

DEPARTMENT OF NATURAL
RESOURCES

TITLE 455, FLOODPLAIN MANAGEMENT

EFFECTIVE 07-02-2008

Table of Contents

CHAPTER 1, MINIMUM STANDARDS FOR FLOODPLAIN MANAGEMENT PROGRAMS.....	3
--	---

TITLE 455 - NEBRASKA DEPARTMENT OF NATURAL RESOURCES - FLOODPLAIN MANAGEMENT

Chapter 1 - MINIMUM STANDARDS FOR FLOODPLAIN MANAGEMENT PROGRAMS

001 Purpose and Application. Under authority of and in compliance with subsection (5) of Section 31-1017, R.R.S. 1943, the rules and regulations in this Chapter are prescribed by the Nebraska Department of Natural Resources and are effective until revoked or amended. These regulations are the minimum standards for the adoption, administration, and enforcement of floodplain management regulations by cities, villages, and counties in Nebraska in accordance with Section 31-1019, R.R.S. 1943 and by the Department of Natural Resources in accordance with Section 31-1020, R.R.S. 1943 and are also the minimum standards for the location and construction of state-owned and state-financed buildings, roads, and other facilities in accordance with Section 31-1023, R.R.S. 1943.

002 Definitions. As used in this Chapter, unless the context otherwise requires, the following definitions shall apply:

002.01 Appurtenant structure. "Appurtenant structure" shall mean a structure on the same parcel of property as the principal structure, the use of which is incidental to the use of the principal structure.

002.02 Base flood. "Base flood" shall mean the flood having a one per cent chance of being equalled or exceeded in magnitude in any given year.

002.03 Basement. "Basement" shall mean any area of the building having its floor subgrade (below ground level) on all sides.

002.04 Drainway. "Drainway" shall mean any depression two feet or more below the land which serves to give direction to a current of water less than nine months of the year, and which has a bed and well-defined banks.

002.05 Existing manufactured home park or subdivision. "Existing manufactured home park or subdivision" shall mean 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 complete before the effective date of the floodplain management regulations adopted by a community.

002.06 Flood. "Flood" shall mean the water of any watercourse or drainway which is above the bank or outside the channel and banks of such watercourse or drainway.

002.07 Floodway. "Floodway" shall mean the channel of a watercourse or drainway and the adjacent land areas that are necessary to be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

002.08 Flood fringe. “Flood fringe” shall mean that portion of the floodplain of the base flood which is outside of the floodway.

002.09 Floodplain. “Floodplain” shall mean the area adjoining a watercourse or drainway which has been or may be covered by floodwaters.

002.10 Floodplain management regulations. “Floodplain management regulations” shall mean and include zoning ordinances, subdivision regulations, building codes, and other applications of the police power which are authorized by law to secure safety from floods and provide for the reasonable and prudent use of floodplains.

002.11 Historic structure. “Historic structure” shall mean any structure that is: (a) listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either; (1) by an approved state program as determined by the Secretary of the Interior or (2) directly by the Secretary of the Interior in states without approved programs.

002.12 Lowest floor. “Lowest floor” shall mean the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building’s lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this Chapter.

002.13 Manufactured home. “Manufactured home” shall mean a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle”.

002.14 Manufactured home park or subdivision. “Manufactured home park or subdivision” shall mean a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

002.15 New construction. “New construction” shall mean obstructions for which the “start of construction” commenced on or after the effective date of the floodplain management regulation adopted by a community and includes any subsequent improvements to such obstructions.

002.16 Obstruction. "Obstruction" shall mean any wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation (including the alteration or relocation of a watercourse or drainway), channel rectification, bridge, conduit, culvert, building, stored equipment or material, wire, fence, rock, gravel, refuse, fill, or other analogous structure or matter which may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water, or that is placed where the natural flow of the water would carry such structure or matter downstream to the damage or detriment of either life or property. Dams designed to store or divert water are not obstructions if permission for the construction thereof is obtained from the Department of Natural Resources pursuant to The Safety of Dams and Reservoirs Act (Sections 46-1601 to 46-1670 R.R.S., 1943 as amended.)

002.17 Principally above ground. "Principally above ground" shall mean that at least 51 percent of the actual cash value of the structure is above ground.

002.18 Recreational vehicle. "Recreational vehicle" shall mean a vehicle which is (i) built on a single chassis; (ii) 400 square feet or less when measured at the largest horizontal projections; (iii) designed to be self-propelled or permanently towable by a light duty truck; and (iv) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

002.19 Start of construction. "Start of construction" shall mean the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. "Start of construction" includes substantial improvements. The actual start date means the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond a stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not the alteration affects the external dimensions of the building.

002.20 Structure. "Structure" shall mean a walled and roofed building that is principally above ground, as well as a manufactured home, and a gas or liquid storage tank that is principally above ground.

002.21 Substantial damage. "Substantial damage" shall mean damage of any origin sustained by an obstruction whereby the cost of restoring the obstruction to its before-damaged condition would equal or exceed 50 percent of the market value of the obstruction before the damage occurred.

002.22 Substantial improvement. “Substantial improvement” shall mean any reconstruction, rehabilitation, addition, or other improvement of an obstruction, the cost of which equals or exceeds 50 percent of the market value of the obstruction before “start of construction” of the improvement. This includes obstructions which have incurred “substantial damage,” regardless of the actual repair work performed. The term does not, however, include either (1) any project for improvement of a structure or other obstruction to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or (2) any alteration of an “historic structure,” provided that the alteration will not preclude the structure’s continued designation as an “historic structure.”

002.23 Watercourse. “Watercourse” shall mean any depression two feet or more below the surrounding land which serves to give direction to a current of water at least nine months of the year and which has a bed and well-defined banks.

003 Determination of Floodways. When adequate flood elevation and other necessary data and information are available from federal, state, or other sources, the entity responsible for assuring compliance with the rules and regulations in this Chapter shall, before permitting the location of an obstruction or substantial improvement in the floodplain of a base flood, determine whether the proposed obstruction is located in the flood fringe or in a floodway. Normally, the floodway shall be determined using the method requiring equal loss of conveyance on opposite sides of the stream. If the equal loss of conveyance method is not technically appropriate in a specific situation, the responsible entity may select and utilize another more appropriate method which is acceptable in accordance with hydraulic engineering principles and standards.

004 Minimum Standards Governing Location of Obstructions and Substantial Improvements in the Floodplains for the Base Flood. The following minimum standards shall apply when an obstruction is to be located or substantially improved within the floodplain of a base flood. In the event of a conflict between the following minimum standards and those in Section 005, the minimum standards in Section 005 shall govern.

004.01 No new construction, substantial improvements, or other obstruction (including fill) shall be permitted unless it is demonstrated that the cumulative effect of the proposed new construction, when combined with all other existing and anticipated new construction or substantial improvement, will not increase the water surface elevation of the base flood more than one foot at any location.

004.02 To the extent otherwise permitted by the minimum standards in this Chapter, all new obstructions and substantial improvements shall (i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the obstruction, (ii) be constructed with

materials and utility equipment resistant to flood damage, (iii) be constructed by methods and practices that minimize flood and flood related damages, and (iv) be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

004.03 All public utilities and facilities, such as sewer, gas, electrical, and water systems shall be located and constructed to minimize or eliminate flood damage to such utilities and facilities.

004.04 New and replacement water systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

004.05 New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters.

004.06 On-site waste disposal systems shall be designed to avoid impairment to them or contamination from them during flooding.

004.07 All new construction and substantial improvements of residential structures shall have the lowest floor (including basement) elevated to or above one foot above the base flood level.

004.08 All new construction and substantial improvements of non-residential structures shall (i) have the lowest floor (including basement) elevated to or above one foot above the base flood level or, (ii) together with attendant utility and sanitary facilities be designed so that below the level one foot above the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Floodproofing measures shall be consistent with the flooding characteristics of the drainway or watercourse. A registered professional engineer or architect shall certify that the floodproofing methods to be utilized are adequate to withstand the flood depths, pressures, velocities, impact and uplift forces, sewage backups and other factors associated with the base flood.

004.09 Appurtenant structures used exclusively for storage of motor vehicles, and storage of other items readily removable in the event of a flood warning may have their lowest floor below one foot above the base flood elevation provided the structure is capable of withstanding hydrostatic and hydrodynamic forces caused by the base flood and provided that no utilities are installed in the structure except elevated or flood proofed electrical fixtures. If the structure is converted to another use, it must be brought into full compliance with the minimum standards governing such use.

004.10 For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and

which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall not be higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

004.11 All manufactured homes to be placed or substantially improved on sites: (i) outside of a manufactured home park or subdivision (ii) in a new manufactured home park or subdivision; (iii) in an expansion to an existing manufactured home park or subdivision; or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above one foot above the base flood elevation, and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

004.12 Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision that are not subject to the provisions of subsection 004.11 shall be elevated so that either: (i) the lowest floor of the manufactured home is at or above one foot above the base flood elevation or (ii) the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade; and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

004.13 Recreational vehicles shall either (i) be on the site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) be fully licensed and ready for highway use, or (iii) meet the permit requirements and the elevation and anchoring requirements for "manufactured homes" of this Chapter. 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 utilities and security devices, and has no permanently-attached additions.

004.14 A watercourse or drainway shall not be altered or relocated in any way which in the event of a base flood or more frequent flood will alter the flood carrying characteristics of the watercourse or drainway to the detriment of upstream, downstream, or adjacent locations. The county, city, village or state agency responsible for any alteration or relocation of a watercourse or drainway or for approving any such alteration or relocation shall notify the Department of Natural Resources and adjacent communities prior to commencing or approving such activity.

004.15 The storage or processing of materials that are in time of flooding buoyant, flammable, explosive, or could be injurious to human, animal or

plant life is prohibited. Storage of other material or equipment may be allowed if not subject to major damage by floods and firmly anchored to prevent flotation or if readily removable from the area within the time available after flood warning.

005 Minimum Standards Governing Location of Obstructions and Substantial Improvements in Floodways. The following minimum standards shall apply in addition to those in Section 004 when adequate data and other information are available to determine the location of a floodway and when an obstruction is to be located or substantially improved within that floodway. In the event of a conflict between the following minimum standards and those in Section 004, the following minimum standards shall govern.

005.01 No new construction, substantial improvements, or other obstruction (including fill) shall be permitted within the floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed new construction would not result in any increase in water surface elevations along the floodway profile during the occurrence of the base flood.

005.02 New structures for human habitation shall be prohibited. New structures intended for other types of human occupancy on a regular basis shall also be prohibited unless the functions of the structure are water dependent and cannot reasonably be fulfilled at an alternate location outside the floodway.

006 Variances and Exceptions. Variances and exceptions to the rules in this Chapter may be granted by the responsible authority subject to the following conditions.

006.01 Except as allowed by subsection 006.02, no variance or exception may be made to the provisions of subsections 004.01 and 005.01.

006.02 An exception to subsections 004.01 and 005.01 may be made if the applicant has acquired by land rights purchase, flowage easement, or other legal arrangement the right to increase flood levels on all affected lands.

006.03 An exception to subsection 004.07 may be made if a community complies with the standards for flood proofed residential basements as outlined in Section 60.6 (c) of the National Flood Insurance Program Regulations, 44 CFR Chapter 1.

006.04 Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve this historic character and design of the structure.

006.05 Variances or exceptions may otherwise be granted upon (i) a showing of good and sufficient cause, (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant and (iii) a determination that the granting of a variance will not result in

additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with other applicable laws or ordinances.

006.06 Variances and exceptions shall be granted only upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

STATUTORY AUTHORITY: Neb. Rev. Stat. § 31-1001 to 31-1023

