the floodway map can be changed, as previously agreed, upon review and acceptance of as-built plans.

*Conditional letter of map revision (CLOMR)* means a letter which indicates that FEMA will revise base flood elevations, flood insurance rate zones, flood boundaries or floodways as shown on an effective flood hazard boundary map or flood insurance rate map, once the as-built plans are submitted and approved.

*Control structure* means a structure designed to control the rate of flow that passes through the structure, given a specific upstream and downstream water surface elevation (e.g., culvert).

*Critical facility* means 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. Examples of critical facilities where flood protection should be required include: emergency services facilities (such as fire and police stations), schools, hospitals, retirement homes and senior care facilities, major roads and bridges, critical utility sites

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(telephone switching stations or electrical transformers), and hazardous material storage facilities (chemicals, petrochemicals, hazardous or toxic substances). Examples of critical facilities where flood protection is recommended include: sewage treatment plants, water treatment plants, and pumping stations.

*Dam* means 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.

*Department* means, for purposes of this chapter, the Cook County Department of Building and Zoning.

*Designated Floodway* means the channel, including on-stream lakes, and that portion of the floodplain adjacent to a stream or watercourse as designated by IDNR/OWR, which is needed to store and convey the existing 100-year frequency flood discharge with no more than a 0.1 foot increase in stage due to the loss of flood conveyance or storage, and no more than a ten percent increase in velocities.

~~(1) The floodways are designated on the countywide Flood Insurance Rate Map for Cook County number 17031C, panels 15-93, 155-244, 253, 265, 285-404, 415, 416, 418, 419, 456-520, 581-609, 616, 628-635, 637-655, 658, 661-701, 706, and 708-832, dated August 19, 2008; panels 611-614, 617-619, 636, 702-704, 707 dated November 1, 2019; and panels 94, 113, 251, 252, 254-260, 266-269, 406-409, 417, 436-440, 526-545, 656, 657, 659 dated September 10, 2021 prepared by FEMA. With respect to panels 94, 113, 251, 252, 254-260, 266-269, 406-409, 417, 436-440, 526-545, 656, 657, 659 Cook County only has jurisdiction over the portions of these panels that are unincorporated as defined pursuant to 65 ILCS 5/7-4-4 and 55 ILCS 5/1-1004.~~

(2) To locate the designated floodway boundary on any site, the designated floodway boundary should be scaled off the designated floodway map and located on a site plan, using reference marks common to both maps. Where interpretation is needed to determine the exact location of the designated floodway boundary, IDNR/OWR should be contacted for the interpretation.

(3) The terms "designated floodway" and "floodway" are synonymous for purposes of this chapter.

*Development* means any manmade 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, cconstruction, reconstruction, repair, or placement of a building or any addition to a building.

(2) Installing a manufactured home on a site, preparing a site for a manufactured home, or installing a travel trailer or recreational vehicle on a site for more than 180 days. If the travel trailer or recreational vehicle is on site for less than 180 days, it must be fully licensed and ready for highway use.

(3) Installation of utilities, Drilling, mining, installing utilities, construction of roads, bridges, culverts or similar projects.

(4) Demolition of a structure or redevelopment of a site Substantial improvement of an existing building.

(5) Redevelopment of a site, Clearing of land as an adjunct of construction.

(6) Construction or erection of levees, walls, fences, or dams.

(7) Drilling, mining, or culverts, channel modification, filling, dredging, grading, excavating, paving, or other nonagricultural alterations of the ground surface; storage of materials; deposit of solid or liquid waste.

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(78) Storage of materials including the placement of gas and liquid storage tanks, and channel Any modifications or any other activity of humans that might change the direction, height, or velocity of flood or surface water, including extensive vegetation removal.

Development does not include maintenance of existing buildings and facilities such as reroofing or resurfacing of roads when there is no increase in elevation, gardening, plowing, and similar agricultural practices that do not involve filling, grading, or construction of levees.

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*Elevation certificates* means a form published by FEMA that is used to certify the elevation to which a building has been elevated.

*Erosion* means the general process whereby soils are moved by flowing water or wave action.

*Exempt organizations* means organizations which are exempt from this chapter per Illinois Compiled Statutes (ILCS), including State, Federal or local units of government.

*Existing manufactured home park or subdivision* means 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 (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) has been completed before April 1, 1990.

*Expansion to an existing manufactured home park or subdivision* means 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* means the Federal Emergency Management Agency and its regulations at 44 CFR Pts. 59—79 effective as of September 29, 1989. This incorporation does not include any later editions or amendments.

*Flood* means a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland or tidal waves, or the unusual and rapid accumulation or runoff of surface waters from any source.

*Flood frequency* means a period of years, based on a statistical analysis, during which a flood of a stated magnitude may be expected to be equaled or exceeded.

*Flood fringe* means that portion of the floodplain outside of the delineated floodway.

*Flood insurance rate map (FIRM)* means a map prepared by FEMA that depicts the special flood hazard area (SFHA) within a community. This map includes insurance rate zones and floodplains and may or may not depict floodways.

*Flood Insurance Study (FIS)* means an examination, evaluation and determination of flood hazard and, if appropriate, corresponding water surface elevations.

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*Flood protection elevation (FPE)* means the elevation of the base flood or 100-year frequency flood plus two feet of freeboard at any given location in the special flood hazard area (SFHA). For critical facilities, this means the elevation of the base flood or 100-year frequency flood plus three feet of freeboard at any given location.

*Floodplain and Special Flood Hazard Area (SFHA)* means that land typically adjacent to a body of water with ground surface elevations at or below the base flood or the 1 percent or greater annual chance of flooding in any given year (100-year frequency flood elevation). Floodplains may also include detached special flood hazard areas (SFHAs), ponding areas, etc. The floodplain is also known as the special flood hazard area (SFHA). The floodplains are those lands within the jurisdiction of the County that are subject to inundation by the base flood or 100-year frequency flood. The special flood hazard areas (SFHAs) of the County are generally identified on the Countywide flood insurance rate map (FIRM) for Cook County number 17031C, prepared by the Federal Emergency Management Agency, panels 15-93, 155-244, 253, 265, 285-404, 415, 416, 418, 419, 456-520, 581-609, 616, 628-635, 637-655, 658, 661-701, 706, and 708-832, dated August 19, 2008; panels 611-614, 617-619, 636, 702-704, 707 dated November 1, 2019; and panels 94, 113, 251, 252, 254-260, 266-269, 406-409, 417, 436-440, 526-545, 656, 657, 659 dated September 10, 2021. With respect to panels 94, 113, 251, 252, 254-260, 266-269, 406-409, 417, 436-440, 526-545, 656, 657, 659 Cook County only has jurisdiction over the portions of these panels that are unincorporated as defined pursuant to 65 ILCS 5/7-4-4 and 55 ILCS 5/1-1004. 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

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including but not limited to historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

*Flood Protection Elevation (FPE)* means the elevation of the Base Flood (or depth) plus two feet of freeboard at any given location in the Floodplain.

*Floodproofing* means any combination of structural and nonstructural additions, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

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

*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. In no case shall the designated height be more than 0.1 foot at any point within the community. The floodway for the floodplains shall be as delineated on the FIRM prepared by FEMA. For other areas, the entire floodplain shall be considered to be the floodway unless an analysis is approved by the IDNR/OWR demonstrating that a project site is outside of the floodway. If a floodway analysis is not required by IDNR/OWR under 17 ILL. ADM. Code 3700, the floodways shall be according to the best data available from the Federal, State, or other sources.

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*Freeboard* means an increment of elevation added to the base flood elevation 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.

*Highest Adjacent Grade* means the highest natural elevation of the ground surface prior to construction next to the proposed structure, before any construction begins.

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*Historic structure* means 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.

*Hydrologic and hydraulic calculations* means engineering analysis which determines expected flood flows and flood elevations based on land characteristics and rainfall events.

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

*Letter of map amendment (LOMA)* means an official determination by FEMA that a specific structure is not in a 100-year flood zone; amends the effective flood hazard boundary map (FHBM) or flood insurance rate map (FIRM).

*Letter of map revision (LOMR)* means a letter that revises base flood or 100-year frequency flood elevations, flood insurance rate zones, flood boundaries or floodways as shown on an effective flood hazard boundary map (FHBM) or flood insurance rate map (FIRM).

*Lowest Floor* means 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 Building in violation of the applicable non-elevation design requirements of this chapter.

*Manufactured home* means a structure, transportable in one or more sections, which is built on a permanent chassis and is designated for use with or without a permanent foundation when attached to the required utilities. The term "manufactured homes" also includes park trailers, travel trailers and other similar vehicles placed on site for more than 180 consecutive days. The term "manufactured home" does not include a recreational vehicle.

*Manufactured home park or subdivision* means a parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale.

*Mitigation* includes those measures necessary to minimize the negative effects which floodplain development activities might have on the public health, safety and welfare. Examples of mitigation include compensatory storage, soil erosion and sedimentation control, and channel restoration. Mitigation may also include those activities taken to reduce a structure's susceptibility to flooding.

*Natural*, when used in reference to channels, means those channels formed by the existing surface topography of the earth prior to changes made by man. A natural stream tends to follow a meandering path; its floodplain is not constrained by levees; the area near the bank has not been cleared, mowed or cultivated; the stream flows over soil and geologic materials typical of the area with no substantial alteration of the course or cross-section of the stream caused by filling or excavating. A modified channel may regain some natural characteristics over time as the channel meanders and vegetation is reestablished. Similarly, a modified channel may be restored to more natural conditions by man through regrading and revegetation.

*NAVD88* means North American Vertical Datum of 1988. NAVD88 supersedes the National Geodetic Vertical Datum of 1929 (NGVD).

*New Construction* means structures for which the start of construction commenced on or after the effective date of floodplain management regulations adopted by Cook County on 04-01-1990 and includes any subsequent improvements of such structures.

*New manufactured home park or subdivision* means 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 (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) has been completed on or after April 1, 1990.

*Ordinary high water mark (OHWM)* means the point on the bank or shore up to which the presence and action of surface water is so continuous so as to leave a distinctive mark, such as by erosion, destruction or prevention of terrestrial vegetation, predominance of aquatic vegetation or other easily recognized characteristics.

*Public bodies of waters* means all open public streams and lakes capable of being navigated by watercraft, in whole or in part, for commercial uses and purposes, and all lakes, rivers, and streams which in their natural condition were capable of being improved and made navigable, or that are connected with or discharge their waters into navigable lakes or rivers within, or upon the borders of the State of Illinois, together with all bayous, sloughs, backwaters, and submerged lands that are open to the main channel or body of water directly accessible thereto.

*Public flood control project* means a flood control project which will be operated and maintained by a public agency to reduce flood damages to existing buildings and structures which includes a hydrologic and hydraulic study of the existing and proposed conditions of the watershed. Nothing in this definition shall preclude the design, engineering, construction or financing, in whole or in part, of a flood control project by qualified persons or parties who are not public agencies.

*Recreational vehicle and travel trailer* mean a vehicle which is:

- (1) Built on a single chassis;
- (2) Four hundred square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and

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- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

*Registered land surveyor* means a land surveyor registered in the State of Illinois, under The Illinois Land Surveyors Act (225 ILCS 330/1 et seq.).

*Registered professional engineer* means an engineer registered in the State of Illinois, under The Illinois Professional Engineering Practice Act (225 ILCS 325/1 et seq.).

*Repair, remodeling and maintenance* mean development activities which do not result in any increases in the outside dimensions of a building or any changes to the dimensions of a structure.

*Retention/detention facility.* A retention facility stores storm water runoff without a gravity release. A detention facility provides for storage of storm water runoff and controlled release of this runoff during and after a flood or storm.

*Riverine SFHA* means any special flood hazard area (SFHA) subject to flooding from a river, creek, intermittent stream, ditch, on stream lake system or any other identified channel. This term does not include areas subject to flooding from lakes, ponding areas, areas of sheet flow, or other areas not subject to overbank flooding.

*Runoff* means the water derived from melting snow or rain falling on the land surface, flowing over the surface of the ground or collected in channels or conduits.

*Sedimentation* means the processes that deposit soils, debris, and other materials either on other ground surfaces or in bodies of water or watercourses.

*Special flood hazard area (SFHA)* means any base flood area subject to flooding from a river, creek, intermittent stream, ditch, or any other identified channel or ponding and shown on a flood hazard boundary map (FHBM) or flood insurance rate map (FIRM) as Zone A, AO, A1-30, AE, A99, AH, [AR, AR/A1-30, AR/AO, AR/AH, AR/A, VO, V1-30, VE, V, M, E, D, or X or V.](#)

*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* means the results of a manmade change to the land constructed on or below the ground, including the construction, reconstruction or placement of a building or any addition to a building; installing a manufactured home on a site; preparing a site for a manufactured home or installing a travel trailer on a site for more than 180 days unless they are fully licensed and ready for highway use.

*Substantial damage.* A building is considered substantially damaged when it sustains damage from any cause (fire, flood, earthquake, etc.), whereby the cost of fully restoring the structure would equal or exceed 50 percent of the pre-damage market value of the structure, regardless of the actual repair work performed.

*Substantial improvement* means any [cumulative](#) repair, [addition, rehabilitation](#), reconstruction or improvement of a structure, [subsequent to the adoption of this ordinance on April 1, 1990, in which where the](#) cost of the improvements equals or exceeds 50 percent of the market value of the structure [or and/or](#) increases the floor area by [at least more than](#) 20 percent, with the calculation of initial value or measurement of initial floor area to be taken at the latest point in time prior to the repair, [addition, rehabilitation](#), reconstruction or improvement.

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- (1) ~~For the purposes of this definition substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.~~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.
  - (2) ~~The term "substantial improvement" does not include 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 Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure listed on the National Register of Historic Places or the Illinois Register of Historic Places..~~

*Transition section* means reaches of the stream or floodway where water flows from a narrow cross-section to a wide cross-section or vice versa.

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

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

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(Ord. No. 00-O-30, § 300.0, 11-2-2000; Ord. No. 04-O-10, § 300.0, 2-3-2004; Ord. No. 05-O-29, 5-17-2005; Ord. No. 05-O-48, §§ 300.14(a), 300.26(a), 11-15-2005; Ord. No. 06-O-34, 9-19-2006; Ord. No. 07-O-21, 4-3-2007; Ord. No. 08-O-31, 4-23-2008; Ord. No. 19-5803, 10-24-2019 ; Ord. No. 21-4087 , 7-29-2021.)

### **Sec. 106-3. Administration and enforcement.**

- (a) The County Department of Building and Zoning (Department) shall be responsible for fulfilling all of the duties listed in Section 106-4.
- (b) To fulfill those duties, the Department first should use the criteria listed in Section 106-5, Base Flood Elevations, to determine whether the development site is located within a floodplain subject to the regulatory jurisdiction of the County.
- (c) Once it has been determined that a site is located within a floodplain, the Department shall determine whether the development site is within a flood fringe, a designated floodway, or within a special flood hazard area (SFHA) or floodplain for which no floodway has been identified.
  - (1) If the site is within a flood fringe, the Department shall require that the minimum requirements of Section 106-6 be met.
  - (2) If the site is within a floodway, the Department shall require that the minimum requirements of Section 106-7 be met.
  - (3) If the site is located within a special flood hazard area (SFHA) or floodplain for which no detailed study has been completed and approved, the Department shall require that the minimum requirements of Section 106-8 be met.
- (d) In addition, the general requirements of Section 106-9 shall be met for all developments meeting the requirements of Section 106-6, 106-7, or 106-8.
- (e) The Department shall assure itself that all development proposals comply with the requirements of Section 106-10.
- (f) If a variance is to be sought for a development proposal, the Department shall determine whether the requirements of Section 106-11 have been satisfactorily addressed. Applications for variation shall be made in accordance with the Appendix A, Zoning.
- (g) In order to ensure that property owners obtain permits as required in this chapter, the Department may take any and all actions as outlined in Section 106-13.



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(Ord. No. 00-O-30, § 400.0, 11-2-2000; Ord. No. 04-O-10, § 400.0, 2-3-2004.)

#### **Sec. 106-4. Duties of the enforcement officials.**

The Department shall be responsible for the general administration and enforcement of this chapter, which shall include the following:

- (1) *Determining the floodplain designation.*
  - a. Checking all proposed development sites to determine whether the site is in a special flood hazard area (SFHA) in unincorporated Cook County.
  - b. If the development site is in a special flood hazard area (SFHA), determining whether the site is located in a floodway, flood fringe or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile.
  - c. Checking whether the development is potentially within an extended special flood hazard area (SFHA) (with a drainage area of less than one square mile), indicating that the development would have adverse impacts regarding storage, conveyance, or inundation which would be the basis for the applicant being required to delineate the floodplain and floodway and be subject to the provisions of the remaining sections of this chapter.
  - d. If the site is within a Coastal High Hazard Area, require that the minimum requirements of Section 106-9 be met.
  - e. Require base flood elevation data for subdivision proposals or other developments greater than 50 lots or 5 acres.
- (2) *Professional engineer review.*
  - a. If the development site is within a floodway or in a floodplain for which a detailed study has not been conducted and which drains more than one square mile, the permit shall be referred to ~~the County Superintendent of Highways~~ a Professional Engineer under employ or contract of Cook County, for review to ensure that the development meets Section 106-7 or 106-8.
  - b. In the case of an appropriate use, ~~the County Superintendent of Highways~~ a Professional Engineer under employ or contract of Cook County shall state in writing that the development meets the requirements of Section 106-7.
- (3) *Dam safety requirements.*
  - a. Ensure that an IDNR/OWR permit has been issued or a letter indicating no permit is required, if the proposed development activity includes construction of a dam as defined in Section 106-1.
  - b. Regulated dams may include weirs, restrictive culverts or impoundment structures.
- (4) *Other permit requirements.* Ensure that any and all required Federal, State and local permits are received prior to the issuance of a floodplain development permit.
- (5) *Plan review and permit issuance.*
  - a. Ensure that all development activities within the special flood hazard area (SFHAs) of the jurisdiction of the County meet the requirements of this chapter; and
  - b. Issue a floodplain development permit in accordance with the provisions of this chapter and other regulations of this community when the development meets the conditions of this chapter.
- (6) *Inspection review.* Inspect all development projects before, during and after construction to assure proper elevation of the structure and to ensure compliance with the provisions of this chapter.

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(7) *Elevation and floodproofing certificates.* Maintain permit files including:

- a. An elevation certificate certifying the elevation of the lowest floor (including basement) of a residential or nonresidential building subject to Section 106-9; or an Elevation Certificate certifying the elevation of the lowest horizontal structural member of the Lowest Floor, where required by Section 106.9 and/or
- b. The elevation to which a nonresidential building has been floodproofed, using a floodproofing certificate, for all buildings subject to the provisions of Section 106-9.
- c. Certification of structural design and methods of construction for VE zone construction as required by Section 106.9.
- d. Certification of breakaway wall design, when applicable, as provided in Section 106.9.

(8) Records for Substantial Improvement. Maintain records that include the cost of work, market value, calculation of percent improvement, and issued determination letters.

(9) LOMC Process. Within 6 months of changes in Base Flood Elevation, ensure notification of FEMA and submission of technical or scientific data.

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(810) *Records for public inspection.* Maintain for public inspection and furnish upon request base flood data, special flood hazard areas (SFHA's) and designated floodway maps, copies of Federal or State permit documents, variance documentation, conditional letter of map revision, letter of map revision, letter of map amendment and "as-built" elevation and floodproofing and/or elevation certificates for all buildings constructed subject to this chapter.

(911) *State permits.* Ensure that construction authorization has been granted by IDNR/OWR, for all development projects subject to Sections 106-7 and 106-8, unless enforcement responsibility has been delegated to the County. However, the following review approvals are not delegated to the County and shall require review or permits from IDNR/OWR:

- a. Organizations which are exempt from this chapter, as per the Illinois Compiled Statutes;
- b. IDNR/OWR projects, dams or impoundment structures as defined in Section 106-2 and all other State, Federal or local unit of government projects, including projects of any City, or Village and County, except for those projects meeting the requirements of Section 106-7(2)g;
- c. An engineer's determination that an existing bridge or culvert crossing is not a source of flood damage and the analysis indicating the proposed flood profile, per Section 106-7(2)c.3;
- d. An engineer's analysis of the flood profile due to Section 106-7(2)c.4;
- e. Alternative transition sections and hydraulically equivalent compensatory storage as indicated in Sections 106-7(2)c.1, 106-7(2)c.2, and 106-7(2)c.8;
- f. Permit issuance of structures within, under, or over publicly navigable rivers, lakes and streams;
- g. Any changes in the base flood elevation or floodway locations; and
- h. Base flood elevation determinations where none now exist.

(10) *Cooperation with other agencies.*

- a. Cooperate with State and Federal floodplain management agencies to improve base flood or 100-year frequency flood and floodway data and to improve the administration of this chapter;
- b. Submit data to IDNR/OWR and FEMA for proposed revisions of a regulatory map;
- c. Submit reports as required for the National Flood Insurance Program; and

d. Notify FEMA of any proposed amendments to this chapter.

- (11) *Promulgate regulations.* Promulgate rules and regulations as necessary to administer and enforce the provisions of this chapter, subject however to the review and approval of IDNR/OWR and FEMA for any ordinance changes.

(Ord. No. 00-O-30, § 500.0, 11-2-2000; Ord. No. 04-O-10, § 500.0, 2-3-2004; Ord. No. 21-4087, 7-29-2021.)

## Sec. 106-5. Base flood elevation.

This chapter's protection standard is based on the Flood Insurance Study for the County dated January 23, 2026. This chapter's protection standard is based on the Flood Insurance Study for the County dated September 10, 2021. The special flood hazard areas (SFHAs) of the County are generally identified on the Countywide flood insurance rate maps (FIRM) for Cook County prefix numbers 17031C, prepared by the Federal Emergency Management Agency. 262 Map Panels are included, starting at: 17031C0038J, 17031C0039J, 17031C0043J, 17031C0044J, 17031C0063J, 17031C0064J, 17031C0068J, 17031C0069J, 17031C0088J, 17031C0089J, 17031C0093J, 17031C0177J, 17031C0179J, 17031C0181J, 17031C0182J, 17031C0183J, 17031C0184J, 17031C0187J, 17031C0188J, 17031C0189J, 17031C0192J, 17031C0193J, 17031C0194J, 17031C0201J, 17031C0207J, 17031C0209J, 17031C0211J, 17031C0212J, 17031C0213J, 17031C0214J, 17031C0217J, 17031C0218J, 17031C0219J, 17031C0226J, 17031C0227J, 17031C0228J, 17031C0229J, 17031C0231J, 17031C0232J, 17031C0234J, 17031C0236J, 17031C0237J, 17031C0238J, 17031C0239J\*, 17031C0242J, 17031C0253J, 17031C0267J\*, 17031C0285J\*, 17031C0305J, 17031C0306J\*, 17031C0307J, 17031C0330J\*, 17031C0331J, 17031C0332J, 17031C0351J, 17031C0352J\*, 17031C0356J, 17031C0357J, 17031C0358J, 17031C0359J, 17031C0366J, 17031C0367J, 17031C0376J, 17031C0378J, 17031C0380J\*, 17031C0385J, 17031C0386J, 17031C0387J, 17031C0388J, 17031C0389J, 17031C0388J, 17031C0389J, 17031C0456J, 17031C0457J, 17031C0458J, 17031C0459J, 17031C0467J, 17031C0468J, 17031C0469J, 17031C0476J, 17031C0477J, 17031C0478J, 17031C0479J, 17031C0479J, 17031C0483J, 17031C0484J, 17031C0485J\*, 17031C0487J, 17031C0488J, 17031C0489J, 17031C0491J, 17031C0492J, 17031C0495J\*\*, 17031C0545J\*, 17031C0567J, 17031C0569J, 17031C0579J, 17031C0581J, 17031C0582J, 17031C0583J, 17031C0584J, 17031C0586J, 17031C0587J, 17031C0588J, 17031C0589J, 17031C0591J, 17031C0592J, 17031C0593J, 17031C0594J, 17031C0601J, 17031C0602J, 17031C0603J, 17031C0604J, 17031C0608J, 17031C0609J, 17031C0616J, 17031C0628J, 17031C0630J\*, 17031C0635J\*, 17031C0637J, 17031C0638J, 17031C0639J, 17031C0643J, 17031C0644J, 17031C0645J, 17031C0661J, 17031C0663J, 17031C0664J, 17031C0682J, 17031C0684J, 17031C0692J, 17031C0701J, 17031C0706J, 17031C0708J, 17031C0709J, 17031C0711J\*, 17031C0712J, 17031C0716J, 17031C0717J, 17031C0718J, 17031C0719J, 17031C0726J, 17031C0727J, 17031C0728J, 17031C0729J, 17031C0731J, 17031C0732J, 17031C0733J, 17031C0734J, 17031C0736J, 17031C0737J, 17031C0738J, 17031C0739J, 17031C0741J, 17031C0742J, 17031C0743J, 17031C0744J, 17031C0752J, 17031C0753J, 17031C0754J, 17031C0756J, 17031C0758J, 17031C0761J, 17031C0762J, 17031C0763J, 17031C0764J, 17031C0766J, 17031C0767J, 17031C0768J, 17031C0781J, 17031C0782J, 17031C0801J, 17031C0802J, 17031C0806J, 17031C0807J, 17031C0826J, 17031C0827J, 17031C0831J, 17031C0832J Effective 08/19/2008, Panels 17031C0611K, 17031C0612K, 17031C0613K, 17031C0614K, 17031C0617K, 17031C0618K, 17031C0619K, 17031C0636K, 17031C0702K, 17031C0703K, 17031C0704K, 17031C0707K effective 11/01/2019, Panels 17031C0094K, 17031C0113K, 17031C0251K, 17031C0252K, 17031C0254K, 17031C0258K, 17031C0260K\*, 17031C0266K, 17031C0268K, 17031C0269K, 17031C0407K, 17031C0409K, 17031C0417K, 17031C0436K, 17031C0438K, 17031C0440K, 17031C0526K, 17031C0528K, 17031C0529K, 17031C0537K, 17031C0539K, 17031C0543K, 17031C0656K, 17031C0657K, 17031C0659K effective 09/10/2021, and Panels 17031C0019K, 17031C0142K, 17031C0144K, 17031C0151K, 17031C0152K, 17031C0153K, 17031C0154K, 17031C0156K, 17031C0157K, 17031C0158K, 17031C0159K, 17031C0161K, 17031C0162K, 17031C0163K, 17031C0164K, 17031C0166K, 17031C0167K, 17031C0168K, 17031C0169K, 17031C0178K effective 01/23/2026. Cook County only has jurisdiction over the portions of these panels that are unincorporated as defined pursuant to 65 ILCS 5/7-4-4 and 55 ILCS 5/1-1004. 17031C0015J and others Effective 08/19/2008, Panels 1703C0611K and others effective 11/01/2019, and 17031C0094K and others effective 09/10/2021. Cook County only has jurisdiction

over the portions of these panels that are unincorporated as defined pursuant to 65 ILCS 5/7-4-4 and 55 ILCS 5/1-1004.

(1) If a base flood elevation or 100-year frequency flood elevation is not available for a particular site, then the protection standard shall be according to the best existing data available in the Illinois State Water Survey's Floodplain Information Repository that has been approved by IDNR/OWR and FEMA.

- (2) When a party disagrees with the best available data, the party may finance the detailed engineering study needed to replace existing data with better data and submit it to IDNR/OWR and FEMA.
- (3) The base flood or 100-year frequency flood elevation for the special flood hazard area (SFHA's) shall be as delineated on the 100-year flood profiles in the Countywide flood insurance study for the County prepared by FEMA, and dated September 10, 2021, and such amendments to such study and maps as may be prepared from time to time.
- (4) The base flood or 100-year frequency flood elevation for each special flood hazard area (SFHA) delineated as an "AH Zone" or "AO Zone" shall be that elevation (or depth above the highest adjacent grade) delineated on the Flood Insurance Rate Map (FIRM) of the County. In AO Zones, all new and substantially improved residential and non-residential structures must have their lowest floor (including basement) above the highest adjacent grade and at least as high as the FIRM's depth number and to the FPE. Drainage paths are required on slopes to direct water away from structures.
- (5) The BFE for any zone VE floodplain, and for a zone AE floodplain in an area subject to flooding effects from Lake Michigan, shall be the highest elevation specified on the FIRM among all flood zones affecting the proposed development. Where development is proposed to encroach upon a riverine Zone AE which is subject to flooding effects from Lake Michigan, the requirements of Section 106-9 shall apply to the entire floodplain.
- (6) The base flood or 100-year frequency flood elevation for for each of the remaining special flood hazard areas (SFHAs) delineated as an A Zone on the Flood Insurance Rate Map (FIRM) of the County, in the absence of FEMA BFE data and floodway data, shall be according to the best existing data available from federal, state, or other sources. 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 less.—Should no other data exist, an engineering study must be financed by the applicant to determine BFEs.
  - a. When no BFE exists, the BFE for a riverine SFHA shall be determined from an accepted hydraulic model, based on current industry standards approved by the County Highway Department, such as HEC-II, WSP-2, or HEC-RAS.
  - b. The flood flows used in the hydraulic models shall be obtained from a hydraulic model, approved by the County Highway Department, such as HEC-I, or TR-20, or by techniques presented in various publications prepared by the United States Geological Survey for estimating peak flood discharges.
  - c. Along any watercourses draining more than one square mile, the above analyses shall be submitted to IDNR/OWR for approval. Once approved it must be submitted to the Illinois State Water Survey Floodplain Information Repository for filing.
  - d. For an unmapped extended SFHA (with a drainage area less than one square mile) which has been identified by the Department of Building and Zoning pursuant to Section 501.3, the base flood elevation shall be determined by the applicant utilizing a method as approved in Section 106-8, with concurrence of the County.

(Ord. No. 00-O-30, § 600.0, 11-2-2000; Ord. No. 04-O-10, § 600.0, 2-3-2004; Ord. No. 08-O-47, 7-22-2008; Ord. No. 19-5803, 10-24-2019 ; Ord. No. 21-4087 , 7-29-2021.)

## Sec. 106-6. Occupation and use of flood fringe areas.

Development in and/or filling of the flood fringe will be permitted if protection is provided against the base flood or 100-year frequency flood by proper elevation, compensatory storage, and other applicable provisions of this chapter. No use will be permitted which adversely affects the capacity of drainage facilities or systems. Developments located within the flood fringe shall meet the requirements of this section, along with the requirements of Section 106-9.

(1) *Development permit.*

- a. No person, firm, corporation, or governmental body not exempted by State law shall commence any development in the special flood hazard area (SFHA) without first obtaining a development permit from the Department. Permits are reviewed to assure sites are reasonably safe from flooding and requirements for new construction and substantial improvements in flood-prone areas may need to include:

1. Anchoring (including manufactured homes) to prevent flotation, collapse, or lateral movement of the structure.
2. Use of flood-resistant materials.
3. Construction methods and practices that minimize flood damage.
4. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry to accumulate.

Subdivision proposals and other development, including manufactured home parks or subdivisions must be designed to assure that such proposals minimize flood damage, public utilities and facilities are constructed to minimize flood damage, and adequate drainage is provided.

- b. Application for a development permit shall be made on a form provided by the Department.

1. The application shall be accompanied by plan drawings of the site, with graphic scale and north arrow showing property line dimensions. The plans shall include, existing and proposed contour elevations in NAVD88 datum depicting all proposed changes in grade resulting from excavation or filling, the location and dimensions of all buildings and proposed additions to buildings all necessary compensatory storage details including cross sections, earthwork volume calculation and erosion control plans signed and sealed by an Illinois licensed professional engineer. Permits or written waivers from the other regulatory agencies as determined necessary by the County ~~Highway Department~~ may also be required including Army Corps of Engineers, Illinois Environmental Protection Agency, United States Department of Agriculture Natural Resource Conservation Service (for permits affecting agricultural property), and Illinois Department of Natural Resources Endangered Species Consultation Program. A recent legal plat of survey (less than two years~~six months~~ old) signed and sealed by an Illinois licensed land surveyor is also required.
  2. For all proposed buildings, the elevation of the lowest floor (including basement) and lowest adjacent grade shall be shown on the submitted plans and the development will be subject to the requirements of Section 106-9.
- c. Upon receipt of a development permit application, the Department shall compare the elevation of the site to the base flood or 100-year frequency flood elevation.
1. Any development located on land that can be shown to be higher than the base flood elevation of the current flood insurance rate map and which has not been filled after the

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date of the site's first flood insurance rate map (FIRM) without a permit as required by this chapter is not in the special flood hazard area (SFHA) and, therefore, not subject to the requirements of this chapter.

2. The Department 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 flood insurance rate map (FIRM) identification.
  - d. A soil erosion and sediment control plan for disturbed areas shall be submitted. This plan shall include a description of the sequence of grading activities and the temporary sediment and erosion control measures to be implemented to mitigate their effects. This plan shall also include a description of final stabilization and revegetation measures, and the identification of a responsible party to ensure post-construction maintenance.
  - e. The Department 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 Department shall not issue a permit unless all other Federal, State, and local permits have been obtained.
- (2) *Preventing increased damages.* No development in the flood fringe shall create a potential threat to public health and safety.
- a. If fill is being used to elevate the site above the base flood or 100-year frequency flood elevation, the applicant shall submit sufficient data and obtain a letter of map revision (LOMR) from FEMA for the purpose of removing the site from the floodplain.
  - b. Compensatory storage.
    1. Whenever any portion of a floodplain is authorized for use, the volume of space which will be occupied by the authorized fill or structure below the base flood or 100-year frequency flood elevation shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the base flood or 100-year frequency flood elevation.
    2. The excavation volume shall be at least equal to 1.5 times the volume of storage lost due to the fill or structure.
    3. In the case of streams and watercourses, such excavation shall be made opposite or adjacent to the areas so filled or occupied.
    4. All floodplain storage lost below the existing ten-year flood elevation shall be replaced below the proposed ten-year flood elevation. All floodplain storage lost above the existing ten-year flood elevation shall be replaced above the proposed ten-year flood elevation.
    5. All such excavations shall be constructed to drain freely and openly to the watercourse.
    6. The applicant is to dedicate and record a permanent drainage easement encompassing the entire compensatory storage area.

(Ord. No. 00-O-30, § 700.0, 11-2-2000; Ord. No. 04-O-10, § 700.0, 2-3-2004; Ord. No. 19-5803, 10-24-2019 .)

#### **Sec. 106-7. Occupation and use of designated floodways.**

This section applies to all proposed development, redevelopment, site modification or building modification within a designated floodway. The designated floodway for any river, creek, or stream shall be as delineated on the designated floodway maps designated by IDNR/OWR according to and referenced in Section 106-1. Only those uses and structures will be permitted which meet the criteria in this section. All floodway modifications shall be

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the minimum necessary to accomplish the purpose of the project. The development shall also meet the requirements of Section 106-9.

- (1) *Development permit.* No person, firm, corporation or governmental entity not exempted by State law shall commence any development in a floodway without first obtaining a development permit from the Department and IDNR/OWR. [Permits are reviewed to assure sites are reasonably safe from flooding and requirements for new construction and substantial improvements in flood-prone areas may need to include:](#)
  - i. [Anchoring \(including manufactured homes\) to prevent flotation, collapse, or lateral movement of the structure.](#)
  - ii. [Use of flood-resistant materials.](#)
  - iii. [Construction methods and practices that minimize flood damage.](#)
  - iv. [Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry to accumulate.](#)[Subdivision proposals and other development, including manufactured home parks or subdivisions must be designed to assure that such proposals minimize flood damage, public utilities and facilities are constructed to minimize flood damage, and adequate drainage is provided.](#)
- a. Application for a development permit shall be made on a form provided by the Department. The application shall include the following information:
  1. Name and address of applicant or agent if applicable;
  2. Site location (including legal description) of the property, drawn to scale, on the designated floodway map, indicating whether it is proposed to be in an incorporated or unincorporated area;
  3. Name of stream or body of water affected;
  4. Description of proposed activity;
  5. Statement of purpose of proposed activity;
  6. Anticipated dates of initiation and completion of activity;
  7. Name and mailing address of the owner of the subject property if different from the applicant;
  8. Signature of the applicant or the applicant's agent;
  9. If the applicant is a corporation, the president or other authorized officer shall sign the application form;
  10. If the applicant is a partnership, each partner shall sign the application form; or a designated agent; and
  11. If the applicant is a land trust, the trust officer shall sign the name of the trustee by him or her as trust officer. A disclosure affidavit shall be filed with the application, identifying each beneficiary of the trust by name and address and defining the respective interests therein.
  12. Plans signed and sealed by a licensed Illinois professional engineer of the proposed activity shall be provided which include as a minimum:

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- (i) A vicinity map showing the site of the activity, name of the waterway, boundary lines, names of roads in the vicinity of the site, graphic or numerical scale, and north arrow;
  - (ii) A plan view of the project and engineering study each showing existing and proposed conditions including principal dimensions of the structure or work, elevations in NAVD88 datum, adjacent property lines and ownership, drainage and flood control easements, location of any channels and any existing or future access roads, distance between proposed activity and navigation channel (when the proposed construction is near a commercially navigable body of water), designated floodway limit, floodplain limit, specifications and dimensions of any proposed channel modifications, location and orientation of cross-sections, north arrow, and a graphic scale;
  - (iii) Cross-section views of the project and engineering study each showing existing and proposed conditions including principal dimensions of the work as shown in plan view, existing and proposed elevations, normal water elevation, ten-year frequency flood elevation, 100-year frequency flood elevation, and both horizontal and vertical graphic scales;
  - (iv) A soil erosion and sediment control plan for disturbed areas. This plan shall include a description of the sequence of grading activities and the temporary sediment and erosion control measures to be implemented to mitigate their effects. This plan shall also include a description of final stabilization and revegetation measures, and the identification of a responsible party to ensure post-construction maintenance;
  - (v) A copy of the designated floodway map, marked to reflect any proposed change in the designated floodway location.
- 13. Any and all other Federal, State, and local permits or approval letters that may be required for this type of development.
  - 14. Engineering calculations and supporting data which is signed and sealed by an Illinois licensed professional engineer shall be submitted showing that the proposed work will meet the permit criteria of Subsection (2) of this section.
  - 15. If the designated floodway delineation, base flood or 100-year frequency flood elevation will change due to the proposed project, the application will not be considered complete until IDNR/OWR has indicated conditional approval of the designated floodway map change. No structures may be built until a letter of map revision has been approved by FEMA.
  - 16. The application for a structure shall be accompanied by plan drawings of the site, with graphic scale and north arrow showing property line dimensions. The plans shall include, existing and proposed contour elevations in NAVD88 datum depicting all proposed changes in grade resulting from excavation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 106-9, all necessary compensatory storage details including cross sections, earthwork volume calculations and erosion control plans all signed and sealed by an Illinois licensed professional engineer. Permits or written waivers from the other regulatory agencies, as determined necessary by the County Highway Department may also be required, including Army Corps of Engineers, Illinois Environmental Protection Agency, United States Department of Agriculture Nature Resources Endangered Species Consultation Program. A recent legal plat of survey is also required.
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17. If the proposed project involves a channel modification, the applicant shall submit the following information:
- (i) A discussion of the purpose of and need for the proposed work;
  - (ii) A discussion of the feasibility of using alternative locations or methods (see Subsection (2)c.9.i of this section) to accomplish the purpose of the proposed work;
  - (iii) An analysis of the extent and permanence of the impacts each feasible alternative identified in Subsection (2)c.9.i of this section would have on the physical and biological conditions of the body of water affected; and
  - (iv) An analysis of the impacts of the proposed project, considering cumulative effects on the physical and biological conditions of the body of water affected.
- b. The Department shall be responsible for obtaining applicant's copies of all other Federal, State, and local permits and approvals that may be required for this type of activity.
1. The Department shall not issue the development permit unless all required Federal and State permits have been obtained.
  2. An Illinois registered professional engineer, under the ~~employ or contract supervision of the Cook County Superintendent of Highways~~ shall review and approve applications reviewed under this section.
- (2) *Preventing increased damages and a list of appropriate uses.*
- a. The only development in a floodway which will be allowed are appropriate uses, which will not cause a rise in the base flood elevation, and which will not create a damaging or potentially damaging increase in flood heights or velocity or be a threat to public health and safety and welfare or impair the natural hydrologic and hydraulic functions of the floodway or channel, or permanently impair existing water quality or aquatic habitat. Construction impacts shall be minimized by appropriate mitigation methods as called for in this chapter. Only those appropriate uses listed in 17 Ill. Admin. Code Part 3708 will be considered. The approved appropriate uses are as follows:
1. Public flood control structures, dikes, dams and other public works or private improvements relating to the control of drainage, flooding of existing structures, erosion, or water quality or habitat for fish and wildlife;
  2. Structures or facilities relating to the use of, or requiring access to, the water or shoreline, such as instream aeration and similar treatment facilities, facilities and improvements related to recreational boating, and commercial shipping and other functionally water dependent uses;
  3. Storm sewers;
  4. Underground and overhead utilities;
  5. Public open space and recreational facilities such as playing fields and trail systems including any related fencing (at least 50 percent open when viewed from any one direction) built parallel to the direction of flood flows, and including open air pavilions;
  6. Bridges, culverts, and associated roadways, sidewalks, and railways, necessary for crossing over the floodway or for providing access to other appropriate uses in the floodway and any modification thereto;
  7. Flood proofing activities to protect previously existing lawful structures including the construction of water tight window wells, elevating structures, or construction of
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floodwalls around residential, commercial or industrial principal structures where the outside toe of the floodwall shall be no more than ten feet away from the exterior wall of the existing structure, and, which are not considered substantial improvements to the structure;

8. In the case of damaged or replacement buildings, reconstruction or repairs made to a building that are valued at less than 50 percent of the market value of the building before it was damaged or replaced, and which does not increase the outside dimensions of the building.
- b. Appropriate uses do not include the construction or placement of any new structures, fill, building additions, buildings on stilts, excavation or channel modifications done to accommodate otherwise nonappropriate uses in the floodway, fencing (including landscaping or planting designed to act as a fence) and storage of materials except as specifically defined in Section 106-2 as an appropriate use.
- c. Within the designated floodway, as identified on the floodway maps designated by IDNR/OWR, the construction of an appropriate use, will be considered permissible, provided that the proposed project meets the following engineering and mitigation criteria and is so stated in writing with supporting plans, calculations and data by a registered professional engineer and provided that any structure meets the protection requirements of Section 106-9:
  1. *Preservation of flood conveyance, so as not to increase flood stages upstream.* For appropriate uses other than bridge or culvert crossings, on-stream structures or dams, all effective designated floodway conveyance lost due to the project will be replaced for all flood events up to and including the 100-year frequency flood. In calculating effective designated floodway conveyance, the following factors shall be taken into consideration:
    - (i) Designated floodway conveyance,  $K = (1.486/n)(AR^{2/3})$  where "n" is Manning's roughness factor, "A" is the effective flow area of the cross-section, and "R" is the ratio of the area to the wetted perimeter. (See Open Channel Hydraulics, Ven Te Chow, 1959, McGraw-Hill Book Company, New York).
    - (ii) The same Manning's "n" value shall be used for both existing and proposed conditions unless a recorded maintenance agreement with a Federal, State, or local unit of government can assure the proposed conditions will be maintained or the land cover is changing from a vegetative to a nonvegetative land cover.
    - (iii) Transition sections shall be provided and used in calculations of effective designated floodway conveyance. The following expansion and contraction ratios shall be used unless an applicant's engineer can prove to IDNR/OWR through engineering calculations or model tests that more abrupt transitions may be used with the same efficiency:
      - A. When water is flowing from a narrow section to a wider section, the water should be assumed to expand no faster than at a rate of one foot horizontal for every four feet of the flooded stream's length.
      - B. When water is flowing from a wide section to a narrow section, the water should be assumed to contract no faster than at a rate of one foot horizontal for every one foot of the flooded stream's length.
      - C. When expanding or contracting flows in a vertical direction, a minimum of one foot vertical transition for every ten feet of stream length shall be used.

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- D. Transition sections shall be provided between cross-sections with rapid expansions and contractions and when meeting the designated floodway delineation on adjacent properties.
  - E. All cross-sections used in the calculations shall be located perpendicular to flood flows.
2. *Preservation of floodway storage so as not to increase downstream flooding.*
- (i) Compensatory storage shall be provided for any designated floodway storage lost due to the proposed work from the volume of fill or structures placed and the impact of any related flood control projects.
  - (ii) Compensatory storage for fill or structures shall be equal to at least 1.5 times the volume of floodplain storage lost.
  - (iii) Artificially created storage lost due to a reduction in head loss behind a bridge shall not be required to be replaced.
  - (iv) The compensatory designated floodway storage shall be placed between the proposed normal water elevation and the proposed 100-year flood elevation. All designated floodway storage lost below the existing ten-year flood elevation shall be replaced below the proposed ten-year flood elevation. All designated floodway storage lost above the existing ten-year flood elevation shall be replaced above the proposed ten-year flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse.
  - (v) If the compensatory storage will not be placed at the location of the proposed construction, the applicant's engineer shall demonstrate to IDNR/OWR through a determination of flood discharges and water surface elevations that the compensatory storage is hydraulically equivalent.
  - (vi) There shall be no reduction in floodway surface area as a result of a floodway modification, unless such modification is necessary to reduce flooding at existing structure.
3. *Preservation of floodway velocities so as not to increase stream erosion or flood heights.*
- (i) For all appropriate uses, except bridges or culverts or on-stream structures, the proposed work will not result in an increase in the average channel or designated floodway velocities or stage for all flood events up to and including the 100-year frequency event.
  - (ii) In the case of bridges or culverts or on-stream structures built for the purpose of backing up water in the stream during normal or flood flows, velocities may be increased at the structure site if scour, erosion and sedimentation will be avoided by the use of rip-rap or other design measures.
4. *Construction of new bridges or culvert crossings and roadway approaches.*
- (i) The proposed structure shall not result in an increase of upstream flood stages greater than 0.1 foot when compared to the existing conditions for all flood events up to and including the 100-year frequency event; or the upstream flood stage increases will be contained within the channel banks (or within existing vertical extensions of the channel banks) such as within the design protection grade of existing levees or flood walls or within recorded flood easements.
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- (ii) If the proposed construction will increase upstream flood stages greater than 0.1 foot, the developer must contact IDNR/OWR to obtain a permit for a dam or waiver.
    - A. The engineering analysis of upstream flood stages must be calculated using the flood study flows, and corresponding flood elevations for tailwater conditions for the flood study specified in Section 106-5. Culverts must be analyzed using the U.S. DOT, FHWA Hydraulic Chart for the Selection of Highway Culverts. Bridges must be analyzed using the U.S. DOT/Federal Highway Administration Hydraulics of Bridge Waterways calculation procedures.
    - B. Lost floodway storage must be compensated for per Subsection (2)c.2 of this section.
    - C. Velocity increases must be mitigated per Subsection (2)c.3 of this section.
    - D. If the crossing is proposed over a public water that is used for recreational or commercial navigation, an IDNR/OWR permit must be received.
    - E. The hydraulic analysis for the backwater caused by the bridge showing the existing condition and proposed regulatory profile must be submitted to IDNR/OWR for concurrence that a CLOMR is not required by Subsection (2) of this section.
    - F. All excavations for the construction of the crossing shall be designed per Subsection (2)c.8 of this section.
  - 5. *Reconstruction or modification of existing bridges, culverts, and approach roads.*
    - (i) The bridge or culvert and roadway approach reconstruction or modification shall be constructed with no more than 0.1 foot increase in backwater over the existing flood profile for all flood frequencies up to and including the 100-year event, if the existing structure is not a source of flood damage.
    - (ii) If the existing bridge or culvert and roadway approach is a source of flood damage to buildings or structures in the upstream floodplain, the applicant's engineer shall evaluate the feasibility of redesigning the structure to reduce the existing backwater, taking into consideration the effects on flood stages on upstream and downstream properties.
    - (iii) The determination as to whether or not the existing crossing is a source of flood damage and should be redesigned must be prepared in accordance with 17 Ill. Adm. Code Part 3708 (Floodway Construction in Northeastern Illinois) and submitted to IDNR/OWR for review and concurrence before a permit is issued.
  - 6. *On-stream structures built for the purpose of backing up water.*
    - (i) Any increase in upstream flood stages greater than 0.1 foot when compared to the existing conditions, for all flood events up to and including the 100-year frequency event shall be contained within the channel banks (or within existing vertical extensions of the channel banks) such as within the design protection grade of existing levees or flood walls or within recorded flood easements.
    - (ii) A permit or letter indicating that a permit is not required must be obtained from IDNR/OWR for any structure built for the purpose of backing up water in the stream during normal or flood flow.
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- (iii) All dams and impoundment structures as defined in Section 106-2 shall meet the permitting requirements of 17 Ill. Admin. Code Part 3702 (Construction and Maintenance of Dams). If the proposed activity involves a modification of the channel or floodway to accommodate an impoundment, it shall be demonstrated that:
- A. The impoundment is determined to be in the public interest by providing flood control, public recreation, or regional storm water detention;
  - B. The impoundment will not prevent the migration of indigenous fish species, which require access to upstream areas as part of their life cycle, such as for spawning;
  - C. The impoundment will not cause or contribute to degraded water quality or habitat conditions. Impoundment design should include gradual bank slopes, appropriate bank stabilization measures, and a pre-sedimentation basin.
  - D. A nonpoint source control plan has been implemented in the upstream watershed to control the effects of sediment runoff as well as minimize the input of nutrients, oil and grease, metals, and other pollutants. If there is more than one municipality in the upstream watershed, the municipality in which the impoundment is constructed should coordinate with upstream municipalities to ensure comprehensive watershed control;
  - E. The project otherwise complies with the requirements of this Section.
7. *Flood proofing of existing habitable, residential and commercial structures.*
- (i) If construction is required beyond the outside dimensions of the existing building, the outside perimeter of the floodproofing construction shall be placed no further than feet from the outside of the building.
  - (ii) Compensation of lost storage and conveyance will not be required for floodproofing activities.
8. *Excavation in the floodway.*
- (i) When excavation is proposed in the design of bridges and culvert openings, including the modifications to and replacement of existing bridge and culvert structures, or to compensate for lost conveyance or other appropriate uses, transition sections shall be provided for the excavation.
  - (ii) The following expansion and contraction ratios shall be used unless an applicant's engineer can prove to IDNR/OWR through engineering calculations or model tests that more abrupt transitions may be used with the same efficiency:
    - A. When water is flowing from a narrow section to a wider section, the water should be assumed to expand no faster than at a rate of one foot horizontal for every four feet of the flooded stream's length;
    - B. When water is flowing from a wide section to a narrow section, the water should be assumed to contract no faster than at a rate of one foot horizontal for every one foot of the flooded stream's length;
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- C. When expanding or contracting flows in a vertical direction, a minimum of one foot vertical transition for every ten feet of stream length shall be used; and
  - D. Erosion/scour protection shall be provided inland upstream and downstream of the transition sections.
9. *Channel modification.* If the proposed activity involves a channel modification, it shall be demonstrated that:
- (i) There are no practical alternatives to the activity which would accomplish its purpose with less impact to the natural conditions of the body of water affected. Possible alternatives include levees, bank stabilization, flood proofing of existing structures, removal of structures from the floodplain, clearing the channel, high flow channel, or the establishment of a stream side buffer strip or green belt. Channel modification is acceptable if the purpose is to restore natural conditions and improve water quality and fish and wildlife habitat;
  - (ii) Water quality, habitat, and other natural functions would be significantly improved by the modification and no significant habitat area may be destroyed, or the impacts are offset by the replacement of an equivalent degree of natural resource values;
  - (iii) The activity has been planned and designed and will be constructed in a way which will minimize its adverse impacts on the natural conditions of the body of water affected, consistent with the following criteria:
    - A. The physical characteristics of the modified channel shall match as closely as possible those of the existing channel in length, cross-section, slope and meander. If the existing channel has been previously modified, restoration of more natural physical conditions should be incorporated into channel modification design, where practical;
    - B. Hydraulically effective transitions shall be provided at both the upstream and downstream ends of the project, designed such that they will prevent erosion;
    - C. One-sided construction of a channel shall be used when feasible. Removal of streamside (riparian) vegetation should be limited to one side of the channel, where possible, to preserve the shading and stabilization effects of the vegetation;
    - D. Clearing of stabilizing vegetation shall be limited to that which is essential for construction of the channel;
    - E. Channel banks shall be constructed with a side slope no steeper than 3:1 horizontal to vertical, wherever practicable. Native vegetation and gradual side slopes are the preferred methods for bank stabilization. Where high velocities or sharp bends necessitate the use of alternative stabilization measures, soil bioengineering techniques, natural rock or rip-rap are preferred approaches. Artificial materials such as concrete, gabions, or construction rubble should be avoided unless there are no practicable alternatives;
    - F. All disturbed areas associated with the modification shall be seeded or otherwise stabilized as soon as possible upon completion of construction. Erosion blanket or an equivalent material shall be required to stabilize disturbed channel banks prior to establishment of the vegetative cover;

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- G. If the existing channel contains considerable bottom diversity, such as deep pools, riffles, and other similar features, such features shall be provided in the new channel. Spawning and nesting areas and flow characteristics compatible with fish habitat shall also be established, where appropriate;
  - H. A sediment basin shall be installed at the downstream end of the modification to reduce sedimentation and degradation of downstream water quality;
  - I. New or relocated channels should be built in the dry and all items of construction, including vegetation, should be completed prior to diversion of water into the new channel;
  - J. There shall be no increases in stage or velocity as the channel enters or leaves the project site for any frequency flood unless necessitated by a public flood control project or unless such an increase is justified as part of a habitat improvement or erosion control project;
  - K. Unless the modification is for a public flood control project, there shall be no reduction in the volume of floodwater storage outside the floodway as a result of the modification; and
- (iv) The project otherwise complies with the requirements of this section.
10. *Seeding and stabilization plan.* For all activities located in a floodway, a seeding and stabilization plan shall be submitted by the applicant.
11. *Soil erosion and sedimentation measures.* For all activities in the floodway, including grading, filling, and excavation, in which there is potential for erosion of exposed soil, soil erosion and sedimentation control measures shall be employed consistent with the following criteria:
- (i) The construction area shall be minimized to preserve the maximum vegetation possible. Construction shall be scheduled to minimize the time soil is exposed and unprotected. In no case shall the existing natural vegetation be destroyed, removed, or disturbed more than 15 days prior to the initiation of improvements.
  - (ii) Temporary and/or permanent soil stabilization shall be applied to denuded areas as soon as possible. As a minimum, soil stabilization shall be provided within 15 days after final grade is reached on any portion of the site, and within 15 days to denuded areas which may not be at final grade but will remain undisturbed for longer than 60 days.
  - (iii) Sedimentation control measures shall be installed before any significant grading or filling is initiated on the site to prevent the movement of eroded sediments off site or into the channel. Potential sediment control devices include filter fences, straw bale fences, check dams, diversion ditches, and sediment traps and basins.
  - (iv) Vegetated buffer strip of at least 25 feet in width shall be preserved and/or reestablished, where possible, along existing channels (See Subsection (2)c.16 of this section). Construction vehicle use of channels shall be minimized. Temporary stream crossings shall be constructed, where necessary, to minimize erosion. Necessary construction in or along channels shall be re-stabilized immediately.
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- (v) Soil erosion and sedimentation control measures shall be designed and implemented consistent with "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" (1988) also known as the "Green Book" and "The Illinois Urban Manual" (NRCS, 1995).
12. *Public flood control projects.* For public flood control projects, the permitting requirements of this section will be considered met if the applicant can demonstrate to IDNR/OWR through hydraulic and hydrologic calculations that the proposed project will not singularly or cumulatively result in increased flood heights outside the project right-of-way or easements for all flood events up to and including the 100-year frequency event.
13. *General criteria for analysis of flood elevations.*
- (i) The flood profiles, flows and floodway data in the designated floodway study, referenced in Section 106-5, must be used for analysis of the base conditions. If the study data appears to be in error or conditions have changed, IDNR/OWR shall be contacted for approval and concurrence on the appropriate base conditions data to use.
  - (ii) If the 100-year designated floodway elevation at the site of the proposed construction is affected by backwater from a downstream receiving stream with a larger drainage area, the proposed construction shall be shown to meet:
    - A. The requirements of this section for the 100-year frequency flood elevations of the designated floodway conditions; and
    - B. Conditions with the receiving stream at normal water elevations.
  - (iii) If the applicant learns from IDNR/OWR, local governments, or a private owner that a downstream restrictive bridge or culvert is scheduled to be removed, reconstructed, modified, or a regional flood control project is scheduled to be built, removed, constructed or modified within the next five years, the proposed construction shall be analyzed and shown to meet the requirements of this section for both the existing conditions and the expected flood profile conditions when the bridge, culvert or flood control project is built.
14. *Conditional letter of map revision.*
- (i) If the appropriate uses would result in a change in the designated floodway location or the 100-year frequency flood elevation, the applicant shall submit to IDNR/OWR and FEMA all information, calculations and documents necessary to be issued a conditional designated floodway map revision and receive from IDNR/OWR a conditional concurrence of the designated floodway change before a permit is issued.
  - (ii) The final designated floodway map will not be changed by FEMA until as-built plans or record drawings of initial filling, grading, dredging, or excavating activities are submitted and accepted by FEMA and IDNR/OWR.
  - (iii) In the case of nongovernment projects, the municipality in incorporated areas and the County in unincorporated areas shall concur with the proposed conditional designated floodway map revision before IDNR/OWR approval can be given.
  - (iv) No filling, grading, dredging or excavating shall take place until a conditional approval is issued.
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- (v) After initial filling, grading, dredging or excavating, no activities shall take place until a final letter of map revision (LOMR) is issued by FEMA with concurrence from IDNR/OWR.
  - 15. *Professional engineer's supervision.* All engineering analyses shall be performed by or under the supervision of a licensed Illinois professional engineer.
  - 16. *Construction within 25 feet of channel.* For all activities in the floodway involving construction within 25 feet of the channel, the following criteria shall be met:
    - (i) A natural vegetation buffer strip shall be preserved within at least 25 feet of the ordinary high water mark of the channel.
    - (ii) Where it is impossible to protect this buffer strip during the construction of an appropriate use, a vegetated buffer strip shall be established upon completion of construction.
  - 17. *Permitted construction pending approval of revised floodway map.* After receipt of conditional approval of the designated floodway change and issuance of a permit and a conditional letter of map revision, construction as necessary to change the floodway designation may proceed but no buildings or structures or other construction that is not an appropriate use may be placed in that area until the designated floodway map is changed and a final letter of map revision is received. The designated floodway map will be revised upon acceptance and concurrence by IDNR/OWR and FEMA of the "as-built" plans.
  - d. Development activities in delegated communities requiring State review. For those projects listed below located in a designated floodway, the following criteria shall be submitted to IDNR/OWR for their review and concurrence prior to the issuance of a permit by a community or County delegated State permitting authority in the floodway.
    - 1. An Illinois licensed professional engineer's analysis of the flood profile due to a proposed bridge pursuant to Subsection (2)c.4 of this section.
    - 2. Alternative transition sections and hydraulically equivalent storage pursuant to Subsections (2)c.1, (2)c.2, and (2)c.8 of this section.
    - 3. The construction of any IDNR/OWR projects, dams (as defined in Section 106-1) and all other State, Federal, or local units of government projects, including projects of the municipality or county.
    - 4. An Illinois licensed professional engineer's determination that a proposed bridge affected by backwater from a downstream receiving stream may be built with a smaller opening.
    - 5. Projects which revise the floodway and/or flood profiles.
    - 6. Projects in public bodies of water.
  - e. Other permits. In addition to the other requirements of this chapter, a development permit for a site located in a floodway shall not be issued unless the applicant first obtains a permit or written documentation that a permit is not required from IDNR/OWR, issued pursuant to the Rivers, Lakes and Streams Act (615 ILCS 5/4.9 et seq.).
  - f. Permits for dams.
    - 1. Any work involving the construction, modification or removal of a dam as defined in Section 106-2 per 17 Ill. Admin. Code Part 3702 (Rules for Construction of Dams) shall obtain an IDNR/OWR permit prior to the start of construction of a dam.
    - 2. If the Department finds a dam that does not have an IDNR/OWR permit, the Department shall immediately notify the IDNR/OWR.
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3. If the Department finds a dam which is believed to be in unsafe condition, the Department shall immediately notify the owner of the dam, the IDNR/OWR, and the Illinois Emergency Management Agency (IEMA).
  - g. Activities that do not require a licensed professional engineer's review. The following activities may be permitted without a licensed professional engineer's review. Such activities shall still meet the other requirements of this chapter, including the mitigation requirements and other regulatory agency permit requirements and these activities are also under the requirements of other County departments.
    1. Underground and overhead utilities that:
      - (i) Do not result in any increase in existing ground elevations;
      - (ii) Do not require the placement of above ground structures in the floodway; or
      - (iii) In the case of underground stream crossings, the top of the pipe or encasement is buried a minimum of three feet below the existing streambed; and
      - (iv) Overhead utility lines shall be constructed above the estimated 100-year frequency flood elevation or attached above the low chord of an existing bridge (with the permission of the bridge owner). No supporting towers shall be placed in the watercourse and shall be designed so as to not catch debris;
      - (v) Disturbance of streamside vegetation shall be kept to minimum during construction to prevent erosion and sedimentation. All disturbed floodway areas, including the stream banks shall be restored to their original contours and seeded or otherwise stabilized upon completion of construction;
      - (vi) Utilities that carry material which may cause water pollution as defined by the Environmental Protection Act (415 ILCS 5/1 et seq.) shall be provided with shut-off valves on each side of the body of water to be crossed.
    2. All Illinois Commerce Commission, National Electric Safety Codes, and Federal requirements for clearance must be met.

(Ord. No. 00-O-30, § 800.0, 11-2-2000; Ord. No. 04-O-10, § 800.0, 2-3-2004; Ord. No. 19-5803, 10-24-2019 ; Ord. No. 21-4087 , 7-29-2021.)

#### **Sec. 106-8. Occupation and use of special flood hazard areas (SFHA) where floodways are not identified.**

In special flood hazard areas (SFHAs) or floodplains, (including AE, AH, AO and unnumbered A Zones) where no floodways have been identified and no base flood or 100-year frequency flood elevations have been established by FEMA, and draining more than a square mile, no development shall be permitted unless the cumulative effect of the proposals, when combined with all other existing and anticipated uses and structures, shall not significantly impede or increase the flow and passage of the floodwaters nor significantly increase the base flood or 100-year frequency flood elevation.

(1) *Development permit.*

- a. No person, firm, corporation, or governmental body, not exempted by State law, shall commence any development in a special flood hazard area (SFHA) or floodplain without first obtaining a development permit from the County. [Permits are reviewed to assure sites are reasonably safe from flooding and requirements for new construction and substantial improvements in flood-prone areas may need to include:](#)

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1. Anchoring (including manufactured homes) to prevent flotation, collapse, or lateral movement of the structure.
  2. Use of flood-resistant materials.
  3. Construction methods and practices that minimize flood damage.
  4. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry to accumulate.

Subdivision proposals and other development, including manufactured home parks or subdivisions must be designed to assure that such proposals minimize flood damage, public utilities and facilities are constructed to minimize flood damage, and adequate drainage is provided.

b. Application for a development permit shall be made on a form provided by the Department.

1. The application shall be accompanied by plan drawings of the site, with graphic scale and north arrow, showing property line dimensions. The plans shall include existing and proposed contour elevations in NAVD88 datum depicting all proposed changes in grade resulting from excavation of the lowest floor (including basement) of all proposed buildings subject to the requirements of Section 106-9, all necessary compensatory storage details, including cross sections, earthwork volume calculations and erosion control plans all signed and sealed by an Illinois licensed professional engineer. Permits or written waivers from the other regulatory agencies, as determined necessary by the County.
2. The application for a development permit shall also include the following information:
  - (i) A detailed description of the proposed activity, its purpose, and intended use;
  - (ii) Site location (including legal description) of the property, drawn to scale, on the designated floodway maps, indicating whether it is proposed to be in an incorporated or unincorporated area;
  - (iii) Anticipated dates of initiation and completion of activity;
  - (iv) Plans signed and sealed by an Illinois licensed professional engineer of the proposed activity shall be provided which include as a minimum:
    - A. A vicinity map showing the site of the activity, name of the waterway, boundary lines, names of roads in the vicinity of the site, graphic scale, and north arrow;
    - B. A plan view of the project and engineering study each showing existing and proposed conditions including principal dimensions of the structure or work, elevations in NAVD88 datum, adjacent property lines and ownership, drainage and flood control easements, distance between proposed activity and navigation channel (when the proposed construction is in or near a commercially navigable body of water), floodplain limit, location and orientation of cross-sections, north arrow, and a graphic scale;
    - C. Cross-section views of the project perpendicular to the flow of floodwater and engineering study each showing existing and proposed conditions including principal dimensions of the work as shown in plan view, existing and proposed elevations, normal water elevation, ten-year

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frequency flood elevation, 100-year frequency flood elevation, and graphic scale (horizontal and vertical); and

- D. A soil erosion and sedimentation control plan for disturbed areas. This plan shall include a description of the sequence of grading activities and the temporary sediment and erosion control measures to be implemented to mitigate their effects. This plan shall also include a description of final stabilization and revegetation measures, and the identification of a responsible party liable for post-construction maintenance.
  - 3. Engineering calculations and supporting data shall be submitted showing that the proposed work will meet the criteria of Subsection (2) of this section.
  - 4. Any and all other Federal, State, and local permits or approvals that may be required for this type of development.
  - c. Based on the best available existing data according to the Illinois State Water Survey's Floodplain Information Repository, the Department shall compare the elevation of the site to the base flood or 100-year frequency flood elevation.
    - 1. Should no elevation information exist for the site, the developer's licensed professional engineer shall calculate the elevation according to Section 106-5(10).
    - 2. Any development located on land that can be shown to have been higher than the base flood elevation of the current flood insurance rate map identification is not in the special flood hazard area (SFHA) and, therefore, not subject to the requirements of this chapter.
    - 3. The Department 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 flood insurance rate map identification.
  - d. The Department shall be responsible for obtaining from the applicant and the applicant is responsible for providing 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 Department shall not issue the development permit unless all required Federal, State, and local permits have been obtained.
- (2) *Preventing increased damages.*
- a. No development in the special flood hazard area (SFHA), where a floodway has not been determined shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health, safety and welfare or impair the natural hydrologic and hydraulic functions of the floodway or channel, or impair existing water quality or aquatic habitat. Construction impacts shall be minimized by appropriate mitigation methods as called for in this chapter.
  - b. Within all riverine special flood hazard areas (SFHAs), where the floodway has not been determined, the following standards shall apply:
    - 1. The developer shall have a licensed professional engineer state in writing and show through supporting plans, calculations, and data that the project meets the engineering requirements of Section 106-7(2)c.1 through (2)c.12 for the entire floodplain as calculated under the provisions of Section 106-5(5).
      - (i) As an alternative, the developer should have an engineering study performed to determine a floodway and submit that engineering study to IDNR/OWR for acceptance as a designated floodway.

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- (ii) Upon acceptance of the floodway by IDNR/OWR, the developer shall then demonstrate that the project meets the requirements of Section 106-7 for the designated floodway. The floodway shall be defined according to the definition in Section 106-2.
  - 2. A development permit shall not be issued unless the applicant first obtains a permit from IDNR/OWR or written documentation that a permit is not required from IDNR/OWR.
  - 3. Permits for dams.
    - (i) Any work involving the construction, modification or removal of a dam as defined in Section 106-2 per 17 Ill. Admin. Code Part 3702 (Rules for Construction of Dams) shall obtain an IDNR/OWR permit prior to the start of construction of a dam.
    - (ii) If the Department finds a dam that does not have an IDNR/OWR permit, the Department shall immediately notify the IDNR/OWR.
    - (iii) If the Department finds a dam which is believed to be in unsafe condition, the Department shall immediately notify the owner of the dam, the IDNR/OWR, and the Illinois Emergency Management Agency (IEMA).
  - c. The following activities may be permitted under this chapter without an Illinois registered professional engineer's review or calculation of a base flood elevation and designated floodway. Such activities shall still meet the other requirements of this chapter including mitigation and other regulatory agency permit requirements and these activities are also under the requirements of other County departments.
    - 1. Underground and overhead utilities that:
      - (i) Do not result in any increase in existing ground elevations;
      - (ii) Do not require the placement of above ground structures in the floodway; or
      - (iii) In the case of underground stream crossings, the top of the pipe or encasement is buried a minimum of three feet below the existing streambed; and
      - (iv) Overhead utility lines shall be constructed above the estimated 100-year frequency flood elevation or attached above the low chord of an existing bridge (with the permission of the bridge owner). No supporting towers shall be placed in the watercourse and shall be designed so as to not catch debris.
    - 2. Disturbance of streamside vegetation shall be kept to a minimum during construction to prevent erosion and sedimentation.
    - 3. Utilities that carry material which may cause water pollution as defined by the Environmental Protection Act (415 ILCS 5/1 et seq.) shall be provided with shut-off valves on each side of the body of water to be crossed.
    - 4. All Illinois Commerce Commission, National Electrical Safety Codes, and Federal requirements for clearance must be met.
  - d. The flood carrying capacity within any altered or relocated watercourse shall be maintained.
  - e. Compensatory storage.
    - 1. Whenever any portion of a floodplain is authorized for use, the volume of space which will be occupied by the authorized fill or structure below the base flood or 100-year frequency flood elevation shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the base flood or 100-year frequency flood elevation.
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2. The excavation volume shall be at least equal to 1.5 times the volume of storage lost due to the fill or structure.
3. In the case of streams and watercourses, such excavation shall be made opposite or adjacent to the areas so filled or occupied.
4. All floodplain storage lost below the existing ten-year flood elevation shall be replaced below the proposed ten-year flood elevation. All floodplain storage lost above the existing ten-year flood elevation shall be replaced above the proposed ten-year flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse.

(Ord. No. 00-O-30, § 900.0, 11-2-2000; Ord. No. 04-O-10, § 900.0, 2-3-2004; Ord. No. 19-5803, 10-24-2019 ; Ord. No. 21-4087 , 7-29-2021.)

#### Sec. 106-9. Permitting requirements applicable to all floodplain areas.

In addition to the requirements found in Sections 106-6—106-8 for development in flood fringes, designated floodways, and special flood hazard areas (SFHAs) or floodplains where no floodways have been identified (Zones A, AO, AH, AE, A1-A30, A99, VO, V1-30, VE, V, M, E, D, or X) identified, the following requirements shall be met: permits are reviewed to assure sites are reasonably safe from flooding and requirements for new construction and substantial improvements in flood-prone areas may need to include:

1. Anchoring (including manufactured homes) to prevent flotation, collapse, or lateral movement of the structure.
2. Use of flood-resistant materials.
3. Construction methods and practices that minimize flood damage.
4. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities designed and/or located to prevent water entry to accumulate.

Subdivision proposals and other development, including manufactured home parks or subdivisions must be designed to assure that such proposals minimize flood damage, public utilities and facilities are constructed to minimize flood damage, and adequate drainage is provided.

(1) *Public health standards.*

- a. No developments in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other hazardous or toxic materials below the flood protection elevation (FPE) unless such materials are stored in a floodproofed and anchored storage tank and certified by a P.E. or floodproofed Building constructed according to the requirements of this chapter.
- b. New and replacement water supply systems, wells, sanitary sewer lines and on-site waste disposal systems may be permitted providing all manholes or other above ground openings located below the FPE are watertight. 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.
- c. Public utilities and facilities such as sewer, gas and electric shall be located and constructed to minimize or eliminate flood damage.
- d. All other activities, defined as development, such as pools, fences, filling, paving, etc., shall be designed so as not to alter flood flows or increase potential flood damages. Non-structural fill within a coastal high hazard area (zone V, V1-30, or VE) shall be permitted only if an engineering

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report demonstrates that the fill will not cause wave runup, ramping, or deflection of floodwaters that cause damage to buildings.

- e. The use of fill for structural support of buildings within a coastal high hazard area (zone V, V1-30, or VE) [or within a Moderate Wave Action Area] is prohibited.
- f. Man-made alterations of sand dunes within a coastal high hazard area (zone V, V1-30, or VE) are prohibited unless an engineering report documents that the alterations will not increase potential flood damage by reducing the wave and flow dissipation characteristics of the sand dunes.
- g. Within a coastal high hazard area, bulkheads, seawalls, revetments, and other erosion control structures shall not be connected to the foundation or superstructure of a building, and shall be designed and constructed so as not to direct floodwaters or increase flood forces or erosion impacts on the foundation or superstructure of any building.

(2) *Carrying capacity and notification.*

- a. For all projects involving channel modification, fill, or stream maintenance (including levees), the flood carrying capacity of the watercourse shall be maintained.
- b. In addition, the County shall notify adjacent communities in writing 30 days prior to the issuance of a permit for the alteration or relocation of the watercourse.

(3) *Protecting buildings.*

- a. All buildings located within a 100-year floodplain also known as a special flood hazard area (SFHA), ~~and all buildings located outside the 100-year floodplain but within the 500-year floodplain,~~ shall be protected from flood damage below the flood protection elevation. This building protection criteria applies to the following situations:
  - 1. Construction or placement of a new building;
  - 2. Substantial improvement made to an existing building. If substantially improved, both the existing building and any addition must meet the flood protection standards of this section. Substantial improvement shall be figured cumulatively subsequent to April 1, 1990.
  - 3. Installing a manufactured home on a new site or a new manufactured home on an existing site. This building protection requirements does not apply to returning a mobile home to the same site it lawfully occupied before it was removed to avoid flood damage; and
  - 4. Installing a travel trailer on a site for more than 180 days.
  - 5. A substantially damaged building under repair. Substantial damage shall be figured cumulatively subsequent to April 1, 1990. If substantially damaged, the entire building must meet the flood protection standards of this section
- b. This building protection requirement may be met by one of the following methods:
  - 1. A residential or nonresidential building, when allowed in zones A, AO, AH, and AE, may be constructed or substantially improved on permanent land fill in accordance with the following:
    - (i). The lowest floor (including basement) shall be at or above the flood protection elevation (FPE) as defined in Section 106-1.
    - (ii) Fill requirements.

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- A. The fill shall be placed in layers no greater than one foot deep before compaction and should extend at least ten feet beyond the foundation of the building before sloping below the flood protection elevation.
  - B. The top of the fill shall be above the flood protection elevation. However, the ten-foot minimum may be waived if an Illinois licensed structural engineer certifies an alternative method to protect the building from damages due to hydrostatic pressures.
  - C. The fill shall be protected against erosion and scour.
  - D. The fill shall not adversely affect the flow or surface drainage from or onto neighboring properties.

c. Construction of new or substantially improved critical facilities shall be located outside the limits of the floodplain. Construction of new critical facilities shall be permissible within the floodplain if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor (including basement) elevated or structurally dry floodproofed to the 500-year flood frequency elevation or three (3) feet above the level of the 100-year flood frequency elevation whichever is greater. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities.

- 2. A residential or nonresidential building in zones A, AO, AH, and AE may be elevated in accordance with the following:
  - (i) The building or improvements shall be elevated on crawl space, stilts, piles, walls, or other foundation that is permanently open to floodwaters and not subject to damage by hydrostatic pressures of the base flood or 100-year frequency flood. The permanent openings shall be no more than one foot above existing grade, and consists of a minimum of two permanent openings on at least two walls, located below the BFE. The openings must have a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding below the base flood elevation. Refer to FEMA TB1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
  - (ii) The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris.
  - (iii) All areas below the flood protection elevation shall be constructed of materials resistant to flood damage.
    - A. The lowest floor (including basement) and all electrical, heating, ventilating, plumbing, and air conditioning equipment and utility meters shall be located at or above the flood protection elevation.
    - B. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the flood protection elevation.
  - (iv) The areas below the flood protection elevation may only be used for the parking of vehicles, building access or storage in an area other than a basement.

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- (v) Manufactured homes and travel trailers to be installed on a site for more than 180 days, in zones A, AO, AH, and AE, shall be elevated to or above the flood protection elevation using a support and anchoring system, designed by a P.E. pursuant to 77 Ill. Adm. Code § 870.110 and shall be 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. Admin. Code Part 870.
    - (vi) Recreational vehicles or travel trailers shall be required to meet the elevation and anchoring requirements of Subsection (3)b.2.v of this section above unless:
      - A. They are on site for fewer than 180 consecutive days; and
      - B. They are fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utility and service devices, and has no permanently attached additions.
  - c. Only a nonresidential building in zones A, AO, AH, and AE, may be structurally dry floodproofed (in lieu of elevation) provided that:
    - 1. A licensed Illinois professional engineer shall certify that the building has been structurally dry floodproofed below the flood protection elevation, certifying that the design and methods of construction are in accordance with accepted standards of practice for meeting the requirements of ASCE 24-14, and the structure and attendant utility facilities are watertight and capable of resisting the effects of the base flood or 100-year frequency flood.
    - 2. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impacts from debris or ice.
    - 3. Floodproofing measures shall be operable without human intervention and without an outside source of electricity (levees, berms, floodwalls and similar works are not considered floodproofing for the purpose of this Subsection (3)c.3).
  - d. In zones A, AO, AH, and AE, detached accessory structures may be constructed with the lowest floor below the flood protection elevation in accordance with the following:
    - 1. The building must be non-habitable, must not include areas intended or used for cooking, and must not include bathrooms, toilet rooms, or shower rooms.
    - 2. All areas below the base flood or 100-year frequency flood elevation shall be constructed with waterproof material. Structures located in a designated floodway shall be constructed and placed on a building site so as not to block the flow of floodwaters and shall also meet the Appropriate Use criteria of Section 106-7. In addition, all other requirements of Sections 106-6—106-8 must be met.
    - 3. The structure shall be anchored to prevent flotation.
    - 4. Service facilities such as electrical and heating equipment shall be elevated or flood proofed to the flood protection elevation.
    - 5. The building shall be valued at less than \$7,500.00 and be less than 500 square feet in floor size.
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6. The building shall be used only for the storage of vehicles or tools and may not contain other rooms, workshops, greenhouses or similar uses. The building shall meet the permanent opening criteria of Subsection (3)2.i of this section.
- e. Existing buildings located within a designated floodway shall also meet the more restrictive appropriate use standards included in Section 106-7. Nonconforming structures located in a designated floodway may remain in use and may only be enlarged, replaced or structurally altered in accordance with Section 106-7(2). A nonconforming structure damaged by flood, fire, wind or other natural or manmade disaster may be restored unless the damage equals or exceeds 50 percent of its market value before it was damaged.
- f. In a Coastal high hazard area (zone VE), the building protection requirements of this Section must be met according to the following criteria:
1. All New Construction and Substantial Improvements shall be elevated on pilings or columns so that the bottom of the lowest horizontal structural member of the Lowest Floor (excluding the pilings or columns) is elevated to or above the FPE, and the pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.
    - (i) Water loading values used shall be those associated with the Base Flood.
    - (ii) Wind loading values shall be those defined according to American Society of Civil Engineers 7-16 Minimum design loads and associated criteria for buildings and other structures, or other equivalent standard.
  2. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Subsection 106-9(3)f.1.
  3. All New Construction and Substantial Improvements shall have the space below the Lowest Floor either free of obstruction or constructed with non-supporting Breakaway Walls, open wood lattice-work, or insect screening intended to collapse without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.
    - (i) For the purpose of Subsection 106-9(3), a Breakaway Wall shall have a design safe loading resistance of not less than ten and no more than 20 pounds per square foot.
    - (ii) Use of Breakaway Walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or where so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet all of the following conditions:
      - A. Breakaway Wall collapse shall result from a water load less than that which would occur during the base flood; and
      - B. The elevated portion of the Building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Water loading values shall be those associated with the base flood. Wind loading values shall be those defined according to American Society of Civil Engineers 7-
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16 Minimum design loads and associated criteria for buildings and other structures, or equivalent standard.

- C. All space enclosed by Breakaway Walls, open wood lattice-work, or insect screening below the lowest floor shall be used solely for parking of vehicles, building access, or storage.
4. Placement or Substantial Improvement of Manufactured Homes must comply with Section 106.9.
5. Recreational Vehicles, including park models, must either be on site for fewer than 180 consecutive days; or be fully licensed and ready for highway use; or comply with Section 106.9.

(Ord. No. 00-O-30, § 1000.0, 11-2-2000; Ord. No. 04-O-10, § 1000.0, 2-3-2004; Ord. No. 21-4087, 7-29-2021.)

#### **Sec. 106-10. Other development requirements.**

The County Board shall take into account flood hazards, to the extent that they are known in all official actions related to land management, use and development. [Subdivision proposals and other development, including manufactured home parks or subdivisions must be designed to assure that such proposals minimize flood damage, public utilities and facilities are constructed to minimize flood damage, and adequate drainage is provided.](#)

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- (1) Subdivisions, manufactured home parks, annexation agreements, and planned unit developments (PUDs) within the special flood hazard area (SFHA) shall be reviewed to assure that the proposed developments are consistent with Sections 106-6—106-9 of this chapter and the need to minimize flood damage. Plats or plans for new subdivisions, mobile home parks and planned unit developments (PUDs) shall include a signed sealed statement by a registered professional engineer that the plat or plans account for changes in the drainage of surface waters in accordance with the Conveyances Act (765 ILCS 205/0.01 et seq.).
- (2) Proposals for new subdivisions, manufactured home parks, travel trailer parks, planned unit developments (PUDs) and additions to manufactured home parks and additions to subdivisions shall include base flood or 100-year frequency flood elevation data and floodway delineations.
- a. Where this information is not available from an existing study filed with the Illinois State Water Survey, the applicant's engineer shall be responsible for calculating the base flood or 100-year frequency flood elevation and the floodway delineation per the definition in Section 106-1.
- b. The applicant's engineer shall submit the data to IDNR/OWR for review and approval as best available regulatory data and then send it to the State Water Survey.
- (3) 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 shall be included within parks or other public grounds.
- (4) The County Board shall not approve any planned unit development (PUD) or plat of subdivision unless such PUD or plat is in accordance with the provisions of this chapter.

(Ord. No. 00-O-30, § 1100.0, 11-2-2000; Ord. No. 04-O-10, § 1100.0, 2-3-2004.)

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**Sec. 106-11. Variances.**

- (a) No variances shall be granted to any development located in a designated floodway as defined in Section 106-1.
  - (1) Whenever the standards of this chapter place exceptional undue hardship on a specific development proposal, the applicant may apply to the County Zoning Board of Appeals for a variance.
  - (2) The application and supporting evidence for a variance shall in addition to the requirements of this chapter, comply with all requirements for variations as set forth in the County Zoning Ordinance.
- (b) No variance shall be granted unless the applicant demonstrates that:
  - (1) The development activity cannot be located outside the special flood hazard area (SFHA);
  - (2) An exceptional hardship, due to property which is physically unique or exceptional different from other properties to which the requirements are applied would result if the variance were not granted. Economic hardships, inconvenience, aesthetic considerations, physical handicaps, personal preferences or the disapproval by one's neighbor cannot as a rule qualify as exceptional hardship;
  - (3) The relief requested is the minimum necessary;
  - (4) The development will pose no additional threat to public health, safety, beneficial stream uses and functions, especially aquatic habitat, or creation of a nuisance;
  - (5) There will be no additional public expense for flood protection, lost environmental stream uses and functions, rescue or relief operations, policing, or repairs to streambeds and banks, roads, utilities, or other public facilities;
  - (6) The provisions of Sections 106-6(2)a, (2)b and 106-8(2)a—(2)e shall be complied with;
  - (7) The activity is not in a designated floodway;
  - (8) The applicant's circumstances are unique and do not represent a general problem; and
  - (9) The granting of the variance will not alter the essential character of the area involved including existing stream uses.
- (c) The Zoning Board of Appeals shall notify an applicant in writing that a variance from the requirements of Section 106-9 that would lessen the degree of protection to a building will:
  - (1) Result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage;
  - (2) Increase the risks to life and property; and
  - (3) Require that the applicant proceed with knowledge of these risks and that the applicant will acknowledge in writing that the applicant assumes the risk and liability. Insurance required.
- (d) Variances requested in connection with restoration of a historic site or historic structure may be granted using criteria more permissive than the requirements of this section subject to the conditions that:
  - (1) The repair or rehabilitation is the minimum necessary to preserve the historic character and design of the structure; and
  - (2) The repair or rehabilitation will not result in the structure being removed as a certified historic structure.

(Ord. No. 00-O-30, § 1200.0, 11-2-2000; Ord. No. 04-O-10, § 1200.0, 2-3-2004.)

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**Sec. 106-12. Disclaimer of liability.**

- (a) The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on available information derived from engineering and scientific studies.
  - (b) Larger floods may occur or flood heights may be increased by manmade or natural causes.
  - (c) This chapter does not imply that development, either inside or outside of the special flood hazard area (SFHA), will be free from flooding or damage.
  - (d) This chapter does not create liability on the part of the County or any officer or employee thereof for any flood damage that results from reliance on this chapter or any administrative decision made thereunder.
- (Ord. No. 00-O-30, § 1300.0, 11-2-2000; Ord. No. 04-O-10, § 1300.0, 2-3-2004.)

**Sec. 106-13. Penalty.**

Failure to obtain a permit where required, to comply with the requirements of a permit or conditions of a variance resolution shall be deemed to be a violation of this chapter. Upon due investigation, the Department may determine that a violation of the minimum standards of this chapter exist. The Department shall notify the owner in writing of such violation.

- (1) If such owner fails after ten days' notice to correct the violation:
  - a. The State's Attorney may make application to the Circuit Court for an injunction requiring conformance with this chapter or for such other relief as the Court deems necessary to secure compliance with this chapter.
  - b. Any person found guilty of performing any act in violation of this chapter shall, be fined not less than \$50.00 or more than \$1,000.00 for each offense.
  - c. A separate offense shall be deemed committed upon each day during which a violation occurs or continues uncorrected.
  - d. The County may record a notice of uncorrected or uncured violation on the title to the property.
- (2) The Department 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.
  - a. The Department is authorized to issue an order suspending construction and Development in violation of this chapter. The stop-work order shall be in writing, shall 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 any permit issued for the Development.
  - b. Nothing in this chapter shall prevent the County from taking such other lawful action to prevent or remedy violations of this chapter.

(Ord. No. 00-O-30, § 1400.0, 11-2-2000; Ord. No. 04-O-10, § 1400.0, 2-3-2004.)

**Sec. 106-14. Abrogation and greater restrictions.**

- (a) This chapter is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions.
- (b) Where this chapter and other ordinances, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

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(Ord. No. 00-O-30, § 1500.0, 11-2-2000; Ord. No. 04-O-10, § 1500.0, 2-3-2004.)

**Sec. 106-15. Other Laws.**

The provisions of this chapter shall not be deemed to nullify any provisions of local, State or federal law. With respect to Coastal High Hazard Areas, Cook County only has jurisdiction over the portions of the Cook County FIRM that are unincorporated as defined pursuant to 65 ILCS 5/7-4-4 and 55 ILCS 5/1-1004.

( Ord. No. 21-4087 , 7-29-2021.)

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