General Provisions

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GENERAL PROVISIONS

§ 152.01 PURPOSE.

(A) This chapter is enacted pursuant to the police powers granted to the village by ILCS Ch. 65, Act 5, §§ 1-2-1, 11-12-12, 11-30-2, 11-30-8 and 11-31-2 (1994). The purpose of this chapter is to maintain the village'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.

(B) This chapter is adopted in order to accomplish the following specific purposes:

(1) To meet the requirements of ILCS Ch. 615, Act 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 village 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.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.02 DEFINITIONS.

For the purpose of this chapter, the following definitions shall apply unless the context clearly indicates or requires a different meaning.

ACT. "An act in relation to the regulation of the rivers, lakes and streams of the State of Illinois", ILCS Ch. 615, Act 5, §§ *et seq*.

APPLICANT. Any person, firm, corporation or agency which submits an application.

APPROPRIATE USE. 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 § 152.32 of this chapter.

BASE FLOOD. The flood having a 1% probability of being equaled or exceeded in any given year. The base flood is also known as the 100-year frequency flood event. Application of the base flood elevation at any location is as defined in § 152.03 of this chapter.

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

CHANNEL. 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 drainage way, which has a definite bed and banks or shoreline, in or into which surface or groundwater flows, either perennially or intermittently. A channel includes on-stream, lakes and impoundments.

CHANNEL MODIFICATION. Alteration of a channel by changing the physical dimensions or materials of its bed or banks. ***CHANNEL MODIFICATION*** includes damming, rip-rapping or other armoring, widening, deepening, straightening, relocating, lining and significant removal of bottom or woody vegetation. ***CHANNEL MODIFICATION*** does not include the clearing of dead or dying vegetation, debris or

trash from the channel. Channelization is a reverse form of channel modification typically involving relocation of the existing channel (for example, straightening).

COMPENSATORY STORAGE. An artificially excavated, hydraulically equivalent volume of storage within the SFHA used to balance the loss of natural flood storage capacity when artificial fill or structures are placed within the floodplain. The uncompensated loss of natural floodplain storage can increase off-site floodwater elevations and flows.

CONDITIONAL APPROVAL OF A REGULATORY FLOODWAY MAP CHANGE. Preconstruction approval by DWR and the Federal Emergency Management Agency of a proposed change to the floodway map. This preconstruction approval, pursuant to this part, gives assurances to the property owner that once 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 which indicates that the Federal Emergency Management Agency will revise base flood elevations, flood insurance rate zones, flood boundaries or floodway as shown on an effective Flood Hazard Boundary Map or Flood Insurance Rate Map, once the as-built plans are submitted and approved.

CONTROL STRUCTURE. A structure designed to control the rate of flow that passes through the structure, given a specific upstream and downstream water surface elevation.

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. 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 as designated by IDNR/OWR, which is needed to store and convey the existing 100-year frequency flood discharge with no more than a 0.1 foot increase in stage due to the loss of flood conveyance or storage, and no more than a 10% increase in velocities.

(1) The floodways are designated for Kishwaukee Creek and Eakin Creek on the Regulatory Floodplain Map prepared by FEMA and dated May 19, 1997. When two floodway maps exist for a waterway, the more restrictive floodway limit shall prevail.

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

DEVELOPMENT. Any man-made change to real estate (which could significantly alter the hydraulics or hydrology of the floodplain or otherwise interfere with its natural functions) including:

(1) Construction, reconstruction, repair or placement of a building or any addition to a building.

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

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

(4) Demolition of a structure or redevelopment of a site.

(5) Clearing of land as an adjunct of construction.

(6) Construction or erection of levees, walls, fences, dams or culverts; channel modification; filling, dredging, grading, excavating, paving or other alterations of the ground surface; storage of materials; deposit of solid or liquid waste.

(7) 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 maintenance of existing buildings and facilities such as re-roofing or re-surfacing of roads when there is no increase in elevation, or gardening, plowing, and similar agricultural practices that do not involve filling, grading or construction of levees.

ELEVATION CERTIFICATES. A form published by the Federal Emergency Management Agency that is used to certify the elevation to which a building has been elevated.

EROSION. The general process whereby soils are moved by flowing water or wave action.

EXEMPT ORGANIZATIONS. Organizations which are exempt from this chapter per the Illinois Compiled Statutes including state, federal or local units of government.

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION. A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads is completed before April 1, 1990).

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISIONS. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets and either final site grading or the pouring of concrete pads).

FEMA. Federal Emergency Management Agency and its regulations at 44 CFR 59-79 effective as of September 29, 1989. This incorporation does not include any later editions or amendments.

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

FLOOD FREQUENCY. A period of years, based on a statistical analysis, during which a flood of a stated magnitude may be expected to be equaled or exceeded.

FLOOD FRINGE. That portion of the floodplain outside of the regulatory floodway.

FLOOD INSURANCE RATE MAPS (FIRM). A map prepared by the Federal Emergency Management Agency that depicts the special flood hazard area (SFHA) within a community. This map includes insurance rate zones and floodplains and may or may not depict floodways.

FLOODPLAIN. That land typically adjacent to a body of water with ground surface elevations at or below the base flood or the 100-year frequency flood elevation. Floodplains may also include detached special flood hazard areas, ponding areas, and the like. The ***FLOODPLAIN*** is also known as the Special Flood Hazard Area (SFHA). The floodplains are those lands within the jurisdiction of the village that are subject to inundation by the base flood or 100-year frequency flood. The SFHA's of the village are generally identified as such on the Flood Insurance Rate Map of the village prepared by the Federal Emergency Management Agency and dated May 19, 1997. The SFHA's of those parts of unincorporated McHenry and Kane Counties that are within the extraterritorial jurisdiction of the village or that may be annexed into the village are generally identified as such on the Flood Insurance Rate Map prepared for McHenry County on May 19, 1997 and Kane County (map index date May 19, 1997) by the Federal Emergency Management Agency.

FLOOD PROOFING. Any combination of structural and non-structural addition, changes or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

FLOOD PROOFING CERTIFICATE. A form published by the Federal Emergency Management Agency that is used to certify that a building has been designed and constructed to be structurally dry, flood proofed to the flood protection elevation.

FLOOD PROTECTION ELEVATION (FPE). The elevation of the base flood or 100-year frequency flood plus one-foot of freeboard at any given location in the SFHA.

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

HISTORIC STRUCTURE. Any structure that is:

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

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

(3) Individually listed on the state inventory of historic places by the Illinois Historic Preservation Agency.

(4) Individually listed on a local inventory of historic places that has been certified by the Illinois Historic Preservation Agency.

HYDROLOGIC and ***HYDRAULIC CALCULATIONS.*** Engineering analyses which determine expected flood flows and flood elevations based on land characteristics and rainfall events.

IDNR/OWR. The Illinois Department of Natural Resources and Office of Water Resources.

LETTER OF MAP AMENDMENT (LOMA). Official determination by FEMA that a specific structure is not in a 100-year flood zone; amends the effective Flood Hazard Boundary Map or FIRM.

LETTER OF MAP REVISION (LOMR). Letter that revises base flood or 100-year frequency flood elevations, flood insurance rate zones, flood boundaries or floodways as shown on an effective FHBM or FIRM.

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

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

MITIGATION. Those measures necessary to minimize the negative effects which floodplain development activities might have on the public health, safety and welfare. Examples of mitigation include compensatory storage, soil erosion and sedimentation control, and channel restoration.

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 April 1, 1990.

NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD). Reference surface set by the National Geodetic Survey deduced from a continental adjustment of all existing adjustments in 1929.

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

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

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

PUBLICLY NAVIGABLE WATERS. 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, together with all bayous, sloughs, backwaters and submerged lands that are open to the main channel or body of water directly accessible thereto.

RECREATIONAL VEHICLE or ***TRAVEL TRAILER.*** A vehicle which is:

(1) Built on a single chassis.

(2) Four hundred square feet or less when measured at the largest horizontal projection.

(3) Designed to be self-propelled or permanently towable by a light duty truck.

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

REGISTERED LAND SURVEYOR. A land surveyor registered in the state under the Illinois Land Surveyors Act (ILCS Ch. 225, Act 330, §§ 1 *et seq.*).

REGISTERED PROFESSIONAL ENGINEER. An engineer registered in the state under the Illinois Professional Engineering Act (ILCS Ch. 225, Act 325, §§ 1 *et seq.*).

REPAIR, REMODELING or ***MAINTENANCE.*** Development activities which do not result in any increases in the outside dimensions of a building or any changes to the dimensions of a structure.

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

RIVERINE SFHA. Any SFHA subject to flooding from a river, creek, intermittent stream, ditch or 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 over-bank flooding.

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

SEDIMENTATION. The processes that deposit soils, debris and other materials either on other ground surfaces or in bodies of water or watercourses.

SPECIAL FLOOD HAZARD AREA (SFHA). Any base flood area subject to flooding from a river, creek, intermittent stream, ditch or any other identified channel or ponding and shown on a Flood Hazard Boundary Map or Flood Insurance Rate Map as Zone A, AO, A1-30, AE, A99, AH, VO, V30, VE, V, M, E, D or X.

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

SUBSTANTIAL DAMAGE. A building is considered substantially damaged when it sustains damage from any cause (fire, flood, earthquake, and the like) whereby the cost of fully restoring the structure would equal or exceed 50% of the predamage market value of the structure, regardless of the actual repair work performed.

SUBSTANTIAL IMPROVEMENT. Any repair, reconstruction, rehabilitation, addition or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure either before the improvement or repair is started or if the structure has been damaged from any source and is being restored before the damage occurred. This term includes structures which were damaged, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50% of the market value before the damage occurred regardless of the actual repair work performed. For the purposes of this definition, ***SUBSTANTIAL IMPROVEMENT*** is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include whether any project for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions or any alteration of a “historic structure” provided that the alteration will not preclude the structure's continued designation as a “historic structure”.

TRANSITION SECTION. Reaches of the stream or floodway where water flows from a narrow cross-section to a wide crosssection or vice versa.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.03 BASE FLOOD ELEVATION.

This chapter's protection standard is based on the flood insurance study for the village. If a base flood elevation or 100-year frequency flood elevation is not available for a particular site, then the

protection standard shall be according to the best existing data available in the Illinois State Water Survey's Floodplain Information Repository. When a party disagrees with the best available data, he/she may finance the detailed engineering study needed to replace existing data with better data and submit it to IDNR/OWR and FEMA.

(A) The base flood or 100-year frequency flood elevation for SFHA'S for the South Branch Kishwaukee River shall be delineated on the 100-year profiles in the flood insurance study of the village and prepared by FEMA, dated May 19, 1997, and such amendments to the study and maps as prepared from time to time.

(B) The base flood or 100-year frequency flood elevation for the SFHAs of those parts of unincorporated McHenry and Kane County that are within the extraterritorial jurisdiction of the village or that may be annexed into the village shall be as delineated on the 100-year flood profiles in the flood insurance study of McHenry County prepared by FEMA and map index dated May 19, 1997, and such amendments or revisions to such study and maps as may be prepared from time to time.

(C) The base flood or 100-year frequency flood elevation for each SFHA delineated as an “AH Zone” or “AO Zone” shall be that elevation (or depth) delineated on the Flood Insurance Rate Map of the village.

(D) The base flood or 100-year frequency flood elevation for each of the remaining SFHAs delineated as an “A Zone” on the Flood Insurance Rate Map of the village shall be according to the best existing data available in the Illinois State Water Survey Floodplain Information Repository. When no base flood or 100-year frequency flood elevation exists, the base flood or 100-year frequency flood elevation for a riverine SFHA shall be determined from a backwater model, such as HEC-II, WSP-2 or a dynamic model such as HIP. The flood flows used in the hydraulic models shall be obtained from a hydrologic model, such as HEC-1, TR-20 or HIP, or by techniques presented in various publications prepared by the United States Geological Survey for estimating peak flood discharges. Flood flows should be based on anticipated future land use conditions in the watershed as determined from adopted local and regional land use plans. Along any watercourses draining more than one square mile, the above analyses shall be submitted to IDNR/OWR for approval, once approved it must be submitted to the Illinois State Water Survey Floodplain Information Repository for filing. For a non-riverine SFHA, the base flood elevation shall be the historic flood of record plus three feet, unless calculated by a detailed engineering study and approved by IDNR/OWR for drainage areas greater than one square mile.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.04 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 SFHA will be free from

flooding or damage. This chapter does not create liability on the part of the village or any officer or employee or Village Engineer thereof for any flood damage that results from reliance on this chapter or any administrative decision made lawfully thereunder.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.05 ABROGATION AND GREATER RESTRICTIONS.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. Where this chapter and other ordinances, easements, covenants or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail. This chapter is intended to repeal the original ordinance or resolution which was adopted to meet the National Flood Insurance program regulations, but is not intended to repeal the resolution which the village passed in order to established initial eligibility for the program.
(Ord. 97-05-08-006, passed 5-8-97)

OCCUPATION AND USE OF FLOOD FRINGE AREAS

§ 152.15 REQUIREMENTS TO BE MET.

Development in and/or filling of the flood fringe will be permitted if protection is provided against the base flood or 100-year frequency flood by proper elevation, and compensatory storage and other provisions of this chapter are met. No use will be permitted which adversely affects the capacity of drainage facilities or systems. Developments located within the flood fringe shall meet the requirements of this subchapter along with the requirements of §§ 152.60 through 152.63 of this chapter.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.16 DEVELOPMENT PERMIT.

No person, firm, corporation or governmental body, not exempted by state law, shall commence any development in the SFHA without first obtaining a development permit from the Building Inspector.

(A) Application for a development permit shall be made on a form provided by the Building Inspector. 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 licensed engineer, architect or land surveyor; existing grade elevations in M.S.L., 1928 adj. datum of N.G.V.D. and all changes in grade resulting from excavation or filling; the location and dimensions of all buildings and

additions to buildings. 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 §§ 152.60 through 152.63 of this chapter. Five copies of the application and all drawings shall be delivered to the village.

(B) Upon receipt of a development permit application, the Village Engineer shall compare the elevation of the site to the base flood or 100-year frequency flood elevation. Any development located on land that can be shown to have been higher than the base flood elevation as of the site's first Flood Insurance Rate Map identification is not in the SFHA and, therefore, not subject to the requirements of this chapter. The Village Engineer shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first Flood Insurance Rate Map identification.

(C) A soil erosion and sedimentation control plan for disturbed areas shall be submitted. This plan shall include a description of the sequence of grading activities and the temporary sediment and erosion control measures to be implemented to mitigate their effects. This plan shall also include a description of final stabilization and revegetation measures, and the identification of a responsible party to insure post-construction maintenance.

(D) The Building Inspector or delegate shall be responsible for obtaining from the applicant, copies of all other local, state and federal permits, approvals or permit-not-required letters that may be required for this type of activity. The Building Inspector shall not issue a development permit unless all other local, state and federal permits have been obtained.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

§ 152.17 PREVENTING INCREASED DAMAGES.

No development in the flood fringe shall create a threat to public health and safety.

(A) If fill is being used to elevate the site above the base flood or 100-year frequency flood elevation, the applicant shall submit sufficient data and obtain a letter of map revision (LOMR) from FEMA for the purpose of removing the site from the floodplain.

(B) Whenever any portion of a floodplain is authorized for use, the volume of space which will be occupied by the authorized fill or structure below the base flood or 100-year frequency flood elevation shall be compensated for and balanced by a

hydraulically equivalent volume of excavation taken from below the base flood or 100-year frequency flood elevation. The excavation volume shall be at least equal to 1.5 times the volume of storage lost due to the fill or structure. In the case of streams and watercourses, such excavation shall be made opposite or adjacent to the areas so filled or occupied. All floodplain storage lost below the existing ten-year flood elevation shall be replaced below the proposed ten-year flood elevation. All floodplain storage lost above the existing ten-year flood elevation shall be replaced above the proposed ten-year flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

OCCUPATION AND USE OF DESIGNATED FLOODWAYS

§ 152.30 APPLICATION.

This subchapter applies to proposed development, redevelopment, site modification or building modification within a regulatory floodway. The regulatory floodway for South Branch of Kishwaukee River shall be as delineated on the regulatory floodway maps designated by IDNR/OWR and referenced in § 152.02 of this chapter. Only those uses and structures will be permitted which meet the criteria in this subchapter. All floodway modifications shall be the minimum necessary to accomplish the purpose of the project. The development shall also meet the requirements of §§ 152.60 through 152.63 of this chapter.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.31 DEVELOPMENT PERMIT.

No person, firm, corporation or governmental body, not exempted by state law, shall commence any development in a floodway without first obtaining a development permit from the Building Inspector and IDNR/OWR.

(A) Application for a development permit shall be made on a form provided by the Building Inspector. The original of the application and five copies of the application and all drawings shall be delivered to the village. The application shall include the following information:

(1) Name and address of applicant.

(2) Site location (including legal description) of the property, drawn to scale, on the regulatory floodway map, indicting whether it is proposed to be in an incorporated or unincorporated area.

(3) Name of stream or body of water affected.

(4) Description of proposed activity.

(5) Statement of purpose of proposed activity.

(6) Anticipated dates of initiation and completion of activity.

(7) Name and mailing address of the owner of the subject property if different from the applicant.

(8) Signature of applicant or the applicant's agent.

(9) If the applicant is a corporation, the president or other authorized officer shall sign the application form.

(10) If the applicant is a partnership, each partner shall sign the application form.

(11) If the applicant is a land trust, the trust officer shall sign the name of the trustee by him (her) as trust officer. A disclosure affidavit shall be filed with the application, identifying each beneficiary of the trust by name and address and defining the respective interests therein.

(12) Plans of the proposed activity shall be provided which include as a minimum:

(a) A vicinity map showing the site of the activity, name of the waterway, boundary lines, names of roads in the vicinity of the site, graphic or numerical scale and north arrow.

(b) A plan review of the project and engineering study reach showing existing and proposed conditions including principal dimensions of the structure or work, elevations in mean sea level (1929 adjustment) datum or N.G.V.D., adjacent property lines and ownership, drainage and flood control easements, location of any channels and any existing or future access roads, distance between proposed activity and navigation channel (when the proposed construction is near a commercially navigable body of water), regulatory floodway limit, floodplain limit, specifications and dimensions of any proposed channel modifications, location and orientation of cross-sections, north arrow and a graphic or numerical scale.

(c) Cross-section views of the project 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, ten-year frequency flood elevation, 100-year frequency flood elevation and graphic or numerical scales (horizontal and vertical).

(d) A soil erosion and sedimentation control plan for disturbed areas. This plan shall include a description of the sequence of grading activities and the temporary sediment and erosion control measures to be implemented to mitigate their effects. This plan shall also include description of final stabilization and revegetation measures, and the identification of a responsible party to insure post-construction maintenance.

(e) A copy of the designated floodway map, marked to reflect any proposed change in the regulatory floodway location.

(13) Any and all other local, state and federal permits or approval letters that may be required for this type of development.

(14) Engineering calculations and supporting data shall be submitted showing that the proposed work will meet the permit criteria of § 152.32.

(15) If the designated floodway delineation, base flood or 100-year frequency flood elevation will change due to the proposed project, the application will not be considered complete until IDNR/OWR has indicated conditional approval of the regulatory floodway map change. No structures may be built until a letter of map revision has been approved by FEMA.

(16) The application for a structure shall be accompanied by drawings of the site, drawn to scale showing property line dimensions and existing ground elevations and all changes in grade resulting from any proposed excavation or filling and floodplain and floodway limits; sealed by a registered professional engineer, licensed architect or registered land surveyor; the location and dimensions of all buildings and additions to buildings; and the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of §§ 152.60 through 152.63 of this chapter.

(17) If the proposed project involves a channel modification, the application shall submit the following information:

(a) A discussion of the purpose of and need for the proposed work.

(b) A discussion of the feasibility of using alternative locations or methods to accomplish the purpose of the proposed work.

(c) An analysis of the extent and permanence of the impacts the project would have on the physical and biological conditions of the body of water affected.

(d) An analysis of the extent and permanence of the impacts each feasible alternative identified in § 152.33(D)(1) would have on the physical and biological conditions of the body of water affected.

(e) An analysis of the impacts of the proposed project, considering cumulative effects on the physical and biological conditions of the body of water affected.

(B) The applicant shall be responsible for providing copies of all other local, state and federal permits and approvals that may be required for this type of activity to the Building Inspector and Village Engineer. The Building Inspector shall not issue the development permit unless all required federal and state permits have been obtained. A registered professional engineer, under employ or contract with the village, shall review applications under this section and prepare recommendations to the Village Board on all ordinances.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

§ 152.32 PREVENTING INCREASED DAMAGES; LIST OF APPROPRIATE USES.

(A) The only development in a floodway which will be allowed are appropriate uses, which will not cause a rise in the base flood elevation, and which will not create a damaging or potentially

damaging increase in flood heights or velocity or be a threat to public health and safety and welfare or impair the natural hydrologic and hydraulic functions of the floodway or channel, or permanently impair existing water quality or aquatic habitat. Construction impacts shall be minimized by appropriate mitigation methods as called for in this chapter. Only those appropriate uses listed in 92 Ill. Adm. Code 708 will be allowed. Appropriate uses do not include the construction or placement of any new structures, fill, building additions, buildings on stilts, excavation or channel modifications done to accommodate otherwise 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.

(B) The approved appropriate uses are as follows:

(1) Public flood control structures, dikes, dams and other public works or private improvements relating to the control of drainage, flooding of existing structures, erosion or water quality or habitat for fish and wildlife.

(2) Structures or facilities relating to the use of, or requiring access to, the water or shoreline, such as in-stream aeration and similar treatment facilities, facilities and improvements related to recreational boating and commercial shipping and other functionally water dependent uses.

(3) Storm and sanitary sewer outfalls.

(4) Underground and overhead utilities.

(5) Public open space and recreational facilities such as playing fields and trail systems including any related fencing (at least 50% open when viewed from any one direction) built parallel to the direction of flood flows and including open air pavilions.

(6) Bridges, culverts and associated roadways, sidewalks and railways, necessary for crossing over the floodway or for providing access to other appropriate uses in the floodway and any modification thereto.

(7) Flood proofing activities to protect previously existing lawful structures including the construction of water tight window wells, elevating structures or construction of flood walls around residential, commercial or industrial principal structures where the outside toe of the flood wall shall be no more than ten feet away from the exterior wall of the existing structure and which are not considered substantial improvements to the structure.

(8) In the case of damaged or replacement buildings, reconstruction or repairs made to a building that are valued at less than 50% of the market value of the building before it was damaged or replaced and which does not increase the outside dimensions of the building.

(Ord. 97-05-08-006, passed 5-8-97)

§ 152.33 ENGINEERING AND MITIGATION CRITERIA.

Within the regulatory floodway as identified on the regulatory floodway maps designated by IDNR/OWR, the construction of an appropriate use will be considered permissible provided that the proposed project meets the following engineering and mitigation criteria and is so stated in writing with supporting plans, calculations and data by a registered professional engineer and provided that any structure meets the protection requirements of §§ 152.60 through 152.63 of this chapter:

(A) *Preservation of flood conveyance, so as not to increase flood stages upstream.* For appropriate uses other than bridge or culvert crossings, on-stream structures or dams, all effective regulatory floodway conveyance lost due to the project will be replaced for all flood events up to and including the 100-year frequency flood. In calculating effective regulatory floodway conveyance, the following factors shall be taken into consideration:

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(1) Regulatory floodway conveyance,

where “n” is Manning's roughness factor, “A” is the effective area of the cross-section and “R” is the ration of the area to the wetted perimeter. (See Open Channel Hydraulics, Ven Te Chow, 1959, McGraw-Hill Book Company, NY).

(2) The same Manning's “n“, value shall be used for both existing and proposed conditions unless a record maintenance agreement with a federal, state or local unit of government can assure the proposed conditions will be maintained or the land cover is changing from a vegetative to a non-vegetative land cover.

(3) Transition sections shall be provided and used in calculations of effective regulatory floodway conveyance. The following expansion and contraction ratios shall be used unless an applicant's engineer can prove to IDNR/OWR through engineering calculations or model tests that more abrupt transitions may be used with the same efficiency:

(a) When water is flowing from a narrow section to a wider section, the water should be assumed to expand no faster than at a rate of one foot horizontal for every four feet of the flooded stream's length.

(b) When water is flowing from a wide section to a narrow section, the water should be assumed to contract no faster than at a rate of one foot horizontal for every one foot of the flooded stream's length.

(c) When expanding or contracting flows in a vertical direction, a minimum of one foot vertical transition for every ten feet of stream length shall be used.

(d) Transition sections shall be provided between cross-sections with rapid expansions and contractions and when meeting the regulatory floodway delineation on adjacent properties.

(e) All cross-sections used in the calculations shall be located perpendicular to flood flows.

(B) *Preservation of floodway storage so as not to increase downstream flooding.* Compensatory storage shall be provided for any regulatory 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. Compensatory storage for fill or structures shall be equal to at least 1.5 times the volume of floodplain storage lost. Artificially created storage lost due to a reduction in head loss behind a bridge shall not be required to be replaced. The compensatory regulatory floodway storage shall be placed between the proposed normal water elevation and the proposed 100-year flood elevation. All regulatory floodway storage lost below the existing ten-year flood elevation shall be replaced below the proposed ten-year flood elevation. All regulatory floodway storage lost above the existing ten-year flood elevation shall be replaced above the proposed ten-year flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse. If the compensatory storage will not be placed at the location of the proposed construction, the applicant's engineer shall demonstrate to IDNR/OWR through a determination of flood discharges and water surface elevations that the compensatory storage is hydraulically equivalent. Finally, there shall be no reduction in floodway surface area as a result of a floodway modification, unless such modification is necessary to reduce flooding at existing structure.

(C) *Preservation of floodway velocities so as not to increase stream erosion or flood heights.* For all appropriate uses, except bridges or culverts or on-stream structures, the proposed work will not result in an increase in the average channel or designated floodway velocities or stage, for all flood events up to and including the 100-year frequency event. However, 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.

(D) *Construction of new bridges or culvert crossings and roadway approaches.* 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 including the 100-year frequency event; or the upstream flood stage increases will be contained within the channel banks (for within existing vertical extensions of the channel banks) such as within the design protection grade of existing levees or flood walls or within recorded flood easements. If the proposed construction will increase upstream flood stages greater

than 0.1 feet, the developer must contact IDNR/OWR, Dam Safety Section for a dam safety permit or waiver.

(1) The engineering analysis of upstream flood stages must be calculated using the flood study flows, and corresponding flood elevations for tail water conditions for the flood study specified in § 152.03 of this chapter. Culverts must be analyzed using the U.S. DOT, FHWA Hydraulic Chart for the selection of highway culverts. Bridges must be analyzed using the U.S. DOT/Federal Highway Administration Hydraulics of Bridge Waterways calculation procedures.

(2) Lost floodway storage must be compensated for per division (B) of this section.

(3) Velocity increases must be mitigated per division (C) of this section.

(4) If the crossing is proposed over a public water that is used for recreational or commercial navigation, a IDNR/OWR permit must be received.

(5) 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 division (B) of this section.

(6) All excavations for the construction of the crossing shall be designed per division (H) of this section.

(E) *Reconstruction or modification of existing bridges, culverts and approach road.*

(1) The bridge or culvert and roadway approach reconstruction or modification shall be constructed with no more than 0.1 foot increase in backwater over the existing flood profile for all flood frequencies up to and including the 100-year event, if the existing structure is not a source of flood damage.

(2) If the existing bridge or culvert and roadway approach is a source of flood damage to buildings or structures in the upstream floodplain, the applicant's engineer shall provide an evaluation of the feasibility of redesigning the structure to reduce the existing backwater taking into consideration the effects on flood stages on upstream and downstream properties.

(3) The determination as to whether or not the existing crossing is a course of flood damage and should be redesigned must be prepared in accordance with the Department of Transportation Rules 92 Ill. Adm. Code 708 (Floodway Construction in Northeastern Illinois) and submitted to IDNR/OWR for review and concurrence before a permit is issued.

(F) *On-stream structures built for the purpose of backing up water.* Any increase in upstream flood stages greater than 0.0 feet when compared to the existing conditions, for all flood events up to and including the 100-year frequency event shall be contained within the channel banks (or within existing vertical extensions of the channel banks) such as within the design protection grade of existing levees or flood walls or within recorded flood easements. A permit or letter indicating a permit is not required must be obtained from IDNR/OWR Dam Safety Section for a dam safety permit or waiver for any structure built for the purpose of backing up water in the stream during normal or flood

flow. All dams and impoundment structures as defined in § 152.02 of this chapter shall meet the permitting requirements of 92 Ill. Adm. Code 702 (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:

(1) The impoundment is determined to be in the public interest by providing flood control, public recreation or regional storm water detention.

(2) 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.

(3) 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 presedimentation basin.

(4) A non-point source control plan has been implemented in the upstream watershed to control the effects of sediment run-off 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 insure comprehensive watershed control.

(5) The project otherwise complies with the requirements of this subchapter.

(G) *Flood proofing of existing habitable, residential and commercial structures.* If construction is required beyond the outside dimensions of the existing building, the outside perimeter of the flood proofing construction shall be placed no further than ten feet from the outside of the building. Compensation of lost storage and conveyance will not be required for flood proofing activities.

(H) *Excavation in the floodway.* When excavation is proposed in the design of bridges and culvert openings, including the modifications to and replacement of existing bridge and culvert structures, or to compensate for lost conveyance for other appropriate uses, transition sections shall be provided for the excavation. The following expansion and contraction ratios shall be used unless an applicant's engineer can prove to IDNR/OWR through engineering calculations or model tests that more abrupt transitions may be used with the same efficiency:

(1) When water is flowing from a narrow section to a wider section, the water should be assumed to expand no faster than at a rate of one foot horizontal for every four feet of the flooded stream's length.

(2) When water is flowing from a wide section to a narrow section, the water should be assumed to contract no faster than at a rate of one foot horizontal for every one foot of the flooded stream's length.

(3) When expanding or contracting flows in a vertical direction, a minimum of one foot vertical transition for every ten feet of stream length shall be used.

(4) Erosion/scour protection shall be provided inland upstream and downstream of the transition sections.

(I) *Channel modification.* If the proposed activity involves a channel modification, it shall be demonstrated that:

(1) There are no practicable alternatives to the activity which would accomplish its purpose with less impact to the natural conditions of the body of water affected. Possible alternatives include levees, bank stabilization, flood proofing of existing structures, removal of structures from the floodplain, clearing the channel, high flow channel or the establishment of a stream side buffer strip or green belt. Channel modification is acceptable if the purpose is to restore natural conditions and improve water quality and fish and wildlife habitat.

(2) Water quality, habitat and other natural functions would be significantly improved by the modification and no significant habitat area may be destroyed, or the impacts are offset by the replacement of an equivalent degree of natural resource values.

(3) The activity has been planned and designed and will be constructed in a way which will minimize its adverse impacts on the natural conditions of the body of water affected, consistent with the following criteria:

(a) The physical characteristics of the modified channel shall match as closely as possible those of the existing channel in length, cross-section, slope and sinuosity. If the existing channel has been previously modified, restoration of more natural physical conditions should be incorporated into channel modification design, where practical.

(b) Hydraulically effective transitions shall be provided at both the upstream and downstream ends of the project, designed such that they will prevent erosion.

(c) One-sided construction of a channel shall be used when feasible. Removal of stream side (riparian) vegetation should be limited to one side of the channel, where possible, to preserve the shading and stabilization effects of the vegetation.

(d) Clearing of vegetation shall be limited to that which is essential for construction of the channel.

(e) Channel banks shall be constructed with a side slope no steeper than 3:1 horizontal to vertical, wherever practicable. Natural vegetation and gradual side slopes are the preferred methods for bank stabilization. Where high velocities or sharp bends necessitate the use of alternative stabilization measures, natural dock or rip-rap are preferred materials. Artificial materials such as concrete, gabions or construction rubble should be avoided unless there are no practicable alternatives.

(f) All disturbed areas associated with the modification shall be seeded or otherwise stabilized as soon as possible upon completion of construction. Erosion

blanket or an equivalent material shall be required to stabilize disturbed channel banks prior to establishment of the vegetative cover.

(g) If the existing channel contains considerable bottom diversity such as deep pools, riffles and other similar features, such features shall be provided in the new channel. Spawning and nesting areas and flow characteristics compatible with fish habitat shall also be established, where appropriate.

(h) A sediment basin shall be installed at the downstream end of the modification to reduce sedimentation and degradation of downstream water quality.

(i) New or relocated channels should be built in the dry and all items of construction, including vegetation, should be completed prior to diversion of water into the new channel.

(j) There shall be no increases in stage or velocity as the channel enters or leaves the project site for any frequency flood unless necessitated by a public flood control project or unless such an increase is justified as part of a habitat improvement or erosion control project.

(k) Unless the modification is for a public flood control project, there shall be no reduction in the volume of floodwater storage outside the floodway as a result of the modification.

(4) The project otherwise complies with the requirements of this subchapter.

(J) *Seeding and stabilization plan.* For all activities located in a floodway, a seeding and stabilization plan shall be submitted by the applicant.

(K) *Soil erosion and sedimentation measures.* For all activities in the floodway, including grading, filling and excavation, in which there is potential for erosion of exposed soil, soil erosion and sedimentation control measures shall be employed consistent with the following criteria:

(1) The construction area shall be minimized to preserve the maximum vegetation possible. Construction shall be scheduled to minimize the time soil is exposed and unprotected. In no case shall the existing natural vegetation be destroyed, removed or disturbed more than 15 days prior to the initiation of improvements.

(2) Temporary and/or permanent soil stabilization shall be applied to denuded areas as soon as possible. As a minimum, soil stabilization shall be provided within 15 days after final grade is reached on any portion of the site, and within 15 to denuded areas which may not be at final grade but will remain undisturbed for longer than 60 days.

(3) Sedimentation control measures shall be installed before any significant grading or filling is initiated on the site to prevent the movement of eroded sediments off-site or into the channel. Potential sediment control devices include filter fences, straw bale fences, check dams, diversion ditches and sediment basins.

(4) A vegetated buffer strip of at least 25 feet in width shall be preserved and/or reestablished, where possible, along existing channels (see division (P) of this section). Construction vehicle use of channels shall be minimized. Temporary stream crossings shall be constructed where necessary, to minimize erosion. Necessary construction in or along channels shall be restabilized immediately.

(5) Soil erosion and sedimentation control measures shall be designed and implemented consistent with "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" (1988) also known as the "Green Book" and "The Illinois Urban Manual" (NRCS, 1995).

(L) *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 food events up to and including the 100-year frequency event.

(M) *General criteria for analysis of flood elevations.*

(1) The flood profiles, flows and floodway data in the regulatory floodway study, referenced in § 152.03 of this chapter, must be used for analysis of the base conditions. If the study data appear to be in error or conditions have changed, IDNR shall be contacted for approval and concurrence on the appropriate base conditions data to use.

(2) If the 100-year designated floodway elevation at the site of the proposed construction is affected by backwater from a downstream receiving stream with a larger drainage area, the proposed construction shall be shown to meet the requirements of this section for the 100-year frequency flood elevation of a designated floodway conditions and conditions with the receiving stream at normal water elevations.

(3) If the applicant learns from IDNR/OWR, local governments or a private owner that a downstream restrictive bridge or culvert is scheduled to be removed, reconstructed, modified or a regional flood control project is scheduled to be built, removed, constructed or modified within the next five years, the proposed construction shall be analyzed and shown to meet the requirements of this section for both the existing conditions and the expected flood profile conditions when the bridge, culvert or flood control project is built.

(N) *Conditional letter of map revision.* If the appropriate use would result in a change in the designated floodway location or the 100-year frequency flood elevation, the applicant shall submit to IDNR/OWR and to FEMA all the 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. However, 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 shall take place until a conditional approval is issued. After

initial filling, grading, dredging or excavating, no further development activities shall take place until a final letter of map revision (LOMR) is issued by FEMA with concurrence from IDNR/OWR.

(O) *Professional engineer's supervision.* All engineering analyses shall be performed by or under the supervision of a registered professional engineer.

(P) *Construction near channel.* For all activities in the floodway involving construction within 25 feet of the channel, the following criteria shall be met:

(1) A natural vegetation buffer strip shall be preserved within at least 25 feet of the ordinary high watermark of the channel.

(2) Where it is impossible to protect this buffer strip during the construction of an appropriate use, a vegetated buffer strip shall be established upon completion of construction.

(3) The use of native riparian vegetation is preferred in the buffer strip. Access through this buffer strip shall be provided, when necessary, for stream maintenance purposes.

(Q) *Final requirements.* 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 designated floodway designation may proceed but no buildings or structures or other construction that is not an appropriate use may be placed in that area until the designated floodway map is changed and a final Letter of map revision is received. The designated floodway map will be revised upon acceptance and concurrence by IDNR/OWR and FEMA of the “as-built” plans.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.34 STATE REVIEW.

For those projects listed below located in a regulatory floodway, the following criteria shall be submitted to IDNR/OWR for their review and concurrence prior to the issuance of a permit:

(A) An engineer's analysis of the flood profile due to a proposed bridge pursuant to § 152.33(D).

(B) An engineer's determination that an existing bridge or culvert crossing is not a source of flood damage and the analysis indicating the proposed flood profile, pursuant to § 152.33(E).

(C) Alternative transition sections and hydraulically equivalent storage pursuant to § 152.33(A), (B) and (H).

(D) The construction of any IDNR/OWR projects, dams (as defined in § 152.02 of this chapter) and all other state, federal or local units of government projects, including projects of the municipality or county.

(E) An engineer's determination that a proposed bridge affected by backwater from a downstream receiving stream may be built with a smaller opening.

(F) Projects which revise the floodway and/or flood profiles.

(G) Projects in public bodies of water.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.35 OTHER PERMITS.

In addition to the other requirements of this chapter, a development permit for a site located in a floodway shall not be issued unless the applicant first obtains a permit or written documentation that a permit is not required from IDNR/OWR issued pursuant to ILCS Ch. 615, Act 5, §§ 5 *et seq.* No permit from IDNR/OWR shall be required if IDNR/OWR has delegated this responsibility to the village.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.36 DAM SAFETY PERMITS.

Any work involving the construction, modification or removal of a dam as defined in § 152.02 of this chapter, per 92 Ill. Adm. Code 702 (Rules for Construction of Dams), shall obtain an IDNR/OWR permit prior to the start of construction of a dam. If the Village Engineer finds a dam that does not have a IDNR/OWR permit, the Village Engineer shall immediately notify the IDNR/OWR Schaumburg office. If the Village Engineer finds a dam which is believed to be in unsafe condition, the Village Engineer shall immediately notify the owner of the dam, IDNR/OWR Schaumburg office and the Illinois Emergency Management Agency (IEMA).
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.37 ACTIVITIES NOT REQUIRING REGISTERED PROFESSIONAL ENGINEER'S REVIEW.

The following activities may be permitted without a registered professional engineer's review. Such activities shall still meet the other requirements of this chapter, including the mitigation requirements.

(A) Underground and overhead utilities that:

(1) Do not result in any increase in existing ground elevations.

(2) Do not require the placement of above ground structures in the floodway.

(3) In the case of underground steam crossings, the top of the pipe or encasement is buried a minimum of three feet below the existing stream bed.

(4) Overhead utility lines shall be constructed above the estimated 100-year frequency flood elevation or attached above the low chord of an existing bridge (with the

permission of the bridge owner). No supporting towers shall be placed in the watercourse and shall be designed so as to not catch debris.

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(5) Disturbance of stream side vegetation shall be kept to minimum during construction to prevent erosion and sedimentation. All disturbed floodway areas, including the stream banks shall be restored to their original contours and seeded or otherwise stabilized upon completion of construction.

(6) A utility crossing carrying material which may cause water pollution as defined by the Environmental Protection Act ILCS Ch. 415, Act 5 (1992 State Bar Edition) shall be provided with shut-off valves on each side of the body of water to be crossed.

(7) All Illinois Commerce Commission, National Electric Safety Codes and federal requirements for clearance must be met.

(B) Storm and sanitary sewer outfalls that:

(1) Do not extend riverward or lakeward of the existing adjacent natural bank slope.

(2) Do not result in an increase in ground elevation.

(3) Are designed so as not to cause stream erosion at the outfall location.

(C) Construction of sidewalks, athletic fields (excluding fences), properly anchored playground equipment and patios at grade.

(D) Construction of shoreline and stream bank protection that:

(1) Does not exceed 1,000 feet in length.

(2) Materials are not placed higher than the existing top of bank.

(3) Materials are not placed so as not to reduce the cross-section area of the stream channel or bank of the lake.

(4) Vegetative stabilization and gradual side slopes are the preferred mitigation methods for existing erosion problems. Where high channel velocities, sharp bends or wave action necessitate the use of alternative stabilization measures, natural rock or rip-rap are preferred materials. Artificial materials such as concrete, construction rubble and gabions should be avoided unless there are no practicable alternatives.

(E) Temporary stream crossings in which:

(1) The approach roads will be 0.5' (½-foot) or less above natural grade.

(2) The crossing will allow stream flow to pass without backing up the water above the stream bank vegetation line or above any drainage tile or outfall invert.

(3) The top of the roadway fill in the channel will be at least two feet below the top of the lowest bank. Any fill in the channel shall be non-erosive material, such as rip-rap or gravel.

(4) All disturbed stream banks will be seeded or otherwise stabilized as soon as possible upon installation and again upon removal of construction.

(5) The access road and temporary crossings will be removed within one year after authorization.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

OCCUPATION AND USE OF SFHA AREAS WHERE FLOODWAYS NOT IDENTIFIED

§ 152.50 DEVELOPMENT PERMITTED UNDER CERTAIN CONDITIONS.

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

(A) *Development permit.*

(1) No person, firm, corporation or government body, not exempted by state law, shall commence any development in a SFHA or floodplain without first obtaining a development permit from the Building Inspector. Application and five copies thereof for a development permit shall be made on a form provided by the Building Inspector. The application shall be accompanied by drawings of the site, drawn to scale showing property line dimensions and existing grade elevations and all changes in grade resulting from excavation or filling, sealed by a licensed engineer, architect or surveyor; the location and dimensions of all buildings and additions to buildings; and the elevation of the lowest floor (including basement) of all proposed buildings subject to the requirements of §§ 152.60 through 152.63 of this chapter.

(2) The application for a 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 regulatory floodway maps, 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:

1. 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.

2. A plan view of the project and engineering study reach showing existing and proposed conditions including principal dimensions of the structure or work, elevations in mean sea level (1929 adjustment) datum or N.G.V.D., adjacent property lines and ownership, drainage and flood control easements, distance between proposed activity and navigation channel (when the proposed construction is near a commercially navigable body of water), floodplain limit, location and orientation of cross-sections, north arrow and a graphical or numerical scale.

3. Cross-section views of the project 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, ten-year frequency flood elevation, 100-year frequency flood elevation and graphical or numerical scales (horizontal and vertical).

4. A soil erosion and sedimentation control plan for disturbed areas. The plan shall include a description of the sequence of grading activities and the temporary sediment and erosion control measures to be implemented to mitigate their effects. This plan shall also include a description of final stabilization and revegetation measures and the identification of a responsible party to insure post-construction maintenance.

5. Engineering calculations and supporting data shall be submitted showing that the proposed work will meet the criteria of § 152.51.

6. Any and all other local, state and federal permits or approvals that may be required for this type of development.

(B) Based on the best available existing data according to the Illinois State Water Survey's Floodplain Information Repository, the Village Engineer shall compare the elevation of the site to the base flood or 100-year frequency flood elevation. Should no elevation information exist for the site, the developer's engineer shall calculate the elevation according to § 152.03(D) of this chapter. Any development located on land that can be shown to have been higher than the base flood elevation as of the site's first Flood

Insurance Rate Map identification is not in the SFHA and, therefore, not subject to the requirements of this chapter. The Village Engineer shall maintain documentation of the existing ground elevation at the development site and certification that this ground elevation existed prior to the date of the site's first Flood Insurance Rate Map identification.

(C) The applicant shall be responsible for providing copies of all other local, state and federal permits, approvals or permit-not-required letters that may be required for this type of activity. The Building Inspector shall not issue the development permit unless all required local, state and federal permits have been obtained.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

§ 152.51 PREVENTING INCREASED DAMAGES.

No development in the SFHA, where a floodway has not been determined shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health, safety and welfare or impair the natural hydrologic and hydraulic functions of the floodway or channel, or impair existing water quality or aquatic habitat. Construction impacts shall be minimized by appropriate mitigation methods as called for in this chapter.

(A) Within all riverine SFHAs where the floodway has not been determined, the following standards shall apply:

(1) The developer shall have a registered professional engineer state in writing and show through supporting plans, calculations and data that the project meets the engineering requirements of § 152.33(A) through (L) of this chapter for the entire floodplain as calculated under the provisions of § 152.03(D) of this chapter. As an alternative, the developer should have an engineering study performed to determine a floodway and submit that engineering study to IDNR/OWR for acceptance as a designated floodway. Upon acceptance of their floodway by IDNR/OWR, the developer shall then demonstrate that the project meets the requirements of §§ 152.30 through 152.37 of this chapter for the regulatory floodway. The floodway shall be defined according to the definition in § 152.02 of this chapter.

(2) A development permit shall not be issued unless the applicant first obtains a permit from IDNR/OWR or written documentation that a permit is not required from IDNR/OWR.

(3) No permit from IDNR/OWR shall be required if IDNR/OWR has delegated permit responsibility to the village per 92 Ill. Adm. Code, Part 708 for designated floodways.

(4) Any work involving the construction, modification or removal of a dam or an on-stream structure to impound water as defined in § 152.02 of this chapter per 92 Ill. Adm. Code Part 702 (Rules for Construction of Dams) shall obtain an IDNR/OWR permit or letter indicting a permit is not required prior to the start of construction of a dam. If the Village Engineer finds a dam that does not have an IDNR/OWR permit, the Village Engineer shall immediately notify IDNR/OWR Schaumburg office. If the Building Inspector finds a dam which is believed to be in unsafe condition, the Village Engineer shall immediately notify the owner of the dam, IDNR/OWR Schaumburg office and the Illinois Emergency Management Agency (IEMA).

(5) The following activities may be permitted without a registered professional engineer's review or calculation of a base flood elevation and designated floodway. Such activities shall still meet the other requirements of this chapter.

(a) Underground and overhead utilities that:

1. Do not result in any increase in existing ground elevations.

2. Do not require the placement of above ground structures in the floodway.

3. In the case of underground stream crossings, the top of the pipe or encasement is buried a minimum of three feet below the existing stream bed.

4. Overhead utility lines shall be constructed above the estimated 100-year frequency flood elevation or attached above the low chord of an existing bridge (with the permission of the bridge owner). No supporting towers shall be placed in the watercourse and shall be designed so as to not catch debris.

5. Disturbance of stream side vegetation shall be kept to minimum during construction to prevent erosion and sedimentation.

6. A utility crossing carrying material which may cause water pollution as defined by the Environmental Protection Act, ILCS Ch. 415, Act 5 (1992 State Bar Edition) shall be provided with shut-off valves on each side of the body of water to be crossed.

7. All Illinois Commerce Commission, National Electric Safety Codes and federal requirements for clearance must be met.

(b) Storm and sanitary sewer outfalls that:

1. Do not extend riverward or lakeward of the existing adjacent natural bank slope.

2. Do not result in an increase in ground elevation.

3. Are designed so as not to cause stream bank erosion at the outfall location.

(c) Construction of shoreline and stream bed protection that:

1. Does not exceed 1,000 feet in length or two cubic yards per lineal foot of stream bed.

2. Materials are not placed higher than the existing top of bank.

3. Materials are placed so as not to reduce the cross-section area of the stream channel by more than 10%.

4. Vegetative stabilization and gradual side slopes are the preferred mitigation methods for existing erosion problems. Where high channel velocities, sharp bends or wave action necessitate the use of alternative stabilization measures, natural rock or rip-rap are preferred materials. Artificial materials such as concrete, construction rubble and gabions should be avoided unless there are no practicable alternatives.

(d) Temporary stream crossings in which:

1. The approach roads will be 0.5 feet (½-foot) or less above natural grade.

2. The crossing will allow stream flow to pass without backing up the water above the stream bank vegetation line or above any drainage tile or outfall invert.

3. The top of the roadway fill in the channel will be at least two feet below the top of the lowest bank. Any fill in the channel shall be non-erosive material, such as rip-rap or gravel.

4. All disturbed stream banks will be seeded or otherwise stabilized as soon as possible upon installation and again upon removal of construction.

5. The access road and temporary crossings will be removed within one year after authorization.

(e) The construction of light poles, sign posts and similar structures.

(f) The construction of sidewalks, driveways, athletic fields (excluding fences), patios and similar surfaces which are built at grade.

(g) The construction of properly anchored, unwalled, open structures such as playground equipment, pavilions and carports built at or below existing grade that would not obstruct the flow of floodwaters.

(h) The placement of properly anchored buildings not exceeding 70 square feet in size, nor ten feet in any one dimension (such as, animal shelters and tool sheds).

(i) The construction of additions to existing buildings which do not increase the first flood area by more than 20%, which are located on the upstream or downstream side of the existing building and which do not extend beyond the side of the existing building that are parallel to the flow of floodwaters.

(j) Minor maintenance dredging of a stream channel where:

1. The affected length of stream is less than 1,000 feet.

2. The work is confined to re-establishing flows in natural stream channels.

3. The cross-sectional area of the dredged channel conforms to that of the natural channel upstream and downstream of the site.

4. The flood carrying capacity within any altered or relocated watercourse shall be maintained.

(B) *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 base flood or 100-year frequency flood elevation shall be compensated for and balanced by a hydraulically equivalent volume of excavation taken from below the base flood or 100-year frequency flood elevation. The excavation volume shall be at least equal to 1.2 times the volume of storage lost due to the fill or structure. In the case of streams and watercourses, such excavation shall be made opposite or adjacent to the areas so filled or occupied. All floodplain storage lost below the existing ten-year flood elevation shall be replaced below the proposed ten-year flood elevation. All floodplain storage lost above the existing ten-year flood elevation shall be replaced above the proposed ten-year flood elevation. All such excavations shall be constructed to drain freely and openly to the watercourse.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

REQUIREMENTS APPLICABLE TO ALL AREAS

§ 152.60 REQUIREMENTS TO BE MET.

In addition to the requirements found in §§ 152.15 through 152.51 of this chapter for development in flood fringes, regulatory floodways and SFHA or floodplains where no floodways have been identified (Zones A, AO, AH, AE, A1-A30, A99, VO, V1-30, VE, V, M, E, D or X), the following requirements in this subchapter shall be met.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

§ 152.61 PUBLIC HEALTH STANDARDS.

(A) No developments in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, animal wastes, fertilizers, flammable liquids, pollutants or other hazardous or toxic materials below the FPE.

(B) New and replacement water supply systems, wells, sanitary sewer lines and on-site waste disposal systems may be permitted providing all manholes or other above-ground openings located below the FPE are watertight.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.62 CARRYING CAPACITY AND NOTIFICATION.

For all projects involving channel modification, fill or stream maintenance (including levees), the flood carrying capacity of the watercourse shall be maintained. In addition, the village shall notify adjacent communities in writing 30 days prior to the issuance of a permit for the alteration or relocation of the watercourse.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.63 PROTECTING BUILDINGS.

(A) All buildings located within a 100-year floodplain also known as a SFHA shall be protected from flood damage below the flood protection elevation. However, existing buildings located within a regulatory floodway shall also meet the more restrictive appropriate use standards included in §§ 152.30 through 152.37 of this chapter. This building protection criteria applies to the following situations:

(1) Construction or placement of a new building.

(2) A structural alteration to an existing building that either increases the first floor area by more than 20% or the building's market value by more than 50%. This alteration shall be figured cumulatively beginning with any alteration which has taken place subsequent to April 1, 1990.

(3) Installing a manufactured home on a new site or a new manufactured home on an existing site. Building protection requirements do not apply to returning a mobile home to the same site it lawfully occupied before it was removed to avoid flood damage.

(4) Installing a travel trailer on a site for more than 180 days.

(B) This building protection requirement may be met by one of the following methods:

(1) A residential or non-residential building, when allowed, may be constructed on permanent land fill in accordance with the following:

(a) The lowest floor (including basement) shall be at or above the flood protection elevation.

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

(2) A residential or non-residential building may be elevated in accordance with the following:

(a) The building or improvements shall be elevated on crawl space, stilts, piles, walls or other foundation that is permanently open to floodwaters and not subject to damage by hydrostatic pressures of the base flood or 100-year frequency flood. The permanent openings shall be no more than one foot above grade and consists of a minimum of two openings. The openings must have a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding below the base flood elevation.

(b) The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris.

(c) All areas below the flood protection elevation shall be constructed of materials resistant to flood damage. The lowest floor (including basement) and all electrical, heating, ventilating, plumbing and air conditioning equipment and utility meters shall be located at or above the flood protection elevation. Water and sewer pipes, electrical and telephone lines, submersible pumps and other waterproofed service facilities may be located below the flood protection elevation.

(d) The areas below the FPE may only be used for the parking of vehicles, building access or storage in an area other than a basement.

1. In the case of manufactured homes placed or substantially improved outside of a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision or in an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage from a flood, the top of the lowest floor shall be elevated to or above the flood protection elevation.

2. In the case of manufactured homes placed or substantially improved in an existing manufactured home park or subdivision, the manufactured home shall be elevated so that either the top of the lowest floor is above the base flood elevation or the chassis is at least 36 inches in height above grade and supported by reinforced piers or other foundations of equivalent strength, whichever is less.

(e) Recreational vehicles or travel trailers shall be required to meet the elevation and anchoring requirements of division (d) above of this section unless:

1. They are on site for less than 180 consecutive days.

2. They are fully licensed and ready for highway use.

(f) A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utility and service devises and has no permanently attached additions.

(3) (a) Only a non-residential building may be structurally dry flood proofed (in lieu of elevation) provided that a registered professional engineer shall certify that the building has been structurally dry flood proofed below the flood protection elevation, the structure and attendant utility facilities are watertight and capable to resisting the effects

of the base blood or 100-year frequency flood. The building design shall take into account flood velocities, duration, rate of rise, hydrostatic and hydrodynamic forces, the effects of buoyancy and impacts from debris or ice. Flood proofing measures shall be operable without human intervention and without an outside source of electricity (levees, berms, flood walls and similar works are not considered flood proofing for the purpose of this subsection).

(b) Tool sheds and detached garages on an existing single-family platted lot may be constructed with the lowest floor below the flood protection elevation in accordance with the following:

1. The building is not used for human habitation.

2. All areas below the base flood or 100-year frequency flood elevation shall be constructed with waterproof material. Structures located in a regulatory floodway shall be constructed and placed on a building site so as not to block the flow of floodwaters and shall also meet the appropriate use criteria of §§ 152.30 through 152.37 of this chapter. In addition, all other requirements of §§ 152.15 through 152.51 of this chapter must be met.

3. The structures shall be anchored to prevent flotation.

4. Service facilities such as electrical and heating equipment shall be elevated or flood proofed to the flood protection elevation.

5. The building shall be valued at less than $5,000 and be less than 500 square feet in floor size.

6. The building shall be used only for the storage of vehicles or tools and may not contain other rooms, workshops, greenhouses or similar uses.

7. The building shall meet the permanent opening criteria of division (B)(2) of this section.

(4) Nonconforming structures located in a designated floodway may remain in use, but may not be enlarged, replaced or structurally altered. A nonconforming structure damaged by flood, fire, wind or other natural or man-made disaster may be restored unless the damage exceed 50% of its market value before it was damaged, in which case it shall conform to this chapter.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

§ 152.64 OTHER DEVELOPMENT REQUIREMENTS.

The Board of Trustees shall take into account 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 (PUDs) within the SFHA shall be reviewed to assure that the

proposed developments are consistent with §§ 152.15 through 152.63 of this chapter and the need to minimize flood damage. Plats or plans for new subdivisions, manufactured home parks and planned unit developments (PUDs) shall include a signed statement by a registered professional engineer that the plat or plans account for changes in the drainage of surface waters in accordance with the Plat Act ILCS Ch. 765, Act 205, § 2.

(B) Proposals for new subdivisions, manufactured home parks, travel trailer parks, planned unit developments (PUDs) and additions to manufactured home parks and additions to subdivisions shall include base flood or 100-year frequency flood elevation data and floodway delineations. Where this information is not available from an existing study flied with the Illinois State Water Survey, the applicant's engineer shall be responsible for calculating the base flood or 100-year frequency flood elevation per § 152.05(D) of this chapter and the floodway delineation per the definition in § 152.02 of this chapter and submitting it to the State Water Survey and IDNR/OWR for review and approval as best available regulatory data.

(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 Board of Trustees shall not approve any planned unit development (PUD) or plat of subdivision located outside the corporate limits unless such agreement or plat is in accordance with the provisions of this chapter.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

ADMINISTRATION AND ENFORCEMENT

§ 152.75 RESPONSIBILITIES OF BUILDING INSPECTOR AND VILLAGE ENGINEER.

(A) The Building Inspector and Village Engineer shall be responsible for administering all of the duties listed in § 152.76 of this chapter.

(B) To fulfill those duties, the Village Engineer first should use the criteria listed in § 152.03 of this chapter to determine whether the development site is located within a floodplain. Once it has been determined that a site is located within a floodplain, the Village Engineer must determine whether the development site is within a flood fringe, a designated floodway or within a SFHA or floodplain or which no floodway has been identified. If the site is within a flood fringe, the Building Inspector shall require that the minimum requirements of §§ 152.15 through 152.17 of this chapter be met. If the site is within a floodway, the Building Inspector shall require that the minimum requirements of §§ 152.30 through 152.37 of this chapter be met. If the site is located within a SFHA or floodplain for which no detailed study has been completed and approved, the Building Inspector shall require that the minimum requirements of §§ 152.50 and 152.51 of this chapter be met. In addition, the general requirements of §§ 152.60 through 152.63 of this

chapter shall be met for all developments meeting the requirements of §§ 152.15 through 152.51 of this chapter. The Village Engineer shall assure that all subdivision proposals shall meet the requirements of § 152.64 of this chapter. If a variance is to be granted for a proposal, the Building Inspector and Village Engineer shall review the requirements of § 152.77 of this chapter to make sure they are met. In addition, the Building Inspector shall determine that all

notification requirements have been met. In order to assure that property owners obtain permits as required in this chapter, the Building Inspector may take any and all actions as outlined in § 152.78 or § 152.99 of this chapter.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.76 DUTIES OF ENFORCEMENT OFFICIAL.

The Building Inspector and Village Engineer shall be responsible for the general administration and enforcement of this chapter which shall include the following:

(A) *Determining the floodplain designation.* Check all new development sites to determine whether they are in a Special Flood Hazard Area (SFHA). If they are in a SFHA, determine whether they are in a floodway, flood fringe or a floodplain on which a detailed study has not been conducted which drains more than one square mile.

(B) *Professional engineer review.* If the development site is within a floodway or in a floodplain on which a detailed study has not been conducted which drains more than one square mile, then the permit shall be referred to a registered professional engineer (P.E. under the employ or contract of the village) for review to insure that the development meets the requirements of §§ 152.30 through 152.37 of this chapter. The developer shall deposit with the Village Clerk a sum determined by the village necessary to defray the cost of the engineer's review. In the case of an appropriate use, the P.E. shall state in writing that the development meets the requirements of §§ 152.30 through 152.37 of this chapter.

(C) *Dam safety requirements.* Insure that a DWR dam safety permit has been issued or a letter indicating no dam safety permit is required, if the proposed development activity includes construction of a dam as defined in § 152.02 of this chapter. Regulated dams may include weirs, restrictive culverts or impoundment structures.

(D) *Other permit requirements.* Insure that any and all required federal, state and local permits are received prior to the issuance of a floodplain development permit.

(E) *Plan review and permit issuance.* Insure that all development activities within the SFHAs of the jurisdiction of the village meet the requirements of this chapter and other village ordinances and issue a floodplain development permit in accordance with the provisions of this chapter and other regulations of this community when the development meets the conditions of this chapter.

(F) *Inspection review*. Inspect all development projects before, during and after construction to assure proper elevation of the structure and to insure they comply with the provisions of this chapter.

(G) *Elevation and flood proofing certificates.* Maintain in the permit files an elevation certificate certifying the elevation of the lowest floor (including basement) of a residential or non-residential building or the elevation to which a non-residential building has been flood proofed, using a flood proofing certificate, for all buildings subject to §§ 152.60 through 152.63 of this chapter for public inspection and provide copies of same.

(H) *Records for public inspection.* Maintain at the village hall for public inspection and the village shall furnish upon request base flood data, SFHA and designated floodway maps, copies of federal or state permit documents, variance documentation, conditional letter of map revision, letter of map revision, letter of map amendment and "as-built" elevation and flood proofing or elevation and flood proofing certificates for all buildings constructed subject to this chapter.

(I) *State permits.* Insure that construction authorization has been granted by IDNR/OWR for all development projects subject to §§ 152.30 through 152.51 of this chapter, unless enforcement responsibility has been delegated to the village. Upon acceptance of this chapter by IDNR/OWR and FEMA, responsibility is hereby delegated to the village as per 92 Ill. Adm. Code 708 for construction in the designated floodway and floodplain when floodways have not been defined in §§ 152.30 through 152.51 of this chapter. However, the following review approvals are not delegated to the village and shall require review or permits from DWR:

(1) Organizations which are exempt from this chapter, as per the Illinois Compiled Statutes.

(2) IDNR/OWR projects, dams or impoundments structures as defined in § 152.02 of this chapter and all other state, federal or local units of government projects, including projects of the village and county, except for those projects meeting the requirements of § 152.37 of this chapter.

(3) An engineer's determination that an existing bridge or culvert crossing is not a source of flood damage and the analysis indicating the proposed flood profile per § 152.33(E) of this chapter.

(4) An engineer's analysis of the flood profile due to § 152.33(D) of this chapter.

(5) Alternative transition sections and hydraulically equivalent compensatory storage as indicated in § 152.33(A), (B) and (H) of this chapter.

(6) Permit issuance of structures within or over publicly navigable rivers, lakes and streams.

(7) Any changes in the base flood elevation or floodway locations.

(8) Base flood elevation determinations where none now exist.

(J) *Cooperation with other agencies.* Cooperate with state and federal floodplain management agencies to improve base flood or 100-year frequency flood and floodway data and to improve the administration of this chapter. Submit data to IDNR/OWR and the Federal Emergency Management Agency for proposed revisions of a regulatory map. Submit reports as required for the National Flood Insurance Program. Notify the Federal Emergency Management Agency of any proposed amendments to this chapter.

(K) *Regulations.* Recommended procedures as necessary to administer and enforce the provisions of this chapter to the Village Board, subject, however, to the review and approval of IDNR/OWR and FEMA for any ordinance changes.
(Ord. 97-05-08-006, passed 5-8-97)

§ 152.77 VARIANCES.

No variances shall be granted to any development as defined in § 152.02 of this chapter located in a regulatory floodway. However, when a development proposal is located outside of a regulatory floodway and whenever the standards of this chapter place undue hardship on a specific development proposal or where the flowing ordinance requirements for flooding development which are more restrictive than the minimum state requirements, the applicant may be eligible for variance considerations. The applicant may apply to the Building Inspector for a variance. The Building Inspector and Village Engineer shall review the applicant's request for a variance and shall submit their recommendation to the Board of Trustees.

(A) No variance shall be granted unless the applicant demonstrates that:

(1) The development activity cannot be located outside the SFHA.

(2) An exceptional hardship would result if the variance were not granted.

(3) The relief requested is the minimum necessary.

(4) There will be no additional threat to public health, safety, beneficial stream uses and functions, especially aquatic habitat or creation of a nuisance.

(5) There will be no additional public expense for flood protection, lost environmental stream uses and functions, rescue or relief operations, policing or repairs to stream beds and banks, roads, utilities or other public facilities.

(6) The provisions of §§ 152.17, 152.32 and 152.51 of this chapter shall still be met.

(7) The activity is not in a regulatory floodway.

(8) The applicant's circumstances are unique and do not represent a general problem.

(9) The granting of the variance will not alter the essential character of the area involved including existing stream uses.

(B) The Building Inspector and Village Engineer shall notify an applicant in writing that a variance from the requirements of §§ 152.60 through 152.63 of this chapter 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 for $100 of insurance coverage.

(2) Increase the risks to life and property.

(3) Require that the applicant proceed with knowledge of these risks and that he will acknowledge in writing that he assumes the risk and liability.

(C) Variances requested in connection with restoration of a historic site or historic structure as defined in § 152.02 of this chapter, may be granted using criteria more permissive than the requirements of divisions (A) and (B) of this section, subject to the conditions that:

(1) The repair or rehabilitation is the minimum necessary to preserve the historic character and design of the structure.

(2) The repair or rehabilitation will not result in the structure being removed as a certified historic structure.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99

§ 152.99 PENALTY.

(A) Failure to comply with the requirements of a permit or conditions of a variance resolution shall be deemed to be a violation of this chapter. Upon due investigation, the Building Inspector may determine that a violation of the minimum standards of this chapter exist. The Village Attorney shall notify the owner in writing of such violation. If such owner fails after ten days notice to correct the violation:

(1) The village 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.

(2) Any person who violates this chapter shall, upon conviction thereof, be fined not less than $50 or more than $1,000 for each offense.

(3) A separate offense shall be deemed committed upon each day during or on which a violation occurs or continues.

(4) The village may record a notice of violation on the title to the property.

(B) The Village Attorney shall inform the owner that any such violation is considered a willful act to increase flood damages and, therefore, may cause coverage by a standard flood insurance policy to be suspended.

(C) Nothing in this chapter shall prevent the village from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.
(Ord. 97-05-08-006, passed 5-8-97) Penalty, see § 152.99