



PLANNING COMMISSION WORK SESSION AGENDA

Monday, September 09, 2019 - 6:00 PM

City Hall, Conference Room A, 169 SW Coast Hwy, Newport, OR 97365


The meeting location is accessible to persons with disabilities. A request for an interpreter for the DEAF AND HARD OF HEARING, or for other accommodations for persons with disabilities, should be made at least 48 hours in advance of the meeting to Peggy Hawker, City Recorder at 541.574.0613.

The agenda may be amended during the meeting to add or delete items, change the order of agenda items, or discuss any other business deemed necessary at the time of the meeting.

1. CALL TO ORDER
2. UNFINISHED BUSINESS
3. NEW BUSINESS
- 3.A Review Draft Amendments to NMC Chapter 14.20, Flood Hazard Areas.
 - Staff Memorandum
 - NMC Chapter 14.20 - Amended
 - FEMA Code Audit
 - NMC Chapter 14.20 - Existing
4. ADJOURNMENT

Memorandum

To: Planning Commission/Commission Advisory Committee

From: Derrick I. Tokos, AICP, Community Development Director 

Date: September 5, 2019

Re: Draft Amendments to NMC Chapter 14.20, Flood Hazards

On August 27, 2019, City staff met with Roxanne Reale-Pilkenton, FEMA Region X, who was conducting a Community Assistance Visit (CAV). The CAV process is used by FEMA to audit a jurisdiction's compliance with flood hazard regulations promulgated at the federal level and tied to the National Flood Insurance Program.

The visit included a code audit, completed by Ms. Reale-Pilkenton, which was delivered to the City on September 2, 2019. The audit is based upon an Oregon State Model Flood Ordinance that was released on August 6, 2019. The principal difference between the model ordinance and the City's existing 2009 ordinance, is the detail in which it spells out procedures and record keeping requirements. Some construction standards were updated and clarified, and there are a number of new "informational" sections that we would not normally include in the Municipal Code. FEMA; however, has indicated that the informational sections are mandatory. The substantive provisions of the code remain the same, which is:

- A. The lowest floor of habitable structures must be elevated at least one (1) foot above base flood elevation.
- B. Non-habitable portions of a structure must be constructed out of flood resistant materials and be designed to withstand the hydrodynamic and hydrostatic forces of a flood, and the techniques used are different in inland versus coastal areas.
- C. Utilities located below the base flood elevation must be water-tight.
- D. Construction in a floodway (i.e. area of active flow during a 100-year event) is subject to "no rise" analysis, meaning the development cannot measurably impact the flood carrying capacity of a tributary. As an FYI, the City has very little in the way of floodways, with Big Creek being the prime example.

I have prepared a draft set of amendments that incorporate the changes requested by FEMA. It includes staff comments summarizing the nature of the changes on a section by section basis. This work session is an opportunity for you to review the changes and seek clarifications, as needed. Unlike most legislative amendments, the City cannot deviate materially from the model code, as it is a key regulatory tool must be in place in order for persons that own property in the floodplain to obtain federally subsidized flood insurance. The code will be presented with the maps at a public hearing on September 23, 2019.

Attachments

- Draft Amendments to NMC Chapter 14.20, FEMA Code Audit, NMC Chapter 14.20 (as currently adopted)

CHAPTER 14.20 FLOOD HAZARD AREA

14.20.005 Authority

The State of Oregon has in ORS 197.175 delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City of Newport does ordain as follows:

- A. The flood hazard areas of the City of Newport are subject to periodic inundation which may result 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.
- B. These flood losses may be caused by the cumulative effect of obstructions in special flood hazard areas which increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

Staff: This is a new section that specifically calls out the City's authority to implement flood hazard regulations. We would typically include this in the ordinance, but not code. FEMA wants it in the code. This change addresses Sections 1.1 and 1.2 of the 9/2/19 FEMA Code Audit.

14.20.010 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 flooding in flood hazard areas by provisions designed to:

- A. Protect human life and health;
- B. Minimize expenditure of public money for costly flood control projects;

- C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in special flood hazard areas;
- F. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding;
- G. Notify potential buyers that the property is in a special flood hazard area
- H. Notify those who occupy special flood hazard areas that they assume responsibility for their actions
- I. Participate in and maintain eligibility for flood insurance and disaster relief.

Staff: The Purpose section of the code has been expanded upon to include additional reasons why a flood hazard code is necessary. The changes address Section 1.3 of the 9/2/19 FEMA Code Audit.

14.20.015 Methods of Reducing Flood Losses

In order to accomplish its purposes, this Chapter includes methods and provisions for:

- A. Restricting or prohibiting development which is 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;
- B. Requiring that development vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

- D. Controlling filling, grading, dredging, and other development which may increase flood damage;
- E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.

Staff: This is a new section that explains how the regulations outlined below go about achieving the purpose of the code. It responds to Section 1.4 of the 9/2/19 FEMA Code Audit.

14.20.020 Definitions

Words or phrases used in this Code shall be interpreted so as to give them the meaning they have in common usage and to give this Code its most reasonable application.

1. Appeal: A request for a review of the interpretation of any provision of this Chapter or a request for a variance.
2. Area of shallow flooding: A designated Zone AO, AH, AR/AO, 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 (1) to three (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.
3. Area of special flood hazard: The land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous in meaning and definition with the phrase "area of special flood hazard".
4. Base flood: the flood having a 1% chance of being equaled or exceeded in any given year.
5. Base flood elevation (BFE): The elevation to which floodwater is anticipated to rise during the base flood.
6. Basement: Any area of the building having its floor or subgrade (below ground level) on all sides.

7. Breakaway walls: 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.
8. Coastal high hazard area: An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources.
9. 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 located within the area of special flood hazard.
10. Flood or flooding:
 - A. general and temporary condition of partial or complete inundation of normally dry land areas from:
 - i. The overflow in inland or tidal waters;
 - ii. The unusual and rapid accumulation or run-off of surface waters from any source; or
 - iii. 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, as when earth is carried by a current of water and deposited along the path of the current.
 - 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)(i) of this definition.

11. 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.
12. Flood insurance rate map (FIRM): the official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).
13. Flood insurance study: See “Flood elevation study.”
14. Floodproofing: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.
15. Floodway: The channel of a river or other water-course 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. Also referred to as “Regulatory Floodway.”
16. 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. Uses classified as “water-dependent” in NMC Chapter 14 are considered functionally dependent uses.
17. Highest adjacent grade: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.
18. Historic structure: Any structure that is:
 - 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;

- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - i. By an approved state program as determined by the Secretary of the Interior or
 - ii. Directly by the Secretary of the Interior in states without approved programs.

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

20. Manufactured dwelling: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured dwelling" does not include a "recreational vehicle" and is synonymous with "manufactured home."

21. Manufactured dwelling park or subdivision: A parcel (or contiguous parcels) of land divided into two or more manufactured dwelling lots for rent or sale.

22. Mean sea level (MSL): 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.

23. New construction: 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 of Newport and includes any subsequent improvements to such structures.
24. Recreational vehicle: A vehicle which is:
- A. built on a single chassis;
 - B. 400 square feet or less when measured at the largest horizontal projection;
 - C. designed to be self-propelled or permanently towable by a light duty truck; and
 - D. designed primarily not for uses as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
25. Special flood hazard area: See “Area of special flood hazard” for this definition.
26. Start of construction: 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 from the date 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 dwelling on a foundation. Permanent construction does not include land preparation (such as clearing, grading, and filling), the installation of streets and/or walkways, excavation (for a basement, footings, piers, or foundation or the erection of temporary forms), or 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 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.

27. Structure: For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank that is principally above the ground, as well as a manufactured dwelling.
28. 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.
29. Substantial improvement: Any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 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 term does not, however, include either:
- A. 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
 - B. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."
30. Variance: A grant of relief by the City of Newport from the terms of a flood plain management regulation.
31. 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 in this Chapter is presumed to be in violation until such time as that documentation is provided.

Staff: Definitions were updated or added to comply with the Oregon State Model Flood Ordinance. Definitions for "below grade crawl space," "critical facility," "elevated building," "state

building code,” and “water dependent” have been deleted as unnecessary, redundant, or outdated. For example, water-dependent is now addressed under the definition for “functionally dependent use.” Definitions for existing, expansion, and new Manufactured Dwelling Parks are deleted as the circumstances they speak to are adequately addressed in the code. These changes address Section 2.0 of the 9/2/19 FEMA Code Audit.

14.20.025 Lands to Which this Chapter Applies

This Chapter shall apply to all special flood hazard areas within the jurisdiction of the City of Newport.

Staff: This is a new section that specifically links this code chapter to “special flood hazard areas.” This is a clarification, as the existing code applies to special flood hazard areas as well (it was just framed differently). This change addresses Section 3.1 of the 9/2/19 FEMA Code Audit.

14.20.030 Basis for Establishing the Special Flood Hazard Areas

The special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for Lincoln County, Oregon and Incorporated Areas," dated September 28, 2018, with accompanying Flood Insurance Rate Maps (FIRMs) 41041C0354E, 41041C0360E, 41041C0362E, 41041C0364E, 41041C0366E, 41041C0368E, 41041C0369E, 41041C0502E, 41041C0504E, 41041C0506E, 41041C0507E, 41041C0508E, 41041C0515E, and 41041C0520E are hereby adopted by reference and declared to be part of this Chapter. The FIS and FIRM panels are on file at the Community Development Department located at Newport City Hall (169 SW Coast Hwy, Newport).

Staff: This section has been amended to reference the latest flood insurance study and to specifically call out the FIRM map panels relevant to this code chapter. It addresses Section 3.2 of the 9/2/19 FEMA Code Audit.

14.20.035 Coordination with State of Oregon Specialty Codes

Pursuant to the requirement established in ORS 455 that the City of Newport administers and enforces the State of Oregon Specialty Codes, the City of Newport does hereby

acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood hazard areas. Therefore, this Chapter is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.

Staff: This is a new section that acknowledges the Oregon Specialty Codes apply to new construction and that both codes are to be applied within special flood hazard areas. That is the current practice, so this is a clarification not a substantive change to how the two codes are applied. This revision addresses Section 3.3 of the 9/2/19 FEMA Code Audit.

14.20.040 Compliance

All development within special flood hazard areas is subject to the terms of this Chapter and required to comply with its provisions and all other applicable regulations.

Staff: This is a new section that stipulates development in special flood hazard areas must adhere to the requirements of this chapter. It is somewhat redundant, as NMC Chapter 14.55 already requires this for the whole of Chapter 14. FEMA though wants the language in the flood hazard chapter. This change addresses Section 3.4.1 of the 9/2/19 FEMA Code Audit.

14.20.045 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. 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 civil infraction subject to penalties set forth in NMC Chapter 14.57. Nothing contained herein shall prevent the City of Newport from taking such other lawful action as is necessary to prevent or remedy any violation.

Staff: This new section cross-references to the existing Chapter that spells out penalties for non-compliance. The penalties themselves are unchanged. This revision addresses Section 3.4.2 of the 9/2/19 FEMA Code Audit.

14.20.050 Abrogation

This Chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter and other provisions of the Newport Municipal Code, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

Staff: This new section adds language explaining the relationship between the code chapter and private binding agreements such as easements and covenants. Even without the additional language, the practice would be that the most stringent restrictions prevail, so this is really a clarification of existing practice. The change addresses Section 3.5.1 of the 9/2/19 FEMA Code Audit.

14.20.055 Severability

This Chapter and the various parts thereof are hereby declared to be severable. If any section clause, sentence, or phrase of the Chapter is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Chapter.

Staff: This is a new section. The issue is already addressed under Chapter 14.59; however, FEMA wants the language in the code chapter proper. The change addresses Section 3.5.2 of the 9/2/19 FEMA Code Audit.

14.20.060 Interpretation

In the interpretation and application of this Chapter, all provisions shall be:

- A. Considered as minimum requirements;
- B. Liberally construed in favor of the governing body; and
- C. Deemed neither to limit nor repeal any other powers granted under state statutes.

Staff: This new section articulates what is already existing law. The change addresses Section 3.6 of the 9/2/19 FEMA Code Audit.

14.20.065 Warning

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.

Staff: This new section is informational, not regulatory. It addresses Section 3.7.1 of the 9/2/19 FEMA Code Audit.

14.20.070 Disclaimer of Liability

This Chapter shall not create liability on the part of the City of Newport, any officer or employee thereof, or the Federal Insurance Administrator for any flood damages that result from reliance on this Chapter or any administrative decision lawfully made hereunder.

Staff: This new section is informational, not regulatory. It addresses Section 3.7.2 of the 9/2/19 FEMA Code Audit.

14.20.075 Designation of the Floodplain Administrator

The Community Development Director is hereby appointed to administer, implement, and enforce this Chapter by granting or denying development permits in accordance with its provisions. The Floodplain Administrator may delegate authority to implement these provisions.

Staff: This new section establishes that the Community Development Director, or designee, is responsible for implementing this Code Chapter. The Building Official also has a role in implementing the Chapter. The language codifies existing practice, and addresses Section 4.1 of the 9/2/19 FEMA Code Audit.

14.20.080 Administration

A. Establishment of Building/Development Permit. A Building/Development Permit shall be obtained before construction or development begins within any area horizontally within the special flood hazard area

established in [Section 14.20.030](#). The development permit shall be required for all structures, including manufactured dwellings, and for all other development, as defined in [Section 14.20.020](#), including fill and other development activities.

- B. Application for Permit. Application shall be made on forms provided by the Community Development Department for this purpose 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. In riverine flood zones, the proposed elevation (in relation to mean sea level), of the lowest floor (including basement) and all attendant utilities of all new and substantially improved structures; in accordance with the requirements of [Subsection 14.20.080\(F\)](#).
 2. In coastal flood zones (V zones and coastal A zones), the proposed elevation in relation to mean sea level of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all structures, and whether such structures contain a basement.
 3. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed.
 4. Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in [Subsection 14.20.095\(B\)\(4\)](#); and
 5. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.
 6. Base Flood Elevation data for subdivision proposals or other development when required per [Subsection 14.20.080\(C\)](#) and [Subsection 14.20.095\(A\)\(6\)](#).

7. Substantial improvement calculation for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure.
 8. The amount and location of any fill or excavation activities proposed.
- C. Duties and Responsibilities. The duties of the Community Development Director shall include, but not be limited to, permit review to determine:
1. That the permit requirements of this Code have been satisfied;
 2. That necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 3. Whether or not the proposed development is located in the floodway. If located in the floodway, assure that the floodway provisions of [Subsection 14.20.095\(B\)\(8\)](#) are met.
 4. If the proposed development is located in an area where Base Flood Elevation (BFE) data is available either through the Flood Insurance Study (FIS) or from another authoritative source. If BFE data is not available then ensure compliance with the provisions of [Subsection 14.20.080\(E\)](#).
 5. If the proposed development qualifies as a substantial improvement as defined in [Section 14.20.020](#).
 - G. If the proposed development activity is a watercourse alteration. If a watercourse alteration is proposed, ensure compliance with the provisions in [Subsection 14.20.080\(I\)](#).
 - H. If the proposed development activity includes the placement of fill or excavation.
- D. Provide to building officials the Base Flood Elevation (BFE) applicable to any building requiring a development permit.

E. Use of Other Base Flood Data.

1. When base flood elevation data has not been provided in accordance with this Section, the Community Development Director shall obtain, review, and reasonably utilize any base flood elevation data available from a Federal, State, or other source, in order to administer [Section 14.20.095](#) (Specific Standards) and [Subsection 14.20.095\(B\)\(8\)](#) (Floodways).
2. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) must meet the requirements of [Subsection 14.20.095\(A\)\(6\)](#).
3. Base Flood Elevations shall be determined for development proposals that are 5 acres or more in size or are 50 lots or more, whichever is lesser in any A zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding; the test of reasonableness includes use of historical data, high water marks, FEMA provided Base Level Engineering data, and photographs of past flooding, etc... where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

F. Information to be obtained and maintained by the Community Development Director:

1. Obtain, record, and maintain the actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where Base Flood Elevation (BFE) data is provided through the Flood Insurance Study (FIS), Flood Insurance Rate Map (FIRM), or obtained in accordance with [Subsection 14.20.080\(E\)](#).
2. Obtain and record the elevation (in relation to mean sea level) of the natural grade of the building site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of [Subsection 14.20.095\(B\)\(8\)](#), [Subsection](#)

[14.20.095\(C\)\(7\)](#), [Subsection 14.20.080\(C\)\(2\)](#) are adhered to.

3. Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, obtain documentation, prepared and sealed by a professional licensed surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement).
4. Where base flood elevation data are utilized, obtain As-built certification of the elevation (in relation to mean sea level) of the lowest floor (including basement) prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection.
5. Maintain all Elevation Certificates (EC) submitted to the City of Newport.
6. Obtain, record, and maintain the elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this Chapter and where Base Flood Elevation (BFE) data is provided through the FIS, FIRM, or obtained in accordance with [Subsection 14.20.080\(E\)](#).
7. Maintain all floodproofing certificates required under this Chapter.
8. Record and maintain all variance actions, including justification for their issuance.
9. Obtain and maintain all hydrologic and hydraulic analyses performed as required under [Subsection 14.20.095\(B\)\(8\)](#).
10. Record and maintain all Substantial Improvement and Substantial Damage calculations and determinations as required under [Section 14.20.090](#).
11. Maintain for public inspection all records pertaining to the provisions of this Chapter.

G. Structures Located in Multiple or Partial Flood Zones. In coordination with the State of Oregon Specialty Codes:

1. When a structure is located in multiple flood zones on the community's Flood Insurance Rate Maps (FIRM) the provisions for the more restrictive flood zone shall apply.
2. When a structure is partially located in a special flood hazard area, the entire structure shall meet the requirements for new construction and substantial improvements.

H. Community Boundary Alterations. The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

I. Alteration of Watercourses. The Community Development Director shall:

1. Notify Lincoln County, the Department of Land Conservation and Development, and other appropriate state and federal agencies prior to any alteration or relocation of a water course and submit evidence of such notification to the Federal Insurance Administration. This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:
 - a. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or
 - b. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

2. The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under [Section 14.20.085](#). Ensure compliance with all applicable requirements in Sections [14.20.085](#) and [14.20.080\(I\)](#).

Staff: Language has been added and amended to address Sections 4.2, 4.2.1, 4.2.2, 4.2.3.1, 4.2.3.2, 4.3.1, 4.3.2 and 5.1.1 of the 9/2/19 FEMA Code Audit. The changes elaborate on what the City looks for when evaluating development in special flood hazard areas and the types of records it must keep. The scope of the City's responsibilities are unchanged, as is the extent private property is regulated. It is more about ensuring that all requirements are clearly and explicitly articulated so that steps are not missed.

14.20.085 Requirement to Submit New Technical Data

- A. A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Section 44 of the Code of Federal Regulations (CFR), Subsection 65.3. The community may require the applicant to submit such data and review fees required for compliance with this Section through the applicable FEMA Letter of Map Change (LOMC) process.
- B. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:
 1. Proposed floodway encroachments that increase the base flood elevation; and
 2. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.
- C. An applicant shall Notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

Staff: This new section confirms an existing obligation that the City and applicants have to share new technical data with FEMA. It addresses Section 4.2.3.3 of the 9/2/19 FEMA Code Audit.

14.20.090 Substantial Improvement and Substantial Damage Assessments and Determinations

Conduct Substantial Improvement (SI) (as defined in [Section 14.20.020](#)) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files in accordance with [Subsection 14.20.080\(F\)](#). Conduct Substantial Damage (SD) (as defined in [Section 14.20.020](#)) assessments when structures are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the special flood hazard area (as established in [Section 14.20.030](#)) are damaged to the extent that 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.

Staff: This is a new section. The requirement that substantial improvement/damage assessments be performed is not new, nor is the 50 percent threshold. The record keeping requirements are new. This change addresses Section 4.2.4 of the 9/2/19 FEMA Code Audit.

14.20.095 Provisions for Flood Hazard Reduction

A. General Standards. In areas of special flood hazard as adopted by this Chapter (which may be illustrated on a zoning map as a Flood Hazard Overlay Zone (FH Zone)) the following provisions are required:

1. Anchoring.
 - a. All new construction and substantial improvements shall be anchored to prevent floatation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
 - b. All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement by providing

over-the-top and frame ties to ground anchors.
Specific requirements shall be that:

- i. Over-the-top ties be provided at each end of the manufactured home, with two (2) additional ties per side at intermediate locations, and manufactured homes less than 50 feet long requiring one (1) additional tie per side.
 - ii. Frame ties are to be provided at each corner of the home with five (5) additional ties per side at intermediate points, and manufactured homes less than 50 feet long will require four (4) additional ties per side;
 - iii. All components of the anchoring system are to be capable of carrying a force of 4,800 pounds; and
 - iv. Additions to the manufactured home are to be similarly anchored.
 - c. An alternative method of anchoring may involve a system designed to withstand the wind force of 90 miles an hour or greater.
 - d. Certification must be provided by a registered structural engineer to the Building Official that this standard has been met.
 - e. All modular homes shall comply with the requirements of the applicable building code.
2. Construction Materials and Methods.
 - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - b. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
 3. Water Supply, Sanitary Sewer, and On-Site Waste Disposal Systems.

- 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 systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into the flood waters; and
 - c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with Department of Environmental Quality regulations.
4. Electrical, Mechanical, Plumbing, and Other Equipment.
- a. Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated one foot above the base flood level or shall be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding. In addition, electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall:
 - i. If replaced as part of a substantial improvement shall meet all the requirements of this Section.
 - ii. Not be mounted on or penetrate through breakaway walls.
5. Tanks.
- a. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.
 - b. Above-ground tanks shall be installed one foot above the base flood level or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.

- c. In coastal flood zones (V Zones or coastal A Zones) when elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on foundations that conform to the requirements of the State of Oregon Specialty Code.

6. Subdivision Proposals.

- a. All subdivision proposals and other proposed new 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. All new subdivision proposals and other proposed new developments (including proposals for manufactured home parks and subdivisions) shall:
 - i. Be consistent with the need to minimize flood damage.
 - ii. Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage.
 - iii. Have adequate drainage provided to reduce exposure to flood hazards.

Staff: This Subsection includes general regulatory requirements for development in special flood hazard areas, be they inland (i.e. riverine) or coastal. Anchoring requirements have been clarified, as have the standards applicable to utilities. New provisions have been added for tanks. The regulatory concepts when comparing the old and new codes remain the same, which is that structures in flood hazard areas must be anchored, and utilities water-tight, so that they can withstand the hydrostatic and hydrodynamic forces of a flood. These changes address Section 5.1.2, 5.1.3, 5.1.4.1, 5.1.4.2, and 5.1.5 of the 9/2/19 FEMA Code Audit.

- B. Specific Standards for Riverine (including all non-coastal) flood zones. These specific standards shall apply to all

new construction and substantial improvements in addition to the General Standards contained in [Subsection 14.20.095\(A\)](#) of this Chapter.

1. Residential Construction.

- a. New construction and substantial improvement of any residential structures shall have the lowest floor, including the basement, elevated to a minimum of one (1) foot above the base flood elevation.
- b. Enclosed areas below the lowest floor shall comply with the flood opening requirements in [Subsection 14.20.095\(B\)\(7\)](#).

2. Garages.

- a. Attached garages may be constructed with the garage floor slab below the Base Flood Elevation (BFE) in riverine flood zones, if the following requirements are met:
 - i. If located within a floodway the proposed garage must comply with the requirements of [Subsection 14.20.095\(B\)\(8\)](#);
 - ii. The floors are at or above grade on not less than one side;
 - iii. The garage is used solely for parking, building access, and/or storage;
 - iv. The garage is constructed with flood openings in compliance with [Subsection 14.20.095\(B\)\(7\)](#) to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater;
 - v. The portions of the garage constructed below the BFE are constructed with materials resistant to flood damage;
 - vi. The garage is constructed in compliance with the standards in [Subsection 14.20.095\(B\)\(2\)](#); and

- vii. The garage is constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.
 - b. Detached garages must be constructed in compliance with the standards for appurtenant structures in [Subsection 14.20.095\(B\)\(3\)](#) or nonresidential structures in [Subsection 14.20.095\(B\)\(4\)](#) depending on the square footage of the garage.
3. Appurtenant (Accessory) Structures.

Relief from elevation or floodproofing requirements for Residential and Non-Residential structures in Riverine (Non-Coastal) flood zones may be granted for accessory structures that meet the following requirements:

- a. Appurtenant structures located partially or entirely within the floodway must comply with requirements for development within a floodway found in [Subsection 14.20.095\(B\)\(8\)](#).
- b. Appurtenant structures must only be used for parking, access, and/or storage and shall not be used for human habitation;
- c. In compliance with State of Oregon Specialty Codes, Appurtenant structures on properties that are zoned residential are limited to one-story structures less than 200 square feet, or 400 square feet if the property is greater than two (2) acres in area and the proposed appurtenant structure will be located a minimum of 20 feet from all property lines. Appurtenant structures on properties that are zoned as non-residential are limited in size to 120 square feet.
- d. The portions of the appurtenant structure located below the Base Flood Elevation must be built using flood resistant materials;
- e. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral

movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.

- f. The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in [Subsection 14.20.095\(B\)\(7\)](#);
- g. Appurtenant structures shall be located and constructed to have low damage potential;
- h. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with [Subsection 14.20.095\(A\)\(5\)](#).
- i. Appurtenant structures shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

4. Nonresidential Construction.

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including the basement) elevated to one (1) foot above the base floor elevation or, together with attendant utility and sanitary facilities, shall:

- a. Be floodproofed so that below the base flood level 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;

- d. Nonresidential structures that are elevated, not floodproofed, shall comply with the standards for enclosed areas below the lowest floor as described in [Subsection 14.20.095\(B\)\(7\)](#); and
- e. Applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one (1) foot below that level).

5. Manufactured Dwellings.

- a. New or substantially improved manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with [Subsection 14.20.095\(B\)\(7\)](#);
- b. The bottom of the longitudinal chassis frame beam shall be at or above Base Flood Elevation;
- c. New or substantially improved manufactured dwellings shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques), and;
- d. Electrical crossover connections shall be a minimum of twelve (12) inches above Base Flood Elevation (BFE).

6. Recreational Vehicles.

Recreational vehicles placed on sites are required to:

- a. Be on the site for fewer than 180 consecutive days,
- b. 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

- c. Meet the requirements of [Subsection 14.20.095\(B\)\(5\)](#), including the anchoring and elevation requirements for manufactured dwellings.

7. Flood Openings.

All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the Base Flood Elevation, including crawl spaces shall:

- a. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exist of floodwaters;
- b. Be used solely for parking, storage, or building access;
- c. Be certified by a registered professional engineer or architect or meet or exceed all of the following minimum criteria:
 - i. A minimum of two openings;
 - ii. The total net area of non-engineered openings shall be not less than one (1) square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosure walls;
 - iii. The bottom of all openings shall be no higher than one foot above grade;
 - iv. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area;
 - v. All additional higher standards for flood openings in the State of Oregon Residential

Specialty Codes Section R322.2.2 shall be complied with when applicable.

Staff: This Subsection includes specific regulatory requirements for development in inland (i.e. riverine) special flood hazard areas. Standards for residential development have been clarified and new standards added for garages and accessory structures. This is largely a clarification of the rules, as garages and accessory structures were previously regulated as non-residential construction. New standards were added for manufactured dwellings and recreational vehicles, and crawlspace requirements have been folded into a new Subsection titled floor openings. When comparing the old and new codes, the regulatory principals are unchanged. The lowest floor of habitable spaces must be elevated at least one (1) foot above BFE, and non-habitable spaces must be floodproofed such that they can withstand the hydrostatic and hydrodynamic forces of a flood. The rules applicable to RVs are intended to ensure they are transient and mobile or, if not mobile, treated like manufactured dwellings. These changes address Section 5.2, 5.2.1, 5.2.2, 5.2.3, 5.2.3.1, 5.2.3.2, 5.2.3.3, 5.2.3.4, 5.2.3.5, and 5.2.3.6 of the 9/2/19 FEMA Code Audit.

8. Floodways.

- a. Located within the special flood hazard areas established in [Section 14.20.030](#) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of the floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
 - i. Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless:
 - A. Certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that proposed encroachment shall not result in any increase in flood levels within the community

during that occurrence of the base flood discharge.

- B. A community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that a Conditional Letter of Map Revision (CLOMR) is applied for and approved by the Federal Insurance Administrator, and the requirements for such revision as established under Volume 44 of the Code of Federal Regulations, Section 65.12 are fulfilled.

b. If the requirements of [Subsection 14.20.095\(B\)\(8\)\(a\)\(i\)](#) above are satisfied, all new construction, substantial improvements, and other development shall comply with all other applicable flood hazard reduction provisions of [Section 14.20.095](#)

Staff: Requirements for demonstrating “no rise” in a regulatory floodway have been clarified. They are not materially different, just more specific. Provisions in the existing city code allowing alternative approval processes for manufactured dwellings and stream habitat restoration have been removed. A floodway is an area of active flow during a 100-year event, and the City’s exposure is limited to areas in and around Big Creek.

9. Before Regulatory Floodway. In areas where a regulatory floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-A30 and AE on the community FIRMs, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

Staff: This subsection was restructured with minor edits. It addresses Section 5.2.3.1 of the 9/2/19 FEMA Code Audit.

- C. Coastal High Hazard Area. Located within areas of special flood hazards established in [Subsection 14.32.040](#) are "Coastal High Hazard Areas," designated as Zones V1-V30, VE, and/or V. These areas have special flood hazards associated with high velocity waters from tidal surges and, therefore, in addition to meeting all applicable provisions of this Chapter and the State Building Code, the following criteria shall apply:
1. All new construction and substantial improvements in Zones V1 - V30 and VE (V if base flood elevation data is available) shall be elevated on pilings and columns such that:
 - a. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated a minimum of one foot above the base flood level; and
 - b. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those specified by the State of Oregon Specialty Codes.
 2. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this Section.
 3. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures and whether or not such structures contain a basement. The Community Development Director shall maintain a record of all such information in accordance with [Subsection 14.20.080\(F\)](#).
 4. All new construction shall be located landward of the reach of mean high tide.

5. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this Section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls that exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 - a. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and
 - b. If breakaway walls are utilized, such enclosed space shall be usable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.
 - c. Walls intended to break away under flood loads shall have flood openings that meet or exceed the criteria for flood openings in [Subsection 14.20.095\(B\)\(7\)](#).
6. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Maximum water loading values to be used in this determination shall be those associated with the base flood. Maximum wind loading values used shall be those specified by the State of Oregon Specialty Codes.
7. Prohibit the use of fill for structural support of buildings.

8. Prohibit man-made alteration of sand dunes which would increase potential flood damage.
9. All structures, including but not limited to residential structures, non-residential structures, appurtenant structures, and attached garages shall comply with all the requirements of [Subsection 14.20.095\(C\)\(1\)](#) Floodproofing of non-residential structures is prohibited.
10. Manufactured Dwelling Standards for Coastal High Hazard Zones. All manufactured dwellings to be placed or substantially improved within Coastal High Hazard Areas (Zones V, V1-30, VE, or Coastal A) shall meet the following requirements:
 - a. Comply with all of the standards within [Subsection 14.20.095\(C\)](#);
 - b. The bottom of the longitudinal chassis frame beam shall be elevated to a minimum of one foot above the Base Flood Elevation (BFE); and
 - c. Electrical crossover connections shall be a minimum of 12 inches above the BFE.
11. Recreational Vehicle Standards for Coastal High Hazard Zones. Recreational vehicles within Coastal High Hazard Zones V1-30, V, and VE on the community's FIRM shall either:
 - a. Be on the site for fewer than 180 consecutive days; and
 - b. 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
 - c. Meet the permit requirements of [Section 14.20.020](#) (Administration) and the requirements for manufactured homes in [Subsection 14.20.095\(C\)\(10\)](#).

12. Tank Standards for Coastal High Hazard Zones.
Tanks shall meet the requirements of [Subsection 14.20.095\(A\)\(5\)](#).

Staff: Design standards for development in coastal high hazard areas have been clarified and cross-referenced to the State of Oregon Specialty Codes where appropriate. New standards have been added for manufactured dwellings requiring the chassis be elevated at least one (1) foot above BFE. Standards for tanks have also been added. These changes address Section 5.3, 5.3.1, 5.3.1.1, 5.3.1.2, and 5.3.1.3 of the 9/2/19 FEMA Code Audit.

D. Standards for Shallow Flooding Areas (AO Zone).

Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths range from one (1) to three (3) feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow.

1. In AO zones, adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.
2. All new construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade to the building by one foot or more above the depth number specified on the FIRM or by at least two (2) feet if no depth number is specified on the FIRM. For manufactured dwellings the lowest floor is considered to be the bottom of the longitudinal chassis frame beam.
3. All new construction and substantial improvements of nonresidential structures within AO zones shall either:
 - a. Have the lowest floor (including the basement) elevated above the highest adjacent grade of the building by one foot or more above the depth number specified on the FIRM or by at least two (2) feet if no depth number is specified on the FIRM; or

- b. Together with attendant utility and sanitary facilities, be completely floodproofed by one foot or more above the depth number specified on the FIRM or by at least two (2) feet if no depth number is specified on the FIRM, so that any space below that level 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. If this method is used, compliance shall be certified by a registered professional engineer or architect as stated in [Subsection 14.20.095\(B\)\(4\)\(c\)](#).
4. Recreational vehicles placed on sites within AO Zones on the community's Flood Insurance Rate Maps (FIRM) shall either:
 - a. Be on the site for fewer than 180 consecutive days, and
 - b. 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
 - c. Meet the elevation requirements of [Subsection 14.20.095\(D\)\(2\)](#), and the anchoring and other requirements for manufactured dwellings of [Subsection 14.20.095\(B\)\(5\)](#).
5. New and substantially improved appurtenant structures must comply with the standards in [Subsection 14.20.095\(B\)\(3\)](#).
6. Enclosed areas beneath elevated structures shall comply with the requirements in [Subsection 14.20.095\(B\)\(7\)](#).

Staff: Design standards have been clarified and new standards put in place for RVs that are comparable to those applicable to other hazard designations. In reviewing the FIRM panels, it doesn't appear that the city has any designated shallow flooding areas; however, the rules are being retained in case a future map amendment designates lands as subject to shallow flooding. The

*changes address Section 5.2.5, 5.2.5.1, and 5.2.5.2, of the
9/2/19 FEMA Code Audit.*

14.20.100 Variance Procedures

- A. The issuance of a variance is for floodplain management purposes only. Flood insurance premium rates are determined by federal statute according to actuarial risk and will not be modified by the granting of a variance.
- B. Variances shall be processed and authorized by the Planning Commission using a Type III decision making procedure.
- C. Conditions for Variance(s). A variance(s) may only be granted if the following conditions exist:
 1. New construction and substantial improvements to be erected will occur 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; or
 2. New construction, substantial improvements and other development is necessary for the conduct of a functionally dependent use.
- D. Variance(s) permissible pursuant to [Subsection 14.20.100\(C\)](#) may be approved upon a finding that the following criteria have been satisfied.
 1. The structure or other development is protected by methods that minimize flood damages during the base flood.
 2. There is a good and sufficient cause for the variance. Examples of good and sufficient cause include the reconstruction, rehabilitation or restoration of historic structures (that are listed in the National Register of Historic Places, state inventory of Historic Places, or that contribute to a historic district) or a functionally-dependent use (a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water). In considering this criterion, the Planning Commission shall consider:
 - a. The importance of the services provided by the facility to the community.

- b. The necessity to the facility of a waterfront location, where applicable.
 - c. The availability of alternative locations for the use that are not subject to flooding.
 - d. The compatibility of the use with existing and anticipated development.
3. Failure to grant the variance would result in an exceptional hardship to the applicant based on exceptional, unusual, and/or peculiar circumstances of the property. For the reconstruction, rehabilitation or restoration of historic structures (that are listed in the National Register of Historic Places, state inventory of Historic Places, or that contribute to a historic district) or for functionally-dependent uses (a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water) only practical difficulties resulting from the failure to grant the variance rather than exceptional hardship are required.
 4. The granting of the variance will not result in increased flood levels during the base flood discharge, 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.
 5. The variance is the minimum necessary, considering the flood hazard, to afford relief.
- E. Variance Notification. In addition to the notification requirements provided in NMC Chapter 14.52, an applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance and that such construction below the base flood elevation increases risks to life and property. Such notification and a record of all variance actions, including justification for their issuance shall be maintained in accordance with [Subsection 14.20.080\(F\)](#).

Staff: This section has been amended and restructured to clarify the circumstances that qualify for a variance, the process that is to be followed, and the standards that

apply. Variances are limited to situations where the use is a functionally dependent (i.e. water-dependent) use or circumstances where the structure, and surrounding developed properties are nonconforming and situated on small lots where it would be a hardship for them to meet the rules. The process and approval criteria have been clarified and are effectively the same as the existing rules, with the Planning Commission being the approval body. It addresses Section 4.4, 4.4.1, and 4.4.2 of the 9/2/19 FEMA Code Audit.

DRAFT CHECKLIST – Oregon State Model Flood Ordinance

(Created 4/9/2019, updated 8/5/2019)

Community Name: City of Newport

Ordinance No.: 1987

Reviewer's Name: Roxanne Reale-Pilkenton

Ordinance Date: Effective 18 December 2009

Review Date: Completed 02 September 2019

Community Flood Zones:

A AE AE with Floodway V, VE, V1-30, Coastal A

Level of Regulations (Under the Code of Federal Regulations, 44 CFR 60.3):

a) b) c) d) e)

LEGEND

- Black: National Flood Insurance Program and State minimum requirements.
- Red: Wording to be replaced with community's specific information.
- Purple: Only required for communities with Coastal High Hazard Areas.

This checklist is only used to review for compliance with the minimum NFIP and State standards. Recommended optional definitions and standards are provided in Appendices A & B of the Oregon Model Flood Hazard Ordinance.

Section	Verbatim/ Intent	Local Ord. Section	Compliant
1.1 Statutory Authority The State of Oregon has in ORS 203.035 (COUNTIES) OR ORS 197.175 (CITIES) delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the COMMUNITY NAME does ordain as follows:	V	Missing	
1.2 Findings of Fact A. The flood hazard areas of COMMUNITY NAME are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures	V	Missing	

<p>for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.</p> <p>B. These flood losses may be caused by the cumulative effect of obstructions in special flood hazard areas which increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.</p>			
<p>1.3 Statement of Purpose</p> <p>It is the purpose of this ordinance to promote public health, safety, and general welfare, and to minimize public and private losses due to flooding in flood hazard areas by provisions designed to:</p> <p>A. Protect human life and health;</p> <p>B. Minimize expenditure of public money for costly flood control projects;</p> <p>C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;</p> <p>D. Minimize prolonged business interruptions;</p> <p>E. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in special flood hazard areas;</p>	<p>V (order can vary)</p>	<p>NMC 14.20.10 Not Compliant</p>	

<p>F. Help maintain a stable tax base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding;</p> <p>G. Notify potential buyers that the property is in a special flood hazard area</p> <p>H. Notify those who occupy special flood hazard areas that they assume responsibility for their actions</p> <p>I. Participate in and maintain eligibility for flood insurance and disaster relief.</p>			
<p>1.4 Methods of Reducing Flood Losses In order to accomplish its purposes, this ordinance includes methods and provisions for:</p> <p>A. Restricting or prohibiting development which is 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;</p> <p>B. Requiring that development vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;</p> <p>C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;</p>	I	Missing	

<p>D. Controlling filling, grading, dredging, and other development which may increase flood damage;</p> <p>E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.</p>			
<p>2.0 Definitions Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage.</p> <p>Appeal: A request for a review of the interpretation of any provision of this ordinance or a request for a variance.</p> <p>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 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.</p> <p>Area of special flood hazard: The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). “Special flood hazard area” is synonymous in meaning and definition with the phrase “area of special flood hazard”.</p> <p>Base flood: The flood having a one percent chance of being equaled or exceeded in any given year.</p>	<p>V</p>	<p>14.20.020</p> <p>14.20.020(1) Not Compliant</p> <p>14.20.020(2) Not Compliant</p> <p>14.20.020(3) Not Compliant</p> <p>14.20.020(4) Not Compliant</p>	

<p><u>Base flood elevation (BFE):</u> The elevation to which floodwater is anticipated to rise during the base flood.</p> <p><u>Basement:</u> Any area of the building having its floor subgrade (below ground level) on all sides.</p> <p><u>Breakaway wall:</u> 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.</p> <p><u>Coastal high hazard area:</u> An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources.</p> <p><u>Development:</u> 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.</p> <p><u>Flood or Flooding:</u></p> <p>(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:</p> <ul style="list-style-type: none">(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	Missing	14.20.020(5) Compliant
	14.20.020(7) Compliant	
	14.20.020(8) Not Compliant	
		14.20.020(10) Compliant
	14.20.020(14) Not Compliant	

<p>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.</p> <p>(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.</p> <p><u>Flood elevation study:</u> 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.</p> <p><u>Flood Insurance Rate Map (FIRM):</u> The official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).</p> <p><u>Flood Insurance Study (FIS):</u> See “Flood elevation study”.</p> <p><u>Flood proofing:</u> Any combination of structural and nonstructural additions,</p>		<p>Missing</p> <p>14.20.020(15) Not Compliant</p> <p>14.20.020(16) Not Compliant</p> <p>Missing</p>	
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<p>changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.</p> <p>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. Also referred to as "Regulatory Floodway."</p> <p>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.</p> <p>Highest adjacent grade: The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.</p> <p>Historic structure: Any structure that is:</p> <ol style="list-style-type: none"> 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 		<p>14.20.020(17) Not Compliant</p> <p>Missing</p> <p>Missing</p> <p>Missing</p>	
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<p>historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;</p> <p>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</p> <p>4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:</p> <ul style="list-style-type: none"> 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. <p><u>Lowest floor:</u> The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.</p> <p><u>Manufactured dwelling:</u> A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured dwelling" does not</p>		<p>14.20.020(19) Not Compliant</p>	<p>14.20.020(18) Compliant</p>
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<p>include a "recreational vehicle" and is synonymous with "manufactured home".</p> <p><u>Manufactured dwelling park or subdivision:</u> A parcel (or contiguous parcels) of land divided into two or more manufactured dwelling lots for rent or sale.</p> <p><u>Mean sea level:</u> 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.</p> <p><u>New construction:</u> 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 COMMUNITY NAME and includes any subsequent improvements to such structures.</p> <p><u>Recreational vehicle:</u> A vehicle which is:</p> <ol style="list-style-type: none"> 1. Built on a single chassis; 2. 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 temporary living quarters for recreational, camping, travel, or seasonal use. <p><u>Special flood hazard area:</u> See "Area of special flood hazard" for this definition.</p>		<p>14.20.020(20) Not Compliant</p> <p>14.20.020(21) Not Compliant</p> <p>14.20.020(22) Not Compliant</p>	<p>14.20.020(24) Compliant</p>
		<p>Missing</p>	

<p><u>Start of construction:</u> 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 from the date of the permit. 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 dwelling on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.</p> <p><u>Structure:</u> 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 dwelling.</p> <p><u>Substantial damage:</u> 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</p>		<p>14.20.020(25) Not Compliant</p> <p>14.20.020(26) Not Compliant</p>	<p>14.20.020(27) Compliant</p>
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<p>of the structure before the damage occurred.</p> <p>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:</p> <ol style="list-style-type: none"> 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 2. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure." <p>Variance: A grant of relief by COMMUNITY NAME from the terms of a flood plain management regulation.</p> <p>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 in this ordinance is presumed to be in violation until such time as that documentation is provided.</p>		<p>14.20.020(28) Not Compliant</p> <p>14.20.020(30) Not Compliant</p> <p>Missing</p>	
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<p>3.1 Lands to Which This Ordinance Applies This ordinance shall apply to all special flood hazard areas within the jurisdiction of COMMUNITY NAME.</p>	V	Missing	
<p>3.2 Basis for Establishing the Special Flood Hazard Areas The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled “The Flood Insurance Study (FIS) for “EXACT TITLE OF FLOOD INSURANCE STUDY FOR COMMUNITY”, dated DATE (MONTH DAY, FOUR DIGIT YEAR), with accompanying Flood Insurance Rate Maps (FIRMs) LIST ALL EFFECTIVE FIRM PANELS HERE (UNLESS ALL PANELS ARE BEING REPLACED THROUGH A NEW COUNTY_WIDE MAP THAT INCORPORATES ALL PREVIOUS PANELS/VERSIONS, IN THAT SITUATION PANELS DO NOT NEED TO BE INDIVIDUALLY LISTED) are hereby adopted by reference and declared to be a part of this ordinance. The FIS and FIRM panels are on file at INSERT THE LOCATION (I.E. COMMUNITY PLANNING DEPARTMENT LOCATED IN THE COMMUNITY ADMINISTRATIVE BUILDING).</p>	V	14.20.030 Not Compliant	
<p>3.3 Coordination with State of Oregon Specialty Codes Pursuant to the requirement established in ORS 455 that the INSERT COMMUNITY NAME administers and enforces the State of Oregon Specialty Codes, the INSERT COMMUNITY NAME does hereby acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood</p>	I	Missing	

<p>hazard areas. Therefore, this ordinance is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.</p>			
<p>3.4.1 Compliance All development within special flood hazard areas is subject to the terms of this ordinance and required to comply with its provisions and all other applicable regulations.</p>	V	Missing	
<p>3.4.2 Penalties for Noncompliance No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a (INSERT INFRACTION TYPE (I.E. MISDEMEANOR). INSERT PENALTIES PER STATE/LOCAL LAW ASSOCIATED WITH SPECIFIED INFRACTION TYPE (I.E. ANY PERSON WHO VIOLATES THE REQUIREMENTS OF THIS ORDINANCE SHALL UPON CONVICTION THEREOF BE FINED NOT MORE THAN A SPECIFIED AMOUNT OF MONEY...)) Nothing contained herein shall prevent the COMMUNITY NAME from taking such other lawful action as is necessary to prevent or remedy any violation.</p>	I	Missing	
<p>3.5.1 Abrogation This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed</p>	V	Missing	

restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.			
<p>3.5.2 Severability</p> <p>This ordinance and the various parts thereof are hereby declared to be severable. If any section clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.</p>	V	Missing	
<p>3.6 Interpretation</p> <p>In the interpretation and application of this ordinance, all provisions shall be:</p> <ul style="list-style-type: none"> A. Considered as minimum requirements; B. Liberally construed in favor of the governing body; and C. Deemed neither to limit nor repeal any other powers granted under state statutes. 	V	Missing	
<p>3.7.1 Warning</p> <p>The degree of flood protection required by this ordinance 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 ordinance 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.</p>	V	Missing	
<p>3.7.2 Disclaimer of Liability</p> <p>This ordinance shall not create liability on the part of the COMMUNITY NAME, any officer or employee</p>	V	Missing	

thereof, or the Federal Insurance Administrator for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.			
4.1 Designation of the Floodplain Administrator The INSERT INDIVIDUAL JOB TITLE is hereby appointed to administer, implement, and enforce this ordinance by granting or denying development permits in accordance with its provisions. The Floodplain Administrator may delegate authority to implement these provisions.	V	Missing	
4.2 Duties and Responsibilities of the Floodplain Administrator Duties of the floodplain administrator, or their designee, shall include, but not be limited to:	V		14.20.040 (C) Compliant
4.2.1 Permit Review Review all development permits to determine that: <ul style="list-style-type: none"> A. The permit requirements of this ordinance have been satisfied; B. All other required local, state, and federal permits have been obtained and approved. C. Review all development permits to determine if the proposed development is located in a floodway. If located in the floodway assure that the floodway provisions of this ordinance in section Error! Reference source not found. are met; and D. Review all development permits to determine if the proposed development is located in an area where Base Flood Elevation (BFE) data is available either through the Flood Insurance Study (FIS) or from another authoritative source. If BFE data is not available then 	I		14.20.040(C)(2) Compliant 14.20.040(C)(2) Compliant 14.20.040(C)(3) Compliant 14.20.040(D) Compliant

<p>ensure compliance with the provisions of sections 5.1.7; and</p> <p>E. Provide to building officials the Base Flood Elevation (BFE) (ADD FREEBOARD IF COMMUNITY HAS HIGHER ELEVATION STANDARDS) applicable to any building requiring a development permit.</p> <p>F. Review all development permit applications to determine if the proposed development qualifies as a substantial improvement as defined in section 2.0.</p> <p>G. Review all development permits to determine if the proposed development activity is a watercourse alteration. If a watercourse alteration is proposed, ensure compliance with the provisions in section 5.1.1.</p> <p>H. Review all development permits to determine if the proposed development activity includes the placement of fill or excavation.</p>		<p>14.020.040(B)(1) Not Compliant</p> <p>14.20.040(E)(2) Not Compliant</p> <p>14.20.040(F) Not Compliant</p> <p>Missing</p>	
<p>4.2.2 Information to be Obtained and Maintained</p> <p>The following information shall be obtained and maintained and shall be made available for public inspection as needed:</p> <p>A. Obtain, record, and maintain the actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where Base Flood Elevation (BFE) data is provided through the Flood Insurance Study (FIS), Flood Insurance Rate Map (FIRM), or obtained in accordance with section 5.1.7.</p> <p>B. Obtain and record the elevation (in relation to mean sea level) of the natural grade of the building</p>	<p>I</p>	<p>14.20.040(E) Not Compliant</p> <p>Missing</p>	

<p>site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of sections 5.2.4, 5.3.1(F), 4.2.1(B) are adhered to.</p> <p>C. Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, obtain documentation, prepared and sealed by a professional licensed surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement).</p> <p>D. Where base flood elevation data are utilized, obtain As-built certification of the elevation (in relation to mean sea level) of the lowest floor (including basement) prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection.</p> <p>E. Maintain all Elevation Certificates (EC) submitted to (INSERT COMMUNITY NAME);</p> <p>F. Obtain, record, and maintain the elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this ordinance and where Base Flood Elevation (BFE) data is provided through the FIS, FIRM, or obtained in accordance with section 5.1.7.</p> <p>G. Maintain all floodproofing certificates required under this ordinance;</p> <p>H. Record and maintain all variance actions, including justification for their issuance;</p>		<p>Missing</p> <p>14.20.040(E)(1) Not Compliant</p> <p>Missing</p> <p>14.20.040(E) Not Compliant</p> <p>Missing</p> <p>Missing</p>	
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<p>I. Obtain and maintain all hydrologic and hydraulic analyses performed as required under section 5.2.4.</p> <p>J. Record and maintain all Substantial Improvement and Substantial Damage calculations and determinations as required under section 4.2.4.</p> <p>K. Maintain for public inspection all records pertaining to the provisions of this ordinance.</p>		<p>Missing</p> <p>Missing</p>	<p>14.20.040(E)(3) Compliant</p>
<p>4.2.3.1 Community Boundary Alterations The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.</p>	V	Missing	
<p>4.2.3.2 Watercourse Alterations Notify adjacent communities, the Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. This</p>	V	14.20.040(F) Not Compliant	

<p>notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:</p> <ul style="list-style-type: none"> A. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or B. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance. <p>The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under section 4.2.3.3. Ensure compliance with all applicable requirements in sections 4.2.3.3 and 5.1.1.</p>			
<p>4.2.3.3 Requirement to Submit New Technical Data</p> <p>A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Section 44 of the Code of Federal Regulations (CFR), Sub-Section 65.3. The community may require the</p>	I	Missing	

<p>applicant to submit such data and review fees required for compliance with this section through the applicable FEMA Letter of Map Change (LOMC) process.</p> <p>The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:</p> <ul style="list-style-type: none"> A. Proposed floodway encroachments that increase the base flood elevation; and B. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway. <p>An applicant shall Notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).</p>		Missing	
<p>4.2.4 Substantial Improvement and Substantial Damage Assessments and Determinations</p> <p>Conduct Substantial Improvement (SI) (as defined in section 2.0) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files in accordance with section 4.2.2.</p> <p>Conduct Substantial Damage (SD) (as defined in section 2.0) assessments when structures are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the special flood hazard area (as established in section 3.2) are damaged to the extent that the cost of restoring the structure to its before damaged condition would equal or</p>	I	Missing	

<p>exceed 50 percent of the market value of the structure before the damage occurred.</p>			
<p>4.3.1 Floodplain Development Permit Required A development permit shall be obtained before construction or development begins within any area horizontally within the special flood hazard area established in section 3.2. The development permit shall be required for all structures, including manufactured dwellings, and for all other development, as defined in section 2.0, including fill and other development activities.</p>	<p>V</p>	<p>14.20.040(A) Not Compliant</p>	
<p>4.3.2 Application for Development Permit Application for a development permit may be made on forms furnished by the Floodplain Administrator 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:</p> <p>A. In riverine flood zones, the proposed elevation (in relation to mean sea level), of the lowest floor (including basement) and all attendant utilities of all new and substantially improved structures; in accordance with the requirements of section 4.2.2.</p> <p>B. In coastal flood zones (V zones and coastal A zones), the proposed elevation in relation to mean sea level of the bottom of the lowest structural member of</p>	<p>I</p>	<p>14.20.040(B)(1) Not Compliant</p> <p>14.20.050(18)(b) Not Compliant</p>	<p>14.20.040(B) Compliant</p>

<p>the lowest floor (excluding pilings and columns) of all structures, and whether such structures contain a basement;</p> <p>C. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed.</p> <p>D. Certification by a registered professional engineer or architect licensed in the State of Oregon that the floodproofing methods proposed for any nonresidential structure meet the floodproofing criteria for nonresidential structures in section 5.2.3.3.</p> <p>E. Description of the extent to which any watercourse will be altered or relocated.</p> <p>F. Base Flood Elevation data for subdivision proposals or other development when required per sections 4.2.1 and 5.1.6.</p> <p>G. Substantial improvement calculation for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure.</p> <p>H. The amount and location of any fill or excavation activities proposed.</p>		<p>14.20.040(B)(2) Compliant</p> <p>14.20.040(B)(3) Compliant</p> <p>14.20.040(B)(4) Compliant</p> <p>14.20.050(8)(d) Not Compliant</p> <p>Missing</p> <p>Missing</p>	
<p>4.4 Variance Procedure The issuance of a variance is for floodplain management purposes only. Flood insurance premium rates are determined by federal statute according to actuarial risk and will not be modified by the granting of a variance.</p>	I	14.20.060(A) Not Compliant	
<p>4.4.1 Conditions for Variance</p>	I (but order may vary and additional more		

<p>A. Generally, 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, in conformance with the provisions of sections 4.4.1 (C) and (E), and 4.4.2. As the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases.</p> <p>B. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.</p> <p>C. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.</p> <p>D. Variances shall only be issued upon:</p> <ol style="list-style-type: none"> 1. A showing of good and sufficient cause; 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant; 3. 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 laws or ordinances. <p>E. Variances may be issued by a community for new construction and substantial improvements and for other development necessary</p>	<p>restrictive language may be added. Or may not allow variances)</p>	<p>14.20.060(B) Missing</p> <p>Missing</p> <p>14.20.060(B) Not Compliant</p>	<p>14.20.060(B)(4) Complaint</p> <p>14.20.060(B)(1)(a) Complaint</p> <p>14.20.060(B)(2) Compliant</p> <p>14.20.060(B)(3) Compliant</p>
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<p>for the conduct of a functionally dependent use provided that the criteria of section 4.4.1 (B) – (D) are met, and 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.</p>			
<p>4.4.2 Variance Notification Any applicant to whom a variance is granted shall be given written notice that the issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance and that such construction below the base flood elevation increases risks to life and property. Such notification and a record of all variance actions, including justification for their issuance shall be maintained in accordance with section 4.2.2.</p>	V	14.20.060(B) Not Compliant	
<p>5.1 General Standards In all special flood hazard areas, the following standards shall be adhered to:</p>	I		14.20.050(A) Compliant
<p>5.1.1 Alteration of Watercourses Require that the flood carrying capacity within the altered or relocated portion of said watercourse is maintained. Require that maintenance is provided within the altered or relocated portion of said watercourse to ensure that the flood carrying capacity is not diminished. Require compliance with sections 4.2.3.2 and 4.2.3.3.</p>	V	14.20.040(E) Not Compliant	
<p>5.1.2 Anchoring A. All new construction and substantial improvements shall be anchored to prevent flotation,</p>	V	14.20.050(A)(1)(a) Not Compliant	

<p>collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.</p> <p>B. All manufactured dwellings shall be anchored per section 5.2.3.4.</p>			<p>14.20.050(A)(1)(b) Compliant</p>
<p>5.1.3 Construction Materials and Methods</p> <p>A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.</p> <p>B. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.</p>	<p>V</p>		<p>14.20.050(A)(6)(a) Compliant</p> <p>14.20.050(A)(6)(b) Compliant</p>
<p>5.1.4.1 Water Supply, Sanitary Sewer, and On-Site Waste Disposal Systems</p> <p>A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.</p> <p>B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.</p> <p>C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.</p>	<p>V</p>	<p>14.20.050(A)(7)(b) Not Compliant</p> <p>14.20.050(A)(7)(c) Not Compliant</p>	<p>14.20.050(A)(7)(a) Compliant</p>

<p>5.1.4.2 Electrical, Mechanical, Plumbing, and Other Equipment</p> <p>Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated at or above the base flood level (INSERT ANY COMMUNITY FREEBOARD REQUIREMENT HERE) or shall be designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during conditions of flooding. In addition, electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall:</p> <p>A. If replaced as part of a substantial improvement shall meet all the requirements of this section.</p> <p>B. Not be mounted on or penetrate through breakaway walls.</p>	<p>V</p>	<p>14.20.050(A)(6)(c) Not Compliant</p> <p>Missing</p> <p>Missing</p>	
<p>5.1.5 Tanks</p> <p>A. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.</p> <p>B. Above-ground tanks shall be installed at or above the base flood level (INSERT COMMUNITY FREEBOARD REQUIREMENT HERE) or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.</p> <p>C. In coastal flood zones (V Zones or coastal A Zones) when elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on foundations that conform to the requirements of the State of Oregon Specialty Code.</p>	<p>V</p>	<p>Missing</p> <p>Missing</p> <p>Missing</p>	

<p>5.1.6 Subdivision Proposals</p> <p>A. All new subdivision proposals and other proposed new 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.</p> <p>B. All new subdivision proposals and other proposed new developments (including proposals for manufactured home parks and subdivisions) shall:</p> <ol style="list-style-type: none"> 1. Be consistent with the need to minimize flood damage. 2. Have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage. 3. Have adequate drainage provided to reduce exposure to flood hazards. 	<p>V</p>	<p>14.20.050(A)(8) Not Compliant</p> <p>Missing</p> <p>14.20.050(A)(8)(a) Not Compliant</p> <p>14.20.050(A)(8)(b) Not Compliant</p> <p>14.20.050(A)(8)(c) Not Compliant</p>	
<p>5.1.7 Use of Other Base Flood Data</p> <p>When Base Flood Elevation data has not been provided in accordance with section 3.2 the local floodplain administrator shall obtain, review, and reasonably utilize any Base Flood Elevation data available from a federal, state, or other source, in order to administer section 5.0. All new subdivision proposals and other proposed new developments (including proposals for manufactured dwelling parks and subdivisions) must meet the requirements of section 5.1.6.</p>	<p>V</p>	<p>14.20.040(D) Not Compliant</p>	

<p>Base Flood Elevations shall be determined for development proposals that are 5 acres or more in size or are 50 lots or more, whichever is lesser in any A zone that does not have an established base flood elevation. Development proposals located within a riverine unnumbered A Zone shall be reasonably safe from flooding; the test of reasonableness includes use of historical data, high water marks, FEMA provided Base Level Engineering data, and photographs of past flooding, etc... where available. (INSERT REFERENCE TO ANY OF THIS TYPE OF INFORMATION TO BE USED FOR REGULATORY PURPOSES BY YOUR COMMUNITY, I.E. BASE LEVEL ENGINEERING DATA, HIGH WATER MARKS, HISTORICAL OR OTHER DATA THAT WILL BE REGULATED TO. THIS MAY BE NECESSARY TO ENSURE THAT THE STANDARDS APPLIED TO RESIDENTIAL STRUCTURES ARE CLEAR AND OBJECTIVE. IF UNCERTAIN SEEK LEGAL ADVICE, AT A MINIMUM REQUIRE THE ELEVATION OF STRUCTURES 2FEET ABOVE HIGHEST ADJACENT GRADE). Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.</p>		Missing	
<p>5.1.8 Structures Located in Multiple or Partial Flood Zones In coordination with the State of Oregon Specialty Codes: A. When a structure is located in multiple flood zones on the community’s Flood Insurance Rate Maps (FIRM) the provisions for the more restrictive flood zone shall apply. B. When a structure is partially located in a special flood hazard area, the entire structure shall meet the</p>	I	Missing Missing	

<p>requirements for new construction and substantial improvements.</p>			
<p>5.2 Specific Standards for Riverine (including all non-coastal) flood zones These specific standards shall apply to all new construction and substantial improvements in addition to the General Standards contained in section 5.1 of this ordinance.</p>	<p>I</p>	<p>14.20.050(B) Not Compliant</p>	
<p>5.2.1 Flood Openings All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the Base Flood Elevation, including crawl spaces shall:</p> <p>A. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exist of floodwaters;</p> <p>B. Be used solely for parking, storage, or building access;</p> <p>C. Be certified by a registered professional engineer or architect or meet or exceed all of the following minimum criteria:</p> <ol style="list-style-type: none"> 1. A minimum of two openings, 2. The total net area of non-engineered openings shall be not less than one (1) square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosure walls, 3. The bottom of all openings shall be no higher than one foot above grade. 4. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that 	<p>V</p>	<p>14.20.050(B)(1)(a) & (b) Not Compliant</p> <p>14.20.050(B)(1)(b) Not Compliant</p> <p>Missing</p> <p>14.20.050(B) Not Compliant</p> <p>14.20.050(B) Not Compliant</p> <p>14.20.050(B) Not Compliant</p> <p>15.20.050(B) Not Compliant</p>	<p>14.20.050(B) Compliant</p>

<p>they shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area.</p> <p>5. All additional higher standards for flood openings in the State of Oregon Residential Specialty Codes Section R322.2.2 shall be complied with when applicable.</p>		Missing	
<p>5.2.2 Garages</p> <p>A. Attached garages may be constructed with the garage floor slab below the Base Flood Elevation (BFE) in riverine flood zones, if the following requirements are met:</p> <ol style="list-style-type: none"> 1. If located within a floodway the proposed garage must comply with the requirements of section 5.2.4. 2. The floors are at or above grade on not less than one side; 3. The garage is used solely for parking, building access, and/or storage; 4. The garage is constructed with flood openings in compliance with section 5.2.1 to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. 5. The portions of the garage constructed below the BFE are constructed with materials resistant to flood damage; 	I	<p>Missing</p> <p>Missing</p> <p>Missing</p> <p>Missing</p> <p>Missing</p>	

<p>6. The garage is constructed in compliance with the standards in section 5.1; and</p> <p>7. The garage is constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.</p> <p>B. Detached garages must be constructed in compliance with the standards for appurtenant structures in section 5.2.3.6 or nonresidential structures in section 5.2.3.3 depending on the square footage of the garage.</p>		<p>Missing</p> <p>Missing</p>	<p>14.20.050(13) Compliant</p>
<p>5.2.3 For Riverine (Non-Coastal) Special Flood Hazard Areas with Base Flood Elevations</p> <p>In addition to the general standards listed in section 5.1 the following specific standards shall apply in Riverine (non-coastal) special flood hazard areas with Base Flood Elevations (BFE): Zones A1-A30, AH, and AE.</p>	<p>I</p>		<p>14.20.050(B) Compliant</p>
<p>5.2.3.1 Before Regulatory Floodway</p> <p>In areas where a regulatory floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's Flood Insurance Rate Map (FIRM), unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation</p>	<p>V</p>	<p>14.20.050(B)(17) Not Compliant</p>	

<p>of the base flood more than one foot at any point within the community.</p>			
<p>5.2.3.2 Residential Construction</p> <p>A. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at or above the Base Flood Elevation (BFE) (INSERT ADDITIONAL FREEBOARD FOR YOUR COMMUNITY – RECOMMEND MINIMUM OF 1FT ABOVE BFE).</p> <p>B. Enclosed areas below the lowest floor shall comply with the flood opening requirements in section 5.2.1.</p>	<p>V</p>	<p>14.20.050(B)(1)(a) Not Compliant</p> <p>14.20.050(B)(1)(b) Not Compliant</p>	
<p>5.2.3.3 Non-Residential Construction</p> <p>A. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall:</p> <ol style="list-style-type: none"> 1. Have the lowest floor, including basement elevated at or above the Base Flood Elevation (BFE) (INSERT ANY ADDITIONAL FREEBOARD REQUIREMENTS FOR YOUR COMMUNITY); <p style="margin-left: 40px;">Or, together with attendant utility and sanitary facilities,</p> 2. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water; 3. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. 	<p>V</p>	<p>14.20.050(B)(13) Not Compliant</p> <p>14.20.050(B)(13) Not Compliant</p>	<p>14.20.050(B)(13)(a) Compliant</p> <p>14.20.050(B)(13)(b) Compliant</p>

<p>4. 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 section based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Floodplain Administrator as set forth section 4.2.2.</p> <p>B. Non-residential structures that are elevated, not floodproofed, shall comply with the standards for enclosed areas below the lowest floor in section 5.2.1.</p> <p>C. Applicants floodproofing non-residential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the floodproofed level (e.g. a building floodproofed to the base flood level will be rated as one (1) foot below.</p>		<p>14.20.050(B)(13) (d) Not Compliant</p>	<p>14.20.050(B)(13)(c) Compliant</p> <p>14.20.050(B)(13)(e) Compliant</p>
<p>5.2.3.4 Manufactured Dwellings</p> <p>A. New or substantially improved manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with section 5.2.1;</p> <p>B. The bottom of the longitudinal chassis frame beam shall be at or above Base Flood Elevation;</p>	<p>V</p>	<p>14.20.050(B)(14) (a) Not Compliant</p> <p>Missing</p>	

<p>C. New or substantially improved manufactured dwellings shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA’s “Manufactured Home Installation in Flood Hazard Areas” guidebook for additional techniques), and;</p> <p>D. Electrical crossover connections shall be a minimum of twelve (12) inches above Base Flood Elevation (BFE).</p>		<p>14.20.050(A)(1)(b) Not Compliant</p> <p>Missing</p>	
<p>5.2.3.5 Recreational Vehicles Recreational vehicles placed on sites are required to:</p> <p>A. Be on the site for fewer than 180 consecutive days,</p> <p>B. 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</p> <p>C. Meet the requirements of section 5.2.3.4, including the anchoring and elevation requirements for manufactured dwellings.</p>	V	<p>Missing – was only able to find Recreational Vehicle regulations for V zones.</p> <p>See above.</p>	
<p>5.2.3.6 Appurtenant (Accessory) Structures Relief from elevation or floodproofing requirements for Residential and Non-Residential structures in Riverine (Non-Coastal) flood zones may be granted for appurtenant structures that meet the following requirements:</p> <p>A. Appurtenant structures located partially or entirely within the floodway must comply with</p>	V	<p>Missing</p> <p>Missing</p>	

<p>requirements for development within a floodway found in section 5.2.4.</p> <p>B. Appurtenant structures must only be used for parking, access, and/or storage and shall not be used for human habitation;</p> <p>C. In compliance with State of Oregon Specialty Codes, Appurtenant structures on properties that are zoned residential are limited to one-story structures less than 200 square feet, or 400 square feet if the property is greater than two (2) acres in area and the proposed appurtenant structure will be located a minimum of 20 feet from all property lines. Appurtenant structures on properties that are zoned as non-residential are limited in size to 120 square feet.</p> <p>D. The portions of the appurtenant structure located below the Base Flood Elevation must be built using flood resistant materials;</p> <p>E. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.</p> <p>F. The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in section 5.2.1;</p> <p>G. Appurtenant structures shall be located and constructed to have low damage potential;</p> <p>H. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority</p>		<p>Missing</p> <p>Missing</p> <p>Missing</p> <p>Missing</p> <p>Missing</p> <p>Missing</p> <p>Missing</p> <p>Missing</p>	
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<p>persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with section 5.1.5.</p> <p>I. Appurtenant structures shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.</p>		Missing	
<p>5.2.4 Floodways</p> <p>Located within the special flood hazard areas established in section 3.2 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of the floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:</p> <p>A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless:</p> <ol style="list-style-type: none"> 1. Certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge; <p>Or,</p>	V	<p>14.20.050(B)(16) (a) Not Compliant</p> <p>14.20.050(B)(16) (a)(i) Not Compliant</p> <p>14.20.050(B)(16) (a)(i) Not Compliant</p>	

<p>2. A community may permit encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations, provided that a Conditional Letter of Map Revision (CLOMR) is applied for and approved by the Federal Insurance Administrator, and the requirements for such revision as established under Volume 44 of the Code of Federal Regulations, section 65.12 are fulfilled.</p> <p>B. If the requirements of section 5.2.4 (A) are satisfied, all new construction, substantial improvements, and other development shall comply with all other applicable flood hazard reduction provisions of section 5.0.</p>		<p>Missing</p> <p>14.20.050(B)(16) (b) Not Compliant</p>	
<p>5.2.5 Standards for Shallow Flooding Areas</p> <p>Shallow flooding areas appear on FIRMs as AO zones with depth designations or as AH zones with Base Flood Elevations. For AO zones the base flood depths range from one (1) to three (3) feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow.</p> <p>For both AO and AH zones, adequate drainage paths are required around structures on slopes to guide floodwaters around and away from proposed structures.</p>	<p>V</p>	<p>Missing</p> <p>14.20.050(B)(20) (b)(iii) Not Compliant</p>	
<p>5.2.5.1 Standards for AH Zones</p>	<p>I</p>		

<p>Development within AH Zones must comply with the standards in sections 5.1, 5.2, and 5.2.5(A).</p>		N/A	
<p>5.2.5.2 Standards for AO Zones In AO zones, the following provisions apply in addition to the requirement in section 5.2.5 (A):</p> <p>A. New construction and substantial improvement of residential structures and manufactured dwellings within AO zones shall have the lowest floor, including basement, elevated above the highest grade adjacent to the building, at minimum at or above the depth number specified on the Flood Insurance Rate Maps (FIRM) (INSERT COMMUNITY FREEBOARD REQUIREMENT HERE) (at least two (2) feet if no depth number is specified). For manufactured dwellings the lowest floor is considered to be the bottom of the longitudinal chassis frame beam.</p> <p>B. New construction and substantial improvements of non-residential structures within AO zones shall either:</p> <ol style="list-style-type: none"> 1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, at minimum at or above the depth number specified on the Flood Insurance Rate Maps (FIRMS) (INSERT COMMUNITY FREE BOARD REQUIREMENT HERE) (at least two (2) feet if no depth number is specified); or 2. Together with attendant utility and sanitary facilities, be completely 	V	<p>14.20.050(B)(20) Not Compliant</p> <p>14.20.050(B)(20) (a) Not Compliant</p> <p>14.20.050(B)(20) (a) Not Compliant</p> <p>14.20.050(B)(20) (b)(ii) Not Compliant</p>	<p>14.20.050(B)(20)(b) Compliant</p>

<p>floodproofed to or above the depth number specified on the FIRM (INSERT COMMUNITY FREEBOARD REQUIREMENT HERE) or a minimum of two (2) feet above the highest adjacent grade if no depth number is specified, so that any space below that level 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. If this method is used, compliance shall be certified by a registered professional engineer or architect as stated in section 5.2.3.3(A)(4).</p> <p>C. Recreational vehicles placed on sites within AO Zones on the community’s Flood Insurance Rate Maps (FIRM) shall either:</p> <ol style="list-style-type: none"> 1. Be on the site for fewer than 180 consecutive days, and 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 elevation requirements of section 5.2.5.2(A), and the anchoring and other requirements for 		<p>Missing – was only able to find Recreational Vehicle regulations for V zones.</p> <p>Missing</p> <p>Missing</p>	
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<p>manufactured dwellings of section 5.2.3.4.</p> <p>D. In AO zones, new and substantially improved appurtenant structures must comply with the standards in section 5.2.3.6.</p> <p>E. In AO zones, enclosed areas beneath elevated structures shall comply with the requirements in section 5.2.1.</p>		<p>14.20.050(B)(20) (b) Not Compliant</p> <p>14.20.050(B)(20) (c) Not Compliant</p>	
<p>5.3 Specific Standards for Coastal High Hazard Flood Zones</p> <p>Located within special flood hazard areas established in section 3.2 are Coastal High Hazard Areas, designated as Zones V1-V30, VE, V, or coastal A zones as identified on the FIRMs as the areas between the Limit of Moderate Wave Action (LiMWA) and the Zone V boundary. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions of this ordinance and the State of Oregon Specialty Codes, the following provisions shall apply in addition to the general standards provisions in section 5.1.</p>	I		14.20.050(B)(18) Compliant
<p>5.3.1 Development Standards</p> <p>A. All new construction and substantial improvements in Zones V1-V30 and VE, V, and coastal A zones (where base flood elevation data is available) shall be elevated on pilings and columns such that:</p> <ol style="list-style-type: none"> 1. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated a minimum of one foot above the base flood level; and 	V	<p>14.20.050(B)(18) (a) Not Compliant</p> <p>14.20.050(B)(18) (b) Not Compliant</p>	

<p>2. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those specified by the State of Oregon Specialty Codes;</p>		<p>14.20.050(B)(18) (c) Not Compliant</p>	
<p>B. A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this section.</p>		<p>14.20.050(B)(18) (c) Not Compliant</p>	
<p>C. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures and whether or not such structures contain a basement. The local floodplain administrator shall maintain a record of all such information in accordance with section 4.2.2.</p>		<p>14.20.050(B)(18) (e) Not Compliant</p>	
<p>D. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or</p>			<p>14.20.050(B)(18) (g) Compliant</p>

<p>constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.</p> <p>For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:</p> <ol style="list-style-type: none"> 1. Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and 2. If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation. 3. Walls intended to break away under flood loads shall have flood openings that meet or exceed the criteria for flood openings in section 5.2.1. <p>E. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement,</p>		<p>14.20.050(B)(18) (g) Not Compliant</p> <p>Missing</p> <p>14.20.050(B)(18) (g)(ii) Not Compliant</p>	<p>14.20.050(B)(18) (g)(i) Compliant</p> <p>14.20.050(B)(18) (h) Compliant</p>
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<p>or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and nonstructural). Maximum water loading values to be used in this determination shall be those associated with the base flood. Maximum wind loading values used shall be those specified by the State of Oregon Specialty Codes.</p> <p>F. Prohibit the use of fill for structural support of buildings.</p> <p>G. All new construction shall be located landward of the reach of mean high tide.</p> <p>H. Prohibit man-made alteration of sand dunes which would increase potential flood damage.</p> <p>I. All structures, including but not limited to residential structures, non-residential structures, appurtenant structures, and attached garages shall comply with all the requirements of section 5.3.1 Floodproofing of non-residential structures is prohibited.</p>		Missing	<p>14.20.050(18)(h) Compliant</p> <p>14.20.050(18)(f) Compliant</p> <p>14.20.050(18)(j) Compliant</p>
<p>5.3.1.1 Manufactured Dwelling Standards for Coastal High Hazard Zones</p> <p>All manufactured dwellings to be placed or substantially improved within Coastal High Hazard Areas (Zones V, V1-30, VE, or Coastal A) shall meet the following requirements:</p> <p>A. Comply with all of the standards within section 5.3;</p> <p>B. The bottom of the longitudinal chassis frame beam shall be elevated to a minimum of one</p>	V	Missing	

Oregon Model Flood Ordinance Regulatory Crosswalk

Section	Code of Federal Regulations (CFR) and Technical Bulletin Citation(s)	State of Oregon Citation(s) (Goal 7, Specialty Codes*, ORS)
1.1 Statutory Authorization	59.22(a)(2)	Goal 7; ORS 203.035 (Counties), ORS 197.175 (Cities)
1.2 Findings of Fact	59.22(a)(1)	Goal 7
1.3 Statement of Purpose	59.2; 59.22(a)(1) and (8); 60.22	Goal 7
1.4 Methods of Reducing Flood Losses	60.22	Goal 7
2.0 Definitions	59.1	Goal 7
3.1 Lands to Which this Ordinance Applies	59.22(a)	Goal 7
3.2 Basis for Establishing the Special Flood Hazard Areas	59.22(a)(6); 60.2(h)	Goal 7
3.3 Coordination with Specialty Codes Adopted by the State of Oregon Building Codes Division		ORS 455
3.4.1 Compliance	60.1(b) – (d)	Goal 7
3.4.2 Penalties for Noncompliance	60.1(b) – (d)	Goal 7
3.5.1 Abrogation	60.1(b) – (d)	Goal 7
3.5.2 Severability		
3.6 Interpretation	60.1(b) – (d)	Goal 7
3.7.1 Warning		
3.7.2 Disclaimer of Liability		
4.1 Designation of the Floodplain Administrator	59.22(b)(1)	Goal 7
4.2.1 Permit Review	60.3(a)(1) – (3); 60.3(c)(10)	Goal 7
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5.3.1.1 Manufactured Dwelling Standards for Coastal High Hazard Zones	60.3(e)(8)(i) – (iii)	Goal 7; RR322.3.2; State of OR Manufactured Dwelling Installation Specialty Code (MDISC) and associated statewide Code Interpretation dated 1/1/2011
5.3.1.2 Recreational Vehicle Standards for Coastal High Hazard Zones	60.3(e)(9)(i)- (iii)	Goal 7

CHAPTER 14.20 FLOOD HAZARD AREA

14.20.010 Purpose

It is the purpose of this Flood Hazard Area Section to regulate the use of those areas subject to periodic flooding, to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions.

14.20.020 Definitions

Words or phrases used in this Code shall be interpreted so as to give them the meaning they have in common usage and to give this Code its most reasonable application.

1. Appeal means a request for a review of the administrator's interpretation of any provision of [Section 14.16](#) of this Code or a request for a variance.
2. Area of shallow flooding means a designated AO or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one (1) to three (3) feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.
3. Area of special flood hazard means the land in the flood plain subject to a 1% or greater chance of flooding in any given year. Designation on maps always includes the letters "A" or "V".
4. Base flood means the flood having a 1% chance of being equaled or exceeded in any given year. This is also referred to as the "100-year flood". Designation on maps always includes the letters "A" or "V".
5. Basement means any area of the building having its floor or subgrade (below ground level) on all sides.
6. Below grade crawlspace means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed 4 feet at any point.

7. Breakaway walls means 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.
8. Coastal high hazard area means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designed on a FIRM as Zones V1 - V30, VE, or V.

(* Entire section amended by Ordinance No. 1987 (12-18-09).)

9. Critical Facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.
10. Development means 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 located within the area of special flood hazard.
11. Elevated Building means for insurance purposes, a non-basement building that has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
12. Existing Manufactured Home Park or Subdivision means a manufactured home park 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 these floodplain management regulations.
13. Expansion of Manufactured Home Park or Subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the

manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

14. Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:
 - A. The overflow in inland or tidal waters; and/or
 - B. The unusual and rapid accumulation of run-off of surface waters from any source.
15. Flood insurance rate map (FIRM) means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.
16. Flood insurance study means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary Floodway Map, and the water surface elevation of the base flood.
17. Floodway means the channel of a river or other water-course and the adjacent areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.
18. Lowest floor means the lowest floor of the lowest enclosed area (including the basement). An unfinished or flood-resistant enclosure, usable solely for the 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 found in [14.20.050\(B\)\(1\)\(b\)](#) of this Code.
19. Manufactured home means a structure, transportable in one or more sections, that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes, the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance

purposes, the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

20. Manufactured home park or manufactured home subdivision means a parcel or contiguous parcels of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets).
21. Mean sea level (MSL) means the average height of the sea for all stages of the tide.
22. New construction means the structures for which the "start of construction" commenced on or after the effective date of this Zoning Ordinance.
23. New manufactured home park or subdivision means 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 adopted floodplain management regulations.
24. Recreational vehicle means a vehicle which is:
 - A. built on a single chassis;
 - B. 400 square feet or less when measured at the largest horizontal projection;
 - C. designed to be self-propelled or permanently towable by a light duty truck; and
 - D. designed primarily not for uses as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
25. Start of construction includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, 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 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 filling), the installation of streets and/or walkways, excavation (for a basement, footings, piers, or foundation or the erection of temporary forms), or the installation on the property of accessory buildings (such as garages or sheds not occupied as dwelling units or not part of the main structures). For 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.

26. Structure means a walled and roofed building, including a gas or liquid storage tank that is principally above the ground.

27. Substantial damage means 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.

28. Substantial improvement means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure either:

A. before the improvement or repair is started; or

B. if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either of the following:

1. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications that are solely necessary to assure safe living conditions; or

2. Any alteration of a structure listed on the National Register of Historic Places or the State Inventory of Historic Places.

29. State Building Code means the combined specialty codes.

30. Variance means a grant of relief from the requirements of this Code that permits construction in a manner that would otherwise be prohibited by this Code.

31. Water dependent means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

14.20.030 General Provisions

The basis for establishing the areas of special flood hazard are the areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Lincoln County, Oregon and Incorporated Areas", dated December 18, 2009. The Flood Insurance Study (FIS) and accompanying Flood Insurance Rate Maps (FIRMs) are on file at the City of Newport City Hall in the Community Development Department and are hereby adopted by reference and declared to be part of this Code.

14.20.040 Administration

- A. Establishment of Building/Development Permit. A Building/Development Permit shall be required in conformance with the provisions of this Section. The permit shall be for all structures, including manufactured homes, as set forth in the "definitions", and for all other development, including fill and other activities as set forth in the definitions.
- B. Application for Permit. Application shall be made on forms provided by the Community Development Department for this purpose 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 of flood-proofing in any structure;
 3. Certification by a registered professional engineer or architect that the flood-proofing methods for any nonresidential structure meet the flood-proofing criteria in [14.20.050\(B\)\(2\)](#); and
 4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.
- C. Duties and Responsibilities. The duties of the Building Official shall include, but not be limited to, permit review as follows:
1. Review all development permits to require that the permit requirements and conditions of this Code have been satisfied.
 2. Review all development permits to require 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 [Subsection 14.20.040\(16\)\(C\)\(1\)](#) are met.
- D. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with this Section, 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 [Sections 14.20.050\(B\)](#) (Specific Standards) and [14.20.020\(17\)](#) (Floodways).
- E. Information to be obtained and maintained by the Building Official:
1. Where the base flood elevation data is provided through the Flood Insurance Study or required as in

[14.06.040](#), the actual elevation, in relation to mean sea level, of the lowest floor (including the basement and below-grade crawlspaces) of all new or substantially improved structures in a flood hazard overlay zone shall be obtained and recorded.

2. For all new or substantially improved floodproofed structures in a flood hazard overlay zone:
 - a. Verify and record the actual elevation (in relation to mean sea level);
 - b. Maintain the floodproofing certifications required in [14.20.040\(B\)\(3\)](#).
3. Maintain for public inspection all records pertaining to the provisions of this Code.

F. Alteration of Watercourses. The Building Official shall:

1. Notify Lincoln County, the Department of Land Conservation and Development, and other appropriate state and federal agencies prior to any alteration or relocation of a water course and submit evidence of such notification to the Federal Insurance
2. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

G. Interpretation of FIRM Boundaries. The Building Official shall make interpretations where 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). Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in [Section 14.20.060](#), Appeals and Variance Procedures.

14.20.050 Provisions for Flood Hazard Reduction

- A. General Standards. In areas of special flood hazard as adopted by this ordinance (which may be illustrated on a zoning map as a Flood Hazard Overlay Zone (FH Zone)) the following provisions are required:

1. Anchoring.
 - a. All new construction and substantial improvements lateral movement of the structure.
 - b. All manufactured homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:
 2. Over-the-top ties be provided at each end of the manufactured home, with two (2) additional ties per side at intermediate locations, and manufactured homes less than 50 feet long requiring one (1) additional tie per side.
 3. Frame ties are to be provided at each corner of the home with five (5) additional ties per side at intermediate points, and manufactured homes less than 50 feet long will require four (4) additional ties per side;
 4. All components of the anchoring system are to be capable of carrying a force of 4,800 pounds; and
 5. Additions to the manufactured home are to be similarly anchored.
 - a. An alternative method of anchoring may involve a system designed to withstand the wind force of 90 miles an hour or greater.

Certification must be provided by a registered structural engineer to the Building Official that this standard has been met.
 - b. All modular homes shall comply with the requirements of the applicable building code.
6. Construction Materials and Methods.
 - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - b. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.

- c. 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.
7. 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 systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from the systems into the flood waters; and
 - c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with Department of Environmental Quality regulations.
8. Subdivision Proposals.
- a. All subdivision proposals shall be consistent with the need to minimize flood damage.
 - b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
 - c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
 - d. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments that contain at least 50 lots or five (5) acres (whichever is less).
9. Critical Facilities.
- a. New critical facilities shall be located outside the limits of the Flood Hazard Overlay Zone, unless no feasible alternative site is available.

- b. New critical facilities constructed within the Flood Hazard Overlay Zone shall have the lowest floor elevated three feet or to the height of the 500-year flood, whichever is higher.
- c. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters.
- d. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

10. Review of Building Permit Applications by Building Official. Where elevation data is not available, either through the Flood Insurance Study or from another authoritative source ([14.20.040\(D\)](#)), applications for building permits shall be reviewed to see that proposed construction will be reasonably safe from flooding. A determination of reasonable safety is a judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available for the area. Failure to elevate the lowest floor at least two (2) feet above grade in these zones may result in higher insurance rates.

B. Specific Standards. In all areas of special flood hazards (which may be illustrated on a zoning map as a FH Zone) adopted by this ordinance where base flood elevation data has been provided as set forth in this Section, the following provisions are required:

1. Residential Construction.

- a. New construction or substantial improvement of any residential structures shall have the lowest floor, including the basement, elevated to a minimum of one (1) foot above the base flood elevation.
- b. 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 (1) 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 (1) foot above grade.
- c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

13. Nonresidential Construction. New construction or substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including the basement) elevated to one (1) foot above the base floor elevation or, together with attendant utility and sanitary facilities, shall:

- a. Be flood-proofed so that below the base flood level 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;
- d. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in [14.20.050\(B\)\(1\)\(b\)](#); and
- e. Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one (1) foot below the flood-proofed level (e.g., a building constructed to the base flood level will be rated as one (1) foot below that level).

14. Manufactured Homes.

- a. All manufactured homes to be placed or substantially improved on sites:
 - i. Outside of a manufactured home park or subdivision,
 - ii. In a new manufactured home park or subdivision,
 - iii. In an expansion to an existing manufactured home park or subdivision, or
 - iv. In an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood;

shall be elevated on a permanent foundation such that the finished floor of the manufactured home is elevated to a minimum 18 inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.

- b. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH, and AE on the community’s FIRM that are not subject to the above manufactured home provisions be elevated so that either:
 - i. The finished floor of the manufactured home is elevated to a minimum of 18 inches (46 cm) above the base flood elevation, or
- c. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.

15. Crawl space construction. Below grade crawl space construction is permitted within the floodplain provided that applicable National Flood Insurance Program (NFIP) specifications, as found in FEMA Technical Bulletin 11-01,

are met. More detail is provided by FEMA Technical Bulletin 11-01, including these specifications:

- a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Subsection (b) below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
- b. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
- c. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.
- d. Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.
- e. The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.

- f. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
- g. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity or mechanical means.
- h. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

16. Floodways.

- a. Located within areas of special flood hazards established in this Section are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
 - i. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during that occurrence of the base flood discharge.
- b. If [Subsection 14.20.050\(C\)\(1\)](#) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this [Subsection 14.20.050](#), "Provisions For Flood Hazard Reduction".

- c. Projects for stream habitat restoration may be permitted in the floodway provided:
 - i. The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023); and
- d. A qualified professional (a Registered Professional Engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible, given the goals of the project; and
- e. No structures would be impacted by a potential rise in flood elevation; and
- f. An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included as part of the local approval.
- g. New installation of manufactured dwellings is prohibited (2002 Oregon Manufactured Dwelling and Park Specialty Code). Manufactured dwellings may only be located in floodways according to one of the following conditions:
 - i. If the manufactured dwelling already exists in the floodway, the placement was permitted at the time of the original installation, and the continued use is not a threat to life, health, property, or the general welfare of the public; or
 - ii. A new manufactured dwelling is replacing an existing manufactured dwelling whose original placement was permitted at the time of installation, and the replacement home will not be a threat to life, health, property, or the general welfare of the public and meets the following criteria:
- h. As required by 44 CFR Chapter 1, Subpart 60.3(d)(3), it must be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the manufactured dwelling and any accessory buildings, accessory

structures, or any property improvements (encroachments) will not result in any increase in flood levels during the occurrence of the base flood discharge;

- i. The replacement manufactured dwelling and any accessory buildings or accessory structures minimum of 18 inches (46 cm) above the BFE as identified on the Flood Insurance Rate Map;
- i. The replacement manufactured dwelling is placed and secured to a foundation support system designed by an Oregon professional engineer or architect and approved by the authority having jurisdiction;
- j. The replacement manufactured dwelling, its foundation supports, and any accessory buildings, accessory structures, or property improvements (encroachments) do not displace water to the degree that it causes a rise in the water level or diverts water in a manner that causes erosion or damage to other properties;
- k. The location of a replacement manufactured dwelling is allowed by the local planning department's ordinance; and
- l. Any other requirements deemed necessary by the authority having jurisdiction.

17. In areas where a regulatory floodway has not been designated in a non-tidally influenced area, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-A30 or AE on the community FIRMs, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

18. Coastal High Hazard Area. Located within areas of special flood hazards established in [Subsection 14.32.040](#) above are "Coastal High Hazard Areas", designated as Zones V1-V30, VE, and/or V. These areas have special flood hazards associated with high velocity waters from tidal surges and, therefore, in addition to meeting all provisions

in this Ordinance and the State Building Code, the following provisions shall apply:

- a. All new construction and substantial improvements in Zones V1 - V30 and VE (V if base flood elevation data is available) shall be elevated on pilings and columns so that:
- b. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to at least one foot above the base flood elevation; and
- c. The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a 1% chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
- d. A registered professional engineer or architect shall develop or review the structural design specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of (a) and (b) above.
- e. Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1 - V30 and VE, whether or not such structures contain a basement. The local administrator shall maintain a record of all such information.
- f. All new construction shall be located landward of the reach of mean high tide.
- g. Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting

foundation system. For the purposes of this Section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls that exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

- i. Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
 - ii. The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Maximum wind and water loading values to be used in this determination shall each have a 1% chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
- h. If breakaway walls are utilized, such enclosed space shall be usable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.
 - i. Prohibit the use of fill for structural support of buildings.
 - j. Prohibit man-made alteration of sand dunes which would increase potential flood damage.
 - k. Recreational vehicles placed on sites within Zones V1-30, V, and VE on the community's FIRM shall either:
 - i. Be on the site for fewer than 180 consecutive days.
 - ii. 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

- iii. Meet the requirements of [Section 14.20.020](#) (Administration) and (1) through (8) of this Subsection.

19. For construction of new essential and new special occupancy structures as defined in ORS 455.446 and 447, refer to the statutes which state that such structures may not be constructed in the Tsunami Inundation Zone. The Tsunami Inundation Zone includes V, A, and potentially other flood zones. If an exception is granted pursuant to the statutes, then the Coastal High Hazard Area construction standards outlined in this subsection shall apply.

20. Areas of Shallow Flooding (AO Zone). In all areas of special flood hazards designated as areas of shallow flooding, the following provisions shall apply:

- a. All new construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade to the building by one foot or more above the depth number specified on the FIRM or by at least two (2) feet if no depth number is specified on the FIRM.
- b. All new construction and substantial improvements of nonresidential structures within AO zones shall either:
 - i. Have the lowest floor (including the basement) elevated above the highest adjacent grade to the building by one foot or more above the depth number specified on the FIRM or by at least two (2) feet if no depth number is specified on the FIRM; or
 - ii. Together with attendant utility and sanitary facilities, be completely flood-proofed to or above the level designated in [Subsection 14.20.050\(B\)\(2\)](#) so that any space below that level 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. A registered professional engineer or architect shall certify that the standards of this Subsection are satisfied.

- iii. Adequate drainage paths around structures on slopes shall be required to guide floodwaters around and away from proposed structures.
- c. Crawlspace construction. Below-grade crawlspace construction is permitted within the floodplain provided that applicable National Flood Insurance Program (NFIP) specifications found in FEMA Bulletin TD-1101 are met.

14.20.060 Appeals and Variance Procedures

- A. The Planning Commission shall hear and decide appeals when it is alleged that there is an error in any interpretation, requirement, decision, or determination in the enforcement or administration of this Code. Such appeals shall be granted only if consistent with the standards of 44 CFR Chapter 60.6 of the rules and regulations of the National Flood Insurance Program (44 CFR Chapter 1, Subchapter B) as adopted through January 1, 2009.
- B. Variances.
 - 1. Variances shall be issued or denied in accordance with the procedures for a Planning Commission level variance and subject to the following criteria:
 - a. There is a good and sufficient cause for the variance. Examples of good and sufficient cause include the reconstruction, rehabilitation or restoration of historic structures (that are listed in the National Register of Historic Places, state inventory of Historic Places, or that contribute to a historic district) or a functionally-dependent use (a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water). In considering this criterion, the Planning Commission shall consider:
 - b. The importance of the services provided by the facility to the community.
 - c. The necessity to the facility of a waterfront location, where applicable.
 - d. The availability of alternative locations for the use that are not subject to flooding.

- e. The compatibility of the use with existing and anticipated development.
2. Failure to grant the variance would result in an exceptional hardship to the applicant based on exceptional, unusual, and/or peculiar circumstances of the property. For the reconstruction, rehabilitation or restoration of historic structures (that are listed in the National Register of Historic Places, state inventory of Historic Places, or that contribute to a historic district) or for functionally-dependent uses (a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water) only practical difficulties resulting from the failure to grant the variance rather than exceptional hardship are required.
3. The granting of the 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.
4. The variance is the minimum necessary, considering the flood hazard, to afford relief.
5. The applicant for an approved variance shall be notified in writing that approval of the variance will result in increased flood insurance purchase premium rates, up to \$25 per \$100 coverage.