

ORDINANCE NO. 3129

AN ORDINANCE AMENDING COTTAGE GROVE MUNICIPAL CODE TITLE 14 DEVELOPMENT REPEALING SECTION 14.37.200 FLOOD DAMAGE PREVENTION AND ADOPTING A NEW SECTION 14.37.200 FLOOD DAMAGE PREVENTION

WHEREAS, the City Council amended Title 14 in 2016 with the adoption of Ordinance No. 3064, which adopted Section 14.37.200 Flood Damage Prevention Development, regulating development in the floodplain areas; and

WHEREAS, Section 14.37.200 Floodplain Development was based on the 2012 State Model code, which has since been revised by the state in order to incorporate changes in Federal and State regulations; and

WHEREAS, the City of Cottage Grove is proposing to replace the current Section 14.37.200 Flood Damage Prevention with a new Flood Damage Prevention section that is based upon the 2019 Oregon Model Flood Hazard Management Ordinance and is in compliance with current Code of Federal Regulations, Oregon Statutes, and EO 11988.

THE CITY OF COTTAGE GROVE ORDAINS AS FOLLOWS:


Section 1. Purpose. The purpose of this ordinance is to repeal the existing Section 14.37.200 Flood Damage Prevention and replace it with a new Section 14.37.200 Flood Damage Prevention in Title 14 of the Cottage Grove Development Code. The amendment is intended to: bring the City of Cottage Grove into compliance with current Federal and State regulations regarding development within Special Flood Hazard Areas; to promote the public health, safety and general welfare; and to minimize public and private losses due to flood condition.

Section 2. Procedural Compliance. This amendment is in compliance with 14.47.500-600 of the Municipal code of the City of Cottage Grove and is based upon the City Council determination, after a Planning Commission public hearing and recommendation, that this amendment is a proper implementation of the comprehensive land use plan and, therefore, is in the public interest and for the health, safety and welfare of the residents of the City of Cottage Grove.

Section 3. Amendment. Title 14 of the Cottage Grove Municipal Code is hereby amended, by repealing the current Section 14.37.200 Flood Damage Prevention, and replacing it with a new Section 14.37.200 Flood Damage Prevention, as set forth in Exhibit A, attached hereto and incorporated herein by this reference.


Section 4. Findings. The City Council hereby adopts findings of fact set forth in Exhibit B, attached hereto and incorporated herein by this reference.

PASSED BY THE COUNCIL AND APPROVED BY THE MAYOR THIS 24TH
DAY OF AUGUST, 2020.



Jeffrey D. Gowing, Mayor
Dated: August 24, 2020

ATTEST:



Richard Meyers, City Manager
Dated: August 24, 2020

EXHIBIT A – PROPOSED CODE:

14.37.200 Flood Damage Prevention

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

B. Findings of fact.

1. The flood hazard areas of Cottage Grove 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.
2. These flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards that increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately flood-proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.
3. The city has the primary responsibility for planning, adoption and enforcement of land use regulations to accomplish proper management of special flood hazard areas.

C. Purpose. It is the purpose of this Chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood condition in specific areas by provisions designed to:

1. Protect human life and health;
2. Minimize damage to public facilities and utilities, such as water and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges, that are located in areas of special flood hazard;
3. Help maintain a stable tax base by providing for the sound use and development of flood prone areas so as to minimize blight areas caused by flooding;
4. Minimize expenditure of public money for costly flood control projects;
5. Minimize the need for rescue, emergency services, and relief associated with flooding and generally undertaken at the expense of the general public;
6. Minimize prolonged business interruptions, unnecessary disruption of commerce, access

and public service during times of flood;

7. Notify potential buyers that property is in an area of special flood hazard;
8. Ensure that those who occupy within the areas of special flood hazard assume responsibility for their actions;
9. Manage the alteration of areas of special flood hazard, stream channels and shorelines to minimize the impact of development on the natural and beneficial functions; and
10. Participate in and maintain eligibility for flood insurance and disaster relief.

D. Methods of reducing flood losses. In order to accomplish its purposes, this Chapter includes methods and provisions for:

1. Requiring development that is vulnerable to floods, including structures and facilities necessary for the general health, safety and welfare of citizens, to be protected against flood damage at the time of initial construction;
2. Restricting or prohibiting development which is dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
3. Controlling filling, grading, dredging and other development which may increase flood damage or erosion;
4. Preventing or regulating the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands;
5. Preserving and restoring natural floodplains, stream channels, and natural protective barriers which carry and store flood waters; and
6. Coordinating with and supplementing provisions of State of Oregon Specialty Codes enforced by the State of Oregon Building Codes Division.

E. Definitions.

1. For purposes of this Chapter, the following words, terms, and phrases shall be defined as follows:
 - a. Accessory Structure means a structure on the same parcel of property as a principal structure, the use of which is incidental to the use of the principal structure.
 - b. Appeal means a request for a review of the interpretation of any provision of this ordinance or a request for a variance.

- c. Area of Shallow Flooding means designated Zone AO, AH, AR/AO or AR/AH 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.
- d. Area of Special Flood Hazard means 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. "Special flood hazard area" is synonymous in meaning and definition with the phrase "area of special flood hazard".
- e. Base Flood means a flood having a one percent chance of being equaled or exceeded in any given year.
- f. Base Flood Elevation (BFE) means the elevation to which floodwater is anticipated to rise during the base flood.
- g. Basement means any area of the building having its floor subgrade (below ground level) on all sides.
- h. Below-grade Crawlspace means an enclosed area below the Base Flood Elevation in which the interior grade does not exceed 2 feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the bottom of the lowest horizontal structural member of the lowest floor, does not exceed 4 feet at any point.
- i. Conditional Letter of Map Revision (CLOMR) means a letter from FEMA commenting on whether a proposed project, if built as proposed, would meet the minimum NFIP standards or proposed hydrology changes. If the project, built as proposed, revises the Flood Insurance Rate Map and/or Flood Insurance Study, a LOMR is required to be submitted no later than 6 months after project completion.
- j. Datum means the vertical control datum from which all vertical elevations are determined. Historically, Flood Insurance Rate Maps have used the National Geodetic Vertical Datum of 1929 (NGVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88). (See Mean Sea Level.)
- k. De Minimis Development means development that is exempt under this code provided impacts of the development are negligible or insignificant. Examples include: paving or hardscaping of flat areas; certain types of fencing per Table 3.7.210; and raised garden beds.

- l. 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.
- m. Digital FIRM (DFIRM) means Digital Flood Insurance Rate Map. It depicts flood risk and zones and flood risk information. The DFIRM presents the flood risk information in a format suitable for electronic mapping applications.
- n. Elevated Building means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- o. Encroachment means the activities or construction within the Floodway including, fill, excavation, grading, new construction, substantial improvements and other development.
- p. Essential Facility or Critical Facility means:
 - i. Hospitals and other medical facilities having surgery and emergency treatment areas;
 - ii. Fire and police stations;
 - iii. Tanks or other structures containing, housing or supporting water or fire-suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures;
 - iv. Emergency vehicle shelters and garages;
 - v. Structures and equipment in emergency-preparedness centers;
 - vi. Standby power generating equipment for essential facilities; and
 - vii. Structures and equipment in government communication centers and other facilities required for emergency response.
- q. FEMA means the Federal Emergency Management Agency.
- r. Flood or Flooding means:
 - i. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 1. The overflow of inland or tidal waters.
 2. The unusual and rapid accumulation of runoff or surface waters from any

source.

3. Mudslides (i.e. mudflows) which are proximately caused by flooding as defined in i(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.
 - ii. 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 (i)(1) of this definition.
- s. Flood elevation study means 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.
- t. Flood Insurance Rate Map (FIRM) means 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).
- u. Flood Insurance Study (FIS). See also "Flood elevation study."
- v. Flood Proofed or Flood Proofing means 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.
- w. Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as "Regulatory Floodway."
- x. Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.
- y. Highest adjacent grade means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

- z. Historic Structure means a structure that is:
- i. Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
 - ii. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or to a district preliminarily determined by the Secretary to qualify as a registered historic district;
 - iii. Individually listed on a state inventory of historic places which have been approved by the Secretary of the Interior; or
 - iv. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - a. By an approved state program as determined by the Secretary of the Interior; or
 - b. Directly by the Secretary of the Interior in states without approved programs.
- aa. Letter of Map Change (LOMC) means an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and/or Flood Insurance Studies. LOMCs are issued in the following categories:
- i. Letter of Map Amendment (LOMA) means an amendment to the FIRM based on technical data showing that an existing structure or parcel of land that has not been elevated by fill (natural grade) was inadvertently included in the special flood hazard area because of an area of naturally high ground above the base flood.
 - ii. Letter of Map Revision (LOMR) is a letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood. A LOMR revises the current FIRM and/or FIS to show changes to the floodplains, Floodways or flood elevations. LOMRs are generally based on manmade alterations that affected the hydrologic or hydraulic characteristics of a flooding source and thus result in modification to the existing regulatory Floodway, the effective Base Flood Elevation or the Special Flood Hazard Area. It is recommended that a Conditional Letter of Map Revision be approved by FEMA prior to issuing a permit to start a project that has a potential to affect the special flood hazard area. (See Conditional Letter of Map Revision.)
- bb. Lowest Floor means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this Chapter.

- cc. Manufactured Dwelling or Home means 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".
- dd. Manufactured Dwelling Park or Subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured dwelling lots for rent or sale.
- ee. Mean Sea Level means 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.
- ff. New Construction means 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 Cottage Grove (November 11, 1985) and includes any subsequent improvements to such structures.
- gg. Oregon Specialty Codes means the combined specialty codes adopted under ORS 446.062, 446.185, 447.020 (2), 455.020 (2), 455.496, 455.610, 455.680, 460.085, 460.360, 479.730 (1) or 480.545, but does not include regulations adopted by the State Fire Marshal pursuant to ORS chapter 476 or ORS 479.015 to 479.200 and 479.210 to 479.220. The combined specialty codes are often referred to as building codes.
- hh. Recreational Vehicle means a vehicle which is:
- i. Built on a single chassis;
 - ii. 400 square feet or less when measured at the largest horizontal projection;
 - iii. Designed to be self-propelled or permanently towable by a light duty truck; and
 - iv. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- ii. Special Flood Hazard Area: See "Area of special flood hazard" for this definition.
- jj. Start of Construction includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not

include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of a building whether or not the alteration affects the external dimensions of a building.

- kk. Structure means for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, which is principally above ground, as well as a manufactured dwelling.
 - ll. 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 49 percent of the market value of the structure before the damage occurred.
 - mm. Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 49 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 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.
 - nn. Variance means a grant of relief by the City of Cottage Grove from the terms of a flood plain management regulation.
 - oo. Violation means the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications or other evidence of compliance of this Chapter is presumed to be in violation until such time as that documentation is provided.
 - pp. Water Surface Elevation means the height, in relation to a specific datum, of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.
2. Unless specifically defined in this Section, words or phrases used in this Chapter shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter its most reasonable application.
- F. Applicability.** This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction of Cottage Grove. 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. Nothing in this Ordinance is intended to allow uses or structures that are otherwise prohibited by this Development Code or State of Oregon Specialty Codes.

G. Basis for Areas of Special Flood Hazard. The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled "The Flood Insurance Study (FIS) for Lane County, Oregon and Incorporated Areas," dated June 2, 1999 with accompanying Flood Insurance Rate Maps (FIRM) or Digital Flood Insurance Rate Maps (DFIRM), as amended and updated by FEMA, are adopted by reference and declared a part of this ordinance. The FIS and the FIRM are on file at the Public Works & Development Department, City Hall, 400 East Main Street, Cottage Grove, Oregon.

H. Coordination with Specialty Codes Adopted by the State of Oregon Building Codes Division. Pursuant to the requirement established in ORS 455 that the City of Cottage Grove administers and enforces the State of Oregon Specialty Codes, the City Council of the City of Cottage Grove 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.

I. Floodplain Development Permit Required.

A Floodplain Development Permit shall be obtained prior to start of all proposed construction and other development including the placement of manufactured homes and all other development activities for all other development, as defined in Section E, including fill and other development activities within any area horizontally within the Special Flood Hazard Area.

J. Administration.

1. Designation of Floodplain Administrator. The Public Works & Development Director or his/her designee is appointed as the Floodplain Administrator who is responsible for administering, implementing, and enforcing the provisions of this Chapter by granting or denying development permits in accordance with its provisions.
2. Duties of the Floodplain Administrator shall include, but not be limited to:
 - a. Permit Review: Review all development permits to determine that:
 - i. The permit requirements of this ordinance have been satisfied;
 - ii. All other required local, state, and federal permits have been obtained and approved;
 - iii. 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 Section N(2) are met;

- iv. 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;
 - v. Provide to building officials the Base Flood Elevation (BFE) and required Freeboard elevation (2 feet above BFE) applicable to any building requiring a development permit;
 - vi. Review all development permit applications to determine if the proposed development qualifies as a substantial improvement or substantial development;
 - vii. 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 of Sections J and L;
 - viii. Review all development permits to determine if the proposed development activity includes the placement of fill or excavation; and
 - ix. Issue development permits when the provisions of this Chapter have been met, or deny the same in the event of noncompliance.
- b. Information to be Obtained and Maintained. The following information shall be obtained and maintained and shall be made available for public inspection as needed:
- i. Make periodic inspections of Special Flood Hazard Areas to establish that development activities are being performed in compliance with this Chapter, and to verify that existing buildings and structures maintain compliance with this Chapter;
 - ii. 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 the requirements of this Chapter;
 - iii. 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 this Chapter are adhered to;
 - iv. 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) is in compliance with the 2' Freeboard requirements of this Chapter;

- v. 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;
- vi. Maintain all Elevation Certificates (EC) submitted to the City of Cottage Grove;
- vii. 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 or FIRM;
- viii. Maintain all floodproofing certificates required under this Chapter;
- ix. Record and maintain all variance actions, including justification for their issuance;
- x. Obtain and maintain all hydrologic and hydraulic analyses performed as a permit requirement;
- xi. Record and maintain all Substantial Improvement and Substantial Damage calculations and determinations;
- xii. Maintain for public inspection all records pertaining to the provisions of this Chapter;
- xiii. Coordinate with the Building Official to inspect areas where buildings and structures in Special Flood Hazard Areas have been damaged, regardless of the cause of damage, and notify owners that permits may be required to repair, rehabilitate, demolish, relocate, or reconstruct structures if substantial damage thresholds are met; and
- xiv. Conduct Substantial Improvement (SI) reviews for all structural development proposal applications in the Special Flood Hazard Area and maintain a record of SI calculations within permit files. Conduct Substantial Damage (SD) assessments when structures in the Special Flood Hazard Area are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the Special Flood Hazard Area are damaged to the extent that the cost of restoring the structure to its before damaged condition would equal or exceed 49 percent of the market value of the structure before the damage occurred.

- c. Requirement to Notify Other Entities and Submit New Technical Data. The following information shall be obtained and maintained and shall be submitted to appropriate agencies as needed:
- i. Community Boundary Alterations: 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.
 - ii. Watercourse Alterations: The Floodplain Administrator shall notify adjacent communities and the Oregon Department of Land Conservation and Development prior to any alteration or relocation of the watercourse. Copies of such notification shall be submitted to the Federal Insurance Administrator. The applicant shall provide to the Floodplain Administrator the technical information necessary to prepare the notification. 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.
- The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under section L.
- d. Requirement to Submit New Technical Data through LOMC Process. 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 applicant to submit such data and review fees required for compliance with this Section through the applicable FEMA Letter of Map Change (LOMC) process.

- i. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:
 - (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.
 - (c) Proposed development that involves more than 50 cubic yards of fill (or 1350 cubic feet), alters a watercourse, modifies floodplain boundaries, or modifies Base Flood Elevations,
- ii. Within six months of project completion, an applicant who obtains a Conditional Letter of Map Revision (CLOMR) from FEMA shall obtain from FEMA a Letter of Map Revision (LOMR) reflecting the as-built changes to the FIS and/or FIRM and provide a copy of the final LOMR to the City.
- iii. It is the responsibility of the applicant to have technical data prepared in a format required for a CLOMR or LOMR and to submit such data to FEMA on the appropriate FEMA Form MT-2 application forms. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.
- iv. Applicants shall be responsible for all costs associated with obtaining a CLOMR or LOMR from FEMA.
- v. The Floodplain Administrator shall be under no obligation to sign the Community Acknowledgment Form, which is part of the CLOMR/LOMR application, until the applicant demonstrates that the project will or has met all applicable requirements of this Chapter.

K. Floodplain Development Permit.

- 1. A Floodplain Development Permit shall be obtained prior to start of all proposed construction and other development including the placement of manufactured homes within any area horizontally within the Special Flood Hazard Area established in Section G.
- 2. The Floodplain Development Permit shall be required for all structures, including manufactured dwellings, and for all other development, as defined in Section E, including fill and other development activities.
- 3. The Floodplain Development Permit shall be a Type I Application as set forth by Chapter 14.41. The Public Works & Development Director may require a Type II Application if

discretion is involved in the review of the application.

4. Application Requirements for Floodplain Development Permit. Application for a development permit shall be made on forms furnished by the Public Works & Development Department and may include but not be limited to:
 - a. Plans in triplicate drawn to scale, with elevations of the project area and the nature, location, dimensions of existing or proposed structures, earthen fill placement, storage of materials or equipment and drainage facilities;
 - b. Delineation of Special Flood Hazard Areas, regulatory Floodway boundaries including Base Flood Elevations, or flood depth in AO zones;
 - c. For all proposed or substantially improved structures, elevation in relation to the highest adjacent grade and the Base Flood Elevation, or flood depth in AO zones, of the:
 - i. Lowest enclosed area including crawlspace or basement floor; and
 - ii. Top of the proposed garage slab, if any; and
 - iii. Next highest floor; and
 - iv. Attendant utilities.
 - d. Locations and sizes of all flood openings, if required, in any proposed structure;
 - e. The proposed elevation to which a non-residential structure will be flood-proofed or elevated;
 - f. 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 in Section O(3);
 - g. The amount, location and proposed final elevations of any fill or exaction activities proposed;
 - h. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development;
 - i. Evidence that all necessary permits can be obtained from those governmental agencies from which approval is required by Federal or State law; and
 - j. Substantial Damage/Improvement Calculation: For reconstruction, rehabilitation, additions or other improvements to existing non-conforming buildings, evidence to

determine improvement costs and actual repair/damage value for substantial improvement/substantial damage calculation, including market value estimates of existing building(s) prior to damage/improvement, and market value estimate of building(s) post repair/improvement. Estimates must include all structural elements, interior finish elements, utility and service equipment, labor and other costs associated with demolishing, removing, or altering building components, construction management, and any improvements beyond pre-damaged condition.

5. Approval Requirements. No Floodplain Development Permit shall be issued until compliance with this Chapter and other applicable codes and regulations has been demonstrated. Specifically, the following documentation is required prior to issuance of a Floodplain Development Permit:
 - a. Evidence of compliance with the standards of this Chapter;
 - b. Evidence that all necessary permits have been obtained from those governmental agencies from which approval is required by Federal or State law;
 - c. A FEMA-approved CLOMR if the project will involve adding fill exceeding 50 cubic yards (or 1350 cubic feet), cause a watercourse alteration, modify Base Flood Elevation, or change the boundaries of the floodway or special flood hazard area;
 - d. A complete pre-construction Elevation Certificate signed and sealed by a registered professional surveyor for structures, except as provided in Section O(3) for wet-proofed accessory structures; and
 - e. Certified elevations for non-structural development prepared by registered professional surveyor.
6. During construction.
 - a. For all new construction and substantial improvements, the permit holder shall provide to the Floodplain Administrator an as-built certification of the floor elevation or flood-proofing level immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction; and
 - b. Any deficiencies identified by the Floodplain Administrator shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator to issue a stop-work order for the project.
7. Finished Construction. In addition to the requirements of the Oregon Specialty Codes pertaining to certificate of occupancy, and prior to the final inspection, the owner or authorized agent shall submit the following documentation for finished construction that has been signed and sealed by a registered surveyor or engineer:

- a. For elevated buildings and structures in Special Flood Hazard Areas, the elevation of the lowest floor, including basement.
 - b. For non-residential buildings and structures that have been flood-proofed, the elevation to which the building or structure was flood-proofed.
 - c. Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator to withhold a certificate of occupancy until such deficiencies are corrected.
8. Expiration of Floodplain Development Permit. Floodplain development permits issued under this Chapter shall become invalid unless the work authorized by such permit is commenced within 180 days after issuance or the work is suspended or abandoned for a period of 180 days after the work commences. Extensions for period of not more than 180 days each shall be requested in writing and shall be reviewed against the current FIRM and this Chapter.

L. Watercourse Alterations

1. Development shall not diminish the flood carrying capacity of a watercourse. If a watercourse will be altered or relocated as a result of the proposed development the applicant must submit certification by a registered professional engineer that the flood carrying capacity of the watercourse is maintained and will not be diminished.
2. Applicant will be responsible for obtaining all necessary permits from governmental agencies from which approval is required by federal, state, or local law, including but not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334; the Endangered Species Act of 1973, 16 U.S.C. 1531-1544; and State of Oregon Division of State Lands regulations. The applicant shall also be required to submit a Conditional Letter of Map Revision (CLOMR) to FEMA for watercourse alterations.
3. The Floodplain Administrator shall assure that maintenance for the altered or relocated portion of the water course is provided so that the flood carrying capacity will not be diminished. It shall be the responsibility of the applicant to perform required maintenance.
4. The applicant shall submit required technical data to the Floodplain Administrator prior to any watercourse alteration that will result in the expansion, relocation or elimination of the special flood hazard area.

M. Non-conversion of Enclosed Areas below the Lowest Floor. To ensure that enclosed areas below the lowest floor continue to be used solely for parking vehicles, limited storage, or access to the building and not be finished for use as human habitation/recreation/bathrooms, etc., the Floodplain Administrator shall:

1. Determine which applicants for new construction and/or substantial improvements have fully enclosed areas below the lowest floor that are 5 feet or higher; and
2. Require such applicants to enter into a “NON-CONVERSION DEED DECLARATION FOR CONSTRUCTION WITHIN FLOOD HAZARD AREAS” or equivalent. The deed declaration shall be recorded with Lane County, and shall be in a form acceptable to the Floodplain Administrator.

N. Provisions for Flood Hazard Reduction

1. Site Improvements and Subdivisions

- a. All subdivisions and partitions shall be designed based on the need to minimize the risk of flood damage. No new building lots shall be created entirely within the regulatory Floodway. All new lots shall be buildable without requiring development within the Floodway (i.e. minimum lot size under base zoning must be provided outside of the Floodway) and, where possible, allow building outside of the Special Flood Hazard Area.
- b. If a parcel has a buildable site outside the Special Flood Hazard Area, it shall not be subdivided to create a new lot, tract or parcel for a building that does not have a buildable site outside the Special Flood Hazard Area. This provision does not apply to lots set aside from development and preserved as open space.
- c. Where a Special Flood Hazard Area has been defined but a Base Flood Elevation has not been provided, it shall be generated for subdivision and partition proposals and all other proposed development (including proposals for manufactured home parks and commercial or industrial site developments) by the applicant per Subsection 4 below. 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.
- d. Site improvements, subdivisions, and manufactured home parks shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize or eliminate flood damage and infiltration of floodwaters into the systems. Replacement public utilities and facilities such as sewer, gas, electric, and water systems likewise shall be sited and designed to minimize or eliminate damage and infiltration of floodwaters.
- e. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems. New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of flood waters in the systems and discharges from the systems into flood waters. Onsite waste disposal systems shall be located to avoid functional impairment to them or contamination from them during flooding consistent with the Oregon Department of

Environmental Quality.

- f. Subdivisions proposals and other proposed new development, including manufactured home parks, shall have adequate drainage provided to reduce exposure to flood hazards. In AO and AH zones, drainage paths shall be provided to guide floodwater around and away from proposed structures.
- g. New essential facilities shall not be constructed in the regulatory Floodway, and shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area.

2. Development in Regulatory Floodways

- a. Development Prohibited in Floodway: Since the floodway is an extremely hazardous area due to the velocity of the floodwaters which carry debris, potential projectiles, and erosion potential, except as provided below, encroachments, including fill, new construction, substantial improvements, solid fences or other non-De Minimis development, are prohibited in the regulatory Floodway.
- b. Temporary Encroachments: Temporary encroachments in the regulatory Floodway for the purposes of capital improvement projects (including bridge construction/repair) may be allowed provided:
 - i. A Floodplain Development Permit is obtained prior to initiating development activities; and
 - ii. All other permits and permissions have been obtained from federal, state and local agencies; and
 - iii. Certification by a registered professional civil engineer must be 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; or
 - iv. 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.
- c. Stream Habitat Restoration: Projects for stream habitat restoration may be allowed provided:
 - i. A Floodplain Development Permit is obtained prior to initiating development

activities; and

- ii. The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023); and
 - iii. Certification by a registered professional civil engineer must be 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; or
 - iv. 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
- d. Public Infrastructure: Public infrastructure that requires close proximity near water, including water intake structures, stormwater outfalls, bridges, etc., may be allowed provided:
- i. A Floodplain Development Permit is obtained prior to initiating development activities; and
 - ii. The project limits placement of equipment, material, and structures in the regulatory Floodway to that which is absolutely necessary for the purposes of the project; and
 - iii. Certification by a registered professional civil engineer must be 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; or
 - iv. 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.
- e. Fences in the Floodway. Fences are allowed in the regulatory Floodway if they are open barb or barbless, or open pipe or rail fencing (e.g. corrals). Open means no more

than one horizontal strand per foot of height, with rails occupying less than 10% of the fence area and posts spaced no closer than 8 feet apart. Other types of fencing in a regulatory Floodway may be approved through a Floodplain Development Variance as detailed in Section W.

3. Zones with Base Flood Elevations but No 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 A1-30 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 of the base flood more than one foot at any point within the community.

O. Building Design and Construction. Within the Special Flood Hazard Area, buildings and structures shall be designed and constructed in accordance with the flood-resistant construction provisions of the Oregon Specialty Codes, including but not limited to the Residential Specialty Code, the Manufactured Dwelling Installation Specialty Code, and the Structural Specialty Code, and as specified below:

1. In all Special Flood Hazard Areas:

- a. New construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- b. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- c. New construction and substantial improvements shall be constructed using methods and practices that minimize flood damage;
- d. New structures placed in the SFHA should be elevated by methods other than fill. Projects that involve adding fill exceeding 50 cubic yards (1350 cubic feet) shall pursue CLOMR-Fs prior to LOMR-Fs to ensure ESA compliance;
- e. Electrical, heating, ventilating, air-conditioning, plumbing, duct systems, and other equipment and service facilities shall be elevated at or above 2' above 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 meet all substantial improvement requirements of this Chapter; and
- f. Any alteration, repair, reconstruction or non-substantial improvement to a building

that is not in compliance with the provisions of this Chapter shall be undertaken only if said non-conformity is not furthered, extended or replaced. Flood-resistant materials shall be used below BFE.

g. Structures located in Multiple or Partial Flood Zones:

- i. When a structure is located in multiple flood zones on the FIRM, the provisions of the more restrictive flood zone shall apply.
- ii. 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.

2. Specific Building Design and Construction Standards for Residential Construction.

In addition to Paragraph (1) of this Section:

- a. Required Free Board. New construction and substantial improvement of residential structures located in Special Flood Hazard Areas shall have the lowest floor elevation, including basement, elevated a minimum of two (2) foot above the Base Flood Elevation or three (3) feet above highest adjacent grade where no BFE is defined; and
- b. Requirements for Enclosed Spaces Below Lowest Floor (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:

- i. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters;
- ii. Be used solely for parking, storage, or building access; and
- iii. Be certified by a registered professional engineer or architect or meet or exceed all of the following minimum criteria:
 - (a) A minimum of two openings;
 - (b) 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;
 - (c) The bottom of all openings shall be no higher than one foot above grade;

(d) 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; and

(e) 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.

3. Specific Building Design and Construction Standards for Nonresidential Construction.

- a. New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall:
 - i. Have the lowest floor, including basement elevated at or above 2' above the Base Flood Elevation (BFE); Or, together with attendant utility and sanitary facilities;
 - ii. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
 - iii. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; 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 in this Chapter;
 - iv. Non-residential structures that are elevated, not floodproofed, shall comply with the standards for enclosed areas below the lowest floor in Section O(2); and
 - v. 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).
- b. Applicants floodproofing nonresidential buildings shall provide a comprehensive Maintenance Plan for the entire structure to include but not be limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.

- c. Applicants floodproofing nonresidential buildings shall supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.
4. Specific Building Design and Construction Standards for Manufactured Dwellings.

In addition to Paragraphs (1) and (2)(b) of this Section, new, replacement, and substantially improved manufactured dwellings are subject to the following standards:

- a. New or substantially improved manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section O(2);
- b. The bottom of the longitudinal chassis frame beam shall be at or above 1' above the 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 two feet (2') above Base Flood Elevation (BFE).

P. Below Grade Crawlspace

1. 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 (2) below. Because of hydrodynamic loads, crawlspace construction is not recommended 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.
2. The crawlspace is an enclosed area below the Base Flood Elevation 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.
3. 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.

4. 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.
5. The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.
6. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the bottom of the structural support of the next higher floor, must not exceed four (4) feet at any point.
7. 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.
8. 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.

Q. Recreational Vehicles. In all Special Flood Hazard Areas, Recreational Vehicles authorized as Temporary Trailers under Chapter 14.49.100 or stored on properties in Special Flood Hazard Areas shall:

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, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
3. Meet the requirements of O(4) above, including the anchoring and elevation requirements for manufactured dwellings.

R. Essential Facilities. Construction of new essential facilities shall be prohibited in Floodways and, to the extent possible, located outside the limits of the Special Flood Hazard Area. Construction of new essential facilities shall be permissible within the Special Flood Hazard Area if no feasible alternative site is available. Floodproofing and sealing measures must be taken to ensure that toxic substances or priority organic pollutants as defined by the Oregon Department of Environmental Quality will not be displaced by or released into floodwaters. The lowest floor shall be elevated three feet above the Base Flood Elevation or to the height

of the 500-year flood, whichever is higher. Access routes elevated to or above the level of the Base Flood Elevation shall be provided to all essential facilities to the maximum extent possible.

S. Tanks

1. New and replacement tanks in flood hazard areas either shall be elevated above the Base Flood Elevation on a supporting structure designed to prevent flotation, collapse or lateral movement during conditions of the base flood, or be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the design flood.
2. New and replacement tank inlets, fill openings, outlets and vents shall be placed a minimum of two (2) feet above Base Flood Elevation or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tank during conditions of the design flood.

T. Fences. Floodplain Development Permits are required for solid walls and certain fences located in the Special Flood Hazard Area, to ensure that they are reasonably safe from impacts of flooding. Fencing located in the regulatory Floodway shall meet the requirements of Section N(2) Development in Regulatory Floodways.

U. Other Development, including Accessory Structures, in Special Flood Hazard Areas (all A zones).

1. 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:
 - a. Obtain a Floodplain Permit;
 - 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. 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 Section O(2);
 - 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 section S; and
 - 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.
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. The floors are at or above grade on not less than one side;
 - ii. The garage is used solely for parking, building access, and/or storage;
 - iii. The garage is constructed with flood openings in compliance with section O to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater;
 - iv. The portions of the garage constructed below the BFE are constructed with materials resistant to flood damage;
 - v. The garage is constructed in compliance with the standards in Section O; and
 - vi. 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 non-residential structures in Section O(3).

W. Floodplain Development Variance Procedures and Criteria

1. Floodplain Development Variance Procedure

- a. An application for a Floodplain Development Variance is a Type III Quasi-Judicial decision. A Type III application must be submitted to the City of Cottage Grove on an

application form provided by the City and include at minimum the same information required for a floodplain development permit and an explanation for the basis for the variance request.

- b. The applicant carries the burden to show that the variance is warranted and meets the criteria set out herein.
 - c. Upon consideration of the criteria in Subsection 2 (Criteria for Variances) and the purposes of this Chapter, the City of Cottage Grove may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Chapter.
 - d. 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.
 - e. The Floodplain Administrator shall maintain a permanent record of all variances and report any variances to the Federal Emergency Management Agency upon request.
2. Criteria for Variances. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece or property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. As such, variances from the floodplain development standards should be quite rare.
- a. In passing upon such applications, the City shall consider all technical evaluations, all relevant factors, standards specified in other sections of this Chapter, and the:
 - i. Danger that material may be swept onto other lands to the injury of others;
 - ii. Danger to life and property due to flooding or erosion damage;
 - iii. Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - iv. Importance of the services provided by the proposed facility to the community;
 - v. Necessity to the facility of a waterfront location, where applicable;
 - vi. Availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - vii. Compatibility of the proposed use with existing and anticipated development;
 - viii. The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;

- ix. Safety of access to the property in times of flood for ordinary and emergency vehicles;
 - x. Expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at this site; and,
 - xi. Costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- c. Variances shall only be granted upon a:
- i. Showing of good and sufficient cause;
 - ii. Determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - iii. Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances; and
 - iv. Determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- d. Variances shall not be issued within a designated regulatory Floodway if any increase in flood levels during the base flood discharge would result.
- e. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places, the Statewide Inventory of Historic Properties, or designated with a local Historic Preservation Overlay zone without regard to the procedures set forth in this Section.
- f. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of this Section 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.
3. Variance Decision. If the variance is approved, the Public Works Development Director shall notify the applicant in writing following the procedures established in CGMC 14.41.300 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 shall be maintained with a record of all variance actions.

X. Violation and Penalty.

1. No structure or land shall hereafter be located, extended, converted or altered unless in full compliance with the terms of this Chapter and other applicable regulations.
2. Violation of the provisions of this Chapter by failure to comply with any of its requirements (including violation of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. The City shall enforce violations of this Chapter or its requirements in accordance with the procedures of CMGC 14.15.500.
3. Each person, firm or corporation found guilty of a violation shall be deemed guilty of a separate offense for every day during any portion of which any violations of any provisions of this Chapter are committed, continued or permitted by such person, firm or corporation, and shall be punishable therefore, as provided for in this Chapter.
4. In addition, each person, firm or corporation found guilty of a violation shall pay all costs and expenses involved in the case of all parties.
5. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation.

Y. Abrogation and Greater Restrictions. This Chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this Chapter and another Chapter, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restriction shall prevail.

Z. 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.

AA. Interpretation. In the interpretation and application of this ordinance, all provisions shall be:

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

BB. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights

may be increased by manmade or natural causes. This Chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Chapter shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this Chapter or any administration decision lawfully made thereunder.

EXHIBIT B – FINDINGS

ORDINANCE NO. _____

1. The City Council adopted Title 14 in 2007 with the adoption of Ordinance No. 2959, which included Chapter 3.7.200 Floodplain Development, regulating development in the floodplain areas.
2. Chapter 3.7.200 Floodplain Development was based on the 2005 State Model code, which has since been revised twice by the state in order to incorporate changes in Federal and State regulations.
3. In 2016, City Council adopted Ordinance No. 3064, which replaced Chapter 3.7.300 Floodplain Development, with 14.37.200 Flood Damage Prevention, based upon the 2012 Oregon Model Companion Flood Damage Prevention Ordinance.
4. The City of Cottage Grove is proposing to replace the current Chapter 14.37.200 Flood Damage Prevention with a new Flood Damage Prevention section that is based upon the 2019 Oregon Model Flood Hazard Management Ordinance and is in compliance with current Code of Federal Regulations, Oregon Statutes, and EO 11988.
5. The State of Oregon has adopted statewide land use planning goals. Comprehensive Plan amendments must comply with the applicable Statewide Planning Goals and implementing regulations. To recommend approval to the City Council, the Planning Commission must find that the application complies with the applicable Statewide Goals. Part of this decision requires determining which Statewide Goals are applicable.

The following Statewide Planning Goals are not applicable to the proposed Development Code Text Amendment as detailed in the staff report dated May 18, 2016: Goal 3 – Agricultural Lands; Goal 4 – Forest Lands; Goal 5 – Natural Resources, Scenic and Historic Areas, and Open Spaces; Goal 6 – Air and Water Resources; Goal 8 – Recreational Needs; Goal 9 – Economic Development; Goal 10 – Housing; Goal 11 – Public Facilities; Goal 12 – Transportation; Goal 13 -- Energy Conservation; Goal 14 – Urbanization; Goal 15 – Willamette River Greenway; Goal Goal 16 -- Estuarine Resources Goal 17 – Coastal Shorelands; Goal 18 – Beaches & Dunes; and Goal 19 – Ocean Resources.

The updated Transportation System Plan in the City's Comprehensive Plan must comply with the following Statewide Planning Goals:

Goal 1: Citizen Involvement.

This request is consistent with Goal 1. Adequate public notice of the proposed changes has been provided through the Type IV public notice process as specified in Section 14.4.1.500 of the Development Code. The Department of Land Conservation and Development was instrumental in the development of the text. The Department of Land Conservation and Development was notified of the intended adoption of the final draft

code language on June 10, 2020, and did not express any concerns in writing about the changes. Public hearings have been held at the Planning Commission and City Council levels to consider this code amendment. Our process involves various forms of notification of the public in the immediate area, notification in local media, and notification of impacted governmental agencies and recognized neighborhood groups. A virtual open house was held on June 23, 2020, to which all affected or potentially affected property owners received a mailed invitation. Notice was sent for the Planning Commission public hearing to all affected properties. The Planning Commission held a public hearing on July 15th. All property owners within the Special Flood Hazard Area that are impacted by this code change were sent written notice about this public hearing. A second public hearing was held before the City Council on August 24, 2020.

Goal 2: Land Use Planning

This request is consistent with Goal 2. The City has established a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions. The proposed change followed the process established in Title 14 of the City of Cottage Grove Municipal Code and has been found compatible with the City's Comprehensive Plan. These amendments assure an adequate factual base for decisions and actions associated with flood hazards in Cottage Grove, which is in accordance with the requirements of Goal 2.

Goal 7: Areas Subject to Natural Disasters and Hazards

Goal 7: Areas Subject to Natural Disasters and Hazards requires local jurisdictions to adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property from natural hazards. Jurisdictions are required to adopt or amend, as necessary, based on the evaluation of risk, plan policies and implementing measures consistent with the following principles: a. avoiding development in hazard areas where the risk to people and property cannot be mitigated; and b. prohibiting the siting of essential facilities, major structures, hazardous facilities and special occupancy structures, as defined in the state building code (ORS 455.447(1)(a)(b)(c) and (e)), in identified hazard areas, where the risk to public safety cannot be mitigated, unless an essential facility is needed within a hazard area in order to provide essential emergency response services in a timely manner. Local governments are deemed to comply with Goal 7 for coastal and riverine flood hazards by adopting and implementing local floodplain regulations that meet the minimum National Flood Insurance Program (NFIP) requirements.

Proposed regulations are based upon the 2019 State of Oregon Model Flood Hazard Management Ordinance. It brings the Development Code into compliance with current CFR, Oregon Statutes, and EO 11988, and exceeds minimum NFIP requirements. The siting of essential facilities in floodway areas is prohibited under the code, and criteria are included to avoid development in flood prone areas. The new code complies with Goal 7.

6. The proposed 14.37.200 Flood Damage Prevention Code is consistent with the Cottage Grove Comprehensive Plan.

Among the primary Goals for Community Development in the Cottage Grove Comprehensive Plan are the goals to protect our natural and cultural features from inappropriate and hazardous development and to improve and protect the quality of our air and water resources. The proposed Flood Damage Prevention code implements these Comprehensive Plan goals. The purpose of this Chapter to promote the public health, safety and general welfare, and to minimize public and private losses due to flood condition in specific areas by provisions designed to:

1. Protect human life and health;
2. Minimize damage to public facilities and utilities, such as water and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges, that are located in areas of special flood hazard;
3. Help maintain a stable tax base by providing for the sound use and development of flood prone areas so as to minimize blight areas caused by flooding;
4. Minimize expenditure of public money for costly flood control projects;
5. Minimize the need for rescue, emergency services, and relief associated with flooding and generally undertaken at the expense of the general public;
6. Minimize prolonged business interruptions, unnecessary disruption of commerce, access and public service during times of flood;
7. Notify potential buyers that property is in an area of special flood hazard;
8. Ensure that those who occupy within the areas of special flood hazard assume responsibility for their actions;
9. Manage the alteration of areas of special flood hazard, stream channels and shorelines to minimize the impact of development on the natural and beneficial functions, and;
10. Participate in and maintain eligibility for flood insurance and disaster relief.

The goals and regulations reflected within the proposed Flood Damage Prevention Code are compliant with the goals of the Cottage Grove Comprehensive Plan.

