

Chapter 5

FLOOD HAZARD AREAS

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Sec. 5-1. Statutory Authorization, Findings of Fact, Purpose and Objectives.

- A. Statutory Authorization. The Legislature of the State of Idaho, in Idaho Code Sections 46-1020 through 46-1024, authorized local government units to adopt a floodplain map and floodplain management ordinance that identifies floodplains and that sets forth minimum development requirements in floodplains that are designed to promote the public health, safety, and general welfare of its citizenry.
- B. Findings of Fact:
 - 1. The flood hazard areas of the City of Moscow are subject to periodic inundation which could result in the loss of life and 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.
 - 2. These flood losses are caused by development in flood hazard areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.
 - 3. Local government units have the primary responsibility for planning,

adoption, and enforcement of land use regulations to accomplish proper floodplain management.

- C. Statement of Purpose. It is the purpose of this Chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:
 - 1. Protect human life, health, and property;
 - 2. Minimize expenditure of public money for costly flood control projects;
 - 3. Minimize the need for rescue and emergency services 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 purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets, and bridges located in Special Flood Hazard Areas;
 - 6. Help maintain a stable tax base by providing for the sound use and development of Special Flood Hazard Areas;
 - 7. Ensure that potential buyers are notified that property is in an area of special flood hazards; and
 - 8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- D. Objectives and Methods of Reducing Flood Losses. In order to accomplish its purpose, this Chapter includes methods and provisions to:
 - 1. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion.
 - 2. Require that development that is vulnerable to floods, including structures and facilities necessary for the general health, safety and welfare of citizens, be protected against flood

damage at the time of initial construction;

3. Preserve and restore natural flood plains, stream channels, and natural protective barriers, which carry and store flood waters;

4. Control the filling, grading, dredging, and other development which may increase flood damage or erosion; and

5. Prevent or regulate the construction of flood barriers which will unnaturally divert flood waters or that may increase flood hazards to other lands.

(Ord. 2015-16, 11/16/2015; 2019-02, 04/15/2019)

Sec. 5-2. Definitions.

Unless specifically defined below or in Chapter 1, Title 1 of Moscow City Code (MCC), words or phrases used in this Chapter shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter its most reasonable application.

- A. *Accessory (Appurtenant) Structure.* A structure which is attached to or detached from and is subordinate to a principal residential or non-residential structure on the same parcel and which serves a purpose customarily incidental to the principal structure.
- B. *Appeal.* A request for review of the Floodplain Administrator’s interpretation of provisions of this Ordinance or request for a variance.
- C. *Area Of Shallow Flooding.* A designated Zone AO, AH, AR/AO or AR/AH (or VO) on a community’s Flood Insurance Rate Map (FIRM) with a one percent (1%) or greater annual chance of flooding to an average depth of one to three feet (1 – 3’) 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.
- D. *Area Of Special Flood Hazard.* The land in the flood plain within a

community subject to a one percent or greater chance of flooding in any given year. Zone designation on maps always includes the letters A, AE, or V. Also known as the Special Flood Hazard Area (SFHA).

- E. *Base Flood.* The flood having a one percent (1%) chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood".
- F. *Base Flood Elevation (BFE).* The computed elevation to which flood water is anticipated to rise during the “Base Flood”.
- G. *Basement.* Any area of the building having its floor sub-grade – i.e., below ground level – on all sides.
- H. *Building.* See “Structure”.
- I. *Development.* Any man-made change to improved or unimproved real estate, including, but not limited to, the construction of buildings, structures or accessory structures, or the construction of additions or substantial improvements to buildings, structures or accessory structures; the placement of mobile homes; mining, dredging, filling, grading, paving, excavation or drilling operations; and the deposition or extraction of materials; specifically including the construction of dikes, berms and levees.
- J. *Federal Emergency Management Agency (FEMA).* The agency with the overall responsibility for administering the National Flood Insurance Program.
- K. *Flood Or Flooding.*
 - 1. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - a. The overflow of inland or tidal waters.
 - b. The unusual and rapid accumulation of runoff of surface waters from any source.
 - c. Mudslides (i.e., mudflows) which are proximately caused by flooding, as defined in paragraph (2) of this definition, and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as

when earth is carried by a current of water and deposited along the path of the current.

2. Collapse or subsidence of land along the shore of a lake or similar 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 (1)(a) of this definition.
- L. *Flood Insurance Rate Map (FIRM)*. An official map of a community, issued by the Federal Insurance Administration, delineating both the areas of special flood hazards and the risk premium zones applicable to the community.
- M. *Flood Insurance Study (FIS)*. 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. Also known as a flood elevation study.
- N. *Floodplain*. Any land area susceptible to being inundated by water from any source. See "Flood or Flooding".
- O. *Floodplain Administrator*. The community official designated by title to administer and enforce the floodplain management regulations.
- P. *Floodplain Management*. The operation of an overall program of corrective and preventive measures for reducing flood damage, including, but not limited to, emergency preparedness plans, flood control works, and floodplain management regulations.
- Q. *Floodplain Management Regulations*. Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance), and other application of police power. The term describes such State or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.
- R. *Flood Proofing*. Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- S. *Flood Protection Elevation (FPE)*. As defined in Idaho Code Section 46-1021(7), "an elevation that shall correspond to the elevation of the one percent (1%) chance flood (one hundred [100] year flood) plus any increased flood elevation due to floodway encroachment, plus any required freeboard." The flood protection elevation for the City of Moscow is equal to BFE plus two feet (2') of freeboard; the freeboard accounts for any flood elevation increases due to floodway encroachment as shown in the community's Flood Insurance Study.
- T. *Floodway*. See Regulatory Floodway.
- U. *Freeboard*. A factor of safety usually expressed in feet above a flood level for the purposes of floodplain 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, obstructed bridge openings, debris and ice jams and the hydrologic effects of urbanization in a watershed.
- V. *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, and does not include long-term storage or related manufacturing facilities.
- W. *Highest Adjacent Grade (HAG)*. The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure.
- X. *Historic Structure*. A structure that is:
1. 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.
 2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or to a district preliminarily determined by the Secretary to qualify as a registered historic district.
 3. Individually listed on a state inventory of historic places and determined as eligible by states with historic preservation programs which have been approved by the Secretary of the Interior; or
 4. Individually listed on a local inventory of historic places and determined as eligible by communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior, or
 - b. Directly by the Secretary of the Interior in states without approved programs.
- Y. *Lowest Adjacent Grade*. The lowest point of the ground level next to the structure.
- Z. *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 structure'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.
- AA. *Manufactured Home*. 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 connected to the required utilities. The term "Manufactured Home" does not include a "Recreational Vehicle".
- BB. *Manufactured Home Park Or Subdivision*. A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.
- CC. *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 FIRM are referenced.
- DD. *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 Flood Insurance Rate Map 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.
- EE. *Recreational Vehicle*. A vehicle that is:
1. Built on a single chassis;
 2. Four hundred (400) square feet or less when measured at the largest horizontal projection;
 3. Designed to be self-propelled or permanently towable by a light-duty truck; and

4. Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.
- FF. *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.
- GG. *Start Of Construction*. Includes substantial improvement and means the date the development permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the placement of a manufactured home on a foundation or 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. 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 a building.
- HH. *Structure*. A walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.
- II. *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 fifty percent (50%) of its market value before the damage occurred.
- JJ. *Substantial Improvement*. Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) 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 market value of the structure should be:
 1. The appraised value of the structure prior to the start of the initial repair or improvement; or
 2. In the case of damage, the value of the structure prior to the damage occurring.

The term does not include either:
 - a. A 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
 - b. Any alteration of a Historic Structure provided that the alteration will not preclude the structure's continued designation as a Historic Structure.
- KK. *Variance*. A grant of relief by the governing body from a requirement of this Ordinance.
- LL. *Violation*. The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other

certifications, or other evidence of compliance required by the community's floodplain management ordinance is presumed to be in violation until such time as that documentation is provided. To remedy a violation means to bring the structures or other development into full or partial compliance with State or local regulations or, if this is not possible, to reduce the impacts of its non-compliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provision of this Ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

MM. *Water Surface Elevation.* The height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other specified datum) of floods of various magnitudes and frequencies in the flood plains of costal or riverine areas.
(Ord. 97-18, 05/05/1997; 2002-09, 04/01/2002; 2003-05, 03/17/03; 2015-16, 11/16/2015; 2019-02, 04/15/2019)

Sec. 5-3. General Provisions.

- A. Lands to which this Chapter Applies. This Chapter shall apply to all areas of Special Flood Hazards within the jurisdiction of the City of Moscow.
- B. Basis for Establishing the Areas of Special Flood Hazard. The following Flood Insurance Study and the accompanying Flood Insurance Rate Map, and any revisions thereto as recognized by the Federal Insurance Administration, are hereby adopted by reference and declared to be part of this Chapter: City of Moscow, Latah County, Idaho, revised April 15, 2002. Copies of this study and map are kept on file with the Moscow Community Development Department. Upon recommendation from the Planning and

Zoning Commission, the Council may from time to time amend the development regulations and areas of special flood hazard by ordinance.

- C. Penalties for Noncompliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Chapter and other applicable regulations. Violation of the provisions of this Chapter by failure to comply with any of its requirements, including violations of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a violation and shall be prosecuted in accordance with MCC Title 4, Chapter 11. Nothing herein contained shall prevent the City of Moscow from taking such other lawful actions as is necessary to prevent or remedy any violation.
- D. Abrogation and Greater Restrictions. This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- E. Interpretation. In the interpretation and application of this Chapter, all provisions shall be:
 1. Considered as minimum requirements;
 2. Liberally construed in favor of the governing body; and
 3. Deemed neither to limit nor repeal any other powers granted by state statutes.
- F. Warning and Disclaimer of Liability. The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made

or natural causes. This chapter does not imply that land outside the areas of special flood hazards 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 or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this Chapter or any administrative decision lawfully made hereunder.

- G. This Chapter is hereby declared to be severable. Should any portion of this Chapter be declared invalid by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect and shall be read to carry out the purpose(s) of this Chapter before the declaration of partial invalidity.
(Ord. 2002-09, 04/01/2002; 2015-16, 11/16/2015; 2019-02, 04/15/2019)

Sec. 5-4. Administration.

- A. Establishment of Development Permit:
 - 1. Development Permit Required. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in MCC Section 4-5-3(B). The permit shall be for all structures including manufactured homes, as set forth in the "Definitions" above, and for all development including fill and other activities, also as set forth in the "Definitions."
 - 2. Application for Development Permit. Application for a development permit shall be made on forms furnished by the Zoning Administrator and shall include:
 - a. Plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in questions; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing;
 - b. Elevation in relation to mean sea level, of the lowest floor (including

- basement) of all structures;
- c. Elevation in relation to mean sea level to which any structure has been flood-proofed;
- d. Certification by a registered professional engineer or architect that the flood-proofing methods of any nonresidential structure meet the flood proofing criteria in MCC Section 4-5-5(B)(2); and
- e. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

- B. Designation of the Floodplain Administrator. The Zoning Administrator is hereby appointed to administer and implement this Chapter by granting or denying development permit applications in accordance with its provisions.
- C. Duties and Responsibilities of the Zoning Administrator: Duties of the Zoning Administrator shall include, but not be limited to:
 - 1. Permit Review.
 - a. Review all development permits to determine that the permit requirements of this Chapter have been satisfied.
 - b. Review all development permits to determine that all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required.
 - c. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of MCC Section 4-5-5(C)(1) are met.
 - 2. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with MCC Section 4-5-3(B), BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Zoning Administrator shall obtain, review, and reasonably utilize any base

flood elevation and floodway data available from a federal, state or other source, in order to administer MCC Sections 4-5-5(B), SPECIFIC STANDARDS, and 4-5-5(C), FLOODWAYS.

3. Information to be Obtained and Maintained.

a. Where base flood elevation data is provided through the Flood Insurance Study or required as in MCC Section 4-5-4(C)(2), obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

b. For all new or substantially improved flood-proofed structures:

(1) verify and record the actual elevation (in relation to mean sea level), and

(2) maintain the flood-proofing certifications required in MCC Section 4-5-4(A)(2)(d).

c. Maintain for public inspection all records pertaining to the provisions of this Chapter.

4. Alteration of Watercourses.

a. Notify adjacent communities and the state coordinating agency prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

b. Require that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained.

5. Interpretation of FIRM Boundaries. Make interpretations where needed, as to 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 person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in MCC Section 4-5-6.

6. Base Flood Elevation Changes. Base Flood Elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six (6) months after the date such information becomes available, the Floodplain Administrator shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Volume 44 Code of Federal Regulations Section 65.3. Such a submission is necessary so that, upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

7. Notification. Notify the Federal Insurance Administrator in writing of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

(Ord. 2015-16, 11/16/2015; 2019-02, 04/15/2019; 2021-09, 07/19/2021)

Sec. 5-5. Provisions for Flood Hazard Reduction.

A. General Standards. In all areas of special flood hazards, the following standards are required:

1. Development.

a. All development shall be consistent with the need to minimize flood damage.

b. All subdivision preliminary plats/development plans shall include the mapped flood hazard zones from the effective FIRM.

c. Base flood elevation data shall be generated and/or provided for proposed development, including manufactured home parks and subdivisions greater than fifty (50) lots or five (5) acres, whichever is less.

d. All development shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize flood damage.

e. All development shall have adequate drainage provided to reduce exposure to flood hazards.

2. Construction Standards.

a. All new construction and substantial improvements of an existing structure shall be constructed with materials and utility equipment resistant to flood damage.

b. All new construction and substantial improvements of an existing structure shall be constructed using methods and practices that minimize flood damage.

c. All new construction and substantial improvements of an existing structure shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

d. Enclosed Spaces / Crawlspace. All new construction or substantial improvements of an existing structure that includes a fully enclosed area located below the lowest floor formed by the foundation and other exterior walls, and used solely for parking, access, or storage, and subject to flooding, shall be designed to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or meet the following minimum criteria:

(1) Provide a minimum of two (2) openings with a total net area of not less than

(a) One (1) square inch for every square foot of enclosed area;

(b) The bottom of all openings shall be no higher than one foot (1') above the higher of the exterior or interior grade or floor immediately below the opening;

(c) Openings may be

equipped with screens, louvers, valves or other coverings or devices, provided they permit the automatic flow of floodwater in both directions without manual intervention.

(2) To comply with the "Lowest Floor" criteria of this Chapter, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, storage, or entry to the elevated area.

(3) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.

(4) For crawlspace foundation types, construction must follow the guidelines in FEMA TB 11-01, Crawlspace Construction for Structures Located in Special Flood Hazard Areas: National Flood Insurance Program Interim Guidance, specifically:

(a) Below grade crawlspaces are prohibited at sites where the velocity of floodwaters exceed five feet (5') per second;

(b) Interior grade of the crawlspace below the BFE must not be more than two feet (2') below the lowest adjacent exterior grade (LAG);

(c) Height of the below grade crawlspace, measured from the lowest interior grade of the crawlspace to the top of the foundation wall, must not exceed four feet (4') at any point;

(d) Shall contain an adequate drainage system that removes floodwaters from the interior area of the crawlspace.

3. Utilities.

a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

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

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

d. Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

4. Storage of Material and Equipment.

a. Placement, 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.

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

5. Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, and other relevant information, where available. Failure to elevate at least two feet (2') above grade in these zones may result in higher insurance rates.

B. Specific Standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in MCC Section 4-5-3(B), Basis for Establishing the Areas of Special Flood Hazard or MCC Section 4-5-4(C)(2), Use of Other Base Flood

Data, the following provisions are required:

1. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, constructed at or above the Flood Protection Elevation. If solid foundation perimeter walls are used to elevate a structure, openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the construction standards in MCC Section 4-5-5(A)(2)(d).

2. Nonresidential Construction. New construction and substantial improvement of any non-residential structure must be flood-proofed if the new construction or improvement is not elevated. The structure, together with attendant utility and sanitary facilities, shall:

a. Be flood-proofed to one foot (1') above the Flood Protection Elevation, so that the structure is watertight with walls substantially impermeable to the passage of water.

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in MCC Section 4-5-4(C)(3)(b).

d. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in MCC Section 4-5-5(A)(2)(d).

3. Manufactured Homes. All manufactured homes to be placed,

substantially improved, or which have incurred substantial damage within the SFHA shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the Flood Protection Elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of MCC Section 4-5-5(A)(2)(c) to resist flotation, collapse and lateral movement.

4. Recreational vehicles in all areas of Special Flood Hazard, must either:

a. Be on site for fewer than one hundred eighty (180) consecutive days, or

b. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions, or

c. Meet all the requirements for Manufactured Home installation, including the anchoring and elevation requirements.

5. Accessory Structures. Relief from the elevation or dry flood-proofing standards may be granted for an accessory structure containing no more than fifteen hundred (1,500) square feet. Such a structure must be certified by a registered professional engineer or architect that the structure meets or exceeds the following standards:

a. It shall not be used for human habitation;

b. The accessory structure shall be used solely for parking and/or storage;

c. It shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters;

d. It shall be firmly anchored to prevent flotation;

e. Services such as electrical and heating equipment shall be elevated or flood-proofed to or above the Flood Protection Elevation; and

f. It shall meet the opening requirements of MCC Section 4-5-5(A)(2)(d).

C. Floodways. The following provisions shall apply in a floodway:

1. A proposed project in the regulatory floodway:

a. Must be certified by a licensed professional engineer or architect in a hydrologic and hydraulic analysis, performed in accordance with standard engineering practice that the proposed project will not result in any increase in flood levels within the community during the occurrence of the base flood discharge;

b. The Administrator may make the encroachment determination for minor projects, such as projects that do not increase the natural grade (e.g., paving a driveway or parking lot at existing grade, open fences and small isolated obstructions such as a mailbox or telephone pole).

2. Upon demonstrating that there are no alternatives, the applicant may propose an encroachment in the floodway that will cause an increase in the base flood elevation, provided that the applicant obtain a Conditional Letter of Map Revision from FEMA before the development can be approved and permitted.

(Ord. 97-18, 05/05/1997; 99-12, 04/05/1999; 2003-05, 03/17/2003; 2015-16, 11/16/2015; 2019-02, 04/15/2019)

Sec. 5-6. Variance and Appeal Procedures.

A. Variances. Procedures regarding variances are governed by MCC Section 4-8-3.

B. Criteria for Variances within the Special Flood Hazard Area:

1. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a small or irregularly shaped lot contiguous to and surrounded by lots with existing

structures constructed below the base flood level. As the lot size increases the technical justification required for issuing the variance increases.

2. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.

3. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

4. Variances may be issued upon:

a. (1) A showing by the applicant of good and sufficient cause;

(2) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and

(3) A determination that failure to grant the variance would result in increased flood heights, additional threats to public safety, extraordinary public expense, creation of nuisances, causation of fraud on, or victimization of the public, or conflict with existing local laws and ordinances; or

b. Limited circumstances, where functionally dependent uses are needed, provided that the structure is protected by methods that minimize flood damages during the base flood and there are no additional threats to public safety; or

c. For the repair, rehabilitation or restoration 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.

5. Variances pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods.

C. Variance Decision. The decision to either grant or deny a variance shall be in writing and shall set forth the reasons for such approval and denial. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance. If the variance is granted, the property owner shall be put on notice along with the written decision that the permitted building will have its lowest floor below the Flood Protection Elevation and that the cost of flood insurance likely will be commensurate with the increased flood damage risk.

D. Appeals. The Board of Adjustment shall hear and decide appeals from the interpretations of the Zoning Administrator. Procedures regarding appeals are governed by MCC Section 4--8-2 and 4-10-8. The Board of Adjustment shall consider the following in ruling on an appeal:

All technical evaluations, all relevant factors, standards specified in other sections of this Ordinance, including:

1. The danger that materials may be swept onto other lands with potential for the injury of others;

2. The danger to life and property due to flooding or erosion damage;

3. The susceptibility of the proposed facility and its contents to flood damage and the effects of such damage on the individual landowner;

4. The importance of the services provided by the proposed facility to the community;

5. The necessity of the facility to a waterfront location, where applicable;

6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

7. The compatibility of the proposed use with existing and anticipated development;

8. The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;

9. The safety of access to the property in times of flooding for ordinary and emergency vehicles;
 10. 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; and
 11. The cost of providing government services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water systems, and streets and bridges.
- E. Appeal Decision. The Board of Adjustment decision on appeal shall be in writing and shall set out the facts, technical information and the legal basis for the decision.
(Ord. 2015-16, 11/16/2015; 2019-02, 04/15/2019)