

## Chapter 3.7 — Sensitive Lands

### Sections:

- 3.7.010 Purpose and Applicability**
- 3.7.100 Hillside Development**
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### **3.7.010 Purpose and Applicability**

The following sections contain design standards related to areas of environmental concern within the City of Cottage Grove. These standards are applicable to any development subject to Land Use or Site Design Review on hillsides, in designated floodplains, along river corridors, or within the state-designated Willamette River Greenway.

The requirements of this section are in addition to other provisions of this code. Where the provisions of this chapter conflict with other provisions of this code, the provisions that are more restrictive of regulated development activity shall govern. Requirements of this chapter are in addition to those of the Specialty Codes adopted by Chapter 15.04 of the Cottage Grove Municipal Code.

### **3.7.100 Hillside Development**

**A. Intent and Purpose.** The intent and purpose of the provisions of this section are as follows. Unless otherwise provided, the hillside area regulations are in addition to generally applicable standards provided elsewhere in this code.

1. To implement the landslide hazard prevention goals in the City of Cottage Grove Natural Hazard Mitigation Plan;
2. To implement the “Hillside Development” element of the City of Cottage Grove Comprehensive Plan;
3. To provide for the review of hillside development applications and evaluate properties for potential slope related hazards;
4. To assess the risk that a proposed use or activity may adversely affect the stability and slide susceptibility of an area; and thus promote the public health, safety, and welfare;
5. To establish standards and requirements for the development of lands in a hillside area; and
6. To mitigate risk within a hillside area, not to act as a guarantee that the hazard risk will be eliminated, nor as a guarantee that there is a higher risk of hazard at any location.

**B. Definitions.** As used in this chapter, except where the context otherwise clearly requires:

1. Certified Engineering Geologist means any Geologist who is certified in the specialty of Engineering Geology under provisions of ORS 672.505 to 672.705 and registered in the State of Oregon.
2. Civil Engineer means a Professional Engineer, registered with the State of Oregon, who by training, education and experience is qualified in the practice of geotechnical or soils engineering practices.
3. Contiguous Slope means a slope bounded by a summit, benches or plateaus (including basal plains) of sufficient width that a profile line constructed from the lower toe of the slope to the furthest point of the plateau or bench will have a slope of less than that specified by the particular Hillside Area Level detailed in Exhibit 1 to this ordinance.
4. Emergency Action means an action that must be undertaken immediately to prevent an imminent threat to public health or safety, or prevent imminent danger to public or private property.
5. Erosion means the wearing away of the earth's surface as a result of the movement of wind, water, or ice.
6. Excavation means any act by which earth, sand, gravel, rock or any similar material is dug into, cut, quarried, uncovered, removed, displaced, relocated or bulldozed, including the conditions resulting there from.
7. Fill or Backfill means a deposit of earth or other natural or manmade material placed by artificial means. This includes approved waste materials and the re-deposit of previously removed material.
8. Geological Assessment means an assessment prepared and stamped by a Certified Engineering Geologist, detailing the surface and subsurface conditions of the site and delineating the areas of a property that might be subject to geological hazards, and furnish professional analysis of information to assess the suitability of the site for development. Geological assessment must be prepared in accordance with the report requirements identified in this chapter. The geological assessment may be incorporated into or included as an appendix to the geotechnical report.
9. Geotechnical Assessment means a written assessment prepared and stamped by a geotechnical engineer or professional licensed in the State of Oregon to perform such work stating whether or not a significant risk of landslide hazard exists due to seismic or water induced forces, or if significant landslide hazard risk from any cause may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the assessment. The assessment shall detail the surface and subsurface conditions of the site and delineate the areas of the property that might be subject to geotechnical hazards.

10. Geotechnical Engineer means a Professional Engineer, registered with the State of Oregon as provided by ORS 672.002 to 672.325, who by training, education and experience is qualified in the practice of geotechnical or soils engineering practices.
10. Geotechnical Evaluation means a written letter or evaluation prepared and stamped by a geotechnical or civil engineer identifying whether a landslide hazard exists due to seismic or water induced forces or soil conditions; and whether a significant landslide hazard risk may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the evaluation.
11. Geotechnical Report means a report prepared and stamped by a Geotechnical Engineer, evaluating the site conditions and recommending design and mitigation measures necessary to reduce the risk associated with development and to facilitate a safe and stable development. A geotechnical report must be prepared in accordance with the report requirements identified in this Chapter.
12. Grading means the act of excavating or filling, which results in the changing of the elevation or drainage pattern of the surface of the land.
13. Ground Disturbance means any excavation of 50 cubic yards or more.
14. Hazardous Vegetation means as defined by Section 8.12.045 of the Municipal Code.
15. Hillside Area means any property with slopes of 15% or more.
16. Landslide means the downslope movement of soil, rocks, or other surface matter on a site. Landslides may include, but are not limited to, slumps, mudflows, earthflows, debris flows, and rockfalls.
17. Mitigation Measure means an action designed to reduce project-induced geologically hazardous area impacts.
18. Slope means an inclined earth surface, the inclination of which is expressed denoting a given rise in elevation over a given run in distance. A fifteen percent slope, for example, refers to a fifteen foot rise in elevation over a distance of one hundred feet. Slopes are measured across a horizontal rise and run calculation within any horizontal twenty-five foot distance.
19. Tree means any living, standing, woody plant, having a trunk eight inches or more in diameter or 25 inches in circumference, measured at a point of four feet above grade at the base of the trunk.
20. Tree Removal means to cut down a tree or remove all or 50% or more of the crown, trunk, or root system of a tree; or to damage a tree so as to cause the tree to decline or die. "Removal" includes but is not limited to topping, damage inflicted upon a root system by application of toxic substances, operation of equipment and vehicles, storage of materials, change of natural grade due to unapproved excavation or filling, or unapproved alteration

of natural physical conditions. "Removal" does not include normal trimming or pruning of trees.

21. Vegetative Removal means the disturbance or removal of more than 2,500 square feet of existing vegetative ground cover including but not limited to trees, brush, grass and low growing ground cover plants.

**C. Regulated Activities; Permit and Approval Requirements; Applicability.** Except as provided under section 18.41.040, no person shall engage in any of the following regulated activities in hillside areas of 15% or greater, without first obtaining a Hillside Development Permit as required by this chapter.

1. Tentative or final platting of partitions, subdivisions, manufactured home parks, planned unit developments, or mixed use master plans;
2. Proposed planned unit developments, or mixed use master plans;
3. Construction of new commercial building;
4. Construction of new residential building;
5. Construction of roads and/or utilities;
6. Excavation/fill/grading;
7. Expansion of footprint of more than 500 square feet of any existing structure, building, road or utility; or
8. Tree removal on slopes greater than 60%;
9. Vegetation removal that exceeds 2,500 square feet;
10. Any property where a geotechnical evaluation, assessment or geotechnical report has not been conducted in the last 10 years, subject to review by the City Engineer;
11. At the request of the City Engineer.

**D. Application Process.** The application may be processed simultaneously with other land use applications, but approval of the other land use applications shall be subject to the Hillside Development Permit being issued and the appeal period having expired.

The requirements of this chapter are in addition to other provisions of this code. Where the provisions of this chapter conflict with other provisions of this code, the provisions that are more restrictive of regulated development activity shall govern.

**E. Exemptions.** The following activities, and persons engaging in same, are EXEMPT from the provisions of this chapter:

1. Construction/modifications of utilities and streets within existing footprint of street;
2. Interior remodels;
3. Exterior alterations and/or additions under 500 square feet in area;
4. Construction of accessory structures under 200 square feet in area;
5. Construction/renovation of retaining walls less than 4' in height (measured from bottom of footing to top of wall); or
6. Excavation or fill under 50 cubic yards.

**F. Hillside Area Levels & Mapping.** Hillside Area Levels for the purpose of this Chapter are:

1. Level 1 hillside area is any area with a slope of 15 to 20 percent;
2. Level 2 hillside area is any area with a slope of 20 to 25 percent; and
3. Level 3 hillside area is any area with a slope of greater than 25 percent.
4. Hillside area levels 1-3 are mapped on the "Slopes In Cottage Grove", as prepared by Lane Council of Governments, dated April 19, 2006, which is on file in the Community Development Department. This map provides guidance only. Final determination of slopes should be determined by a professional licensed in the State of Oregon to perform such surveys. This map provides guidance only. Slopes should be determined on a site-specific basis by a registered surveyor.

**G. Geotechnical Evaluation, Assessments & Reports.**

1. Geotechnical Evaluations-Level 1.
  - a. Geotechnical Evaluations shall be based on site visits(s) and literature review and shall state the planned property use for which the evaluation was performed.
  - b. Geotechnical Evaluations shall be performed by a Geotechnical Engineer registered in the State of Oregon, or Civil Engineer registered in the State of Oregon, or a combination thereof.
  - c. The author of the evaluation shall state whether or not, in their professional opinion, a significant landslide hazard exists due to seismic or water induced forces; soil conditions; and if significant landslide hazard risk from any cause may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the evaluation.
  - d. The evaluation shall contain recommendations to be followed during construction of the proposed work, unless the author(s) finds it probable that a significant risk may exist, at which point the author(s) shall recommend either a Geotechnical Assessment

or a Geotechnical Report.

- c. The Geotechnical Evaluation shall be stamped by the author(s).
- f. The Geotechnical Evaluation is required at the time of Hillside Development Permit application submittal.

2. Geotechnical Assessment – Level 2.

- a. Geotechnical Assessments shall be based on site visit(s), literature review and shallow borings of sufficient depth, frequency and distribution to identify the soil or rock zones apt to mobilize under seismic or water induced forces;
- b. Geotechnical Assessment shall be performed by a Geotechnical Engineer registered in the State of Oregon;
- c. The author of the assessment shall state whether or not, in their professional opinion, a significant risk of landslide hazard exist due to seismic or water induced forces, or if significant landslide hazard risk from any cause may become present after development, based on the planned use of the property. The contiguous slope shall be considered in the assessment;
- d. The assessment shall detail the surface and subsurface conditions of the site and delineating the areas of a property that might be subject to geotechnical hazards;
- e. The assessment shall contain recommendations to be followed during construction of the proposed work, unless the author(s) finds that a significant risk may exist, at which point they shall recommend a Geotechnical Report be performed;
- f. The Geotechnical Assessment shall be stamped by the author; and
- g. The Geotechnical Assessment is required at the time of Hillside Development Permit application submittal.

3. Geotechnical Report-Level 3.

- a. A Geotechnical Report shall be required:
  - 1. For slopes greater than 25%; or
  - 2. Where a geological evaluation or assessment recommends preparation of a Geotechnical Report; or
  - 3. Where a landslide risk has been identified by the Oregon Department of Geology and Mineral industries; or
  - 4. Where unusual and site specific circumstances including, but not limited to, importance of facility, land form mobilization history or potential impacts to

surrounding existing structures, exist and the City Engineer makes a written finding that such hazard may exist based on the evidence available and that a detailed examination of the site's geotechnical characteristics is warranted.

b. The Geotechnical Report shall include at minimum the following:

- 1) A report shall evaluate the site conditions and recommend design and mitigation measures necessary to reduce the risk associated with development and to facilitate a safe and stable development;
- 2) The author of the geotechnical report shall state that, in their opinion, a geological assessment is not required. If a Geological Assessment is required, it shall be performed by a Certified Engineering Geologist registered in the State of Oregon. Assessments shall be prepared in accordance with the Guidelines for Preparing Engineering Geologic Reports in Oregon as adopted by the Oregon State Board of Geologist Examiners. The report shall detail the conditions of the surface and subsurface conditions of the site and delineating the areas of the property that might be subject to specified geologic hazards. The report shall be stamped by the author;
- 3) Comprehensive description of the site topography; including the characterization of each type of native and imported soil likely to be impacted by the planned activities including: Atterburg Limits, Specific Gravity, Natural Moisture Content, Cohesion, Internal Angle of Friction;
- 4) An estimate of the safety factor against slope instability before and after development considering gravity forces, seismic forces, hydraulic impacts under varied ground water or vadose zone conditions, and vegetation removal;
- 5) Sections through the hillside illustrating pre and post development configurations for structures, piping and roads;
- 6) Estimate of the allowable bearing strength of the soil for foundations and identification of areas requiring further detailed work;
- 7) Assessment of the safety of and recommendations for cut and fill operations, including specific requirements for plan modification, corrective grading and special techniques and systems to facilitate a safe and stable development;
- 8) Assessment of and recommendations for mitigation of potential adverse impacts on structures, roads, and piping systems;
- 9) Recommendations for transport and collection of surface and subsurface (if present) water;
- 10) Recommendations on vegetation removal and replacement;
- 11) Description of the field investigation and findings;

- 12) Other recommendations as necessary, commensurate with the project grading and development;
- 13) Geotechnical Reports shall be in accordance with recommendations of the Geotechnical Institute of the American Society of Civil Engineers; The Geotechnical Report shall be prepared and stamped by the author; and
- 14) The Geotechnical Report is required at the time of Hillside Development Permit application submittal.

#### **H. Review Procedure and Approvals.**

1. No regulated activity may be initiated until the City Engineer has reviewed the Geotechnical Evaluation, Assessment or Report, and/or the Geological Assessment; has made a recommendation to the Community Development Director, and the Community Development Director has made a decision and issued a Hillside Development Permit (Type I or II).
2. Level 1 Hillside Development Permits shall be processed as Type I applications. Level 2 & Level 3 Hillside Development Permits shall be processed as Type II applications. Upon review of the application, the Community Development Director and/or City Engineer may choose to process a Level 3 Permit as a Type III application.
3. A Geotechnical Evaluation, Assessment or Report and/or a Geological Assessment must be submitted concurrently with the Hillside Development Permit application.
4. Review of submittals shall include examination to ensure that the following criteria are met:
  - a. Required elements are completed;
  - b. Geotechnical or Geological Report procedures and assumptions are generally accepted; and
  - c. All conclusions and recommendations are supported and reasonable.
5. Conclusions and recommendations stated in an approved Geotechnical Evaluation, Assessment or Report; and/or Geological Assessment shall then be directly incorporated as permit conditions or provide the basis for conditions of approval of the regulated activity.
6. An excavation and fill permit may be required pursuant to Section 15.20 "Erosion Prevention and Construction Site Management Practices" of the Cottage Grove Municipal Code.

- I. Independent Review.** Where the City Engineer determines that a Geotechnical Evaluation, Assessment or Report and/or the Geological Assessment fails to meet one or more of the review criteria, or the City Engineer determines that it lacks the qualifications or expertise to

fully review the above noted items, the Community Development Director on the recommendation of the City Engineer, may elect to have an independent Certified Engineering Geologist and/or Geotechnical Engineer undertake the review, at City expense.

**J. Certification of Compliance.** No regulated activity requiring a Geotechnical Evaluation, Assessment, or Report shall receive initial inspection on a valid permit for properties located in a hillside area until the City receives a written statement by a civil or geotechnical engineer or other licensed professional that all performance, mitigation, or monitoring measures contained in an approved Geotechnical Report are completed, in place, and operable.

**K. Disclosure.** As a condition of City permits or approvals of regulated activities located in hillside areas, the owner:

1. Shall record a declaratory statement against the property stating the property contains slopes of fifteen percent or more and that all approved Geotechnical Evaluations, Assessment, or Reports and/or Geological Assessments for such property are on file with the City; and
2. Shall provide evidence of such recording to the Community Development Department.

**L. Emergency Actions.** The person undertaking an emergency action as defined by this chapter shall notify the Community Development Director or City Engineer upon the immediately following the commencement of the emergency activity. If the Community Development Director after review by the City Engineer determines that the action or part of the action taken is beyond the scope of an allowed emergency action, enforcement action may be taken.

### **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.**

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 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.

<b>Table 3.7.210 Fencing and Walls in Special Flood Hazard Area</b>			
<b>Fence or Wall Type</b>	<b>Fencing and Walls Allowed?</b>		
	<b>Floodway Fringe</b>	<b>Regulatory Floodway</b>	<b>Shallow/Sheetflow/Ponding Zones</b>
<b>A</b>	yes	yes	yes
<b>B</b>	yes	Yes, with limited cross channel fencing	yes
<b>C</b>	Design Review Required	Design Review Required	Design Review Required
<b>D</b>	Yes, if open at base to BFE	Variance Required	Yes, if open at base to BFE
<b>E</b>	Yes, if open at base to BFE	Variance Required	Yes, if open at base to BFE
<b>F</b>	Yes, if adequate openings at base to BFE	Variance Required	Yes, if adequate openings at base to BFE
<b>G</b>	Yes, if adequate openings at base to BFE	Variance Required	Yes, if adequate openings at base to BFE
<b>H</b>	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 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.
- c. 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.
- d. 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.

### 3.7.300 Riparian Development

**A. Applicability.** The following standards are applicable to lands adjacent to the Coast Fork of the Willamette River, Row River, Silk Creek and Bennett Creek. This section applies the standards and specific rules for riparian safe harbors as established in OAR 660-023. The requirements of this section are in addition to other provisions of this code, and will be enforced as part of Land Use, Site Review, or other development review. If riparian modifications occur that are not associated with a development project, these standards shall be enforced through a Type II application.

**B. Purpose.** The purpose of this section is to:

1. To improve and maintain water quality in the Coast Fork Willamette River sub-basin;
2. To mitigate potential flood damage caused by modification of natural riparian habitats;
3. To protect native riparian habitats for sensitive fish and animals that depend upon the rivers and their banks;
4. To implement the “Willamette River Greenway” and “Riparian Resources” elements of the Cottage Grove Comprehensive Plan;
5. To protect aesthetic value of the City’s waterways; and
6. To implement Goal 5 Riparian Safe Harbor standards established in OAR 660-023.

**C. Definitions.** For the purpose of this section, the following definitions from OAR 660-023-0090 Riparian Corridors apply:

1. **Riparian Area** is the area adjacent to a river, lake, or stream, consisting of the area of transition from an aquatic ecosystem to a terrestrial ecosystem. Significant riparian areas are identified in the adopted Goal 5 Riparian Resource Inventory.
2. **Riparian Corridor** is a Goal 5 resource that includes the water areas, fish habitat, adjacent riparian areas, and wetlands within the riparian area boundary.

3. **Riparian corridor boundary** is an imaginary line that is a certain distance upland from the top bank as specified in subsection D of this section.
4. **Stream** is a channel such as a river or creek that carries flowing surface water, including perennial streams and intermittent streams with defined channels, and excluding man-made irrigation and drainage channels.
5. **Structure** is a building or other improvement that is built, constructed, or installed, not including minor improvements, such as fences, utility poles, flagpoles, or irrigation system components.
6. **Top of bank** shall have the same meaning as “bankfull stage” defined in OAR 141-085-0010(12).

**D. Riparian Corridor Boundary.** Along all riparian areas identified in the adopted Goal 5 Riparian Resource Inventory, the riparian corridor boundary shall be 50 feet from top of bank.

When the riparian corridor includes all or portions of a significant wetland as defined by the acknowledged Local Wetland Inventory map, the standard distance to the riparian corridor boundary shall be measured from, and include, the upland edge of the wetland.

**E. Prohibited Development & Vegetation Removal within Riparian Corridor Boundary.**

Permanent alteration of the riparian area by grading or by the placement of structures or impervious surfaces shall be prohibited within the riparian corridor boundary, except as identified in subsection E below. Vegetation removal shall be prohibited, except as identified in subsection F below.

**F. Exempt Development.**

The following uses are allowed through a Type II application, provided they are designed and constructed to minimize intrusion into the riparian area:

1. Streets, roads and paths;
2. Drainage facilities, utilities, and irrigation pumps;
3. Water-related and water-dependent uses;
4. Replacement of existing structures with structures in the same location that do not disturb additional riparian surface area; and
5. Removal of non-native vegetation and replacement with native plant species; and

6. Removal of vegetation necessary for the development of water-related or water-dependent uses.

**G. Variance from Riparian Corridor Requirements.** Request for relief from the above standards shall be processed pursuant to the Type III Variance application requirements set forth in Chapter 4.1. Variances may be granted for the permanent alteration of the riparian area by placement of structures or impervious surfaces within the riparian corridor boundary if:

1. The restrictions in this section render a lot existing at the date of the adoption of this ordinance not buildable, at which time a lesser setback of 25 feet from the riparian boundary corridor shall be applied; or
2. It can be demonstrated that equal or better protection for identified resources will be ensured through restoration of riparian areas, enhanced buffer treatment, or similar measures. In no case shall such alterations occupy more than 50 percent of the width of the riparian area measured from the upland edge of the corridor.

### **3.7.400 Willamette River Greenway**

**A. Intent and Purpose.** The Willamette River Greenway is a State-designated scenic corridor along both sides of the Coast Fork of the Willamette River within the City of Cottage Grove. The boundaries of the approved Willamette River Greenway shall be maintained on a map at the City of Cottage Grove Community Development Department Office.

The purpose of the Willamette River Greenway designation is to protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River.

The qualities of the Willamette River Greenway shall be protected, conserved, enhanced and maintained consistent with the lawful uses present on December 6, 1975. Intensification of uses, changes in use or developments may be permitted after this date only when they are consistent with the City of Cottage Grove Comprehensive Plan, the Willamette River Greenway Statute, Statewide Planning Goal 15, ORS Chapter 290.010 to 390.220 and ORS Chapter 390.310 to 390.368, the interim goals in ORS 215.515(1) and the statewide planning goals, as appropriate, and when such changes have been approved by the approval body through a Type III application process.

**B. Applicability.** The land use element of the comprehensive plan and underlying zoning district shall determine the uses permitted in the Greenway. All intensification, changes of use or development activities in the Greenway are subject to this section unless otherwise exempted in Section C Definitions.

### **C. Definitions.**

1. Change of Use: means making a different use of the land or water than that which existed

on December 6, 1975. It includes a change which requires construction, alterations of the land, water or other areas outside of existing buildings or structures and which substantially alters or affects the land or water. It does not include a change of use of a building or other structure which does not substantially alter or affect the land or water upon which it is situated. The sale of property is not in itself considered to be a change of use. An existing open storage area shall be considered to be the same as a building. Landscaping, construction of driveways, modifications of existing structures, or the construction or placement of such subsidiary structures or facilities as are usual and necessary to the use and enjoyment of existing improvements shall not be considered a change of use for purposes of this section.

2. **Intensification:** means any additions which increase or expand the area or amount of an existing use, or the level of activity. Remodeling of the exterior of a structure not excluded below is an intensification when it will substantially alter the appearance of the structure. Maintenance and repair usual and necessary for the continuance of an existing use is not an intensification of use. Reasonable emergency procedures for the safety or the protection of property are not an intensification of use. Residential use of lands within the Greenway includes the practices and activities customarily related to the use and enjoyment of one's home. Landscaping, construction of driveways, modification of existing structures or construction or placement of such subsidiary structures or facilities adjacent to the residence as are usual and necessary to such use and enjoyment shall not be considered an intensification for the purposes of this section.

**D. Criteria and conditions.** The approval body shall consider the following objectives, make affirmative findings on each of them through a Type III Conditional Use Permit per Chapter 4.4, and shall impose conditions on the permit to carry out the purpose and intent of the Willamette River Greenway Statutes:

1. Significant fish and wildlife habitats shall be protected;
2. Identified scenic area, viewpoints and vistas shall be preserved;
3. Any structure must be located outside the existing vegetative fringe or behind a setback line which is at least 50 feet (whichever is the greatest distance) from the top of the river bank to insure that areas of natural, historical or recreational significance will be protected, conserved, maintained or enhanced to the maximum extent possible (setback line shall not apply to water-related or water-dependent uses);
4. The natural vegetative fringe along the river shall be enhanced and protected to the maximum extent practicable in order to assure scenic quality, protection of wildlife, protection from erosion and screening of uses from the river;
5. The proposed development change or intensification of use is compatible with the site and surrounding area;
6. Any development will be located away from the river to the maximum extent possible;

7. The proposed development, change or intensification of use will provide the maximum landscaped area, open space or vegetation between the activity and the river;
8. Necessary public access will be provided to and along the river by appropriate legal means;
9. The proposed development meets the Vegetation Maintenance Standards in Section 3.7.300; and
10. The proposed development, change or intensification of use meets the requirements of the City of Cottage Grove Comprehensive Plan, the Willamette River Greenway Statute, Statewide Planning Goal 15, ORS Chapter 290.010 to 390.220 and ORS Chapter 390.310 to 390.368, the interim goals in ORS 215.515(1) and the statewide planning goals.

**E. Notice to Department of Transportation.** The city will not permit an intensification, change of use or development on lands within the boundaries of the Willamette River Greenway without first giving immediate notice by “certified mail – return receipt requested” to the Department of Transportation of an application for a Greenway conditional use permit. Notice of action taken by the city on an application shall be furnished to the Department of Transportation.

### **3.7.500 Wetland Protection**

**A. Background.** The City of Cottage Grove completed a Local Wetland inventory (LWI) in 2011 in accordance with Department of State Lands (DSL) administrative rules (OAR). DSL approved this inventory on 1/5/2012. The LWI report describes the location, quantity, and quality of a total of 47 wetlands within the study area including 27 wetlands not previously on file with DSL. The study area consisted of Cottage Grove’s Urban Growth Boundary with potential expansion properties to the South. Of these 47 wetlands, 37 met state criteria for locally significant wetland (LSW) qualification. 35 of the wetlands designated as locally significant lie partially or entirely within the City of Cottage Grove’s urban growth boundary. These 35 LSW were the subject of a 2012 Economic, Social, Environmental, and Energy (ESEE) analysis. Review LWI map for specific wetland designations.

**B. Applicability.** This ordinance is applicable to any activity within any wetlands within the corporate limits of the City of Cottage Grove, whether on the LWI map or not.

Unless otherwise stated, the City of Cottage Grove shall apply the following provisions in conjunction and concurrently with the requirements of any other development permit being sought by an applicant. If no other permit is being sought, the Community Development Director shall serve as the approving authority through a Type I or II process.

**C. Purpose.** It is the purpose of this chapter to promote the health, safety, and general welfare of the present and future residents of the City of Cottage Grove by providing for the protection, preservation, proper maintenance, and use of the wetland areas within the City of Cottage Grove. This code is designed to:

1. Implement the goals and policies of the City of Cottage Grove’s Comprehensive Plan;
2. Satisfy the requirements of Statewide Planning Goals 5 and 6;
3. Protect Cottage Grove wetland areas, thereby protecting the hydrologic and ecologic functions wetlands provide, including reduced adverse effects of erosion and flooding;
4. Protect fish and wildlife habitat;
5. Protect the amenity values and educational opportunities of wetlands;
6. Improve and promote coordination among local, state, and federal agencies regarding development activities in and near wetlands.

**D. Determination of Locally Significant Wetlands.** In accordance with rules adopted by DSL (OAR 141-086-3000), wetlands within the City of Cottage Grove have been assessed and a local significance determination made. Locally significant wetlands are identified as such on the City of Cottage Grove LWI map.

All wetlands, mapped or not, remain subject to DSL review and permitting. Oregon’s Removal-Fill Law (ORS 196.795-990) requires people who plan to remove or fill material in waters of the state to obtain a permit from the DSL. The City of Cottage Grove shall notify the Oregon DSL in writing of all applications to the City of Cottage Grove for development that occurs in, or within 20 feet of, any wetland identified on the Local Wetlands Inventory map whether locally significant or not.

**E. Definitions.** As used in this chapter:

1. Economic, Social, Environmental, Energy (ESEE) Analysis – Analysis required of local governments in developing a program to achieve Goal 5 compliance for all significant resource sites. “ESEE consequences” are the positive and negative economic, social, environmental, and energy (ESEE) consequences that could result from a decision to allow, limit, or prohibit a conflicting use. [See OAR **660-023-0040 for more detail on ESEE Decision Process.**]
2. Jurisdictional Delineation – A current delineation of a wetland’s boundaries that is approved by DSL. A delineation is a precise map and documentation of actual wetland boundaries on a parcel, whereas a LWI boundary may only be a rough map with an accuracy target of 5 meters (approximately 16.5 feet). [See OAR 141-90-005 et seq. for specifications for wetland delineation reports.]
3. Jurisdictional Determination – A written decision by DSL that waters of the state subject to regulation and authorization requirements of OAR 141-085, 141-089, 141-0100 and 141-0102 are present or not present on a land parcel. The Jurisdictional Determination may include a determination of the geographic boundaries of the area subject to state

jurisdiction. A Jurisdictional Determination may, but does not necessarily, include a determination that a particular activity is subject to DSL permitting requirements.

4. Jurisdictional Wetland – Wetlands regulated by the U.S. Environmental Protection Agency, the Army Corps of Engineers, and the DSL. This includes all wetlands on the City of Cottage Grove LWI map. Activities that may affect these wetlands are subject to agency review and may be restricted or require state/local permits before work may be done.
5. Locally Significant Wetland – Wetlands determined to be Locally Significant Wetlands based on Oregon Administrative Rules for Identifying Significant Wetlands (OAR 141-86-300 through 141-86-350). If the assessed wetland unit provides “diverse” wildlife habitat, “intact” fish habitat, “intact” water quality function, or “intact” hydrologic control function, then the wetland is locally significant. Locally Significant Wetlands are identified on the City of Cottage Grove LWI. Locally Significant Wetlands also constitute the Wetland Protection Area (unless otherwise indicated in this ordinance).
6. Local Wetlands Inventory (LWI) – *Cottage Grove Local Wetland Inventory Report* and LWI map produced by Environmental Science Associates (ESA) in 2011 and approved by DSL in 2012, and any subsequent revisions as approved by the DSL. The LWI is a comprehensive survey and assessment of all wetlands over a half acre in size within the urbanizing area. This includes both locally significant wetlands, and wetlands that are not identified as locally significant (including probable wetlands).
7. Probable Wetlands (PW) – An area noted during the course of LWI field work that appears to meet, or does meet, wetland criteria but is small or of undetermined size, and is mapped as a point rather than a polygon on the LWI maps.
8. Qualified Wetland Professional – A professional with a background in wetland science and experience with conducting wetland delineations and determinations.
9. Wetland – An area inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and which, under normal circumstances, does support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
10. Wetland Protection Area – An area subject to the provisions of this chapter that is constituted by wetlands determined to be locally significant as shown on the LWI (unless otherwise indicated under Section H.5). The wetland protection area extends 20 feet from the mapped LWI boundary unless an onsite or off site determination or wetland delineation provides a more refined estimation of the wetland boundary.

**F. Prohibited Uses.** Except as exempted or allowed in Sections G-H, the following uses are prohibited within a wetland protection area:

1. Placement of new structures or impervious surfaces;

2. Excavation, drainage, grading, fill, or removal of vegetation;
3. Expansion of areas of landscaping with non-native species, such as a lawn or garden, into the wetland protection area;
4. Disposal or temporary storage of refuse, yard debris, or other material;
5. Discharge or direct runoff of untreated stormwater unless as a conditional use meeting requirements in Section H; or
6. Any use not specifically allowed in Section H.

**G. Exempt Uses.** The following activities and maintenance thereof are exempted from wetland protection area regulations, provided that any applicable state or federal permits are secured:

1. Maintenance of any use or development that was lawfully existing on the date of adoption of this ordinance, [October 14, 2013] per the standards for Non-Conforming Development in Chapter 14.5.2;
2. The maintenance and alteration of pre-existing ornamental landscaping so long as no additional native vegetation is disturbed;
3. Wetland restoration and enhancement of native vegetation;
4. Cutting and removal of trees that pose a hazard to life or property due to threat of falling;
5. Cutting and removal of trees to establish and maintain defensible space for fire protection;
6. Removal of non-native vegetation;
7. Maintenance and repair of existing utilities;
8. Maintenance of existing drainage ways, ditches, or other water control structures, as approved by DSL;
9. Emergency stream bank stabilization approved by DSL, to remedy immediate threats to life or property; or
10. Non-motorized, passive outdoor recreational activities, including hiking, mountain biking, wildlife viewing, picnicking, etc.

**H. Allowed Uses.** The following activities and maintenance thereof are allowed within a wetland protection area upon City review and approval through a Type I or II process and provided any applicable state or federal permits are secured:

1. Replacement of a permanent, legal, nonconforming structure in existence on the date of adoption of this ordinance with a structure on the same building footprint, or expansion of the original building footprint, and in accordance with the provisions of Sections 3.7.2, 3.7.3, and 5.2.
2. Expansion of existing roads and streets in adopted Transportation System Plan provided that such practices avoid sedimentation and other discharges into the wetland or waterway.
3. Installation of interpretive/educational displays.
4. New fencing, provided:
  - a. The fencing does not affect the hydrology of the site;
  - b. The fencing does not present an obstruction that would increase flood velocity or intensity; and,
  - c. Fish habitat is not adversely affected by the fencing.
5. The following activities are also allowed on wetlands receiving Limited Protection as identified in the ESEE Analysis with varying development buffers of 25 or 50 feet also provided impacts to the wetland are minimized or mitigated (Type II review):
  - a. Wetland restoration and enhancement activities including:
    - i. Non-native vegetation removal.
    - ii. Invasive species removal.
    - iii. Native plantings.
    - iv. Endangered species habitat restoration.
    - v. Maintenance of wetland functions.
  - b. Trails and low impact recreational and educational park uses including:
    - i. Expanded and new multi-use trails.
    - ii. Information signs and kiosks.
    - iii. Wildlife viewing platforms.
    - iv. Active recreational activities.

- c. Adopted Master Plan activities.
- d. Unavoidable planned public roads.
- e. Limited access points when no others exist.
- g. Culvert replacement, meeting Oregon Department of Fish and Wildlife (ODFW) guidelines and criteria, to:
  - i. Remove barriers to fish passage.
  - ii. Reduce upstream flooding.
  - iii. Improve water quality.
  - iv. Maintain or repair culvert function.

**I. Notification and Coordination with State Agencies.** The City of Cottage Grove shall notify the Oregon DSL in writing of all applications to the City of Cottage Grove for development activities - including development applications, building permits, and other development proposals - that occur in, or within 20 feet of, any wetland identified on the Local Wetlands Inventory map.

**J. Violations and Penalty.** When a wetland has been altered in violation of this Chapter, enforcement shall be conducted as outlined in Chapter 1.5 of the Development Code. In instances where violations of DSL requirements have occurred, DSL enforcement mechanisms apply. In some cases, both local and DSL enforcements may occur.

**K. Application requirements for Wetland Review.** Where Wetland Review is applicable to approve any Allowed Uses under Section H., applicants shall submit the following materials:

1. A scale drawing that clearly depicts any LWI map wetland boundary within the subject parcel and any wetland within 20 feet of the development on an adjacent parcel, all surface water sources, existing trees and vegetation, property boundaries, and proposed site alterations including proposed excavation, fill, structures, and paved areas.
2. Written statement of compliance demonstrating consistency with approval criteria for any proposed Allowed Use(s).
3. Demonstration of avoidance of impacts to wetland protection area (if applicable). This can be demonstrated by any one of the following:
  - a. Submitting an offsite determination, conducted by DSL, that concludes the proposed activities will occur outside the wetland; or

- b. Submitting an onsite determination, conducted by a qualified wetland professional, that concludes the proposed activities will occur outside the wetland protection area; or
- c. Submitting a current wetland delineation (completed within the last five years), certified by DSL, that shows the proposed activities will occur outside the wetland protection area.

**L. Approval Criteria for Wetland Review.** In approving Allowed Uses under Section H, and/or ensuring compliance with Prohibited Uses, the approval body shall base its decision on the following criteria through a Type I or II process:

- 1. The proposed project will not result in excavation or filling of a wetland or reduction of wetland protection area, except as allowed elsewhere in this code;
- 2. Specified criteria for proposed use in Section H. Allowed Uses; and
- 3. Comments and recommendations on proposed uses received from DSL and ODFW.

**M. Variances.** The Planning Commission shall be the approval body for applications for variances to the Wetland protection provisions. Variances shall be processed as a Type III land use procedure following sections 4.1.400 of the Development Code. The Planning Commission may approve or approve with conditions a request for a Variance based upon findings that all of the following approval criteria have been satisfied:

- 1. The applicant has exhausted all other options available under this chapter to relieve the hardship;
- 2. The variance is the minimum necessary to alleviate the hardship;
- 3. All state and federal permits required for authorization of wetland impacts are obtained;
- 4. There is no feasible on-site alternative to the proposed activities, including but not necessarily limited to: reduction in size, density or intensity; phasing of project implementation; change in timing of activities, revision of road and lot layout; and/or related site planning considerations, that would allow a reasonable economic use with less adverse impacts;
- 5. The proposal utilizes to the maximum extent possible innovative construction, design, and development techniques, including pervious surfaces, which minimize to the greatest extent possible net loss of wetland functions and values; and
- 6. The area of disturbance is limited to the area that has the least practical impact on the wetland functions and values.

**N. Mapping Boundary Corrections.** The boundaries of locally significant wetlands are based on the City’s LWI.

1. Wetland boundary corrections will be processed administratively. The Community Development Director may correct the location of the wetland boundary when the applicant has shown that a mapping error has occurred and the error has been verified by the DSL.
2. Delineations verified by DSL shall be used to automatically update and replace LWI mapping.
3. No formal variance application or plan amendment is needed for map corrections where approved delineations are provided.