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**ORDINANCE NO. 930**

AN ORDINANCE OF THE CITY OF CARNATION, WASHINGTON, AMENDING CMC 15.64 PART 1, FLOODWAYS AND FLOODPLAINS FOR THE PURPOSE OF ADOPTING THE 2007 FEMA NFIP FIRMS; AND AMENDING CHAPTER 15.08 CMC BASIC DEFINITIONS AND INTERPRETATIONS TO ADOPT NEW CODIFIED DEFINITIONS FOR TERMS UTILIZED IN THE ABOVE-REFERENCED CHAPTER; ADOPTING LEGISLATIVE FINDINGS; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

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WHEREAS, pursuant to Chapter 35A.63 RCW, Chapter 36.70A RCW, and Chapter 58.17 RCW, the City of Carnation has established zoning, land use, and subdivision regulations governing development within the City; and

WHEREAS, the City of Carnation has adopted floodplain regulations to promote the public health, safety, and general welfare, reduce the annual cost of flood insurance; and minimize public and private losses due to flood conditions in specific areas; and

WHEREAS, on September 20, 2007, FEMA issued a Preliminary FIS and FIRM which included the map revisions mad by LOMR 02-10-336P. There was public notification and open houses(s) held during this time to alert the public as to the potential changes and insurance requirements for their properties; and

WHEREAS, final approval of the 2007 Preliminary FIRMs have long been delayed for reasons unrelated to the City of Carnation or Snoqualmie Valley; and

WHEREAS, the City has considered the 2007 maps in its land use policy making decisions and documents since that time; and

WHEREAS, on February 24, 2020, the City received notice from FEMA that the 2007 FIRM was considered final and will become effective on August 19, 2020 and instructed the City that they must adopt an updated ordinance with FEMA mandated changes and adopting the new maps; and

WHEREAS, the new FIRM and FIS become effective and must be adopted by August 19, 2020 in order to remain compliant with the National Flood Insurance Program (NFIP); and

WHEREAS, FEMA Region X Coordinator assisted in reviewing the City's current flood damage prevention ordinance and provided comments and requirements on remaining compliant with the NFIP regulations; and

WHEREAS, the City of Carnation Planning Board held a public hearing on July 28, 2020 to collect public testimony. At the close of the public hearing, the Planning Board made a motion to recommend approval to the City Council; and

WHEREAS, the amendments of CMC Chapters 15.08 and 15.64 set forth herein are consistent with the City's Comprehensive Plan and will implement the City Council's community planning vision; NOW, THEREFORE,

THE CITY COUNCIL OF THE CITY OF CARNATION, WASHINGTON, DO  
ORDAIN AS FOLLOWS:

Section 1. Findings. The City Council hereby adopts the above recitals as findings in support of the regulations set forth in this ordinance. The City Council further adopts by reference the findings of the Planning Board dated July 28, 2020, together with the following:

A. The City is authorized by State law, including but not limited to Chapter 35A.11 RCW, Chapter 36.70A RCW, Chapter 35A.63 RCW and Chapter 58.17 RCW, to enact

regulations governing the use and development of real property within the City's jurisdiction.

B. The Planning Board conducted a public hearing on the substance of this ordinance on July 28, 2020, and recommended adoption by the City Council. The City Council held a public hearing on this ordinance on August 4, 2020.

C. The regulations set forth in this ordinance have been processed and considered by the City in material compliance with all applicable procedural requirements, including but not limited to requirements related to public notice and comment.

D. All relevant requirements of SEPA have been satisfied with respect to this ordinance.

E. The City Council has carefully considered, and the regulations set forth in this ordinance satisfy, the review criteria codified at CMC 15.100.030(E).

F. The regulations set forth in this ordinance are consistent with and will implement the City's Comprehensive Plan, and will further advance the public health, safety and welfare.

Section 2. Amendment of CMC 15.08.010. Section 15.08.010 of the Carnation Municipal Code is hereby amended by the addition of new and/or modified definitions for the terms "alteration of watercourse," "area of shallow flowing," "base flood elevation," "flood" or "flooding," "floodway," "functionally dependent use," "highest adjacent grade," "historic structure," "mean sea level," "new construction," "reasonably safe from flooding," "structure," to provide in their respective entirety in Exhibit A, attached hereto and incorporated herein by this reference as it set forth in full.

Section 3. Amendment of Chapter 15.64 CMC. Chapter 15.64 Part I of the Carnation Municipal Code Floodways and Floodplains is hereby amended by modifications and

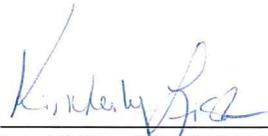
additions to sections 15.64.010, 15.64.015, 15.64.020, 15.64.025, 15.64.030, and 15.64.035 to provide in its entirety as contained in Exhibit B, attached hereto and incorporated herein by this reference as if set forth in full.

Section 4. Copy to Commerce, Ecology and FEMA. Pursuant to RCW 36.70A.106, RCW 86.16.041 and WAC 173-158-084, respectively a true and correct copy of this ordinance shall be transmitted to the Department of Commerce, Growth Management Services Division, within ten days after adoption; to the Department of Ecology; and to the Federal Emergency Management Agency.

Section 5. Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

Section 6. Effective Date. This ordinance or a summary thereof consisting of the title shall be published in the official newspaper of the City and shall take effect thirty (30) days from filing with the Department of Ecology unless disapproved thereby in writing pursuant to RCW 86.16.041 and WAC 173-158-084.

APPROVED by the Carnation City Council this 4th day of August, 2020.

  
\_\_\_\_\_  
MAYOR, KIMBERLY LISK

ATTEST/AUTHENTICATED:

  
\_\_\_\_\_  
CITY CLERK, MARY MADOLE

APPROVED AS TO FORM:  
OFFICE OF THE CITY ATTORNEY:

BY   
\_\_\_\_\_  
J. ZACHARY LELL

FILED WITH THE CITY CLERK: ..... 07/31/2020  
PASSED BY THE CITY COUNCIL: .... 08/04/2020  
PUBLISHED: ..... 08/14/2020  
EFFECTIVE DATE:..... 09/07/2020 (Per § 6, thirty (30) days from filing with DOE)  
ORDINANCE NO. .... 930

## Exhibit A

### 15.08.010 Definitions of basic terms.

....

"Alteration of watercourse" means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

....

"Area of shallow flooding" means 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 or greater annual chance of flooding to an average depth of one to three 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. Also referred to as the sheet flow area designated AE zone on the FEMA flood insurance rate map (FIRM), this does not mean that actual flooding has or will occur. The base flood depths range from one to three feet.

....

"Base Flood Elevation (BFE)" means the elevation to which floodwater is anticipated to rise during the base flood.

....

"Elevated building" means for insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

....

"Flood" or "flooding" means a general and temporary condition of partial or complete inundation of normally dry land areas from:

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 or runoff of surface waters from any source
  - c. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (1)(b) 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. 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 (1)(a) of this definition.

- 1.—~~The overflow of inland waters; or~~
- 2.—~~The unusual and rapid accumulation of runoff of surface waters from any source.~~

....

"Floodway" means 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 one foot designated height.

....

"Functionally dependent use" means 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.

....

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

....

"Historic structure" means any structure that is:

1. 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;
2. 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;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
4. Individually listed on a local inventory of historic places in 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.

....

"Mean Sea Level" means for purposes of the National Flood Insurance Program, the vertical datum to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

....

"New construction" means 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 the City and includes any subsequent improvements to such structures.~~means structures for which the "start of construction" commenced on or after the effective date of this chapter.~~

....

"Reasonably Safe from Flooding" means development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the City. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, reasonably safe from flooding means that the lowest floor is at least two feet above the Highest Adjacent Grade.

....

"Structure" means anything constructed or erected. 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.

....

## Exhibit B

### Chapter 15.64 - FLOODWAYS, FLOODPLAINS, DRAINAGE, AND EROSION

#### Part I. - Floodways and Floodplains

##### 15.64.010 - Findings—Purpose—Flood loss reduction.

- A. Findings. The flood hazard areas of the city City of Carnation are subject to periodic inundation which results in 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. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to the flood loss.
- B. Purpose. It is the purpose of this ordinance 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:
- (1) To protect human life and health;
  - (2) To minimize expenditure of public money and costly flood control projects;
  - (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
  - (4) To minimize prolonged business interruptions;
  - (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
  - (6) To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
  - (7) To ensure that potential buyers are notified that property is in an area of special flood hazard; and
  - (8) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
  - (9) To ensure that development within the special flood hazard area complies with applicable local, state and federal regulations.
  - (10) Participate in and maintain eligibility for flood insurance and disaster relief.
- C. Flood loss reduction. In order to accomplish its purposes, this ordinance includes methods and provisions for:
- (1) 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 or in flood heights or velocities;
  - (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
  - (3) Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
  - (4) Controlling filling, grading, dredging, and other development which may increase flood damage; and

- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas.

**15.64.015 - General provisions.**

- A. Applicability. The floodplain management regulations set forth in this chapter shall apply to all areas of special flood hazard within the jurisdiction of ~~city~~the City of Carnation.
- B. Basis ~~f~~For Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for King County and Incorporated Areas" (FIS) dated ~~December 6, 2001~~August 19, 2020, and ~~letter of map revision (LOMR) dated May 1, 2002,~~ and any revisions thereto, with an accompanying flood insurance rate map (FIRM), dated August 19, 2020, and any revisions thereto, are adopted by reference and declared to be a part of this chapter. The ~~flood insurance study (FIS)~~ and the FIRM are on file with the city clerk at the Carnation city hall and available for public inspection and copying. The best available information for flood hazard area identification as outlined in CMC Section 15.64.020(D)(4) shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under CMC Section 15.64.020(D)(4).
- C. Penalties. 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. Violations 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 conditions), shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction thereof be fined not more than one thousand dollars or imprisoned for not more than ninety days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the city from taking such other lawful action as is necessary to prevent or remedy any violation. Each day that a violation exists shall constitute a separate 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 under 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 ordinance or any administrative decision lawfully made hereunder.

**15.64.020 - Administration.**

- A. Development Permit Required. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in CMC 15.64.015(B). The permit shall be for all structures including manufactured homes, as set forth in CMC 15.08.010 and for all development including fill and other activities, also defined in CMC 15.08.010.
- B. Application for Development Permit. Application for a development permit shall be made on forms

furnished by the city and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
  2. Elevation in relation to mean sea level to which any structure has been floodproofed;
  3. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in CMC 15.64.035(B); and
  4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.
  5. A Floodplain Habitat Assessment as required by 44 C.F.R. 60. Assessment of the potential impacts of any development on the critical habitat of threatened and endangered salmon to ensure compliance with the Endangered Species Act (ESA) per the 2008 Biological Opinion on the implementation of the NFIP in the Puget Sound Region.
  6. Where development is proposed in the floodway, an engineering analysis indicating no rise of the base flood elevation
  7. Any other such information that may be reasonably required by the Floodplain Administrator in order to review the application.
- C. Designation of local administrator. The building official is hereby appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.
- D. Duties and responsibilities of local administrator. The duties of the building official under this chapter shall include, but not be limited to:
1. Review all development permits to determine that the permit requirements of this chapter have been satisfied;
  2. 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;
  3. 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 CMC 15.64.040 are met;
  4. When base flood elevation data has not been provided (A or V zone) in accordance with CMC Section 15.64.015(B), the building official 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 CMC Sections 15.64.035 and 15.64.040;
  5. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or required as in CMC 15.64.020(D)(4), 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;
  6. For all new or substantially improved flood-proofed nonresidential structures where base flood elevation data is provided through the flood insurance study, FIRM, or as required in subsection (D)(4) of this section:
    - a. Obtain and record the elevation (in relation to mean sea level) to which the structure was floodproofed; and

- b. Maintain the floodproofing certifications required in CMC 15.64.020(B);
- 7. Maintain for public inspection all records pertaining to the provisions of this chapter;
- 8. Notify adjacent communities and the department of ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration;
- 9. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished; and
- 10. 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 CMC 15.64.025.

**15.64.025 - Appeals and variances.**

- A. The hearing examiner shall hear and decide appeals and requests for variances from the requirements of this chapter. The hearing examiner shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the building official in the enforcement or administration of this ordinance. Those aggrieved by the decision of the building official, or any taxpayer, may appeal such decision to the hearing examiner, as provided in Chapter 15.11 of the CMC.
- B. In passing upon such applications, the hearing examiner shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:
  - 1. The danger that materials may be swept onto other lands to 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 effect of such damage on the individual owner;
  - 4. The importance of the services provided by the proposed facility to the community;
  - 5. The necessity to the facility of 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 flood 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 costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- C. Upon consideration of the factors of CMC 15.64.025(B) and the purposes of this chapter, the hearing examiner may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter. The hearing examiner shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.
- D. Conditions for Variances.

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 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 items (1-11) in CMC 15.64.025(B) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases;
  2. Variances may be issued 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;~~for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this section;~~
  3. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result;
  4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;
  5. Variances shall only be issued upon:
    - a. A showing of good and sufficient cause;
    - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
    - c. A 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.
- E. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they 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. As such, variances from the flood elevations should be quite rare.
- ~~F. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except CMC 15.64.025(D)(1), and otherwise complies with CMC 15.64.030(A), (C), and (D).~~
- GE. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a 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.

**15.64.030 - General standards.**

In all areas of special flood hazards, the following standards are required:

- A. Anchoring.
  1. All new construction and substantial improvements, including those related to manufactured homes, shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy; and

2. All manufactured homes shall be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.
- B. AH Zone Drainage. Adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.
- C. Construction Materials and Methods.
1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
  2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage; and
  3. 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.
- D. Utilities.
1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems;
  2. A water well shall be located on high ground that is not in the floodway (WAC 173-160-171);
  3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters; and
  4. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- E. Subdivision Proposals.
1. All subdivision proposals shall be consistent with the need to minimize flood damage;
  2. All subdivision proposals shall have public utilities and facilities, such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage;
  3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
  4. For subdivision proposals and other proposed developments which contain at least fifty lots or five acres (whichever is less), base flood elevation data shall be included with the proposal. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated by the project proponent.
- F. Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study, FIRM, 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, etc., where available. Failure to elevate at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.

**15.64.035 - Specific standards.**

In all areas of special flood hazards where base flood elevation data has been

provided as set forth in CMC 15.64.015(B) or CMC 15.64.020(D)(4), the following provisions are required:

A. Residential Construction.

1. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the base flood elevation BFE. Mechanical equipment and utilities shall be waterproof or elevated at least one foot above the BFE.;
2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or 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 must meet or exceed the following minimum criteria:~~
  - a. 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;
  - b. The bottom of all openings shall be no higher than one foot above grade; and,
  - c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
  - d. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters.

Alternatively, a registered engineer or architect may design and certify engineered openings.

B. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated one foot or more above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

1. Be floodproofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
3. 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 building official as set forth in CMC 15.64.020(D)(6);
4. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in CMC 15.64.035(A)(2); and,
5. ~~Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building floodproofed to the base flood level will be rated as one foot below).~~

C. Manufactured Homes.

1. All manufactured homes to be placed or substantially improved on sites shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one foot or more above the base flood elevation and be securely

anchored to an adequately designed foundation system to resist flotation, collapse and lateral movement:

- a. Outside of a manufactured home park or subdivision;
  - b. In a new manufactured home park or subdivision;
  - c. In an expansion to an existing manufactured home park or subdivision; or,
  - d. In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, ~~and shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated one foot or more above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse and lateral movement.~~
2. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision that are not subject to the above manufactured home provisions be elevated so that either:
- a. The lowest floor of the manufactured home is elevated one foot or more above the base flood elevation; or,
  - b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty six inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.
- D. Recreational vehicles. Recreational vehicles, if otherwise permitted by this title, are required to either:
1. Be on the site for fewer than one hundred eighty consecutive days;
  2. Be fully licensed and ready for highway use, 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; or
  3. Meet the requirements of CMC 15.64.035(C) and the elevation and anchoring requirements for manufactured homes.

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