96-0-21

AN ORDINANCE

Amending Title 4, Chapter 13 "Floodplain Regulations" NOW BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF EVANSTON, COOK COUNTY, ILLINOIS, THAT:

SECTION 1: Title 4, Chapter 13 "Floodplain Regulations" of the Evanston City Code of 2012, as amended, is hereby deleted in its entirety and further amended to read as follows:

CHAPTER 13 – FLOODPLAIN REGULATIONS

4-13-1. - GENERAL PROVISIONS.

- (A) Purpose. This Chapter is enacted pursuant to the police powers granted to the City of Evanston by 65 ILCS 5/1-2-1, 5/11-12-12, 5/11-30-2, 5/11-30-8, and 5/11-31-2. The purpose of this Chapter is to maintain the City of Evanston'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 governmental 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 5/18(g) Rivers, Lakes and Streams Act;
 - 2. To assure 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 City of Evanston 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 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 stormwater impacts, improve water quality, reduce soil erosion, protect aquatic and riparian habitat, provide recreational opportunities, provide aesthetic benefits, and enhance community and economic development.
- 10. To prohibit the unlawful conversion of public waters to private land pursuant to Title 17, Part 3704, §3704.70 and all other applicable regulations and requirements of joint agencies. Provisions of this Chapter do not prevent private measures to preserve, restore, and protect littoral properties.
- (*B*) Scope. This Chapter is intended to supplement the City of Evanston zoning ordinance, development ordinance, building Code and stormwater management ordinance and further regulate and restrict the development, layout and improvement of land, including drainage, underground utilities and service facilities; excavating, filling and grading lots and other parcels and special flood hazard areas (SFHA), and storing of certain materials thereon, stream and other floodwater runoff channels, and detention ponds and basins; and the location, construction and elevation of buildings and other structures and parts and appurtenances thereof, and the drainage of parking and other paved lots and areas. In the event there is any conflict between the provisions of this Chapter and any other City ordinance, the more restrictive provision or provisions shall be applicable.
- (C) Compliance With Other Applicable Regulations Required. Before starting any of the works or uses regulated by this Chapter, an applicant shall comply with requirements set forth in all other applicable ordinances and regulations with respect to submission and approval of preliminary and final subdivision plats, improvement plans, building and zoning permits, inspections, appeals and similar matters, along with those set forth in this Chapter as required by federal and state statutes and regulations of any departments of the state.

4-13-2. - **DEFINITIONS**.

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

ACCESSORY STRUCTURE.

ACT.

AGRICULTURAL STRUCTURE.

APPLICANT.

APPROPRIATE USES.

ASCE.

BASE FLOOD.

BASE FLOOD ELEVATION (BFE).

BASEMENT.

BREAKAWAY WALL.

BUILDING.

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.

An act in relation to the regulation of the rivers, lakes, and streams of the State of Illinois, 615 ILCS 5/5 et seq.

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

Any person, firm, corporation, or agency that applies for a Floodplain Development permit. 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 4-13-6(B). American Society of Civil Engineers

The Flood having a one-percent chance of being equaled or exceeded in any given year. The Base Flood is often referred to as the 100-year flood.

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 BFE at any location is as defined in Section 4-13-4.

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

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.

A walled and roofed Building, including gas or

CHANNEL.

CHANNEL MODIFICATION.

COASTAL HIGH HAZARD AREA.

COMPENSATORY STORAGE.

CONDITIONAL APPROVAL OF A Preconstruction approval by IDNR/OWR and

liquid storage tank, that is principally above ground, including Manufactured Homes and prefabricated buildings. The term also includes Recreational Vehicles and travel trailers installed on a site for more than 180 consecutive days.

Any river, stream, creek, brook, branch, natural or artificial depression, ponded area, flowage, slough, ditch, conduit, culvert, gully, ravine, wash, or natural or man-made drainageway, which has a definite bed and banks or shoreline, in or into which surface or groundwater flows, either perennially or intermittently.

Alteration of a Channel by changing the physical dimensions or materials of its bed or banks. Channel Modification includes Damming, riprapping (or other armoring), deepening, widening, 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 involvina relocation of the existing Channel (e.g. straightening).

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.

An artificially excavated, hydraulically equivalent volume of storage within the Floodplain 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.

DESIGNATED FLOODWAY MAP CHANGE.

FEMA of a proposed change to the Floodway map. This preconstruction approval, pursuant to 17 III. Adm. Code Part 3708, 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).

A letter providing FEMA's comment on a proposed project that would, upon construction, affect the hydrologic or hydraulic characteristics of a flooding source and thus result in the modification of the existing Designated Floodway, the effective BFEs, or the Floodplain.

CRITICAL FACILITY.

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

DAM.

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

DESIGNATED FLOODWAY.

The channel, including on-stream lakes, and that portion of the Floodplain adjacent to a stream or watercourse, generally depicted on the FEMA FIRM map, which is needed to store and convey the existing Base 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 10 percent increase in velocities.

(A) The Floodways are designated for on the countywide FIRM of Cook County_prepared by FEMA and dated September 10, 2021. When two Floodway maps exist for a waterway, the more recent effective Floodway limit shall

prevail.

- (B) The Floodways for those parts of unincorporated Cook County that are within the extraterritorial jurisdiction of the City of Evanston that may be annexed into the City of Evanston are designated on the countywide FIRM of Cook County prepared by FEMA and dated September 10, 2021.
- (C) To locate the Designated Floodway boundary on any site, the Designated Floodway boundary should be scaled off the FIRM 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.

Any man-made change to real estate, including:

- (A) Construction, reconstruction, repair, or placement of a Building or any addition or improvement to a Building.
- (B) Substantial Improvement of an existing Building.
- (C) 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 consecutive days.
- (D) Installing utilities, construction of roads, bridges, or similar projects.
- (E) Demolition of a Building, re-development of a site, clearing of land as an adjunct of construction.
- (F) Construction or erection of levees, walls, fences, Dams, culverts, or Channel Modification.
- (G) Filling, dredging, grading, excavating, paving, drilling, mining, or other non-agricultural alterations of the ground surface.

DEVELOPMENT.

surface waters.
(I) Any other activity of man that might change the direction, height, or velocity of Flood or surface water, including extensive

vegetation removal.

Development does not include such activities as re-surfacing of pavement when there is no increase in elevation, or gardening, plowing, and similar agricultural practices that do not involve filling, grading, or construction of levees

(H) Storage of materials including the placement of gas and liquid storage tanks, and any other activity that might change the direction, height, or velocity of Flood or

A form published by FEMA that is used to certify the elevation to which a Building has been elevated.

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

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

A period of years, based on a statistical analysis, during which a Flood of a stated magnitude may be expected to be equaled or

ELEVATION CERTIFICATES.

FEMA

FLOOD.

FLOOD FREQUENCY.

FLOOD FRINGE.

FLOOD INSURANCE RATE MAP (FIRM).

FLOOD INSURANCE STUDY.

FLOODPLAIN.

FLOODPLAIN ADMINISTRATOR

FLOODPROOFING.

FLOODPROOFING CERTIFICATE.

exceeded.

That portion of a Zone A or Zone AE Floodplain that is outside of the Floodway. A map prepared by FEMA that depicts the Floodplain or Special Flood Hazard Area within a community. This map includes insurance rate zones and Floodplains and may or may not depict Floodways and show BFE.

An examination, evaluation, and determination of Flood hazards and if appropriate, corresponding water surface elevations.

The Floodplains are those lands within the jurisdiction of the City of Evanston that are subject to inundation by the Base Flood. The Floodplains of the City of Evanston are generally identified as such on panel numbers 0253, 0254, 0258, 0265, 0266, and 0268 of the countywide FIRM for Cook County as prepared by the FEMA and dated September 10, 2021.

(A) The Floodplains of those parts of unincorporated Cook_County that are within the extraterritorial jurisdiction of the City of Evanston or that may be annexed into the City of Evanston and that are subject to inundation by the Base Flood. The Floodplains are generally identified as such on panel numbers 0253, 0254, 0258, 0265, 0266, and 0268 of the countywide FIRM for Cook_County by the FEMA and dated September 10, 2021.

For the City of Evanston, the City Engineer shall be responsible to fulfill the duties of the Floodplain Administrator

Any combination of structural and nonstructural additions, changes or adjustments to Buildings that reduce or eliminate Flood damage to real estate or improved real property, water and sanitary facilities, Buildings, and their contents.

A form published by FEMA that is used to certify the elevation to which a Building has been designed and constructed to be structurally dry floodproofed.

FLOOD PROTECTION ELEVATION (FPE).

The elevation of the Base Flood (or depth) plus one foot of Freeboard at any given location in the Floodplain.

See Designated Floodway.

FLOODWAY.

FREEBOARD.

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

Any Building that is:

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.

Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic district or a district preliminarily determined by the Secretary of the Interior to qualify as a registered historic district.

Individually listed on the State inventory of historic places by the Illinois Historic Preservation Agency.

Individually listed on a local inventory of historic places that has been certified by the Illinois Historic Preservation Agency. Illinois Department of Natural Resources, Office of Water Resources.

IDNR/OWR has jurisdiction over any stream serving a tributary area of 640 acres or more in an urban or urbanizing area, or in the floodway of any stream serving a tributary area of 6,400 acres or more in a rural area. Construction on these streams requires a permit from the IDNR/OWR (17 III. Adm. Code Part 3700 or Part 3708). The IDNR/OWR may grant approval for specific types of activities by issuance of a statewide permit or a regional permit.

Official determination by FEMA that a specific

HISTORIC STRUCTURE.

IDNR/OWR.

IDNR/OWR JURISDICTIONAL STREAM.

LETTER OF MAP AMENDMENT (LOMA):

LETTER OF MAP REVISION (LOMR).

LIMIT OF MODERATE WAVE ACTION (LIMWA).

LOWEST FLOOR.

MANUFACTURED HOME.

MANUFACTURED HOME PARK OR SUBDIVISION.

MODERATE WAVE ACTION AREA (MoWA).

NEW CONSTRUCTION.

Building, area of land or a parcel of land, where there has not been any alteration of the topography since the date of the first NFIP map showing the property within the Floodplain, was inadvertently included within the Floodplain and that the Building, area of land or a parcel of land is removed from the Floodplain.

Letter that revises BFEs, Floodplains or Floodways as shown on an effective FIRM. A line shown on a FIRM to indicate the inland limit of the 1.5-ft breaking wave height during the base flood.

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.

A Building, 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 Home does not include a Recreational Vehicle.

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

A special flood hazard area subject to the potential for breaking wave heights of greater than or equal to 1.5 feet, but less than 3 feet, where the primary source of flooding is astronomical tides, storm surges, seiches, and/or tsunamis. A MoWA is an area within zone AE on a FIRM that is between the inland limit of zone VE and a LiMWA, where identified. (Also known as "Coastal A Zone") New Construction means Buildings for which the Start of Construction commenced on or after the effective date of a Floodplain management regulation adopted by a

community and includes any subsequent improvements to such Buildings.

NEW MANUFACTURED HOME PARK OR SUBDIVISION.

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) is completed on or after the effective date of the City of Evanston initial Floodplain management regulations.

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

PUBLIC BODY OF WATER.

NAVD 88.

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, as identified in 17 Ill. Adm. Code Part 3704.

A flood control project which will be operated and maintained by a public agency to reduce flood damages to existing buildings and structures, including 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 persons or parties who are not public agencies.

A vehicle which is: Built on a single chassis; 400 square feet or less when measured at the largest horizontal projection; designed to be self-propelled or permanently towable by a light duty truck; and designed primarily not for

PUBLIC FLOOD CONTROL PROJECT.

RECREATIONAL VEHICLE OR TRAVEL TRAILER.

REGIONAL PERMITS.

REGISTERED LAND SURVEYOR.

REGISTERED OR LICENSED PROFESSIONAL ENGINEER (P.E.).

REPTITIVE LOSS.

RETENTION/DETENTION FACILITY.

RIVERINE FLOODPLAIN.

START OF CONSTRUCTION.

use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Regional Permits are offered for pre-approved projects which are considered minor projects that are permissible per III. Adm. Code Part 3708 rules for Northeastern Illinois Designated Floodways. A complete listing of the terms and conditions for specific project types can be obtained from the IDNR/OWR website.

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

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

Flood-related damages sustained by a Building on two separate occasions during a 10-year period for which the cost of repairs at the time of each such Flood event, on the average, equals or exceeds 25 percent of the market value of the Building before the damaged occurred.

A retention facility stores stormwater runoff without a gravity release. A detention facility provides for storage of stormwater runoff and controlled release of this runoff during and after a Flood or storm.

Any Floodplain 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.

Includes Substantial Improvement and means the date the Building permit was issued, provided the actual Start of Construction, reconstruction. repair, rehabilitation, addition placement or other improvement, was within 180 days of the permit date. The actual start means the first placement of permanent construction of a Building on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond STATEWIDE PERMITS.

STRUCTURE.

SUBSTANTIAL DAMAGE.

SUBSTANTIAL IMPROVEMENT.

the stage of excavation, including the 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.

Statewide permits are offered for preapproved projects that are considered minor projects which are permissible per the IDNR/OWR Part 3700 rules. A complete listing of the statewide permits and permit requirements can be obtained from the IDNR/OWR website.

The results of a man-made change to the land constructed on or below the ground, including a Building any addition to a Building; installing utilities, construction of roads or similar projects; construction or erection of levees, walls, fences, bridges or culverts; drilling, mining, filling, dredging, grading, excavating; and the storage of materials.

Damage of any origin sustained by a Building whereby cost to repair the building to its before damaged condition equals or exceeds 50 percent of the market value of the Building before the damage occurred, regardless of actual repair work performed. The term includes flood related damages sustained by a Building on two separate occasions in a 10-year period, in which the cost of the repairs, on average, equals or exceeds 25 percent of the market value of the Building at the time of each such flood event.

Any reconstruction, rehabilitation, addition, or improvement of a Building taking place during a 10-year period in which the percentage of improvements, figured cumulatively by dividing the cost of each improvement by the market value of the Building prior to the start of construction of each improvement, equals or exceeds 50 percent.

(A) 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 Building. This term includes Buildings which have incurred Repetitive Loss or Substantial Damage, regardless of the actual work done.

- (B) The term does not, however, include either:
- 1. Any project for improvement of a Building to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are solely necessary to assure safe living conditions, or
- 2. Any alteration of a Historic Structure listed on the National Register of Historic Places or the Illinois Register of Historic Places, provided that the alteration will not preclude the Building's continued designation as a Historic Structure.

Reaches of the stream or Floodway where water flows from a narrow cross-section to a wide cross-section or vice versa.

The failure of a structure or other

development to be fully compliant with this Chapter.

VIOLATION.

TRANSITION SECTION.

4-13-3. - ADMINISTRATION.

4-13-3-1. – FLOODPLAIN DEVELOPMENT PERMIT.

(A) No person, firm, corporation, or governmental body shall commence any Development activities, including New Construction, Substantial Improvements, and alterations of a watercourse wholly within, partially within or in contact with the Floodplains until a floodplain development permit is obtained from the Floodplain Administrator. No permit shall be issued by the Floodplain Administrator until the requirements of this Chapter have been met.

- (B) No person, firm, corporation, or governmental body shall commence any development of a critical facility on land below the 0.2% annual chance flood elevation without first obtaining a development permit from the Floodplain Administrator.
- (C) A local floodplain development permit shall not be issued by the Floodplain Administer for Development in a Floodway without the applicant first obtaining a state floodway permit from IDNR/OWR, except as noted in Section 4-13-6.
- (D) The Floodplain Administrator shall review all proposed Development by comparing field surveyed topography of the site to the FIRM and shall make interpretations, where needed, as to the location of the floodplain boundaries, floodway boundaries, and BFE.
 - 1. Any Development that is located on land below the BFE, located in the mapped Floodway, or associated with a Zone AO or VE is subject to the requirements of this Chapter. A LOMA-Floodway (LOMR-FW) shall be required before issuing a floodplain development permit for land higher than the BFE if located within a mapped floodway.
 - 2. Any Development located on land below the BFE that was filled after the date of the site's first Floodplain designation on a flood map is subject to the requirements of this Chapter.
 - 3. Any Development located on land below the BFE that is that is hydraulically connected to the Floodplain, but not shown on the current FIRM, is subject to the provisions of this Chapter.
 - 4. The Floodplain Administrator shall maintain documentation of the pre-existing ground elevation at the site and, if applicable, certification that this ground elevation existed prior to the date of the site's first FIRM identification in the Floodplain.
- (E) If the Development site is within a Floodway or in a Floodplain for which a detailed study has not been conducted, the floodplain development permit shall be referred to a P.E. under the employ or contract of the City of Evanston for review to ensure that the Development meets the requirements of this Chapter.
- (F) A floodplain development permit or approval shall become invalid unless the actual Start of Construction, for work authorized by such permit, is commenced within 180 days after its issuance, or if the work authorized is suspended or abandoned for a period of 180 days after the work commences.

The Floodplain Administrator shall ensure that all Development activities happen in a timely manner. All permitted work shall be completed within eighteen months after the date of issuance of the permit or the permit shall expire. Time extensions, of not more than 180 days each, may be granted, in writing, by the Floodplain Administrator. Time extensions shall be granted only if the original permit is compliant with this Chapter and the FIRM and FIS in effect at the time the extension is granted.

(G) Letters of Map Revision. The Floodplain Administrator shall require a CLOMR prior to issuance of a development permit for proposed floodway encroachments that will cause an increase in the BFE; and proposed development which will increase the BFE by more than 0.1 feet in riverine area where FEMA has provided a BFE but no floodway.

Once a CLOMR has been issued, the development permit may be issued for site grading and structures necessary in the area of the map change to achieve the final LOMR. Upon completion, the applicant shall submit as-built certifications, as required by FEMA, to achieve a final LOMR prior to the release of final development permits. Review Section 4-13-8(C)(11) for the construction of buildings in any floodplain issued a LOMR Based on Fill.

- (H) Application. An application for a floodplain development permit shall be made on a form provided by the Floodplain Administrator.
 - 1. The application shall be accompanied by drawings of the site, drawn to scale, showing property line dimensions and legal description for the property and sealed by a Registered P.E, licensed architect or Registered Land Surveyor; existing grade elevations, using the NAVD 88, and all proposed changes in grade resulting from excavation or filling; the location and dimensions of all existing and proposed Buildings, additions to Buildings, sewage disposal and water supply facilities; Floodplain limits based on elevation or depth, as applicable; Floodway limits, as applicable; location and dimensions of all structures, including but not limited to fences, culverts, decks, gazebos, agricultural structures, and Accessory Structures.
 - 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 4-13-8 of this Chapter.
 - 3. The applicant must provide notice to all property owners abutting Lake Michigan within six hundred twenty-five (625) feet of the proposed project.

4-13-3-2 - DUTIES OF THE FLOODPLAIN ADMINISTRATOR.

- (A) Check all new Development sites to determine whether they are in a Floodplain using criteria listed in Section 4-13-4 of this Chapter or for Critical Facilities, using the 0.2% annual chance flood elevation, if defined.
- (B) If the site is in a Floodplain, determine whether the site in a Coastal High Hazard Area, Moderate Wave Action Area, Floodway, Flood Fringe or in a Floodplain for which a detailed study has not been conducted.

- (C) If the site within a Flood Fringe, require that the minimum requirements of Sections 4-13-5 and 4-13-8 be met.
- (D) If the site within a Floodway, require that the minimum requirements of Sections 4-13-6 and 4-13-8 be met.
- (E) If the site is located within a Floodplain for which no detailed study has been completed and approved, require that the minimum requirements of Sections 4-13-7 and 4-13-8 be met.
- (F) If the site is within a Coastal High Hazard Area or Moderate Wave Action Area, require that the minimum requirements of Section 4-13-8 be met.
- (G) Inspect all projects before, during and after construction to assure proper elevation of the Building and to ensure compliance with the provisions of this Chapter.
- (H) Schedule, on an annual basis, an inspection of the Floodplain and document the results of the inspection.
- (I) Review Elevation Certificates and Floodproofing Certificates for accuracy and require incomplete or deficient certificates be corrected and maintained in permit files including:
 - 1. Elevation Certificate certifying the elevation of the Lowest Floor (including Basement) of a residential or non-residential Building subject to Section 4-13-8 of this Chapter, or an Elevation Certificate certifying the elevation of the lowest horizontal structural member of the Lowest Floor, where required by Section 4-13-8(C)(10) and/or;
 - 2. Floodproofing Certificate certifying the elevation to which a non-residential Building has been dry floodproofed, using a Floodproofing Certificate, for all Buildings required to be dry floodproofed pursuant to Section 4-13-8 of this Chapter.
 - 3. Certification of structural design and methods of construction for VE zone construction as required by Section 4-13-8(C)(10).
 - 4. Certification of breakaway wall design, when applicable, as provided in Section 4-13-8(C)(10).
- J. Maintain for public inspection and furnish upon request all permit records, including but not limited to Base Flood data, Floodplain and Designated Floodway maps, copies of federal or state permit documents, variance documentation, soil compaction records, Conditional Letter of Map Revision, Letter of Map Revision, Letter of Map Amendment, asbuilt elevation, Floodproofing Certificates and Elevation Certificates for all Buildings constructed subject to this Chapter.

- K. Floodway Permits. For all Development projects in a Floodway, ensure that construction authorization has been granted by IDNR/OWR or a Delegated Community, or written documentation is provided stating that a permit is not required from IDNR/OWR, issued pursuant to 615 ILCS 5/5 et seq. Floodway permit requirements are specified in Sections 4-13-6 and 4-13-7 of this Chapter.
- L. Permits for Dams may be required from IDNR/OWR. The Floodplain Administrator shall contact IDNR/OWR to determine if a permit is required and for application details. Any work involving the construction, modification, or removal of a Dam, per 17 III. Adm. Code Part 3702 (Rules for Construction of Dams), shall obtain an IDNR/OWR permit prior to the issuing a local permit.
- M. Ensure any and all required federal, state, and local permits are received prior to the issuance of a Floodplain Development permit, including, but not limited to, permits pertaining to the Clean Water Act, Public Water Supply, Endangered Species Act, and Illinois Endangered Species Protection Act.
- N. Establish procedures for administering and documenting determinations, as outlined below, of Substantial Improvement and Substantial Damage made pursuant to Section 4-13-8.
 - 1.Determine the market value or require the Applicant to obtain an appraisal of the market value prepared by a qualified independent appraiser, of the Building before the Start of Construction of the proposed work. In the case of repair, the market value of the Building shall be the market value before the damage occurred and before any repairs are made.
 - 2. Compare the cost to perform the improvement, the cost to repair a damaged Building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the Building, including the cost of volunteer labor and donated materials must be included.
 - 3. Determine and document whether the proposed work constitutes Substantial Improvement or Substantial Damage.
 - 4. Notify the Applicant if it is determined that the work constitutes Substantial Improvement or repair of Substantial Damage and that compliance with the Flood resistant construction requirements of the City of Evanston and this Chapter is required.
- O. Cooperation with Other Agencies.
 - 1. Cooperate with state and federal Floodplain management agencies to improve Base Flood and Floodway data and to improve the administration of this Chapter;

- 2. Submit data to IDNR/OWR and FEMA for proposed revisions of a regulatory map within 6 months whenever a modification of the Floodplain may change the BFE or result in a change to the Floodplain map;
- 3. Submit reports as required for the NFIP; and
- 4. Notify FEMA of any proposed amendments to this Chapter.
- P. 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 Chapter changes.
- Q. Notify IDNR/OWR and adjacent communities in writing 30 days prior to the issuance of a permit for the alteration or relocation of a watercourse.
- R. If a variance is to be granted, the Floodplain Administrator shall review the requirements of Section 4-13-10 to make sure they are met. In addition, the Floodplain Administrator shall complete all notifications requirements, prepare a staff report and recommendations.
- S. Enforce the provisions of this Chapter, investigate violations, issue notices of violation or stop work orders, and require corrective action, as outlined in Section 4-13-12.

4-13-4. - BASE FLOOD ELEVATION.

This Chapter's protection standard is based on the FIS for Cook County.

If a BFE is not available for a particular site, then the protection standard shall be according to the best existing data available from federal, state, or other sources.

When a party disagrees with the best available data, they shall submit a detailed engineering study needed to replace existing data with better data and submit it to IDNR/OWR and FEMA for review and consideration prior to any Development of the site.

A. The BFE for the Floodplains of Evanston shall be as delineated on the Base Flood profiles in the FIS of Cook County prepared by FEMA dated September 10, 2021 and such amendments or revisions to such study and maps as may be prepared from time to time.

- B. The BFE for the Floodplains of those parts of unincorporated Cook County that are within the extraterritorial jurisdiction of the City of Evanston or that may be annexed into the City of Evanston shall be as delineated on the Base Flood profiles in the FIS of Cook County prepared by FEMA and dated September 10, 2021, and such amendments or revisions to such study and maps as may be prepared from time to time.
- C. The BFE for each Floodplain delineated as an AH Zone or AO Zone shall be that elevation (or depth) indicated on the countywide FIRM of Cook County and dated

September 10, 2021, and such amendments or revisions to such study and maps as may be prepared from time to time. For any AH zone with an elevation specified in a table of still water elevations in the FIS, the BFE shall be the elevation specified in the table of still water elevations.

- D. The BFE for each of the remaining Floodplains delineated as an A Zone on the countywide FIRM of Cook County shall be according to the best existing data available from federal, state, or other sources. Should no other data exist, an engineering study must be financed by the Applicant to determine BFEs.
 - 1. When no BFE exists, the BFE for a riverine Floodplain shall be determined from an accepted hydraulic model, based on current industry standards.
 - 2. The Flood flows used in the hydraulic models shall be obtained from an accepted hydrologic model, based on current industry standards, or by techniques presented in various publications prepared by the United States Geological Survey for estimating peak Flood discharges.
- E. 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 4-13-7 shall apply to the entire floodplain.

4-13-5. – 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 by proper elevation, compliance with Compensatory Storage requirements, and other applicable provisions of this Chapter. No use will be permitted that 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 4-13-8.

A. Floodway permit

- 1. All applicants must provide to the City copies of all other federal, state, and local permits, approvals or waivers that may be required for this type of activity. The city engineer shall not issue a permit unless all other federal, state, and local permits have been obtained. All applicants must submit their application to the City of Evanston within ten (10) business days of submitting an application any other joint agency regarding the same subject matter.
- 2. Post-Construction Requirements. Upon completion of all construction, the City requires all applicants to submit to the City Engineer a copy of the final plat of survey.

A. B. Preventing Increased Damages

- 1. No Development in the Flood Fringe shall create a threat to public health and safety.
- 2. If fill is being used to elevate the site above the BFE, the Applicant shall submit sufficient data and obtain a LOMR from FEMA for the purpose of removing the site from the Floodplain. See Section 4-13-8(C)(11) for additional requirements.
- 3. Compensatory Storage.

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 BFE shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the BFE.

- a. The excavation volume shall be at least equal to 1.5 times the volume of storage lost due to the fill or Structure
- b. In the case of streams and watercourses, such excavation shall be made opposite or adjacent to the areas so filled or occupied.
- c. All Floodplain storage lost below the existing 10-percent annual chance Flood elevation shall be replaced below the proposed 10-percent annual chance Flood elevation. All Floodplain storage lost above the existing 10-percent annual chance Flood elevation shall be replaced above the proposed 10-percent annual chance Flood elevation.
- d. All such excavations shall be constructed to drain freely and openly to the watercourse.

4-13-6. - OCCUPATION AND USE OF DESIGNATED FLOODWAYS

This section applies to proposed Development, redevelopment, site modification or Building modification within a Designated Floodway. The Designated Floodway shall be as delineated on the countywide FIRM of Cook County, Floodplain development permits may only be issued for works that meets 17 Ill. Adm. Code Part 3708, which restricts development to Appropriate Uses of the Designated Floodway of which periodic inundation will not pose a danger to the general health and welfare of the user, or require the expenditure of public funds, or the provisions of public resources or disaster relief services, or result in increased Flood stages due to the singular or cumulative loss of regulatory Floodway storage or regulatory Designated Floodway conveyance, or increase in Flood velocities. All Floodway modifications shall be the minimum necessary to accomplish the purpose of the project. The Development shall also meet the requirements of Section 4-13-8. No application is required for an individual permit from IDNR/OWR if the project meets Regional Permit No. 3.

A. Floodway Permit

- 1. In addition to a floodplain development permit, work in the Designated Floodway of an IDNR/OWR Jurisdictional Stream shall require either a floodway permit from IDNR/OWR, documentation that the projects meets Regional Permit No. 3, or a letter from IDNR/OWR stating no permit is required. An application for work in a Floodway shall be made by submitting a completed application on the form furnished by IDNR/OWR. The application for work in a Floodway, shall as a minimum meet all the requirements in 17 III. Adm. Code Part 3708.
 - a. Engineering calculations and supporting data shall be submitted showing that the proposed work will meet the permit criteria of Section 4-13-6(B).
 - b. If the Designated Floodway delineation or BFE 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.
- 2. A Licensed P.E., under the employ or contract of the City of Evanston shall review and approve applications reviewed under this Section.
- 3. All applicants must provide to the City copies of all other federal, state, and local permits, approvals or waivers that may be required for this type of activity. The city engineer shall not issue a permit unless all other federal, state, and local permits have been obtained. All applicants must submit their application to the City of Evanston within ten (10) business days of submitting an application to any other joint agency regarding the same subject matter.
- 4. Post-Construction Requirements. Upon completion of all construction, the City requires all applicants to submit to the City Engineer a copy of the final plat of survey.
- B. Preventing Increased Damages and a List of Appropriate Uses
 - 1. The only Development in a Floodway allowed are Appropriate Uses that will not cause a rise in the BFE and will not create a damaging or potentially damaging increase in Flood heights or velocity, be a threat to public health and safety and welfare, 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 III. Adm. Code Part 3708 will be allowed. The approved Appropriate Uses are as follows:
 - a. Flood Control Structures, dikes, Dams and other public works or private improvements relating to the control of drainage, Flooding, erosion, or water quality or habitat for fish and wildlife.

- b. Structures or facilities relating to the use of, or requiring access to, the water or shoreline, such as pumping and treatment facilities, and facilities and improvements related to recreational boating, commercial shipping and other functionally water dependent uses;
- c. Storm and sanitary sewer relief outfalls;
- d. Underground and overhead utilities;
- e. 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 and toilet facilities (4 stall maximum) that will not block Flood flows nor reduce Floodway storage.
- f. Detached garages, storage sheds, or other non-habitable Accessory Structures that will not block Flood flows nor reduce Floodway storage;
- g. Bridges, culverts, roadways, sidewalks, railways, runways and taxiways and any modification thereto;
- h. Parking lots built at or below existing grade where either:
 - i. The depth of flooding during the Base Flood will not exceed 1.0 foot; or
 - ii. The Applicant of a short-term recreational use facility parking lot formally agrees to restrict access during overbank flooding events and accepts liability for all damage caused by vehicular access during all overbank flooding events.
- i. Aircraft parking aprons built at or below ground elevation where the depth of flooding during the Base Flood will not exceed 1.0 foot;
- j. Designated Floodway regrading, without fill, to create a positive nonerosive slope toward a watercourse.
- k. Floodproofing activities to protect previously existing lawful Buildings including the construction of water tight window wells, elevating Buildings, or construction of floodwalls around residential, commercial or industrial principal Buildings where the outside toe of the floodwall shall be no more than ten (10) feet away from the exterior wall of the existing Building, and, which are not considered Substantial Improvements to the Building.
- I. The replacement, reconstruction, or repair of a damaged Building, provided that the outside dimensions are not increased, and if the Building

was damaged to fifty (50%) percent or more of the market value before the damage occurred, the Building will be protected from flooding to the FPE.

- m. Modifications to an existing Building that would not increase the enclosed floor area of the Building below the BFE, and which will not block Flood flows including but not limited to, fireplaces, bay windows, decks, patios, and second story additions. If the Building is improved to fifty (50%) percent or more of the market value before the modification occurred (i.e., a Substantial Improvement), the Building will be protected from flooding to the FPE.
- 2. Appropriate Uses do not include the construction or placement of any new Buildings, fill, Building additions, Buildings on stilts, excavation or Channel Modifications done to accommodate otherwise non-Appropriate Uses in the Floodway, fencing (including landscaping or planting designed to act as a fence) and storage of materials except as specifically defined above as an Appropriate Use.
- 3. Within the Designated Floodway, the construction of an Appropriate Use, will be considered permissible provided that the proposed project meets the criteria established in 17 III. Adm. Code Part 3708 and is so stated in writing with supporting plans, calculations, and data by a Registered P.E. and provided that any Building meets the protection requirements of this Chapter.
 - a. 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 1.5 times the volume of Designated Floodway 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 BFE. All Designated Floodway storage lost below the existing 10-percent annual chance Flood elevation shall be replaced below the proposed 10-percent annual chance Flood elevation. All Designated Floodway storage lost above the existing 10-percent annual chance Flood elevation shall be replaced above the proposed 10-percent annual chance 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 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 an existing Structure.
- b. 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 Base Flood 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.
- c. Construction of new bridges or culvert crossings and roadway approaches shall meet 17 III. Adm. Code Part 3708.
 - 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 Base Flood 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 floodwalls or within recorded Flood easements.
 - ii. If the proposed construction will increase upstream Flood stages greater than 0.1 feet, the developer must contact IDNR/OWR to obtain a permit for a Dam or waiver.

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 4-13-4 of this Chapter. Bridges and Culverts must be analyzed using any commonly accepted FEMA approved hydraulic models.

Lost Floodway storage must be compensated for per Section 4-13-7(B)(3)(b).

Velocity increases must be mitigated per Section 4-13-7(B)(3)(c).

If the crossing is proposed over a Public Body of Water that is used for recreational or commercial navigation, an IDNR/OWR permit must be received.

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 Section 4-13-6(B).

All excavations for the construction of the crossing shall be designed per Section 4-13-6(B)(3)(h).

- d. Reconstruction or Modification of Existing Bridges, Culverts, and Approach Roads shall meet 17 III. Adm. Code Part 3708.
 - 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 Base Flood 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 Structures in the upstream Floodplain, the Applicant's engineer shall evaluate the feasibility of redesigning the existing bridge or culvert and roadway approach 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 III. Adm. Code Part 3708 (Floodway Construction in Northeastern Illinois) and submitted to IDNR/OWR for review and concurrence before a permit is issued.

- e. On-Stream Structures Built for the Purpose of Backing Up Water shall meet 17 Ill. Adm. Code Part 3708.
 - i. Any increase in upstream Flood stages greater than 0.0 foot when compared to the existing conditions, for all Flood events up to and including the Base Flood 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 Floodwalls or within recorded Flood easements.
 - ii. A permit or letter indicating 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.
 - iii. All Dams and impoundment Structures, shall meet the permitting requirements of 17 III. Adm. 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:

The impoundment is determined to be in the public interest by providing Flood control, public recreation, or regional stormwater detention;

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;

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.

A non-point 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:

The project otherwise complies with the requirements of Section 4-13-6.

f. Excavation in the Floodway shall meet 17 III. Adm. Code Part 3708.

- g. General Criteria for Analysis of Flood Elevations.
 - i. The Flood profiles, flows and Floodway data in the Designated Floodway study, referenced in Section 4-13-5, 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 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:

The requirements of this section for the BFEs of the Designated Floodway conditions; and

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 Public 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.
- h. Conditional Letter of Map Revision.
 - i. If the Appropriate Use would result in a change in the Designated Floodway location or the BFE, 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. All field surveys shall be conducted under the supervision of a Registered P.E. or Registered Land Surveyor and shall be sealed. All required engineering analyses shall be conducted

under the supervision of a Registered P. E., or in the case of a federal project, by the federal agency and shall be so sealed or stated.

- iii. In the case of non-government 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.
- v. 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 including filling, grading, dredging, and excavating. No additional Development activities, including the construction of Buildings, shall take place in the Floodplain or Designated Floodway until a final LOMR is issued by FEMA with concurrence from IDNR/OWR.
- i. 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.
- j. Professional Engineer's Supervision.

All engineering analyses shall be performed by or under the supervision of a Registered P.E.

4. Permits for Dams

- a. Any work involving the construction, modification, or removal of a Dam per 17 III. Adm. Code Part 3702 (Rules for Construction of Dams) shall obtain an IDNR/OWR permit prior to the start of Dam construction.
- b. If the Floodplain Administrator finds a Dam that does not have an IDNR/OWR permit, the Floodplain Administrator shall immediately notify the IDNR/OWR Bartlett office.
- c. If the Floodplain Administrator finds a Dam which is believed to be in unsafe condition, the Floodplain Administrator shall immediately notify the

owner of the Dam, the IDNR/OWR Bartlett office, and the Illinois Emergency Management Agency.

5. Activities that do not Require a Registered Professional Engineer's Review

Regional Permit No. 3, which authorizes, for example, underground and overhead utilities, storm and sanitary sewer outfalls, sidewalks, patios, athletic fields, playground equipment and streambank protection activities; may be permitted without a Registered P.E.'s review. Such activities shall still meet the other requirements of this Chapter, including the mitigation requirements.

4-13-7. – OCCUPATION AND USE OF FLOODPLAIN AREAS WHERE FLOODWAYS ARE NOT IDENTIFIED.

In riverine Floodplains, where no Floodways have been identified, 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 flood heights. The Development must meet all applicable requirements of this Ordinance and 17 III. Adm. Code Part 3700.

A. Floodway Permit

- 1. In addition to a floodplain development permit, work within an IDNR/OWR Jurisdictional Stream shall require either a floodway permit from IDNR/OWR, documentation that the projects meets the conditions of a Statewide Permit listed in Section 4-13-7(B)(3), or a letter from IDNR/OWR stating no permit is required. In addition to the requirements of Section 4-13-3, the application for a floodplain development permit shall also include the following information:
 - a. A detailed description of the proposed activity, its purpose, and intended use:
 - b. Site location (including legal description) of the property, drawn to scale, on the FIRM, indicating whether it is proposed to be in an incorporated or unincorporated area;
 - c. Anticipated dates of initiation and completion of activity;
 - d. Plans of the proposed activity shall be provided which include as a minimum:
 - 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 reach showing existing and proposed conditions including principal dimensions of the Structure or work, elevations, using the NAVD 88, 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 graphical or numerical scale;
- iii. Cross-section views of the project perpendicular to the flow of floodwater and engineering study reach showing existing and proposed conditions including principal dimensions of the work as shown in plan view, existing and proposed elevations, normal water elevation, 10-percent annual chance Flood elevation, BFE, and graphical or numerical scales (horizontal and vertical); and
- iv. A seeding or stabilization plan for the disturbed areas.
- e. Engineering calculations and supporting data shall be submitted showing that the proposed work will meet the criteria of Section 4-13-7(B).
- f. Any and all other federal, state, and local permits or approvals that may be required for this type of Development.
- 2. All applicants must provide to the City copies of all other federal, state, and local permits, approvals or waivers that may be required for this type of activity. The city engineer shall not issue a permit unless all other federal, state, and local permits have been obtained. All applicants must submit their application to the City of Evanston within ten (10) business days of submitting an application to any other joint agency regarding the same subject matter.
- 3. Post-Construction Requirements. Upon completion of all construction, the City requires all applicants to submit to the City Engineer a copy of the final plat of survey.
- 2. <u>4.</u> Based on the best available existing data according to federal, state, or other sources, the Floodplain Administrator shall compare the elevation of the site to the BFE.
 - a. Should no BFE information exist for the site, the developer's engineer shall calculate the BFE according to Section 4-13-4(D).
 - b. The_Floodplain Administrator shall maintain documentation of the existing ground elevation at the Development site and certification that this ground elevation existed prior to the date of the site's current FIRM's Floodplain identification

B. Preventing Increased Damages

- 1. No Development in the Floodplain, 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.
- 2. Within all riverine Floodplains where the Floodway has not been determined, the following standards shall apply:
 - a. The developer shall have a Licensed P.E. state in writing and show through supporting plans, calculations, and data that the project meets the engineering requirements of Section 4-13-6 for the entire Floodplain.
 - b. As an alternative, the developer should have an engineering study performed to determine a Floodway and submit that engineering study to IDNR/OWR and FEMA for acceptance as a Designated Floodway.
 - c. Upon acceptance of the Floodway by IDNR/OWR and FEMA, the developer shall then demonstrate that the project meets the requirements of Section 4-13-6 for the Designated Floodway. The Floodway shall be defined according to the definition in Section 4-13-2 of this Chapter
 - d. A Development permit shall not be issued unless the Applicant first obtains an IDNR/OWR permit or a determination has been made that an IDNR/OWR permit is not required.
 - e. Permits for Dams.
 - i. Any work involving the construction, modification, or removal of a Dam per 17 III. Adm. Code Part 3702 (Rules for Construction of Dams) shall obtain an IDNR/OWR permit prior to the start of dam construction.
 - ii. If the Floodplain Administrator finds a Dam that does not have an IDNR/OWR permit, the Floodplain Administrator shall immediately notify the IDNR/OWR Bartlett office.
 - iii. If the Floodplain Administrator finds a Dam which is believed to be in unsafe condition, the Floodplain Administrator shall immediately notify the owner of the Dam, the IDNR/OWR Bartlett office, and the Illinois Emergency Management Agency.

- 3. The following activities may be permitted without a Licensed P.E.'s review or calculation of BFE and Designated Floodway. Such activities shall still meet the other requirements of this Chapter.
 - a. Bridge and culvert crossings of streams in rural areas meeting conditions of IDNR/OWR Statewide Permit No. 2;
 - b. Barge fleeting facilities meeting conditions of IDNR/OWR Statewide Permit No. 3:
 - c. Aerial utility crossings meeting conditions of IDNR/OWR Statewide Permit No. 4
 - d. Minor boat docks meeting conditions of IDNR/OWR Statewide Permit No.5:
 - e. Minor, non-obstructive activities meeting conditions of IDNR/OWR Statewide Permit No. 6; activities (not involving fill or positive change in grade) are covered by this permit;
 - f. Outfall Structures and drainage ditch outlets meeting conditions of IDNR/OWR Statewide Permit No. 7;
 - g. Underground pipeline and utility crossings meeting the conditions of IDNR/OWR Statewide Permit No. 8;
 - h. Bank stabilization projects meeting the conditions of IDNR/OWR Statewide Permit No. 9;
 - i. Accessory Structures and additions to existing residential Buildings meeting the conditions of IDNR/OWR Statewide Permit No. 10;
 - j. Minor maintenance dredging activities meeting conditions of DNR/OWR Statewide Permit No. 11;
 - k. Bridge and culvert replacement Structures and bridge widenings meeting conditions of IDNR/OWR Statewide Permit No. 12;
 - I. Temporary construction activities meeting conditions of IDNR/OWR Statewide Permit No. 13;
 - m. Special Uses of Public Waters meeting conditions of IDNR/OWR Statewide Permit No. 14; and

- n. Any Development determined by IDNR/OWR to be located entirely within a Flood Fringe area shall be exempt from State Floodway permit requirements.
- 4. The Flood carrying capacity of any altered or relocated watercourse shall be maintained.
- 5. Compensatory Storage.
 - a. 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 BFE shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the BFE.
 - b. The excavation volume shall be at least equal to 1.5 times the volume of storage lost due to the fill or Structure.
 - c. In the case of streams and watercourses, such excavation shall be made opposite or adjacent to the areas so filled or occupied.
 - d. All Floodplain storage lost below the existing 10-percent annual chance Flood elevation shall be replaced below the proposed 10-percent annual chance Flood elevation. All Floodplain storage lost above the existing 110-percent annual chance Flood elevation shall be replaced above the proposed 10-percent annual chance Flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse.

4-13-8. – PERMITTING REQUIREMENTS APPLICABLE TO ALL FLOODPLAIN AREAS.

In addition to the requirements found in Sections 4-13-5, 4-13-6 and 4-13-7 for Development in Flood Fringes, Designated Floodways, and Floodplains where no Floodways have been identified, the following requirements shall be met. Where an existing or proposed Building or other Development is affected by multiple flood zones, by multiple BFEs, or both, the Development activity must comply with the provisions of the Chapter applicable to the most restrictive flood zone and the highest base flood elevation affecting any part of the existing or proposed Building, or for other developments, affecting any part of the Development area.

A. Public Health and Other Standards

 No Developments in the Floodplain shall include locating or storing chemicals, explosives, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants, or other hazardous or toxic materials below the FPE unless such materials are stored in a floodproofed and anchored storage tank and certified by a

- P.E. or floodproofed Building constructed according to the requirements of this Chapter.
- 2. Public utilities and facilities such as sewer, gas and electric shall be located and constructed to minimize or eliminate Flood damage.
- 3. Public sanitary sewer systems and water supply systems shall be located and constructed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
- 4. New and replacement water supply systems, wells, sanitary sewer lines and onsite waste disposal systems may be permitted providing all manholes or other above ground openings located below the FPE are watertight. New and replacement onsite sanitary sewer lines or waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- 5. 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) or within a Moderate Wave Action Area shall be permitted only if an engineering report demonstrates that the fill will not cause wave runup, ramping, or deflection of floodwaters that cause damage to buildings.
- 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.
 Man-made alterations of sand dunes within a Coastal high hazard area (zone V, V1-30, or VE) or within a Moderate Wave Action Area 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.
- 8. Within a Coastal high hazard area or within a Moderate Wave Action 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.
- B. Carrying Capacity and Notification of Adjacent Communities
 - 1. For all projects involving Channel Modification, fill, or stream maintenance (including levees), the Flood carrying capacity of the watercourse shall be maintained.
 - 2. In addition, the City of Evanston shall notify adjacent communities in writing 30 days prior to the issuance of a permit for the alteration or relocation of the watercourse.

C. Protecting Buildings

- 1. In addition to the damage prevention requirements in Sections 4-13-5 and 4-13-6 of this Chapter, all Buildings located within a Floodplain, shall be protected from Flood damage below the FPE. This Building protection criteria applies to the following situations:
 - a. New Construction or placement of a new Building or alteration or addition to an existing Building.
 - b. Substantial Improvements, made to any existing Building. If substantially improved, both the existing Building and any addition must meet the Flood protection standards of this section.
 - c. A Substantially Damaged Building under repair. Substantial Damage shall be figured cumulatively during a 10-year period by comparing the cost to repair the building to its pre-damage condition with the market value of the building immediately prior to the damage, for each event in which the building sustains damage, and adding the percentages of damage for each event. If Substantially Damaged, the entire Building must meet the Flood Protection standards of this section.
 - d. Installing a Manufactured Home on a new site or a Manufactured Home on an existing site.
 - e. Installing a travel trailer or Recreational Vehicle on a site for more than 180 consecutive days; and
 - f. Repetitive Loss to an existing Building.
- 2. Residential Buildings: In zones A, AO, AH, and AE, the lowest floor, including Basement, of New Construction of residential Buildings, and Substantially Improved residential Buildings, must be elevated to the FPE, and are subject to the more specific additional requirements below.
 - a. If fill, including grading to redistribute onsite material to alter existing topography, is used as a means of elevation:
 - i. The fill shall be placed in layers no greater than six inches before compaction and must extend at least twenty (20) feet beyond the foundation before sloping below the FPE in lieu of a geotechnical report.
 - ii. The fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or other structural measure.

- iii. The fill shall be composed of clean rock or soil and not include debris or refuse material.
- iv. The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
- b. If the Building's lowest floor is elevated above ground level with an enclosed or unenclosed area below the lowest floor:
 - i. The Building shall be elevated on piles, walls, columns, or other foundation that is permanently open to floodwaters.
 - ii. All enclosed areas below the FPE shall provide for equalization of hydrostatic pressures by allowing the automatic entry and exit of floodwaters. A minimum of two (2) permanent openings shall be provided on at least two walls located below the BFE and no more than one (1) foot above finished grade. The openings shall provide a total net area of not less than one (1) square inch for every one (1) square foot of enclosed area subject to flooding, or the design must be certified by a Registered P.E, as providing the equivalent performance in accordance with accepted standards of practice. Refer to FEMA TB1, Openings in Foundation Walls and Walls of Enclosures, for additional guidance.
 - iii. All electrical lines, switches, receptacles, and fixtures must be located above the FPE except to the minimum extent required by applicable building or life-safety codes. Any switches, receptacles, and/or fixtures required by applicable building or life-safety codes to extend below the FPE shall be rated, or located in enclosures rated, for prolonged submersion.
 - iv. The Building, foundation, and supporting members shall be adequately anchored to prevent flotation, collapse, or lateral movement of the Building resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, and be designed so as to minimize exposure to current, waves, ice, and floating debris.
 - v. All Building components below the FPE shall be constructed of materials resistant to Flood damage.
 - vi. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other service facilities may be located below the FPE provided they are waterproofed.

- vii. The area below the FPE shall be used solely for parking, storage, or building access and not later modified or occupied as habitable space.
- 3. Nonresidential Buildings: In zones A, AO, AH, and AE, the lowest floor (including basement) of New Construction of nonresidential buildings, and Substantial Improvement of nonresidential Buildings, must either (1) be elevated to or above the FPE, subject to the more specific additional requirements of Sections 4-13-8(C)(2)(a) through 4-13-8(C)(2)(b) above; or (2) be structurally dry-floodproofed, provided a Registered P.E. or architect has developed and/or reviewed the structural design, specifications, and plans for construction, and the Registered P.E. or architect submits a FEMA Floodproofing Certificate, 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 following conditions:
 - a. Below the FPE, the Building and attendant utility and sanitary facilities shall be watertight with walls substantially impermeable to the passage of water and structural components capable of resisting hydrostatic and hydraulic loads and the effects of buoyancy.
 - b. The Building design accounts for Flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy, and impact from debris and ice.
 - c. Floodproofing measures will be incorporated into the Building design and operable without human intervention and without an outside source of electricity.
 - d. The Building, utility, and sanitary facilities' design and construction will prevent the effect of sewer backup into the building.
 - e. Levees, berms, floodwalls, and similar works are not considered Floodproofing for the purpose of this Chapter.
- 4. In zones A, AO, AH, and AE, all placement or substantial improvement of Manufactured Homes and permanent installation of travel trailers on site for more than 180 consecutive days, shall be:
 - a. Elevated with the Lowest Floor at or above the FPE using a support and anchoring system, designed by a P.E. pursuant to 77 III. Adm. Code § 870.110.
 - b. 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 III. Adm. Code § 870.220

- 5. In zones A, AO, AH, and AE, travel trailers and Recreational Vehicles, on site for more than 180 consecutive days, shall meet the elevation requirement and anchoring requirements of Section 4-13-8(C)(4) unless the following conditions are met:
 - a. The vehicle must be either self-propelled or towable by a light duty truck.
 - b. The vehicle must not be attached to any permanent additions or external Structures, such as decks and porches.
 - c. The vehicle must be designed solely for recreation, camping, travel, or seasonal use rather than as a permanent dwelling.
 - d. The vehicles having a total area not exceeding four hundred (400) square feet when measured at the largest horizontal projection.
 - e. The vehicle's wheels must remain on axles and have inflated tires.
 - f. Any air conditioning units must be attached to the frame so as to be safe for movement out of the Floodplain.
 - g. The vehicle must be attached to a site only by quick disconnect type utilities and security devices. Utility connections include, but are not limited to, propane tanks, electrical and sewage.
 - h. The vehicle must be licensed and titled as a Recreational Vehicle or park model, be entirely supported by jacks, or have a hitch jack permanently mounted, have the tires touching the ground and be supported by block in a manner that will allow the block to be easily removed by use of the jacks/hitch jack.
- 6. In zones A, AO, AH, and AE, detached Accessory Structures may be constructed with the Lowest Floor below the FPE provided the following conditions are met:
 - a. 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.
 - b. All areas below the BFE shall be constructed with Flood-resistant materials.
 - c. The Building must be used only for the storage and parking and cannot be modified later into another use.

- d. The Building shall be located outside of the Designated Floodway unless the Building can be constructed and placed on a Building site so as not to block Flood flows nor reduce Floodway storage (Section 4-13-6(B)(1)(f), can also meet the Appropriate Use criteria of Section 4-13-6, and all other applicable requirements of this Chapter
- e. All electrical lines, switches, receptacles, and fixtures must be located above the FPE except to the minimum extent required by applicable building or life-safety codes. Any switches, receptacles, and/or fixtures required by applicable building or life-safety codes to extend below the FPE shall be rated, or located in enclosures rated, for prolonged submersion.
- f. No plumbing, heating, or air conditioning shall be permitted in Accessory Structures allowed under this subsection to be wet floodproofed in lieu of elevation.
- g. The structure must have at least two (2) permanent openings on at least two walls not more than one (1) foot above grade and below the BFE, with one (1) square inch of opening for every one (1) square foot of floor area.
- h. The structure must be no more than one story in height and no more than six hundred (600) square feet in size.
- i. The Building shall be anchored to resist floatation and overturning.
- j. All flammable or toxic materials (gasoline, paint, insecticides, fertilizers, etc.) shall be stored above the FPE.
- k. The Lowest Floor elevation should be documented, and the owner advised of the Flood insurance implications of building with the Lowest Floor below the BFE.
- 7. In Floodplain zones AO and AH, drainage paths shall be provided to guide water around and away from the Buildings.
- 8. The repair, remodeling, or maintenance of existing Buildings located within a Designated Floodway, built before November 18, 1987, are exempt from 17 III. Adm. Code Part 3708, including the more restrictive Appropriate Use standards. Such Buildings are not exempt from Section 4-13-8(A), including Substantial Damage and Substantial Improvement requirements, and if enlarged, replaced, or structurally altered must meet the requirements of 17 III. Adm. Code Part 3708.

9. New Construction or Substantial Improvement of Critical Facilities within the floodplain or the 0.2 percent annual chance flood elevation when defined, shall have the lowest floor (including basement) elevated or structurally dry floodproofed to the 0.2 percent annual chance flood elevation or three feet above the BFE, whichever is greater. Adequate parking shall be provided for staffing of the critical facilities at or above the BFE or 0.2 percent chance flood, when defined. Access routes to all critical facilities should be reviewed and considered when permitting. Access routes should be elevated to or above the level of the BFE.

Floodproofing and sealing measures may also be used to provide protection, as described in Section 7, and must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.

Critical Facilities include emergency services facilities (such as fire and police stations), schools, hospitals, retirement homes, senior care facilities, water treatment plants, and arterial roads and associated bridges.

- 10. In a Coastal high hazard area (zone VE) and in any area of zone AE designated as a Moderate Wave Action Area, the building protection requirements of this Section 4-13-8(C) must be met according to the following criteria:
 - a. All New Construction and Substantial Improvements shall be elevated on pilings or columns so that the bottom of the lowest horizonal 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.
 - b. 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 Section 4-13-8(C)(10)(a).
 - c. All New Construction and Substantial Improvements shall have the space below the Lowest Floor either free of obstruction or constructed with nonsupporting 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 Section 4-13-8(C)(10)(c), a Breakaway Wall shall have a design safe loading resistance of not less than 10 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:

Breakaway Wall collapse shall result from a water load less than that which would occur during the base flood; and

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 7-16 Minimum design loads and associated criteria for buildings and other structures, or equivalent standard.

- iii. 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.
- d. Placement or Substantial Improvement of Manufactured Homes must comply with Section 4-13-8(C)(10)(a) through Section 4-13-8(C)(10)(c).
- e. 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 4-13-8(C)(10)(a) through Section 4-13-8(C)(10)(c).
- 11. When construction of a building following a LOMR Based on Fill is requested, the condition where a site in the floodplain is removed due to the use of fill to elevate the site above the BFE, the applicant may not apply for a permit from the City of Evanston to construct the lowest floor of a building below the BFE in the floodplain.
- D. Compensatory Storage.

- 1. Whenever any portion of a riverine Floodplain is authorized for use, the volume of space which will be occupied by the authorized fill or Structure below the BFE shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the BFE.
- 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 10-percent annual chance Flood elevation shall be replaced below the proposed 10-percent annual chance Flood elevation. All Floodplain storage lost above the existing 110-percent annual chance Flood elevation shall be replaced above the proposed 10-percent annual chance Flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse.

4-13-9. – SUBDIVISION REQUIREMENTS.

The Evanston City Council shall consider Flood hazards, to the extent that they are known in all official actions related to land management, use and Development.

- A. New subdivisions, Manufactured Home parks, annexation agreements, and Planned Unit Developments within the Floodplain shall be reviewed to assure that the proposed Developments are consistent with Sections 4-13-5, 4-13-6, 4-13-7 and 4-13-8 of this Chapter and the need to minimize Flood damage. Plats or plans for new subdivisions, Manufactured Home parks and Planned Unit Developments shall include a signed statement by a Registered P.E. that the plat or plans account for changes in the drainage of surface waters in accordance with the Plat Act (765 ILCS 205/2).
- B. Proposals for new subdivisions, Manufactured Home parks, travel trailer parks, Planned Unit Developments and additions to Manufactured Home parks and additions to subdivisions shall include BFE data and Floodway delineations. Where this information is not available from an existing adopted study, the Applicant's engineer shall be responsible for calculating the BFE per Section 4-13-4(D). and the Floodway delineation.
- C. 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.
- D. The Evanston City Council shall not approve any Planned Unit Development or plat of subdivision located outside the corporate limits unless such agreement or plat is in accordance with the provisions of this Chapter.

E. All public utilities and facilities, such as sewer, gas, electrical and water systems, must be located and constructed to minimize or eliminate Flood damage.

4-13-10. - VARIANCES.

- A. No variances shall be granted within a Designated Floodway if any increase in Flood levels would result.
- B. Whenever the standards of this Chapter place undue hardship on a specific Development proposal, the Applicant may apply for a variance. Upon proper application and after fifteen (15) days' notice of public hearing, the Community Development Director and City Engineer shall review the applicant's request for a variance and shall submit the staff recommendation to the City Council. The City Council may attach such conditions to granting of a variance, as it deems necessary to further the intent of this chapter.
- C. No variance shall be granted unless the Applicant demonstrates, and the Evanston City Council finds, that all of the following conditions are met:
 - 1. The Development activity cannot be located outside the Floodplain.
 - 2. An exceptional hardship would result if the variance were not granted.
 - 3. The variance granted is the minimum necessary, considering the Flood hazard, to afford relief.
 - 4. There will be no additional threat to public health or safety, destruction of beneficial stream uses and functions including, aquatic habitat, creation of a nuisance, causation of fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - 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; and
- 6. The provisions of Sections 4-13-5(B) and 4-13-7(B) of this Chapter shall still be met; and
 - 7. The circumstances of the property are unique and do not establish a pattern inconsistent with the intent of the NFIP; and
 - 8. All other required state and federal permits or waivers have been obtained.
- D. The City Engineer shall notify an Applicant in writing that a variance from the requirements of Section 4-13-8 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 per \$100 of insurance coverage; and
- 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 the assumption of the risk and liability.
- E. The findings of fact and conclusions of law made by the Evanston City Council according to Section 4-13-10(C) the notifications required by Section 4-13-10(D), and a record of hearings and evidence considered as justification for the issuance of all variances from this Chapter shall be maintained by the City_in perpetuity.
- F. Variances requested in connection with restoration of a historic site or Historic Structure, may be granted to allow repair or rehabilitation of Historic Structures using criteria more permissive than the requirements of Sections 4-13-10(C) and 4-13-10(D), subject to the conditions that:
 - 1. The variance is the minimum necessary to preserve the historic character and design of the Building; and
 - 2. The repair or rehabilitation will not preclude the Building's continued designation as a Historic Structure.

4-13-11. - DISCLAIMER OF LIABILITY.

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 methods of study. Larger Floods may occur, or Flood heights may be increased by man-made or natural causes. This Chapter does not imply that Development, either inside or outside of the Floodplain, will be free from flooding or damage. This Chapter does not create liability on the part of the City or any officer or employee thereof for any Flood damage that results from reliance on this Chapter or any administrative decision made lawfully thereunder.

4-13-12. - PENALTY.

A. Failure to obtain a floodplain development permit for Development in the Floodplain or failure to comply with the conditions of a floodplain development permit or a variance shall be deemed to be a violation of this Chapter. Upon due investigation, whenever the Community Development Director in consultation with the Corporation Counsel and City Engineer determines that a Violation of the minimum standards of this Chapter exists, the Community Development Director shall issue a Notice of Violation. The Notice of Violation constitutes a suspension of the permit.

The Notice of Violation shall contain the address or parcel identification number of the property, a brief description of the Violation; section of the Chapter violated; the requirement to stop all work in Violation of this Chapter; a statement informing the violator that they may contest the notice in writing within ten days, correct the violation in ten days, or apply for a permit; a warning that if the violator fails to comply the community shall institute appropriate legal proceedings; and a statement that the Chapter authorizes fines of not less than fifty dollars (\$50.00) or more than one thousand dollars (\$1,000) for each day during or on which a Violation occurs or continues.

Notification to the owner shall be in any of the following manners:

- 1. By personally delivering to the owner of the property involved, or to the owner's agent, or to the person doing the work.
- 2. By posting a copy of the stop work order on the subject property in a conspicuous place, or
- 3. By personally delivering or mailing a copy of the notice of violation to any adult who resides at, occupies, uses, leases, manages, or maintains the property on which the Violation is located,
- 4. By personally delivering or mailing a copy of the notice of violation to any owner in title to the property on which the Violation is located.
- B. If such owner fails, after ten days from the date the written notice is issued, to correct the violation, apply for a permit, or contest the notice in writing, the City may make application to the Circuit Court for an injunction requiring conformance with this Chapter or make such other order as the Court deems necessary to secure compliance with the Chapter.
- C. Any person who violates this Chapter shall, upon conviction thereof, be fined not less than fifty dollars (\$50.00) or more than one thousand dollars (\$1,000) for each offense. A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.
- D. The City shall record a notice of violation on the title to the property.
- E. The Community Development Director 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.
- F. No floodplain development permit shall be permanently suspended or revoked until a hearing is held by the Evanston City Council. Written notice of such hearing shall be served on the permittee and shall state: (1) the grounds for complaint or reasons for suspension or revocation; and (2) the time and place of the hearing. At such hearing, the permittee shall be given an opportunity to present evidence on his/her behalf. At the conclusion of the

hearing, the Evanston City Council shall determine whether the permit shall be suspended or revoked.

G. Nothing herein shall prevent the City from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

SECTION 2: All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 3: If any provision of this ordinance or application thereof to any person or circumstance is held unconstitutional or otherwise invalid, such invalidity shall not affect other provisions or applications of this ordinance that can be given effect without the invalid application or provision, and each invalid provision or invalid application of this ordinance is severable.

SECTION 4: This Ordinance repeals and replaces other Ordinances adopted by the City to fulfill the requirements of the NFIP including: Evanston 2008 Floodplain Ordinance.

However, this Ordinance does not repeal the original resolution or Ordinance adopted to achieve eligibility in the program. Nor does this Chapter repeal, abrogate, or impair any existing annexation agreements, easements, covenants, or deed restrictions. Where this Ordinance and other Ordinance easements, covenants or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Introduced: September 21 , 2021 Adopted: October 11 , 2021	Approved:
	_10/15, 2021
	Daniel Biss
	Daniel Biss, Mayor
Attest:	Approved as to form:
Stephanie Mendoza	Nicholas E. Cummings
Stephanie Mendoza, City Clerk	Nicholas E. Cummings, Corporation Counsel