

## CHAPTER 16

### FLOOD PLAIN MANAGEMENT REGULATIONS

#### SECTION:

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10-16-1: **INTENT AND PURPOSE:** The National Flood Insurance Program (NFIP) was established with the passage of the National Flood Insurance Act of 1968.

- A. The intent of this Chapter is to make sure that the City's flood plain management regulations meet or exceed the minimum requirements of the NFIP and any additional state requirements.
- B. The purpose of this Chapter is to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific area by provisions designed to:
  1. Protect human life and health;
  2. Minimize expenditure of public money for costly flood control projects;
  3. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
  4. Minimize prolonged business interruptions;
  5. Minimize damage to public facilities and utilities such as water and gas lines, storm water facilities, electric, telephone and sewer lines, streets and bridges located in floodplains;
  6. Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize future flood blight areas; and
  7. Ensure that potential buyers are notified that property is in a flood area.

10-16-2: **BASIS OF FLOODPLAIN MANAGEMENT REGULATIONS:** The basis of the City's floodplain management regulations is the flood hazard data provided to the City by FEMA. Flood hazard data will be provided in the form of a Flood Insurance Rate Map (FIRM) (hereafter referred to as the "flood map") and Flood Boundary-Floodway Maps (FBFM) and a Flood Insurance Study (FIS) (hereafter referred to as the "flood study").

- A. The areas of special flood hazard identified by FEMA in a scientific and engineering report entitled, "The Flood Insurance Study for Cache County, Utah and Incorporated Areas" dated May 24, 2011(which includes the City of Providence – Community Number 490226), with accompanying Flood Insurance Rate Maps (FIRM) and Flood Boundary-Floodway Maps (FBFM) and any subsequent revisions thereto are hereby adopted by reference and declared to be part of this Chapter.
- B. This Chapter shall apply to all areas of special flood hazard within the jurisdiction of Providence City.

10-16-3: **DEFINITIONS:** The following words and phrases shall be defined as follows for the purpose of this Chapter. Unless specifically defined below, words or phrases used in this Chapter shall be interpreted to give them the meaning they have in common usage and to give this Chapter its' most reasonable application.

Area of future conditions – flood hazard:	The land area that would be inundated by the 1-percent-annual-chance (100-year) flood based on future-conditions hydrology.
Area of shallow flooding:	A designated AO, AH, AR/AO, AR/AH, OR VO zone on a community's Flood Insurance Rate Map (FIRM) with a 1 percent or greater annual chance of flooding to and average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.
Area of special flood-related erosion hazard:	The land within the City which is most likely to be subject to sever flood-related erosion losses. The area may be designated as Zone E on the Flood Hazard Boundary Map (FHBM). After the detailed evaluation of the special flood-related erosion hazard area in preparation for publication of the FIRM, Zone E may be further refined.
Area of special flood hazard:	The land in the flood plain within the City subject to a one percent or greater chance of flooding in any given year. The area may be designated a Zone A on the FHBM. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map. Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V. For the purposes of these regulations, the term "special flood hazard area," is synonymous in meaning with the phrase "area of special flood hazard."
Base flood:	The flood having one percent chance of being equaled or exceeded in any given year.
Base flood elevation:	The water surface elevation of the one percent annual chance flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.
Basement:	Any area of the building having its floor subgrade (below ground level) on all sides.
Breakaway wall:	A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.
Building:	See structure.
Development:	Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.
Erosion:	The process of the gradual wearing away of land masses. This peril is not covered under the Program.
Existing construction:	For the purposes of determining rates, structures for which the

“start of construction” commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. “Existing construction” may also be referred to as “existing structures.”

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 the effective date of the floodplain management regulations adopted by the City.
Existing structures:	See existing construction.
Expansion to an existing manufactured home park or subdivision:	The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing 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).
Flood or flooding:	(a) A general and temporary condition of partial or complete inundation of normally dry land areas from: (1) The overflow of inland or tidal waters. (2) The unusual and rapid accumulation or runoff of surface waters from any source. (3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, (b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.
Flood elevation determination:	A determination by the Federal Insurance Administrator of the water surface elevations of the base flood, that is, the flood level that has a one percent or greater chance of occurrence in any given year.
Flood Insurance Study or Flood elevation study:	An examination, evaluation and determination of flood hazards and if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e. mudflow) and /or flood-related erosion hazards.
Flood Insurance Rate Map (FIRM)	An official map of a community, on which the Administrator has delineated both the special hazard area and the risk premium zones applicable to the community.
Flood plain or flood-prone area:	Any land area susceptible to being inundated by water from any source (see definition of “flooding”).

Flood proofing:	Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
Floodway:	See regulatory floodway.
Floodway encroachment lines:	The lines marking the limits of floodways on Federal, State and local flood plain maps.
Freeboard:	A factor of safety usually expressed in feet above a flood level for purposes of flood plain management. "Freeboard" tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization of the watershed.
Functionally dependent use:	A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.
Highest adjacent grade:	The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
Historic Structure:	Any structure that is: <ul style="list-style-type: none"> <li>(a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;</li> <li>(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;</li> <li>(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</li> <li>(d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: <ul style="list-style-type: none"> <li>(1) By an approved state program as determined by the Secretary of the Interior or</li> <li>(2) Directly by the Secretary of the Interior in states without approved programs.</li> </ul> </li> </ul>
Levee:	A man-made structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee system:	A flood protection system which consists of a levee, or levees and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.
Lowest floor:	The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; Provided, that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of §60.3.
Manufactured home:	A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for used with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreation vehicle."
Manufactured home park or subdivision:	A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.
Map:	The Flood Hazard Boundary Map (FHBM) or the Flood Insurance Rate Map (FIRM) for a community issued by the Agency.
Mean sea level:	For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
New construction:	For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.
New manufactured home park or subdivision:	A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by the City.
Recreational vehicle:	A vehicle which is: <ul style="list-style-type: none"> <li>(a) Built on a single chassis;</li> <li>(b) 400 Square feet or less when measured at the largest horizontal projection;</li> <li>(c) Designed to be self-propelled or permanently towable by a light duty truck; and</li> <li>(d) Designed primarily not for use as a permanent dwelling but</li> </ul>

as temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory floodway:	The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.
Special flood hazard area:	See "area of special flood hazard."
Special hazard area:	An area having special flood, mudslide (i.e. mudflow), or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, A99, AH, VO, V1-30, VE, V, M, or E.
Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (Pub. L. 97-348)):	Includes substantial improvement, and means 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. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filing; 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 that alteration affects the external dimensions of the building.
Structure:	<p>For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home. Structure for insurance purposes, means:</p> <ul style="list-style-type: none"><li>(a) A building with two or more outside rigid walls and a fully secured roof, that is affixed to a permanent site;</li><li>(b) A manufactured home ("a manufactured home," also known as a mobile home, is a structure: built on a permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation); or</li><li>(c) A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the City's floodplain management and building ordinances or laws.</li></ul> <p>For the latter purpose, "structure" does not mean a recreational vehicle or a park trailer or other similar vehicle, except as described in paragraph (3) of this definition, or a gas or liquid storage tank.</p>

Substantial damage:	Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
Substantial improvement:	Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either: <ul style="list-style-type: none"> <li>(1) Any project for improvement of a structure 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</li> <li>(2) Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."</li> </ul>
Variance:	A grant of relief by a community from the terms of a flood plain management regulation.
Violation:	The failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in §60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.
Water surface elevation:	The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

10-16-4:       **METHODS OF REDUCING FLOOD LOSSES:** In order to decrease flood loss, this Section includes methods and provisions for:

- A.     Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion, flood heights or velocities;
- B.     Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C.     Control the alteration of natural flood plains, stream channels and natural protective barriers, which are involved in the accommodation of channel flood waters;
- D.     Controlling filling, grading, dredging and other development which may affect flood damage; and
- E.     Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

10-16-5:       **PERMIT REQUIRED:** A building and/or development permit shall be required for all proposed construction and other developments including the placement of manufactured homes, within Zone A on the City's FHBM or FIRM.

- A.     The permit shall be reviewed to:

1. Assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334.
  2. Determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall:
    - a. Be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
    - b. Be constructed with materials resistant to flood damage.
    - c. Be constructed by methods and practices that minimize flood damages, and
    - d. 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.
  3. Determine, in the case of subdivision proposals and other proposed new development (including manufactured home parks or subdivisions), whether such proposals will be reasonably safe from flooding. If a subdivision proposal or other proposed new development is in a flood-prone area, any such proposal shall be reviewed to assure that:
    - a. All such proposals are consistent with the need to minimize flood damage within the flood-prone area.
    - b. All public utilities and facilities, such as sewer, gas, electrical, storm water and water systems are located and constructed to minimize or eliminate flood damage; and
    - c. Adequate drainage is provided to reduce exposures to flood hazards.
  4. Require within flood-prone areas new and replacement water supply systems to be designed to minimize or eliminate infiltration of flood waters into the system.
  5. Require within flood –prone areas:
    - a. New and replacement sanitary sewage systems to be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters; and
    - b. Onsite waste disposal systems to be located to avoid impairment to them or contamination from them during flooding.
- B. The Land Use Authority (made up of the Administrative Services Director, City Engineer, and Public Works Director) as defined by Title 2 Chapter 4 is hereby designated the Floodplain Manager to administer and implement the provisions of this Chapter; ensure that the City's Records Officer maintains and holds open for public inspection a record of all records pertaining to the provisions of this Chapter; review permit application to determine whether proposed building site, including the placement of manufactured homes, will be reasonably safe from flooding; and review, approve or deny all applications for development permits required by this Chapter. Approval or denial of a Permit shall be based on all of the provisions of this Chapter and the following relevant factors:
1. The danger to life and property due to flooding or erosion damage;
  2. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  3. The danger that materials may be swept onto other lands to the injury of others;
  4. The compatibility of the proposed use with existing and anticipated development;
  5. The safety of access to the property in times of flood for ordinary and emergency vehicles;
  6. The costs of providing governmental services during and after flood conditions including maintenance and repair of streets and bridges, and public utilities and facilities such as sewer, gas, electrical, storm water and water systems;

7. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site;
  8. The necessity to the facility of a waterfront location, where applicable;
  9. The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
  10. The relationship of the proposed use to the comprehensive plan for that area.
- C. Appeal Authority as defined by Title 2 Chapter 5 Procedures.
1. The Appeal Authority shall hear and render judgment on requests for variances from the requirements of this Chapter; and appeals from a requirement, decision, or determination by the Floodplain Manager.
  2. The Appeal Authority shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision, or determination made by the Floodplain Manager in the enforcement or administration of this Chapter.
  3. Any person or persons aggrieved by the decision of the Appeal Authority may appeal such decision in the courts of competent jurisdiction.
  4. The Floodplain Manager shall maintain a record of all actions involving an appeal and shall report variances to FEMA and the State Office of Emergency Management upon issuing a variance.
  5. Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in D. 2 of this Section have been fully considered. Variances may also be issued for new construction and substantial improvements to be erected on lots larger than one-half acre or more. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
  6. Upon consideration of the factors noted above and the intent of this ordinance, the Appeal Authority may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this Chapter (Section 1).
  7. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result, or the Appeal Authority finds that refusing the variance would result in the taking or damaging of private property for a public purpose without the payment of just compensation.
  8. 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 the historic character and design of the structure.
  9. Prerequisites for granting variances, in addition to the requirements for variances listed elsewhere in this Chapter.
    - a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief, or is necessary to avoid the taking or damaging of private property for a public purpose without the payment of just compensation.
    - b. Variances shall only be issued upon:
      - i. Showing a good and sufficient cause;
      - ii. Determination that failure to grant the variance would result in exceptional hardship to the applicant, and
      - iii. Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
      - iv. Any application to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

10. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that:
  - a. The criteria outlined in the above 1. – 9. are met, and
  - b. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- D. Application for a Permit shall be filed with the Floodplain Administrator on forms furnished by the City and may include, but not be limited to, plans drawn to scale showing the location, dimensions, and elevation of the proposed landscape alterations, existing and proposed structures, including the placement of manufactured homes, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:
  1. Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures.
  2. Elevation to mean sea level to which any nonresidential structure shall be flood-proofed.
  3. A certificate from a registered professional engineer or architect that the nonresidential flood-proofed structure shall meet the flood-proofing criteria in Section 6: B.b.ii of this Chapter.
  4. Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.

10-16-6: **BASE FLOOD ELEVATION DATA:**

- A. All new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser shall include within such proposals base flood elevation data.
- B. Base flood elevation and floodway data available from Federal, State, or other source, including data developed pursuant to A. above, shall be obtained, reviewed and reasonably utilized as criteria for requiring that new construction, substantial improvements or other development in Zone A on the City's FHBM or FIRM to meet the following standards:
  - a. All new construction and substantial improvements of residential structures within Zones A1-30, AE zones, and AH zones on the City's FIRM shall be required to have the lowest floor (including basement) elevated to a minimum of one foot above the base flood level, unless the City is granted an exception by the Administrator for the allowance of basements in accordance with the appropriate sections of 44 Code of Federal Regulations (CFR).
  - b. All new construction and substantial improvements of non-residential structures with in Zones A1-30, AE, and AH zones on the City's FIRM shall be required to:
    - i. have the lowest floor (including basement) elevated to a minimum of one foot above the base flood level,
    - ii. together with attendant utility and sanitary facilities, be designed so that below 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.
  - c. All new construction and substantial improvements that have 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 equalized hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.
    - i. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the flowing minimum requirement:

1. 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 be no 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.
- d. It shall be required that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the City's FIRM 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, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement.
  - e. Manufactured homes to be placed or substantially improved on sites in and existing manufactured home park or subdivision within Zones A1-30, AH, and AE on the City's FIRM that are not subject to d. above shall be elevated so that either:
    - i. The lowest floor of the manufactured home is at or 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 securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
  - f. It shall be required that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the City's FIRM either
    - i. Be on the site for fewer than 180 consecutive days,
    - ii. Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has not permanently attached additions), or
    - iii. Meet the permit requirements of 10-16-4 and the elevation and anchoring requirements for "manufactured homes" in d. above.
  - g. A regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood.
  - h. Encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway shall be prohibited unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the City during the occurrence of the base flood discharge.
- C. Where base flood elevation data are utilized within Zone A on the City's FHBM or FIRM:
- a. All new and substantially improved structures shall provide the elevation (in relation to the mean sea level) of the lowest floor (including basement), and
  - b. If the structure has been flood-proofed in accordance with B.b.ii above, the elevation (in relation to the mean sea level) to which the structure was flood-proofed shall be provided.
  - c. Records of all such information shall be maintained by the Floodplain Manager or their assigns.

10-16-7: **GENERAL DUTIES AND RESPONSIBILITIES:** In addition to all other requirements of this Chapter, the City shall:

- A. Notify, in riverine situations, adjacent communities and the State Coordinating Office (Utah National Floodplain Coordinator) prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.
- B. Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- C. Require that all manufactured homes to be placed within Zone A on the City's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
- D. Assure that the City's General Plan is consistent with the flood plain management objectives.
- E. Compliance is required. No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this Chapter and any other applicable ordinance.
- F. This Chapter is not intended to repeal, abrogate or impair any existing easement, covenant or deed restriction. Where this Chapter and any other ordinance, easement, covenant or deed restriction conflict, whichever imposes the most restrictive regulations shall prevail.
- G. Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Manager shall make the necessary interpretation.
- H. In the interpretation and application of this Section, all provisions shall be:
  - 1. Considered as minimum requirements;
  - 2. Liberally construed in favor of the City Council; and
  - 3. Deemed neither to limit nor repeal any other powers granted under State statutes.

10-16-8: **WARNING AND DISCLAIMER OF LIABILITY:** The degree of flood protection required by this Section is considered reasonable for regulatory purposes and is based upon scientific and engineering considerations. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes. This Chapter does not imply that land outside the areas designated as special flood hazard areas or uses permitted within such areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of the City, any officer, agent or employee thereof for any flood damage that results from reliance on this Section or any administrative decision lawfully made thereunder.

10-16-9: **PENALTIES FOR NONCOMPLIANCE:** Violations of the provisions of this Chapter by failure to comply with its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a Class B misdemeanor. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation.

10-16-10: **SEVERABILITY:** If any section, provision, or portion of this Chapter is adjudged unconstitutional or invalid by a court, the remainder of the Chapter shall not be affected.