

MEMORANDUM

TO: Mayor and City Council

FROM: Howard P. Schesser, Community Development Director

SUBJECT: FIRST VOTE FOR ORDINANCE REPEALING CHAPTER 3.2.700 FLOODPLAIN DEVELOPMENT AND ESTABLISHING A NEW 3.2.700 FLOOD DAMAGE PREVENTION. DCTA-1-16. CITY OF COTTAGE GROVE

DATE: August 3, 2016

Background

Council has held a public hearing on the repeal of the existing Chapter 3.2.700 Floodplain Development ordinance and establishing a new Chapter 3.2.700 Flood Damage Prevention ordinance. The Planning Commission held a public hearing and recommended approval to Council. It is now appropriate that Council consider the ordinance. This ordinance has been available for more than one week prior to this meeting and staff is recommending adoption.

Recommendation

After Council deliberation it is recommended that City Council hold the first vote on the attached Ordinance. The Ordinance was prepared and has been available for at least one week prior to this meeting. This Ordinance could be adopted at one meeting.

Cost

None


Richard Meyers, City Manager


Howard P. Schesser, Community
Development Director

Ordinance No. _____

AN ORDINANCE AMENDING TITLE 14 COTTAGE GROVE DEVELOPMENT
CODE REPEALING CHAPTER 3.7.200 FLOODPLAIN DEVELOPMENT &
ADOPTING A NEW CHAPTER 3.7.200 FLOOD DAMAGE PREVENTION

WHEREAS, 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; and

WHEREAS, 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; and

WHEREAS, the City of Cottage Grove is proposing to replace the current Chapter 3.7.200 Floodplain Development with a new Flood Damage Prevention section that is based upon the 2012 Oregon Model Companion Flood Damage Prevention Ordinance and is in compliance with current Code of Federal Regulations, Oregon Statutes, and EO 11988 (as revised, 2015).

THE CITY OF COTTAGE GROVE ORDAINS AS FOLLOWS:

Section 1. Purpose. The purpose of this ordinance is to repeal the existing Chapter 3.7.200 Floodplain Development and replace it with a new Chapter 3.7.200 Flood Damage Prevention all in Title 14 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; promote the public health, safety and general welfare; and minimize public and private losses due to flood condition.

Section 2. Procedural Compliance. This amendment is in compliance with 14.4.7.500-600 of the Municipal code of the City of Cottage Grove as demonstrated in attached findings 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 Chapter 3.7.200 Flood Plain Development, and establishing a new Chapter 3.7.200 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 the above recitals and the findings of fact set forth in Exhibit B, attached hereto and incorporated herein by this reference, as the basis for these amendments.

PASSED BY THE COUNCIL AND APPROVED BY THE MAYOR THIS _____
DAY OF _____, 2016.

Approved:

Thomas C. Munroe, Mayor

Dated: _____

ATTEST:

Richard Meyers, City Manager

Dated: _____

EXHIBIT A:

3.7.200 Flood Damage Prevention

A. Statutory authorization. The State of Oregon has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry.

B. Findings of fact.

1. The flood hazard areas of the city 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. The flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards that increase flood heights and velocities, and when inadequately anchored, damage uses 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;
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. Ensure that potential buyers are notified 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, and;
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.

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 uses which are 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 regulate 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.

- A. 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 review of an interpretation or decision made by the Community Development Director and of any provision of this Chapter or a decision on a request for a variance.
 - b. Area of Shallow Flooding means a designated Zone AO or Zone AH on a community's Flood Insurance Rate Map (FIRM) with a 1 percent (1%) or greater annual chance of flooding in any given year. Zone AO has an average base flood

depth of 1 to 3 feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Zone AO is characterized as sheet flow; Zone AH indicates ponding and is shown with Base Flood Elevations.

- c. Area of Special Flood Hazard means the land in the flood plain within a community subject to a 1 percent or greater chance of flooding in any given year. The Area of Special Flood Hazard is synonymous with Special Flood Hazard Area (SFHA). The SFHA is shown on Flood Insurance Rate Maps and includes the letters A and AE.
- d. Base Flood means a flood having a one percent chance of being equaled or exceeded in any given year, and is synonymous with the one hundred year flood.
- e. Base Flood Elevation (BFE) means the water surface elevation during the base flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the FIRM to the nearest foot and in the FIS to the nearest 0.1 foot. BFE includes base flood depth as used for Zone AO.
- f. Basement means any area of the building having its floor sub-grade (below ground level) on all sides.
- g. 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.
- h. Conditional Letter of Map Revision (CLOMR) is 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.
- i. 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.)
- j. 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.
- k. Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, fencing, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or

materials located within the area of special flood hazard.

- l. 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.
- m. 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.
- n. Encroachment means the activities or construction within the Floodway including, fill, excavation, grading, new construction, substantial improvements and other development.
- o. 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.
- p. FEMA means the Federal Emergency Management Agency.
- q. Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from:
 - i. The overflow of inland or tidal waters; and/or,
 - ii. The unusual and rapid accumulation of runoff or surface waters from any source.
- r. Flood Insurance Rate Map (FIRM) means the official map of a community, issued by the Federal Insurance Administration, delineating the Special Flood Hazard Areas and the risk premium zones applicable to the community.
- s. Flood Insurance Study (FIS) means the official report provided by the Federal Insurance Administration evaluating flood hazards and containing flood profiles,

regulatory Floodway boundaries and water surface elevations of the base flood.

- t. Flood Proofed or Flood Proofing means any combination of structural and nonstructural additions, changes or adjustment to structures that reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.
- u. Floodway (regulatory Floodway) means the channel of a river or other watercourse and those portions of the land areas adjacent to the channel that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
- v. 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.
- w. 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.)

- x. Lowest Floor means the lowest floor of the lowest enclosed area (including 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 enclosed area is built and maintained in accordance with the applicable design requirements of the Oregon Specialty Codes and this ordinance.
- y. Manufactured Dwelling or Home means a structure, transportable in one or more sections, built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term "Manufactured Dwelling" does not include a "Recreational Vehicle."
- z. Manufactured Home Park means a parcel, or contiguous parcels or lots of land divided into site or lots of two or more manufactured homes that are for rent or sale.
- aa. Mean Sea Level means for purposes of the National Flood Insurance Program, datum to which Base Flood Elevations shown on a community's FIRM are referenced. (See Datum.)
- bb. New Construction means a structure for which the "start of construction" commenced on or after November 11, 1985, and includes any subsequent substantial improvements to the structure.
- cc. 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.
- dd. Recreational Vehicle means a vehicle that is built on a single chassis; is 400 square feet or less when measured at the largest horizontal projection; is designed to be self-propelled or permanently towed by a light duty truck; and designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- ee. Special Flood Hazard Area means zones on Flood Insurance Rate Maps that depict the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. "Special Flood Hazard Area" is synonymous with "Area of Special Flood Hazard." Special Flood Hazard Areas on Flood Insurance Rate Maps always include the letters A or AE.

- ff. 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.
- gg. Structure means a walled and roofed building, a manufactured dwelling, a modular or temporary building, or a gas or liquid tank that is principally aboveground.
- hh. Substantial Damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed by 50% of the market value before the damage occurred.
- ii. Substantial improvement means 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 that have incurred “substantial damage,” regardless of the actual repair work performed. 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 market value of the structure is:

- i. The real market value of the structure prior to the start of the initial repair or improvement; or
- ii. In the case of damage, the real market value of the structure prior to the damage occurring.

Substantial Improvement does not 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.”

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

kk. 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 ordinance is presumed to be in violation until such time as that documentation is provided.

ll. Water Dependent Use means a facility that cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers or water intakes. The term does not include long-term storage, manufacture, sales or service facilities.

mm. 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. 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 Area of Special Flood Hazard identified by the Federal Emergency Management Agency in its 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 Community Development Department, City Hall, 400 East Main Street, Cottage Grove, Oregon.

Areas of Special Flood Hazard are depicted on FIRMS and DFIRMs as Special Flood Hazard Areas (SFHA). When the Base Flood Elevation has not been identified, the best available information for flood hazard area as identified in Section J shall be the basis for regulation.

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 ordinance is intended to be administered and enforced in conjunction with the Oregon Specialty Codes.

I. Floodplain Development Permit Required. A development permit shall be required prior to initiating development activities in any Special Flood Hazard Area established in Section G. The permit shall be for all proposed development as set forth in Section E Definitions, including the placement of manufactured dwellings.

J. Administration.

1. Designation of Floodplain Administrator. The Community Development Director or his/her designee is appointed as the Floodplain Administrator who is responsible for administering and implementing the provisions of this ordinance.
2. Duties of the Floodplain Administrator shall include, but not be limited to:
 - a. Review all proposed construction and other development, including the placement of manufactured dwellings, to determine whether such construction or other development will be located in Special Flood Hazard Areas or other flood-prone areas;
 - b. Review permit applications for new development or modifications of any existing development in Special Flood Hazard Areas for compliance with the requirements of this ordinance;
 - c. Review proposed development to assure that all necessary permits have been received from those federal, state, and local governmental agencies from which approval is required. Copies of such permits shall be maintained on file;
 - d. Review all development permit applications to determine if proposed development is located in the regulatory Floodway, and if so, ensure that the encroachment standards of Section O(2) are met;
 - e. When Base Flood Elevation data or data have not been provided, the Floodplain Administrator shall obtain, review and reasonably utilize any Base Flood Elevation and floodway data available from a Federal, state or other authoritative source in order to administer the provisions of this ordinance;
 - f. When Base Flood Elevations are not available:
 - (a) Review proposed development to determine whether development proposals are reasonably safe from flooding;
 - (b) Review all development permits for all new subdivision proposals and other

proposed development (including proposals for manufactured home parks and subdivisions) greater than 5 acres or 50 lots, whichever is the lesser, to ensure a base flood elevation has been established.

- g. Where a determination is needed of the exact location of boundaries of the Special Flood Hazard Areas (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Floodplain Administrator shall make a determination through a Type II application process. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the determination through a Type III application process;
- h. Issue development permits when the provisions of this ordinance have been met, or deny the same in the event of noncompliance;
- i. Obtain, verify and record the actual elevation in relation to the vertical datum used on the effective FIRM, or in relation to the highest adjacent grade where no Base Flood Elevation is available, of the lowest floor level, including basement, of all new construction or substantially improved structures, including manufactured dwellings, that are located in special flood hazard areas;
- j. Obtain, verify and record the actual elevation of finished construction, in relation to the vertical datum used on the effective FIRM, or highest adjacent grade where no Base Flood Elevation is available, to which a new or substantially improved non-residential structure located in a non-coastal special flood hazard area has been flood-proofed. When floodproofing is utilized for a non-residential structure, the Floodplain Administrator shall obtain a Floodproofing Certificate (FEMA Form 81-65) which has been signed and sealed by a registered professional engineer or architect;
- k. Ensure that all records and certifications pertaining to the provisions of this ordinance are permanently maintained the Community Development Department office and available for public inspection;
- l. Make periodic inspections of Special Flood Hazard Areas to establish that development activities are being performed in compliance with this ordinance, and to verify that existing buildings and structures maintain compliance with this ordinance;
- m. 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;
- n. Make substantial improvement and/or substantial damage determinations for all structures located in Special Flood Hazard Areas.

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 Special Flood Hazard Area.
2. The Floodplain Development Permit shall be a Type I Application as set forth by Chapter 4.1. The Community Development Director may require a Type II Application if discretion is involved in the review of the application.
3. Application Requirements for Floodplain Development Permit. Application for a development permit shall be made on forms furnished by the Community 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, where available;
 - c. For all proposed 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.
 - 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. Specifications for any proposed flood-proofing of nonresidential structures and an indication that the proposed flood-proofing will be certified by a professional engineer or architect prior to issuance of the development permit;
 - g. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development; and
 - h. Evidence that all necessary permits can be obtained from those governmental agencies from which approval is required by Federal or State law.
 - i. 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 determination, 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.

4. Approval Requirements. No Floodplain Development Permit shall be issued until compliance with this ordinance 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 that all necessary permits have been obtained from those governmental agencies from which approval is required by Federal or State law;
 - b. A FEMA-approved CLOMR if the project will involve adding fill exceeding 50 cubic yards, cause a watercourse alteration, modify Base Flood Elevation, or change the boundaries of the floodway or special flood hazard area;
 - c. A complete pre-construction Elevation Certificate signed and sealed by a registered professional surveyor, except as provided in Section P(3) for wet-proofed accessory structures; and
 - d. Certification from a registered professional engineer or architect that any proposed non- residential flood-proofed structure will meet the flood-proofing criteria of the NFIP and Oregon Specialty Codes.
5. 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;
 - 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.
6. 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, or where no Base Flood Elevation is available,

the height of highest adjacent grade of the lowest floor;

- 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.
7. 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 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.
3. 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.
4. 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.
5. 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. Requirement to Submit New Technical Data

1. Within six months of project completion, an applicant who obtains a Conditional Letter of Map Revision (CLOMR) from FEMA, or whose development involves more than 50 cubic yards of fill, alters a watercourse, modifies floodplain boundaries, or modifies Base Flood Elevations, 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.
2. 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.
3. Applicants shall be responsible for all costs associated with obtaining a CLOMR or LOMR from FEMA.
4. 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 ordinance.

N. 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;
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.

O. Provisions for Flood Hazard Reduction

1. Site Improvements and Subdivisions
 - a. Where Special Flood Hazard Areas have not been defined within the community or a Base Flood Elevation has not been provided, all plans and permits for proposed construction, subdivisions, placement of manufactured homes, or other development shall be consistent with the need to ensure that building sites will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes historical data, high water marks, photographs of past flooding, etc.
 - b. 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.

- c. 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.
 - d. 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 other proposed developments (including proposals for manufactured home parks and commercial or industrial site developments) by the applicant per Section 4 below.
 - e. 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.
 - f. 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.
 - g. 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.
 - h. 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. 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 in the regulatory Floodway for the purposes of capital improvement projects (including bridge construction/repair) must have a Floodplain Development Permit. This includes ensuring that all other required permits and

permissions are obtained from federal, state and local agencies. If the temporary encroachment results in an increase in flood levels during the occurrence of the base flood discharge, a CLOMR is not required to be obtained when:

- i. The project is limited as to duration with the days and dates that the structure or other development will be on site specified in the development permit. If a longer permit is required, a new permit should be issued;
 - ii. All other accessory equipment and temporary structures (i.e. construction trailers) are restricted from the regulatory Floodway;
 - iii. The project limits placement of equipment and material in the regulatory Floodway to that which is absolutely necessary for the purposes of the project;
 - iv. Structures shall be placed on site so the flood damages are minimized;
 - v. The project includes a flood warning system sufficient to allow equipment to be evacuated from the regulatory Floodway and placed outside the area of special flood hazard in the event of imminent flood;
 - vi. The project applicant identifies insurable structures affected by an increase in Base Flood Elevation. The community should disclose to all owners of insurable structures and all applicants for permits in the affected area that there is an increased risk of flooding for the duration of the temporary encroachment; and
 - vii. The project applicant is provided with written notification that they may be liable for any flood damages resulting from the temporary encroachment.
- c. Projects for stream habitat restoration may be allowed without certification by a registered professional engineer provided:
- i. A Floodplain Development Permit is obtained prior to initiating development activities;
 - ii. The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023);
 - iii. 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 the 100-year flood levels as close to zero as practically possible given the goals of the project;
 - iv. No structures would be impacted by a potential rise in flood elevation; and
 - v. An agreement to monitor the project, correct problems, and ensure that flood

carrying capacity remains unchanged is included as part of the local approval.

- d. Water dependent uses may be allowed provided:
 - i. A Variance is approved per criteria in Section W of this ordinance;
 - ii. A Floodplain Development Permit is obtained prior to initiating development activities;
 - iii. A registered professional civil engineer provides certification demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that such encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge; and
 - iv. 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.
- e. Fences in the Floodway. Fences may be allowed in the regulatory Floodway per Table 3.7.210, if they are open barb or barbless, or open pipe or rail fencing (e.g. corrals) with limited cross channel fencing. Other types of fencing must meet the standards of (d) above.

3. Zones with Base Flood Elevations but No Regulatory Floodway

- a. In areas within Zones A1-30 and AE on the community's FIRM with a Base Flood Elevation but where no regulatory Floodway has been designated, new construction, substantial improvements, or other development (including fill) shall be prohibited, 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.
- b. Applicants of proposed projects that increase the Base Flood Elevation more than one foot shall obtain from FEMA a Conditional Letter of Map Revision (CLOMR) before the project may be permitted. As soon as possible, but no later than 6 months after project completion, an application for a Letter of Map Revision (LOMR) shall be submitted by the applicant to FEMA. The applicant is responsible for paying any costs associated with the CLOMR and LOMR process.

4. Special Flood Hazard Areas Without Base Flood Elevations

When Special Flood Hazard Areas have been provided by FEMA on Flood Insurance Rate Maps, but Base Flood Elevations have not been provided, the Floodplain Administrator shall:

- a. Require that a Base Flood Elevation be generated whenever development is proposed on greater than 50 lots or 5 acres (whichever is the lesser); or
- b. If Base Flood Elevations are not available, and are not required to be generated, the standards below shall apply:
 - i. No encroachments, including structures or fill, shall be located in an Area of Special Flood Hazard within an area equal to the width of the stream or fifty feet, whichever is greater, measured from the ordinary high water mark; and
 - ii. The lowest floor of any building or structure, including the bottom of the longitudinal chassis frame beam of the manufactured dwelling, shall be elevated a minimum of three (3) feet above highest adjacent grade. Below grade crawlspaces are prohibited.

P. 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;
- 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 shall pursue CLOMR-Fs prior to LOMR-Fs to ensure ESA compliance;
- e. Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities (including ductwork) must be elevated or waterproofed to a minimum of two (2) foot above the Base Flood Elevation; and
- f. Any alteration, repair, reconstruction or non-substantial improvement to a building that is not in compliance with the provisions of this ordinance shall be undertaken only if said non-conformity is not furthered, extended or replaced. Flood-resistant materials shall be used below BFE.

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. New construction and substantial improvement that have fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and 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 be certified by a registered professional engineer or architect and must meet or exceed the following minimum criteria:
 - i. A minimum of two (2) 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;
 - ii. The bottom of all openings shall be no higher than one (1) foot above grade; and
 - iii. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
3. Specific Building Design and Construction Standards for Nonresidential Construction.

In addition to Paragraph (1) of this Section, new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated according to Table 2-1 of the American Society of Civil Engineers, Flood Resistant Design and Construction Standard (ASCE 24); 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;
- c. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- d. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Floodplain Administrator;

- e. Non-residential structures that are elevated, not floodproofed, must meet residential standards in (2) above; and
 - f. Applicants floodproofing nonresidential 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).
 - g. 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.
 - h. 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. If the manufactured dwelling is supported on solid foundation walls, the ground area reserved for the placement of a manufactured dwelling shall be a minimum of two (2) foot above BFE unless the foundation walls are designed to automatically equalize hydrostatic forces 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 meet or exceed the following minimum criteria:
 - i. A minimum of two (2) 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;
 - ii. The bottom of all openings shall be no higher than one (1) foot above grade; and
 - iii. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- b. The bottom of longitudinal chassis frame beam in A zones shall be at or above BFE;
- c. The manufactured dwelling 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; and

- d. Electrical crossover connections shall be a minimum of two (2) foot above BFE.

Q. 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 Section (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.

R. Recreational Vehicles

In all Special Flood Hazard Areas, Recreational Vehicles authorized as Temporary Trailers under Chapter 14.4.9.100 or stored on properties in Special Flood Hazard Areas shall:

1. Be on the site for fewer than 180 consecutive days; or
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.

- S. Essential Facilities.** Construction of new essential facilities shall be, 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.

T. 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.

- U. Fences.** Floodplain Development Permits are required for certain fences and walls located in the Special Flood Hazard Area, as indicated in Table 3.7.210 below. New and replacement fencing shall be designed to collapse under conditions of the base flood or to allow the passage of water by having flaps or openings in the areas at or below the Base Flood Elevation sufficient to allow flood water and associated debris to pass freely. Fencing located in the regulatory Floodway shall meet the requirements of Section O(2) Development in Regulatory Floodways. See Table 3.7.210 below for specific requirements.

Table 3.7.210 Fencing and Walls in Special Flood Hazard Area

Fence or Wall Type	Fencing and Walls Allowed?		
	Floodway Fringe	Regulatory Floodway	Shallow/Sheetflow/Ponding Zones
A	yes	yes	yes
B	yes	Yes, with limited cross channel fencing	yes
C	Design Review Required	Design Review Required	Design Review Required
D	Yes, if open at base to BFE	Variance Required	Yes, if open at base to BFE
E	Yes, if open at base to BFE	Variance Required	Yes, if open at base to BFE
F	Yes, if adequate openings at base to BFE	Variance Required	Yes, if adequate openings at base to BFE
G	Yes, if adequate openings at base to BFE	Variance Required	Yes, if adequate openings at base to BFE
H	Yes, if adequate openings at base to BFE	Variance Required	Yes, if adequate openings at base to BFE

Fence/Wall Types:

- A Open barb or barbless wire. Open means no more than one horizontal strand per foot of height.
- B Open pipe or rail fencing (e.g. corrals). Open means rails occupy less than 10% of the fence area and posts are spaced no closer than 8 feet apart.
- C Collapsible fencing
- D Other wire, pipe, or rail fencing (e.g. field fence, chicken wire, etc.) which does not meet open requirements above
- E Chain link fencing
- F Continuous wood fencing
- G Masonry walls
- H Retaining walls, bulkheads

Design Review: Floodplain Development Permit (Type II) required. Must ensure fence will collapse under anticipated base flood conditions. Debris impact must be considered.

Variance: Type III Variance required. Not allowed unless shown, using FEMA-approved engineering/modeling standards, to cause no-rise in BFE.

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

1. All development (including substantial improvements) in high hazard areas (all A zones) for which provisions are not specified in this ordinance or covered by Oregon Specialty Codes shall:
 - a. Obtain a Floodplain Development Permit;
 - b. Be located and constructed to have low damage potential;
 - c. Be constructed with materials resistant to flood damage;
 - d. If located in a regulatory Floodway, meet the limitations of this ordinance;
 - e. Be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;
 - f. Have all enclosures below the Base Flood Elevation designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or:
 - i. Provide a minimum of two (2) openings with a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
 - ii. The bottom of all openings shall be no higher than one (1) foot above the higher of the exterior or interior grade or floor immediately below the opening; and
 - iii. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions without manual intervention; and
 - g. Have 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.
2. Walled and roofed accessory structures that are exempt from Oregon Special Code requirements, including substantial improvement to existing accessory structures, shall meet the requirements of paragraph (1) above and shall:
 - a. Be less than 200 square feet and not exceed one story;
 - b. Have unfinished interiors and not be temperature controlled;
 - c. Not be used for human habitation and may be used solely for parking of vehicles or storage of items having low damage potential when submerged; and

- d. 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 this ordinance or stored at least one foot above Base Flood Elevation.

W. Variance Procedures and Criteria

1. 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.
 - a. Upon consideration of the criteria in Section 2 (Criteria for Variances) and the purposes of this ordinance, the City of Cottage Grove may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
 - b. 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

- a. Variances shall not be issued within a designated regulatory Floodway if any increase in flood levels during the base flood discharge would result.
- b. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with criteria in this section. As the lot size increases the technical justification required for issuing the variance increases.
- c. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- d. 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; and,

- iii. Determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances.
- e. Variances may be issued for a water dependent use provided that the criteria in Section (O)(2) are met, and the structure or development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- f. 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.
- g. 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. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
- h. In passing upon such applications, the City shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, 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.
3. **Variance Decision.** If the variance is approved, the Community Development Director shall notify the applicant in writing following the procedures established in Section 4.1.300 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 ordinance 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. Any person who violates this Chapter or fails to comply with any of its requirement shall upon conviction thereof be fined not more than 500 dollars, imprisoned for a period not to exceed 30 days, or punished by both such fine and imprisonment.
- 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 ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restriction shall prevail.

Z. 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. The City of Cottage Grove is proposing to replace the current Chapter 3.7.200 Floodplain Development with a new Flood Damage Prevention section that is based upon the 2012 Oregon Model Companion Flood Damage Prevention Ordinance and is in compliance with current Code of Federal Regulations, Oregon Statutes, and EO 11988 (as revised, 2015).
4. **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 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.

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. A public open house was held on February 4, 2016 to review proposed changes to the code. All property owners within 300' of a riparian area or the Special Flood Hazard Area were sent written invitations to attend, and a city-wide notice was included in the January water bill. 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 March 24, 2016, 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.

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 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 2012 Oregon Model Companion Flood Damage Prevention Ordinance and the new Executive Order 11988. 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 new code, and criteria are included to avoid development in flood prone areas. The new code complies with Goal 7.

5. The proposed 3.7.200 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 is to promote the public health, safety and general welfare, and to minimize public and private losses due to flood condition in specific areas through 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;
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. Ensure that potential buyers are notified 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, and;
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.

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

6. **Section 4.1.500.H.4 is not applicable to this application, as the code does not apply to a specific property, but rather to all Special Flood Hazard Areas as defined by the current adopted Floodplain Maps.** As these maps can change, the code is not property-specific, but rather provides additional criteria to address development upon properties that are already provided with assurances of provisions of adequate public facilities, services and transportation networks through other sections of the Cottage Grove Development Code, Public Facilities Plan and Transportation System Plan.
7. The Planning Commission held a public hearing on the ordinance on May 18, 2016 and after receiving and considering public testimony the Planning Commission recommended that City Council approve the ordinance.
8. City Council held a public worksession on the proposed ordinance on June 27, 2016 where staff gave a presentation on the proposed changes and answered questions of Council.
9. The proposed ordinance and recommended changes to the ordinance since the Planning Commission public hearing was held were published on the City website on June 30, 2016. The modifications were a result the meeting with the Department of Land Conservation and Development and the Federal Emergency Management Agency on the

Oregon Biological Opinion and future regulations.

10. The proposed Ordinance with the modifications noted in 9 above was published on the City website on June 30, 2016.
11. City Council held a public hearing on August 8, 2016.