



Department of Land Conservation and Development

635 Capitol Street, Suite 150 Salem, OR 97301-2540 (503) 373-0050 Fax (503) 378-5518 www.lcd.state.or.us



NOTICE OF ADOPTED AMENDMENT

05/12/2011

TO: Subscribers to Notice of Adopted Plan

or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: Jackson County Plan Amendment

DLCD File Number 004-09

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Tuesday, May 24, 2011

This amendment was submitted to DLCD for review prior to adoption with less than the required 45-day notice. Pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

*NOTE: The Acknowledgment or Appeal Deadline is based upon the date the decision was mailed by local

government. A decision may have been mailed to you on a different date than it was mailed to DLCD. As a result, your appeal deadline may be earlier than the above date specified. NO LUBA Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.

Cc: Mike Mattson, Jackson County Jon Jinings, DLCD Community Services Specialist Chris Shirley, FEMA Specialist Ed Moore, DLCD Regional Representative

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DLCD

THIS FORM MUST BE MAILED TO DLCD
WITHIN 5 WORKING DAYS AFTER THE FINAL DECISION
PER ORS 197.610, OAR CHAPTER 660 - DIVISION 18

	In person electronic mailed
A	DEDT OF
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3	MAY 0.5 2011
A M	AND DEVELOPMENT For DLCD Use Only

CONTRACTOR OF THE PROPERTY OF	
Jurisdiction: Jackson County	Local file number: LRP2008-00009
Date of Adoption: April 27, 2011	Date Mailed: 5-3-11
Was a Notice of Proposed Amendment (Form 1)) mailed to DLCD? YesDate: 12-22-09
Comprehensive Plan Text Amendment	Comprehensive Plan Map Amendment
□ Land Use Regulation Amendment	Zoning Map Amendment
New Land Use Regulation	Other:
Summarize the adopted amendment. Do not us	se technical terms. Do not write "See Attached".
Amends Land Development Ordinance Floodplain Compliance with the National Flood Insurance Progr	
	Service Control of the Control of th
Does the Adoption differ from proposal? Yes, Pl	lease explain below:
Amendments to text submitted with original Form 1 new Model Ordinance from DLCD.	changed while going through adoption process. Received
Plan Map Changed from: N/A	to: N/A
Zone Map Changed from: N/A	to: N/A
Location: Throughout Jackson County	Acres Involved: 42000
Specify Density: Previous: N/A	New: N/A
Applicable statewide planning goals:	
1 2 3 4 5 6 7 8 9 10	11 12 13 14 15 16 17 18 19
Was an Exception Adopted? ☐ YES ☒ NO	
Did DLCD receive a Notice of Proposed Amenda	ment
45-days prior to first evidentiary hearing?	⊠ Yes □ No
If no, do the statewide planning goals apply?	☐ Yes ☐ No
If no, did Emergency Circumstances require imn	nediate adoption? Yes No
DLCD file No	

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

DLCD, DLS, ODFW, ODF, USFS, BLM, Ashland, Butte Falls, Central Point, Eagle Point, Gold Hill, Jacksonville, Medford, Phoenix, Rogue River, Shady Cove, Talent

Local Contact: Mike Mattson Phone: (541) 774-6937 Extension:

Address: 10 S. Oakdale, Room 100 Fax Number: 541-774-6791

City: Medford Zip: 97501 E-mail Address: mattsomw@jacksoncounty.org

ADOPTION SUBMITTAL REQUIREMENTS

This form must be mailed to DLCD within 5 working days after the final decision per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and TWO Complete Copies (documents and maps) of the Adopted Amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT 635 CAPITOL STREET NE, SUITE 150 SALEM, OREGON 97301-2540

- 2. Electronic Submittals: At least one hard copy must be sent by mail or in person, or by emailing larry.french@state.or.us.
- 3. <u>Please Note</u>: Adopted materials must be sent to DLCD not later than **FIVE** (5) working days following the date of the final decision on the amendment.
- 4. Submittal of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.
- 5. The deadline to appeal will not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **twenty-one** (21) days of the date, the Notice of Adoption is sent to DLCD.
- 6. In addition to sending the Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.
- 7. Need More Copies? You can now access these forms online at http://www.lcd.state.or.us/. Please print on 8-1/2x11 green paper only. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518; or Email your request to larry.french@state.or.us Attention: Plan Amendment Specialist.

Updated March 17, 2009

Approved: 4/27/11 Effective: 6/26/11

BEFORE THE BOARD OF COMMISSIONERS STATE OF OREGON, COUNTY OF JACKSON

IN THE MATTER OF CONSIDERATION OF A	
TEXT AMENDMENT TO THE LAND	
DEVELOPMENT ORDINANCE TO REVISE	
THE FLOODPLAIN OVERLAY, SECTION	
7.1.2, SECTION 13.3(100), DEFINITIONS,	
AND SECTION 10.4.1(F), FLOODPLAIN	
AREAS, IN ORDER TO MEET THE	
NATIONAL FLOOD INSURANCE PROGRAM	
(NFIP) REQUIREMENTS FOR FLOODPLAIN	
MANAGEMENT IN JACKSON COUNTY. FILE	
I RP2008-00009	

ORDINANCE NO. 2010-2a

RECITALS:

- 1. Pursuant to Chapter 197 and 215 of the Oregon Revised Statutes, and in conformance with the Statewide Planning Goals, Jackson County's Comprehensive Plan (JCCP) and implementing ordinances have been acknowledged by the Oregon Land Conservation and Development Commission (LCDC).
- 2. The proposed text amendment to the Jackson County Land Development Ordinance was initiated by the Jackson County Board of Commissioners on July 16, 2009, Board Order 204-09, pursuant to LDO Section 3.8.2.
- 3. JCLDO Section 3.8.3 states that text amendments to the Land Development Ordinance will be consistent with and adequate to implement all applicable provision of the Comprehensive Plan, the Statewide Planning Goals, and Oregon Administrative Rules.

PROCEDURAL FINDINGS:

- 1. Pursuant to Oregon Revised Statute (ORS) 197.610 and Oregon Administrative Rule (OAR) 660, Division 18, notice was mailed to the State of Oregon Department of Land Conservation and Development Commission (DLCD) on June 8, 2009. The Jackson County Planning Commission (JCPC) conducted the first evidentiary hearing on July 23, 2009. Subsequent public hearings were conducted on September 10, October 8 and December 10, 2009, and deliberations were concluded on this matter on January 14, 2010.
- 2. On January 14, 2010, the JCPC, by motion and vote, recommended approval of the text amendment to the Board of Commissioners.
- 3. In their recommendation to the Board, the JCPC found that it would be prudent to provide a Measure 56 Notice prior to the first evidentiary hearing before the Board of Commissioners and that the proposed amendments are subject to notice requirements under ORS 215.503. The first evidentiary public hearing before the Board of Commissioners was scheduled for May 5, 2010. A notice pursuant to ORS 215.503 was mailed to property owners within or partially within the FEMA mapped floodplain on April 9, 2010, 26 days prior to the first evidentiary before the Board of Commissioners.
- 4. The Board of Commissioners conducted the first evidentiary hearing on May 5, 2010. Subsequent public hearings were conducted on June 16 and August 4, 2010. At the August 4, 2010 public hearing, the Board of Commissioners, by motion and vote, remanded the revised ordinance changes back to the Jackson County Planning Commission for the reasons below.
 - 4.1 In July, 2010, DLCD distributed to Jackson County a new Draft Oregon Model Companion Flood Damage Prevention Ordinance. Development Services staff discussed the changes and format with the Board and it was decided that reformatting the proposed floodplain ordinance to closely match the Oregon Model Ordinance would be appropriate. There was also a need to clarify language in the proposed revisions that would better guide the public regarding development within the mapped floodplains. The Board felt that the proposed revisions should be remanded back to the Jackson County Planning Commissions for their review and recommendation.
- 5. The Jackson County Planning Commission conducted public hearings on the revised ordinance changes on October 28, November 18, December 9, 2010, and January 27, 2011. On January 27, 2011, by motion and vote, the Planning Commission recommended approval of their changes to the Jackson County Board of Commissioners.
- 6. The Board of Commissioners conducted public hearings for the Jackson County Planning Commission's Recommendation on March 1, March 16 and March 30, 2011.

The Board of Commissioners, by motion and vote, approved revisions to Sections 7.1.2 (now Section 7.2), 10.4.1(F), Floodplain Areas, and 13.3(100), Definitions.

Now, therefore,

The Jackson County Board of Commissioners finds and concludes as follows:

SECTION 1. FINDINGS OF FACT:

Based upon the evidence and arguments presented, the Board of Commissioners makes the following findings of fact with respect to this application. Where factual conflicts arose, the Board of Commissioners has resolved them consistent with these findings.

- 1.1 The Board of Commissioners finds that proper legal notice was provided to the property owners within or partially within the FEMA mapped floodplain, pursuant to ORS 215.503, on April 9, 2010, for a public hearing on this matter. Following the remand to the Planning Commission and their subsequent Recommendation of Approval, signed January, 27, 2011, proper legal notice was provided to property owners within or partially within the FEMA mapped floodplain on February 10, 2011. Legal notice was published in the Sunday, February 20, 2011 edition of the Medford Mail Tribune.
- 1.2 The Board of Commissioners adopts as its own the Findings and Conclusion in the Recommendation for Approval by the JCPC, incorporated herein and attached as Exhibit "B", except as noted below.
 - 1.2.1 The Planning Commission was unable to resolve the question as to whether a Type 2 review was required for a floodplain development permit. After reviewing evidence and testimony in the record, the Board of Commissioners finds that a floodplain development permit requires a Type 2 review, which gives the applicant and adjacent property owners the opportunity for appeal of a land use decision. The Board of Commissioners has added the language regarding a Type 2 review for floodplain development permits in Section 7.2.2(C).
 - 1.2.2 In the Planning Commission's findings, Section 4.1.3 of Exhibit "B", the Planning Commission recommended that if the Board of Commissioners determined a Type 2 review was needed for floodplain development permits, the following language should be included in Section 7.2.

"Replacement of bridges and culverts located in the floodway, as determined and mapped by FEMA, that necessitate a no-rise certification are allowed through a Type 1 review process, provided the replacement bridge and/or culvert is located along a similar or parallel alignment and contributes no additional material to the floodway."

The Board of Commissioners has added this language in Section 7.2.2(C)(1).

1.2.3 Section 7.2.13(F), Fences and Walls in Areas of Special Flood Hazard, states "Fencing and walls located in the special flood hazard area require a floodplain development permit." During deliberation, the Board of Commissioners found that the replacement of a portion of a pre-existing fence should not be required to be reviewed through the Type 2 review because the fence already exists and only a portion of the fence will be reconstructed. Since the fence is pre-existing, floodplain effects also currently exist. The Board of Commissioners added the following language to Section 7.2.14(F)(1) as an exemption to a floodplain development permit:

"The replacement of a portion of a pre-existing fence, constructed prior to April 1, 1982 or approved through a Development Services review process, is exempt from a floodplain development permit if the replacement is 25 percent or less than the entire length of the fence."

SECTION 2. LEGAL FINDINGS:

2.1 The Board of Commissioners finds the proposed amendments, as determined and approved by the Board, will bring the LDO into compliance with NFIP requirements for development within the FEMA mapped 100-year floodplain and/or floodway as required by Statewide Planning Goal 7 and the Jackson County Comprehensive Plan Natural Hazards Element. The text amendments are incorporated herein and attached as Exhibit "A".

SECTION 3. CONCLUSIONS:

- 3.1 The Board of Commissioners concludes that proper public notice was given.
- 3.2 The Board concludes that the Jackson County Land Development Ordinance is currently not in compliance with the National Flood Insurance Program (NFIP), Oregon Statewide Planning Goal 7, and Jackson County's Comprehensive Plan Natural Hazards Element.
- 3.3 The Board of Commissioners concludes that the proposed text amendments to Sections 7.1.2 (now Section 7.2), Floodplain Overlay, 10.4.1(F), Floodplain Areas and 13.3(100), Definitions, incorporated herein and attached as Exhibit "A", comply with NFIP requirements for floodplain management within Jackson County, as required by Statewide Planning Goal 7 and the Jackson County Comprehensive Plan Natural Hazards Element.

SECTION 4. DECISION:

Now, therefore,

The Board of County Commissioners of Jackson County ordains as follows:

4.1. Based on the record, evidence, and testimony at the public hearing, the Board of Commissioners approves the text amendments to Sections 7.1.2 (now Section 7.2), 10.4.1(F) and 13.3(100) of the Jackson County Land Development Ordinance, incorporated herein and attached as Exhibit "A". Exhibit "A" includes the changes to Chapters 7, 10 and 13.

APPROVED this 27 th day of April, 2011, at Medford, Oregon.

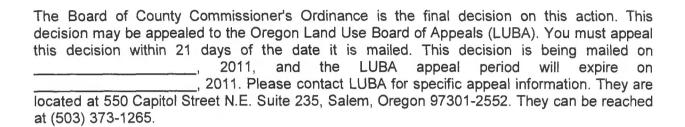
JACKSON	COUNTY	BOARD OF	COMMISSIONERS	

Donald Skundrick, Commissioner

ABSENT
John Rachor, Commissioner

APPROVED AS TO LEGAL SUFFIENCY:

ATTEST:



7.2 Floodplain Overlay

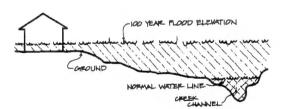
7.2.1) Statutory Authority

The State of Oregon has delegated the responsibility to local governments to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. The degree of flood protection required by this Section is necessary in order to participate in the National Flood Insurance Program and the Community Rating System (CRS). This participation is in the public interest, and the requirements of this Section are considered reasonable for regulatory purposes and are based on scientific and engineering considerations.

A) Warning and Disclaimer of Liability

The degree of flood protection required by this Section is required in order to participate in the National Flood Insurance Program and the Community Rating System (CRS). This participation is in the public interest and the requirements of this Section are considered reasonable for regulatory purposes and are based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Section does not imply that land outside the 100-year floodplain, or uses within such areas, will be free from flooding or flood damages for any size flood. This Section will not create liability on the part of Jackson County, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this Section or an administrative decision lawfully made hereunder.

B) Facts



The flood hazard areas of Jackson County are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

- 2) These flood losses are caused by structures in flood hazard areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.
- Jackson County has the primary responsibility for planning, adoption and enforcement of land use regulations to accomplish proper floodplain management.

C) Purpose

The objectives of this Section are to:

- 1) Protect human life, health and property;
- Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- 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 and emergency services 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 the areas of special flood hazard assume responsibility for their actions, and;
- 9) Manage the alteration of flood hazard areas and stream channels to minimize the impact of development on the natural and beneficial functions of the floodplain.

D) Methods of Reducing Flood Losses

In order to accomplish its purpose, this Section includes methods and provisions to:

1) Require that 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) Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion:
- 3) Control filling, grading, dredging and other development which may increase flood damage or erosion;
- 4) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands;
- 5) Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
- 6) Coordinate with and supplement provisions of State of Oregon Specialty Codes enforced by the State of Oregon Building Codes Division.

E) Definitions

Unless specifically defined in Section 13.3(100), words or phrases used in Section 7.2 will be interpreted according to their ordinary accepted meanings in the context of their use. Section 13.1, General Provisions, states "The contemporary edition of Webster's Third New International Dictionary (unabridged) (Merriam-Webster, Inc. Springfield MA 1986) as supplemented, is to be used as the source for these accepted meanings."

7.2.2) Applicability

Section 7.2 will apply to all Areas of Special Flood Hazard within the jurisdiction of Jackson County. Nothing in Section 7.2 is intended to allow uses or structures that are otherwise prohibited by the zoning ordinance or Specialty Codes.

A) Basis for Area of Special Flood Hazard

The Area of Special Flood Hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study (FIS) for Jackson County, Oregon and Unincorporated Areas, dated May 3, 2011, with accompanying Flood Insurance Rate Maps (FIRM) or Digital Flood Insurance Rate Maps (DFIRM), and other supporting data, are adopted by reference and declared a part of this Section. The FIS and the FIRM are on file at the office of the Jackson County Development Services, 10 S. Oakdale, Room 100, Medford, OR.

B) Coordination with Specialty Codes Adopted by the State of Oregon Building Codes Division

Pursuant to the requirement established in ORS 455 that the County administers and enforces the State of Oregon Codes, Jackson County does hereby acknowledge that the Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in Areas of Special

Flood Hazard. Therefore, this Section is intended to be administered and enforced in conjunction with the Specialty Codes.

C) Establishment of Floodplain Development Permit

A Floodplain Development Permit will be required prior to initiating development activities in any Area of Special Flood Hazard established in Section A above.

A Floodplain Development Permit will be processed through a Type 2 Review except as identified below:

1) Replacement of bridges and/or culverts located in the floodway, as determined and mapped by FEMA, that necessitate a no-rise certification are allowed through a Type 1 review process, provided the replacement bridge and/or culvert is located along a similar or parallel alignment and contributes no additional material to the floodway.

D) Interpretation

In the application of this Section all provisions will be:

- 1) Considered as minimum requirements; and,
- 2) Deemed neither to limit nor repeal any other powers granted under state statutes, including state Specialty Codes.

E) Exemptions

Finding 2, Policy B) of the Natural Hazards Element of the Comprehensive Plan states: "In order to assure maximum usefulness of flood prone areas, regulations should allow for seasonal variations in use. Temporary, removable structures should be allowed during drier months if their removal can be assured by late fall." A floodplain development permit is not required for the following uses:

- Agriculture and grazing, or managing, growing, and harvesting of timber and other forest products;
- 2) Wildlife preserve, game farm, or fish hatchery which do not include structures, fill, or excavation;
- Floating, fishing or swimming platforms that will be removed from the Area of Special Flood Hazard during high-water periods;
- 4) Water gauging stations;
- 5) Any emergency or disaster response operations activated by the Jackson County Emergency Operations Center to respond to flooding; and

6) Temporary emergency alteration of stream beds or banks as flood control measures immediately preceding or following periods of high water. The stream bed or bank will be restored to its pre-flood state within 30 days after the high-water period unless an application for a development permit for the alteration has been submitted.

7.2.3) Administration

The Development Services Director is hereby appointed as the Floodplain Administrator who is responsible for administering and implementing the provisions of this Section.

A) Duties and Responsibilities of the Administrator

Duties of the Floodplain Administrator or staff designee will include, but will not be limited to:

- 1) Review all proposed development to determine whether it will be located in Areas of Special Flood Hazard or other flood-prone areas;
- Review applications for new development or modifications of any existing development in Areas of Special Flood Hazard for compliance with the requirements of this Section;
- Review proposed development to assure that necessary permits have been received from governmental agencies from which approval is required by federal or state law, including but not limited to section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334 (U.S. Army Corps of Engineers (ASACE) and/or Oregon Department of State Lands (DSL)); the Endangered Species Act of 1973, 16 U.S.C. 1531-1544 (National Marine Fisheries Service (NMFS) and/or United States Fish and Wildlife Service (USFWS)); and State of Oregon Department of State Lands (DSL) permits. Copies of such permits will be maintained on file;
- 4) Review all development permit applications to determine if proposed development is located in the floodway, and if so, ensure that the encroachment standards of Section 7.2.10 are met;
- 5) When Base Flood Elevation data or floodway data are not available, then the Floodplain Administrator or staff designee will obtain, review and reasonably utilize any Base Flood Elevation and floodway data available from a Federal, state or other engineering source in order to administer the provisions of this Section;
- 6) When Base Flood Elevations are not available, the Floodplain Administrator or staff designee will require Base Flood elevations to be developed in accordance with Section 7.2.4(A)(3) to determine whether a

- proposed building site or subdivision will be reasonably safe from flooding;
- 7) Where a determination is needed for the exact location of boundaries of the Areas of Special Flood Hazard including regulatory floodway (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Floodplain Administrator or staff designee will make the determination;
- 8) Issue floodplain development permits when the provisions of this Section have been met, or deny the same in the event of noncompliance;
- Coordinate with the Building Official to ensure that applications for building permits comply with the requirements of this Section;
- 10) 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 BFE is available, of the lowest floor level, including basement, of all new construction or substantially improved buildings and structures, including manufactures dwellings;
- Obtain, verify and record the actual elevation, in relation to the vertical datum used on the effective FIRM, or highest adjacent grade where no BFE is available, to which any new or substantially improved buildings or structures have been flood-proofed. When flood-proofing is utilized for a structure, the Floodplain Administrator or staff designee will obtain a certification of elevation to which the structure was flood-proofed from a registered professional engineer or architect;
- 12) Ensure that all records and certifications pertaining to the provisions of this Section are permanently maintained in Development Services and available for public inspection;
- Make periodic inspections in Areas of Special Flood Hazard to establish that development activities are being performed in compliance with this Section and verify that existing buildings and structures maintain compliance with this Section;
- 14) Coordinate with the Building Official to inspect areas where buildings and structures in Areas of Special Flood Hazard have been damaged, regardless of the cause of damage, and notify owners that permits may be required prior to repair, rehabilitation, demolition, relocation, or reconstruction of the building or structure, and;
- 15) Make substantial improvement or substantial damage determinations, based on criteria set forth in Section 7.2.5, for all structures located in Areas of Special Flood Hazard.

7.2.4 Application Requirements

- A) The floodplain development application will include the following whenever applicable:
 - 1) A site plan drawn to scale with elevations of the project area, including the elevations at the development site, and the nature, location, dimensions of existing and proposed structures, earthen fill placement, storage of materials or equipment and drainage facilities;
 - 2) Delineation of flood hazard areas and floodway boundaries, including base flood elevations or flood depth in AO zones, where available;
 - Where base flood elevations and/or floodways have not been determined, an applicant may submit a flood study analysis from an Oregon registered professional engineer certifying the base flood elevation(s) and/or floodway. The analysis will set forth the base flood elevation(s) and the location of the 100-year floodplain and floodway though hydrologic and hydraulic analyses performed in accordance with standard engineering practice as determined by the engineer. The calculated base flood elevation may be from mean sea level or may be based on an assumed elevation when tied to a benchmark as determined by the engineer. The location of the benchmark will be described in the flood study and shown on a map that must be included with the flood study.
 - Certification from a registered professional engineer or architect that any proposed nonresidential flood-proofed structure will meet the floodproofing criteria of the NFIP and Specialty Codes;
 - 5) Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development (See Section 7.2.7);
 - 6) Proof that application has been made for necessary permits from other governmental agencies from which approval is required by Federal or state law.

B) Records and Documentation

- Copies of all necessary permits from other governmental agencies from which approval is required by Federal or state law must be provided prior to issuance of permits.
- 2) At or prior to the time of application for building permits, the applicant will submit to Development Services Planning and the Building Divisions a preliminary Elevation Certificate showing the base flood elevation, if known, and the lowest natural grade adjacent to the building site. Where

no Base Flood Elevation has been determined, the Elevation Certificate will show the highest adjacent grade to the building site.

- 3) Prior to pouring the foundation, an Elevation Certificate showing the elevation of the lowest floor will be submitted;
- 4) In addition to the requirements of the Specialty Codes pertaining to occupancy, prior to the final inspection, the owner or authorized agent will 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 Areas of Special Flood Hazard (A zones), the as-built elevation of the lowest floor, including basement or, where no Base Flood Elevation has been determined, the height above highest adjacent grade of the lowest floor; and
 - (b) For buildings and structures that have been flood-proofed, the applicant will submit a record of the actual elevation (in relation to mean sea level or based on an assumed elevation as determined by Section 7.2.4(A)(3)) to which the building or structure has been flood-proofed.
 - (c) The County will keep a permanent record of all Elevation and Flood-Proofing Certificates.
- 5) Failure to submit certification or failure to correct violations will be cause for the Floodplain Administrator or Building Official to withhold a final inspection and/or occupancy until such deficiencies are corrected.
- C) Per Building Division requirements, Chapters 1420 and 1428 of the Codified Ordinances for Jackson County, Oregon, a Building permit will expire 180 days after issuance or upon expiration of the permit unless the permitted activity has commenced and thereafter is pursued to completion. Commencement of work includes start of construction.

7.2.5) Substantial Damage and Substantial Improvement Determination

For applications for permits to improve buildings and structures, including additions, repairs, renovations, and alterations, the Floodplain Administrator or staff designee, will:

- A) Require the applicant to obtain a professional appraisal of the market value of the building or structure before the proposed work is performed. When repair of damage is proposed, the market value of the building or structure will be the market value before the damage occurred;
- B) Compare the cost of improvement, the cost to repair the damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if

applicable, to the market value of the building or structure. For determining whether the improvement is a substantial improvement, the value of improvements, modifications, additions and/or reconstruction of an existing building will be counted cumulatively for a period of ten (10) years;

- (1) Except as indicated in subsections (2) through (4) below, all costs to repair substantial damage, including emergency repairs, including the costs of complying with any county, state or federal regulation must be included.
- (2) The costs associated with the correction of pre-existing violations of state or local health, sanitary, or safety code specifications that were identified by the building official, the director of environmental health, or any other local code enforcement official prior to the improvement or repair and that are the minimum necessary to ensure safe living conditions will not be included;
- (3) Costs associated with the following items are not included:
 - (a) The preparation and approval of all required plans, calculations, certifications, and specifications;
 - (b) The performance of surveys or other geotechnical or engineering studies and resulting reports;
 - (c) Permit and review fees; and
 - (d) The construction, demolition, repair, or modification of outdoor improvements, including landscaping, fences, swimming pools, detached garages and sheds, etc.
- (4) Proposed alterations of a designated historic building or structure are not to be considered substantial improvement unless the alteration causes a loss of said designation.
- C) Jackson County will make the final determination of whether the proposed improvement and/or repair constitute a substantial improvement or substantial damage.

7.2.6) Temporary Encroachments in the Floodway

Temporary encroachments in the floodway for the purposes of capital improvement projects (including bridges) require a Floodplain Development Permit. No CLOMR/LOMR is required.

A) Application Requirements

The following requirements, as well as the applicable requirements of Section 7.2.4, will be included in a Floodplain Development Permit application under this section:

- (1) Identification of the temporary changes to the floodplain during a 100-year flooding event.
- (2) Identification of all insurable structures affected by any increase in the BFE during a 100-year flooding event.
- (3) The length of time the temporary structure or development will be allowed.

B) Permit Conditions

- (1) The permit will stipulate the days and dates the structure or other development will be on site. If a longer period is required, a new permit application must be submitted.
- (2) A flood warning system for the project will be required to allow equipment to be evacuated from the site and placed outside the floodplain.
- (3) Placement of equipment in the floodway is restricted to only that equipment which is absolutely necessary for the purposes of the project. All other accessory equipment and temporary structures (i.e. construction trailers) are restricted from the floodway.
- (4) Structures will be placed on site so that flood damages are minimized.
- (5) The applicant may be liable for any flood damages resulting from the temporary structure or development.

7.2.7 Alteration or Relocation of a Watercourse

- A) Development will not diminish the carrying capacity of a watercourse. If any watercourse will be altered or relocated as a result of proposed development the applicant must submit certification by an Oregon registered professional engineer that, in the engineer's professional opinion and based upon analysis, the flood carrying capacity of the watercourse will not be diminished.
- B) The alteration or relocation of a stream channel or watercourse is prohibited unless the applicant submits written verification from the Oregon Department of Fish and Wildlife that the proposal will have minimal adverse impact on fish habitat.
- C) Altered riparian areas will be restored with native vegetation in accordance with a landscape plan that has been approved by the Oregon Department of Fish and Wildlife, per Section 8.6.

- D) The applicant will be responsible for obtaining all necessary permits from governmental agencies from which approval is required by Federal or state law, including but not limited to section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334 (U.S. Army Corps of Engineers (ASACE) and/or Oregon Department of State Lands (DSL)); the Endangered Species Act of 1973, 16 U.S.C. 1531-1544 (National Marine Fisheries Service (NMFS) and/or United States Fish and Wildlife Service (USFWS)); and State of Oregon Department of State Lands (DSL) permits..
- E) The applicant will notify adjacent communities and Oregon Department of Land Conservation and Development prior to any alteration or relocation of the watercourse. Evidence of notification must be submitted to the Floodplain Administrator or staff designee, and to the Federal Emergency Management Agency.
- F) The applicant will be responsible for ensuring necessary maintenance for the altered or relocated portion of the watercourse is provided so that the flood carrying capacity will not be diminished.
- The applicant will meet the requirements to submit technical data in of Section 7.2.8 when an alteration of a watercourse results in the expansion, relocation or elimination of the special flood hazard area. Should an alteration or relocation of a watercourse result in the expansion, relocation or elimination of the special flood hazard area, a Conditional Letter of Map Revision will be obtained from FEMA prior to an approval under this section. A Letter of Map Revision will also be required.

7.2.8) Map Revision

Required Technical Data:

- A) Within six months of project completion, an applicant who obtains an approved Conditional Letter of Map Revision (CLOMR) from FEMA or whose development alters a watercourse, modifies floodplain boundaries or Base Flood Elevations, will obtain from FEMA a Letter of Map Revision (LOMR) reflecting the as-built changes to the FIRM.
- B) 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 application forms. Submittal and processing fees for these map revisions will be the responsibility of the applicant.
- C) Applicants will be responsible for all costs associated with obtaining a CLOMR or LOMR from FEMA.
- D) The Floodplain Administrator or designee will be under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR

application, until the applicant demonstrates that the project will or has met all applicable requirements of Section 7.2.

7.2.9) Enclosed Areas Below the Lowest Floor Limited

To ensure that enclosed areas below the lowest floor will be used solely for parking vehicles, limited storage, or access to the building and not be finished for use as human habitation, the Floodplain Administrator or staff designee will:

- A) Determine which applicants for new construction and/or substantial improvements have fully enclosed areas below the lowest floor that are greater than 4 feet;
- B) Have the property owner record a Deed Declaration, "NON-CONVERSION AGREEMENT FOR CONSTRUCTION WITHIN FLOOD HAZARD AREAS", on a form provided by Development Services. The Deed Declaration will be recorded with the Jackson County Clerk's Office and a copy will be provided to Development Services.

7.2.10) Floodway Development

In areas designated as floodways, either on the FIRM or DFIRM, or by methods described in Section 7.2.4(A)(3), the following standards apply due to the extreme hazard resulting from velocity of flood waters which carry debris, potential projectiles, and have erosion potential:

- A) The placement or construction of any new building in the floodway, which does not replace an existing building, is prohibited. Replacement, repair, addition to, or reconstruction of any existing building in a floodway must comply with all applicable standards of this Section as well as 7.2.13;
 - 1) If there is an area on the lot, parcel, or tract that is out of the floodway where the replacement of an existing building can be located, it must be replaced in a location outside of the floodway, if the area outside can accommodate the existing footprint and meet the dimensional and siting standards of this Ordinance; or
 - If there is not an area on the lot, parcel, or tract outside of the floodway where a replacement building can be located, the replacement may be located within the floodway in the same location of the existing building, subject to the standards of Section 7.2.10(C). The area displacement of the replacement building's footprint will not exceed the area displacement of the original building's footprint and the footprint must be in the same configuration and location as the existing footprint of the building. The standard of subsection 7.2.10(C) (no-rise analysis and certification) is not required if the replacement building is in the same footprint, location and area displacement of the existing building.

- The replacement of or addition to an existing building that is not within the existing building's footprint, location and configuration may occur provided the standard of subsection 7.2.10(C) is met and other applicable standards of Section 7.2 are met.
- B) Sand filter septic systems are prohibited in the floodway unless standards set forth in Section 7.2.10(C) are met;
- C) Except as provided in E) below, encroachments, including fill, new construction, substantial improvements, fences, and other development in the regulatory Floodway, or the floodway as determined in 7.2.4(A)(3), are prohibited unless certification by an Oregon registered professional engineer is provided demonstrating, through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that, in the engineer's opinion, such encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge (no-rise analysis and certification).
- D) Any fill allowed to be placed in the floodway will be designed to be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour.
- E) Projects for fish enhancement and stream habitat restoration may be permitted in the floodway provided:
 - 1) The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023);
 - A qualified professional (an Oregon registered professional engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practicable given the goals of the project;
 - No structures would be impacted by a potential rise in flood elevation;
 and,
 - 4) An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged will be included as part of the local approval.
- F) The Floodplain Administrator or staff designee may accept an Oregon licensed surveyor's or Oregon registered professional engineer's determination of the 100-year floodplain boundary and floodway boundary, as depicted on the Flood Insurance Rate Maps (FIRM) and/or Digital Flood Insurance Rate Maps (DFIRM). A survey (map) must include property boundaries, existing and proposed development and 100-year floodplain and/or floodway boundaries as

- depicted on the FIRM and/or DFIRM. The survey (map) must have the surveyor's or engineer's stamp included.
- G) Applicants will obtain a CLOMR from FEMA before an encroachment, including fill, new construction, substantial improvement, and other development, into the floodway is permitted that will cause any increase in the Base Flood Elevation. Per Section 7.2.8, a LOMR will also be required.

7.2.11) Zones with Base Flood Elevations but No Floodway

- A) Prior to the cumulative effect analysis, the floodway boundaries must be determined by Section 7.2.4(A)(3) or as described in Section 7.2.12(B).
- In areas within Zones A1-30 and AE on the community's FIRM with base flood B) elevations, but where no regulatory floodway has been designated, new construction, substantial improvements, or other development (including fill) will be prohibited, unless the applicant provides evidence from an Oregon registered professional engineer demonstrating, in the engineer's professional opinion, 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 (1) foot at any point within the community. The engineer will apply the cumulative effect analysis to the area of the river/stream upstream and downstream to a point where no increase in the Base Flood Elevation is determined by the Oregon registered professional engineer for the proposed development. For purposes of administering subsection (B), "anticipated development" will mean development for which an application is currently under review by Development Services for permit approval or a development application which has been approved by Development Services but has not been initiated. The placement of any new building in the floodway which does not replace an existing building is prohibited.
- C) The Floodplain Administrator or staff designee may accept an Oregon licensed surveyor's or Oregon registered professional engineer's determination of the 100-year floodplain boundary and floodway boundary, as depicted on the Flood Insurance Rate Maps (FIRM) and/or Digital Flood Insurance Rate Maps (DFIRM). A survey (map) must include property boundaries, existing and proposed development and 100-year floodplain and/or floodway boundaries as depicted on the FIRM and/or DFIRM. The survey (map) must have the surveyor's or engineer's stamp included.
- D) Applicants of proposed projects that increase the Base Flood Elevation more than one foot will 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) will be submitted by the applicant to FEMA. The applicant is responsible for paying costs associated with the CLOMR and LOMR process.

7.2.12) Zones Without Base Flood Elevations

The following standards, as well as applicable sections of Section 7.2.13, apply in Areas of Special Flood Hazard where no base flood elevation and floodway data have been provided (approximate A Zones):

- A) When Base Flood Elevations are not available from an engineering source, the Floodplain Administrator will require Base Flood Elevations to be developed in accordance with Section 7.2.4(A)(3) of this ordinance to determine whether a proposed building site or subdivision will be reasonably safe from flooding.
- B) Encroachments, including structures or fill, located in an Area of Special Flood Hazard that are within an area equal to the width of the stream or fifty feet, whichever is greater (measured from the ordinary high water mark) will meet the applicable standards of Section 7.2.10. This area of setback will be considered the floodway for development purposes. New buildings within the floodway are prohibited.
- C) The Floodplain Administrator or staff designee may accept an Oregon licensed surveyor's or Oregon registered professional engineer's determination of the 100-year floodplain boundary and floodway boundary, as depicted on the Flood Insurance Rate Maps (FIRM) and/or Digital Flood Insurance Rate Maps (DFIRM). A survey (map) must include property boundaries, existing and proposed development and 100-year floodplain and/or floodway boundaries as depicted on the FIRM and/or DFIRM. The survey (map) must have the surveyor's or engineer's stamp included.

7.2.13) Construction Standards and Building Design

Buildings and structures, including manufactured dwellings, within the scope of the Building Codes, including repair of substantial damage and substantial improvement of such existing buildings and structures, will be designed and constructed in accordance with the flood-resistant construction provisions of these codes, including but not limited to the Residential Specialty Code, the Manufactured Dwelling Installation Specialty Code, and the Structural Specialty Code.

- A) In all areas of special flood hazards (A & AO zones),
 - New construction and substantial improvements will be anchored to prevent flotation, collapse, or lateral movement of the structure;
 - New construction and substantial improvements will be constructed with materials and utility equipment resistant to flood damage;
 - 3) New construction and substantial improvements will be constructed using methods and practices that minimize flood damage, and;

- 4) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities will be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- B) Specific Building Design and Construction Standards for Residential Construction (A Zones)

In addition to Section (A) above,

- 1) New construction or the substantial improvement of any residential structure will have the lowest floor, including basement, elevated a minimum of one (1) foot above the base flood elevation. This includes floor framing, wood floor joist systems, beams, girders, ducts and all electrical components. If the substantial improvement includes a second story addition or the removal of a wall between a new addition and the existing dwelling, then both the existing dwelling and the addition must be elevated a minimum of one (1) foot above the base flood elevation. If the wall between a new addition and the existing dwelling will remain intact except for the addition of a standard doorway, then only the addition must be elevated;
- Where Base Flood Elevations have not been determined, a flood study as explained in Section 7.2.4(A)(3) will be submitted to determine Base Flood Elevations. New construction or the substantial improvement of any residential building will meet the elevation requirements of 7.2.13(B)(1) above.
- 3) Any addition to a post-FIRM building (built after April 1, 1982) is considered new construction and must meet the requirements of this section regardless of the size or cost of the addition;
- 4) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or will be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by an Oregon registered professional engineer or architect, or must meet or exceed the following minimum standards:
 - (a) A minimum of two (2) openings will be provided having a total net area of not less than one (1) square inch for every square foot of enclosed floor area subject to flooding (i.e., below base flood elevation). A window, door or garage door is not considered an opening;
 - (b) The bottom of all openings will be no higher than one (1) foot above grade; and

(c) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

5) Types of Substantial Improvements

Basic types of substantial improvements are rehabilitations or reconstructions that do not increase square footage, and lateral or vertical additions that do increase square footage. In addition to the design and building standards of Section 7.2.13 (A) & (B), the following standards apply to these types of substantial improvements.

- (a) If the substantial improvement is the rehabilitation or reconstruction of an existing building where there is not an increase in square footage, the entire building must be elevated a minimum of one (1) foot above the base flood elevation. Where Base Flood Elevations have not been determined, see Section 7.2.13(B)(2) above for elevation requirements.
- (b) If the substantial improvement is a lateral addition where the existing footprint of the building increases, see Section 7.2.13(B)(1) above for elevation requirements. Where Base Flood Elevations have not been determined, see Section 7.2.13(B)(2) above for elevation requirements.
- (c) If the substantial improvement is a vertical addition to add a room or rooms on top of an existing building, the entire building must be elevated a minimum of one (1) foot above the base flood elevation. Where Base Flood Elevations have not been determined, see Section 7.2.13(B)(2) above for elevation requirements.

6) Manufactured Dwellings

- (a) If the manufactured dwelling is supported on solid foundations walls, the ground area reserved for the placement of a manufactured dwelling will be a minimum of 12 inches above BFE unless the foundation walls are designed to automatically equalize hydrostatic forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - (i) A minimum of two (2) openings will be provided having a total net area of not less than one (1) square inch for every square foot of enclosed floor area subject to flooding (i.e.,

below base flood elevation). A window, door or garage door is not considered an opening;

- (ii) The bottom of all openings will 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 flood waters.
- (b) The lowest floor of a manufactured dwelling must be elevated such that the bottom of the longitudinal chassis frame beam is a minimum of one (1) foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Anchoring methods may include, but are not limited to use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques). The construction of the manufactured dwelling must meet the applicable requirements of Section 7.2.
- (c) Electrical crossover connections will be a minimum of one (1) foot above BFE.
- (d) A manufactured dwelling which has incurred substantial damage as a result of a flood will be elevated on a permanent foundation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. All applicable requirements of Section 7.2 must be met.

C) Nonresidential Construction

In addition to section (A) above, new construction and substantial improvement of any commercial, industrial or other nonresidential structure will either have the lowest floor, including basement, elevated one (1) foot above the base flood elevation, or, together with attendant utility and sanitary facilities, will,

- 1) Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- 2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- 3) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications

and plans. Such certifications will be provided to the Floodplain Administrator or staff designee;

- 4) Nonresidential structures that are elevated, not flood-proofed, must meet residential standards described in Section 7.2.13 (B);
- 5) Applicants flood-proofing nonresidential buildings will be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g. a building flood-proofed to the base flood level will be rated as one foot below).
- 6) Substantial Improvements for Nonresidential Construction

In addition to the requirements for nonresidential construction, substantial improvements to nonresidential structures, the following standards also apply:

- (a) A substantial improvement addition to a nonresidential structure may be either elevated or flood-proofed. If flood-proofing is used, the wall between the addition and the original structure must be flood-proofed.
- (b) When the substantial improvement is a full or partial vertical addition, the entire structure must elevated or flood-proofed.

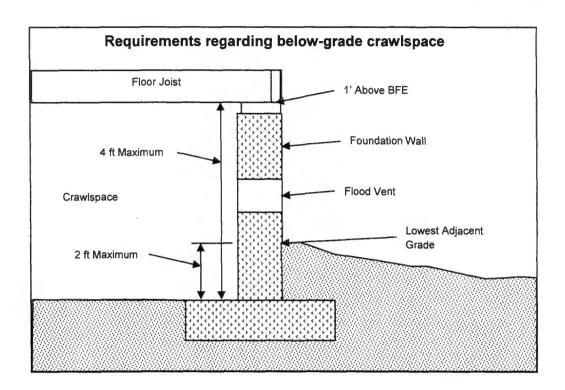
D) Below-grade Crawl Spaces

Below-grade crawlspaces are allowed, unless no base flood elevations are available, subject to the following standards as found in *FEMA Technical Bulletin* 11-01, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas:

- 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 allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
- The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each

- flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
- Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes the foundation walls of the crawlspace used to elevate the building. Per Section 7.2.13 (B)(1), floor framing, wood floor joist systems, beams, girders, ducts and all electrical components must be elevated a minimum of one (1) foot above BFE.
- 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. Per Section 7.2.13 (B)(1), floor framing, wood floor joist systems, beams, girders, ducts and all electrical components must be elevated a minimum of one (1) foot above BFE.
- 5) The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.
- The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall, must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and Building Code requirements for flood hazard areas.
- 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.

For more detailed information refer to FEMA Technical Bulletin 11-01.



There will be increased insurance cost associated with below-grade crawlspaces. There is a charge added to the basic policy premium for a below-grade crawlspace.

E) Standards for Shallow Flooding Areas (AO Zones)

Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is often characterized as sheet flow. In these areas Section 7.2.13(A) and the following provisions will apply:

- 1) New construction and substantial improvements of residential structures and manufactured homes within AO zones will have the lowest floor (including basement) elevated above the highest grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least three feet if no depth number is specified). This includes floor framing, wood floor joist systems, beams, girders, ducts and all electrical components.
- 2) New construction and substantial improvements of nonresidential structures within AO zones will either:

- (a) Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified). This includes floor framing, wood floor joist systems, beams, girders, ducts and all electrical components; or
- (b) Together with attendant utility and sanitary facilities, be completely flood-proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance will be certified by a registered professional engineer or architect, and;
- (c) Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

F) Fences and Walls in Areas of Special Flood Hazard

Fencing and walls located in the special flood hazard area require a floodplain development permit.

The replacement of a portion of a pre-existing fence, constructed prior to April 1, 1982 or approved through a Development Services review process, is exempt from a floodplain development permit if the replacement is 25 percent or less than the entire length of the fence.

G) Accessory Structures

Relief from the elevation or dry flood-proofing standards may be granted for new and replacement, or substantially improved accessory structures, containing no more than 200 square feet. Such a structure must meet the following standards:

- It will 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;
- 2) Toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality will not be stored below BFE, or where no BFE is available, lower than three feet above grade, unless confined in a tank installed in compliance with this Section;
- 3) Services such as electrical and heating equipment will be elevated or flood-proofed to or above the base flood elevation, and;
- 4) It will be 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

- (a) Provide a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
- (b) The bottom of all openings will be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening;
- (c) 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.

H) Recreational Vehicles in Areas of Special Flood Hazard

Recreational Vehicles, defined in Section 13.3(100), located in all Areas of Special Flood Hazard may be occupied subject to the following standards:

- 1) Recreational or camping vehicles will not be used for temporary housing to accommodate visitors of the current resident more than 30 days in any 12 month period.
- 2) A maximum of one (1) self-contained recreational or camping vehicle may be used for recreational purposes for up to three (3) months in any 12 month period on vacant property with the owner's consent, subject to the provisions of this Section.
- 3) Not more than one (1) self-contained camping vehicle may be used as temporary housing for not more than 180 days on property owned by the owner of said vehicle, and only after permits have been issued for construction of the first dwelling, or during remodeling or replacement of a lawfully established dwelling. Such uses are subject to full compliance with the provisions of this Section and health and sanitation regulations.
- 4) Any electrical panel or outlet proposed to service a recreational vehicle will meet the requirement of Section 7.2.13(A).

1) Critical Facilities

Construction of new critical facilities will be, to the extent possible, located outside the limits of the Area of Special Flood Hazard. Construction of new critical facilities will be permissible within the Area of Special Flood Hazard if no feasible alternative site is available. Access elevated to or above the level of the Base Flood Elevation will be provided to all critical facilities to the maximum extent possible. Flood-proofing 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. Access routes elevated to or above the level of the base flood elevation will be provided to all critical facilities to the extent possible.

J) Tanks

- 1) New and replacement underground tanks in flood hazard areas will 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 base flood.
- 2) New and replacement above-ground tanks in flood hazard areas will be:
 - (a) Attached to and elevated above the base flood elevation (or depth number in AO zones) on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the base flood; or be
 - (b) Anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, assuming the tank is empty, during conditions of the base flood.

K) Utilities

- 1) All new and replacement water supply systems will be designed to minimize or eliminate infiltration of floodwaters into the system;
- New and replacement sanitary sewage systems will be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters;
- Consistent with the Oregon Department of Environmental Quality, on-site waste disposal systems will be located to avoid impairment to them or contamination from them during flooding;
- 4) Underground public sewer lines will be certified by an Oregon registered professional engineer to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters; and
- 5) All other underground public utility lines will be certified by an Oregon registered professional engineer to minimize or eliminate infiltration of floodwaters into the systems.

L) Aggregate Mining Operations

- Applications for aggregate mining or surface mining operations within the Area of Special Flood Hazard or floodway will provide evidence that the mining will not cause an increase in flooding potential or stream bank erosion adjacent to, upstream or downstream from the operation; and
- Approval of an application for aggregate mining or surface mining operations will be conditioned to require that all mining and processing equipment and new stockpiles of mined or processed materials will be removed from the 100-year floodplain during the period of November 1 through April 30, unless the operation will be protected by a dike that is of sufficient width and height to prevent the base flood from inundating the site.

M) Development on Areas Surrounded by Floodplain

Building and other development on islands or other topographic features within or surrounded by the floodplain will be subject to the following:

- 1) Verification by an Oregon registered professional engineer or geologist that the island or other topographic feature is a stable land form and will not be subject to erosion during a 100-year flood;
- 2) Submission of topographic information from a registered surveyor showing the topography of the area (island); and
- 3) The roadway to the development site will be located or constructed in such a way as not to increase flood elevations or create an obstruction in the floodway, and must be designed to provide safe passage to and from the site during a flood event.

7.2.14) Variance Procedures and Criteria

A) Variance

- An application for a variance must be submitted to Jackson County on the form provided by the County and include at a minimum the same information required for a development permit and an explanation for the basis for the variance request.
- 2) The burden to show that the variance is warranted and meets the criteria set out herein is on the applicant.
- 3) Upon consideration of the criteria in Section 7.2.14(B) (Criteria for Variances) and the purposes of this Section, the County may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Section.

4) The Floodplain Administrator or staff designee will maintain a permanent record of all variances and report any variance to the Federal Emergency Management Agency upon request.

B) Criteria for Variances

- 1) Variances will not be issued within a floodway if any increase in flood levels during the base flood discharge would result.
- 2) 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. As the lot size increases the technical justification required for issuing the variance increases.
- 3) Variances will only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 4) Variances will only be issued upon a:
 - (a) showing of good and sufficient cause;
 - (b) determination that failure to grant the variance would result in exceptional hardship to the applicant, and;
 - (c) 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.
- 5) Variances may be issued for a water dependent use provided that the:
 - (a) criteria of Section 7.2.14(B)(1-4) are met, and;
 - (b) structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- 6) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Jackson County Register of Historic Landmarks, without regard to the procedures set forth in this section.
- Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the

structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.

C) The decision to either grant or deny a variance will be in writing and will set forth the reasons for such approval or denial. If the variance is granted, the property owner will be put on notice along with the written decision that the permitted building will have its lowest floor below the base flood elevation and that the cost of flood insurance likely will be commensurate with the increased flood damage risk.

7.2.15) Violation and Enforcement

No structure or land will hereafter be located, extended, converted or altered unless in full compliance with the terms of Section 7.2 and other applicable regulations. Enforcement of a violation of Section 7.2 is processed in accordance with the provisions of the Jackson County Codified Ordinance Chapters 202 and 203, as applicable. Sections 1.8 and 2.6.7 are also applicable to violations of Section 7.2.

SECTION 10.4.1

F) Floodplain Areas

The County may restrict divisions in floodplain areas to protect the health, safety, and welfare of the present and future population of the areas, and to ensure that all divisions conform to Section 7.2, "Floodplain Overlay." Such restrictions or exclusions will be clearly labeled on the tentative plan and final plat. Floodplain boundaries will be identified on the final plat.

Subdivisions and Partitions

Subdivisions and partitions greater than 50 lots or 5 acres, whichever is the lesser, are subject to the following standards:

- 1) Partitions and subdivisions will be consistent with the need to minimize flood damage and ensure that building sites will be reasonably safe from flooding.÷
- 2) Partition and subdivision development plans will include the mapped flood hazard zones from the effective FIRM, if available.
- For Approximate A Zones where proposed development will be within the 3) FEMA mapped 100-year floodplain, Base Flood Elevation data and 100year floodplain and floodway boundaries will be generated and/or provided for partitions, subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty lots or five acres, whichever is the lesser of the two. If proposed development will not be within the mapped FEMA 100-year floodplain (approximate A Zone) and base flood elevations have not been determined, a Deed Declaration, Land Division - Floodplain Overlay Existing, will be completed and recorded with Jackson County for each lot which has floodplain identified on the lot and will be recorded with the final plat. The Deed Declaration will indicate a lot has not been shown to be suitable for development within the flood hazard area and a floodplain development permit to establish base flood elevations, and 100-year floodplain and floodway boundaries is required prior to development within the flood hazard boundary.
- Partitions and subdivisions will have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize or eliminate damage and infiltration of floodwaters. Replacement public utilities and facilities such as sewer, gas, electric and water systems, likewise will be sited and designed to minimize or eliminate damage and infiltration of floodwaters.
- 5) New and replacement on-site waste disposal systems will be located and constructed to avoid functional impairment, or contamination from them, during flooding.
- 6) Partitions and subdivisions will have adequate drainage provided to reduce exposure to flood hazards. In AO and AH zones, drainage paths will be provided to guide floodwater around and away from all proposed and existing structures.

CHAPTER 13.3: DEFINITIONS

- 100) <u>FLOOD OR FLOODING</u>: A general and temporary condition of partial or complete inundation of normally dry land areas from: (1) The overflow of inland waters; and/or, (2) The unusual and rapid accumulation or runoff of surface waters from any source.
 - Accessory Structure: A structure on the same or adjacent parcel as a principal structure, the use of which is incidental and subordinate to the principal structure.
 - b) Addition: An improvement that increases the square footage of a structure.
 - c) <u>Adequate opening(s) (Fences):</u> The openings in the fence that allow flood waters to pass without creating a backwater condition.
 - d) <u>Annual period of flood risk:</u> Late October to May.
 - e) Area of shallow flooding: A designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet, and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.
 - f) Area of Special Flood Hazard: The land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. Also referred to as the 100-year floodplain. Designation on maps always includes the letter A. Also known as the Special Flood Hazard Area (SFHA).
 - g) <u>Bankfull stage</u>: The stage or elevation at which water overflows the natural banks of streams or other waters of this state and begins to inundate the upland. In the absence of physical evidence, the two (2)-year recurrence interval flood elevation may be used to approximate the bankfull stage (top of bank). (OAR 141-085-0010(2) & 660-023-0090)
 - h) <u>Base flood</u>: The flood having a one percent (1%) chance of being equaled or exceeded in any given year, i.e., the 100-year flood.
 - i) Base flood elevation (BFE): 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.
 - j) <u>Basement</u>: The portion of a structure with its floor subgrade (below ground level) on all sides.
 - k) <u>Below-grade Crawlspace</u>: An enclosed area below the base flood elevation in which the interior grade is not more than two (2) feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.
 - 1) Building: See "Structure".
 - m) Critical facility:
 - (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 critical 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 critical facilities; and
- (vii) Structures and equipment in government communication centers and other facilities required for emergency response.
- n) <u>Datum</u>: The vertical datum is a base measurement point (or set of points) from which all elevations are determined. Historically, that common set of points has been the National Geodetic Vertical Datum of 1929 (NAVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88).
- o) <u>Development</u>: Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.

Development does not include¹:

- (i) Signs, markers, aids, etc. placed by a public agency to serve the public.
- p) <u>Digital FIRM (DFIRM)</u>: 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.
- q) <u>Encroachment</u>: The advancement or infringement of uses, fill, excavation, buildings, permanent structures or other development into a floodway which may impede or alter the flow capacity of the floodplain.
- r) <u>Elevated building</u>: A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- s) <u>Existing building or structure</u>: a structure for which the "start of construction commenced before April 1, 1982.
- t) <u>Federal Emergency Management Agency (FEMA)</u>: The agency with the overall responsibility for administering the National Flood Insurance Program (NFIP).
- u) Flood Insurance Rate Map (FIRM): An official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.
- v) <u>Flood Insurance Study</u>: The official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles, floodway boundaries and water surface elevations of the base flood.
- w) Floodproofing: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- x) Floodway: The channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to discharge the

¹ Work exempt from Oregon Residential Specialty Code requires a Floodplain Development Permit unless specifically exempted by definition in this ordinance.

- base flood without cumulatively increasing the water surface elevation more than one foot.
- y) <u>Floodway fringe</u>: That area of the floodplain lying outside of the floodway, but still subject to inundation by waters of a base flood.
- z) <u>Highest adjacent grade (HAG)</u>: The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevations Certificate, FEMA Form 81-31, for more HAG information.
- aa) <u>Historic structure</u>: Any historic structure listed on the *Jackson County Register of Historic Landmarks* or the *National Register of Historic Places*.
- bb) <u>Letter of Map Change (LOMC)</u>: An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:
 - (i) Letter of Map Amendment (LOMA)

 A revision based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a special flood hazard area;
 - (ii) Letter of Map Revision (LOMR)

 A revision based on technical data showing, usually due to manmade changes, changes to flood zones, flood elevations, or floodplain and floodway delineations. One common type of LOMR, a LOMR-F, is a determination that a structure of parcel has been elevated by fill above the Base Flood Elevation and is excluded from the special flood hazard area:
 - (iii) Conditional Letter of Map Revision (CLOMR)

 A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.
- Lowest floor: The lowest floor of the lowest enclosed area (including basement). This includes any interior finishes, all floor framing, wood floor joist systems, beams, girders, or ducts. An unfinished or flood resistant enclosure used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a structure's lowest floor provided that the enclosed area is built and maintained in accordance with the applicable design requirements of the Specialty Codes and this ordinance. The lowest floor of a manufactured dwelling is the bottom of the longitudinal chassis frame beam in Azones.
- dd) Manufactured dwelling or manufactured home: 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 terms "Manufactured Dwelling" and "Manufactured Home" do not include a "Recreational Vehicle."
- ee) Mean sea level: For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or North American Vertical Datum (NAVD) of 1988 or other datum, to which Base Flood Elevations shown on a community's FIRM are referenced.

- ff) New construction: A structure for which the "start of construction" commenced after April 1, 1982, and includes subsequent substantial improvements to the structure.
- gg) <u>Nonresidential building</u>: A building used for commercial, industrial, or other accessory uses. A building which is not used as a dwelling.
- hh) Priority Persistent Pollutant: A substance that is toxic and either persists in the environment or accumulates in the tissues of humans, fish, wildlife or plants. Oregon DEQ has developed a Priority Persistent Pollutant List that meets this definition.
- ii) Reasonably safe from flooding: Base flood waters will not inundate the land or damage structures and that any subsurface waters related to the base flood will not damage existing or proposed buildings.
- jj) Recreational vehicle: A vehicle which is:
 - (i) Built on a single chassis;
 - (ii) 400 square feet or less when measured at the largest horizontal projection;
 - (iii) Designed to be self-propelled or permanently towed by a light duty truck, and;
 - (iv) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- kk) <u>Rehabilitation & Reconstruction:</u> An improvement to an existing structure which does not affect the external dimensions of the structure.
- Start of construction: Includes substantial improvement, and means the 11) date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home or manufactured dwelling on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
- mm) <u>Structure</u>: A walled and roofed building, a manufactured dwelling, a modular or temporary building, or a gas or liquid storage tank that is principally above ground.
- nn) <u>Substantial damage</u>: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of its market value before the damage occurred.
- oo) <u>Substantial improvement</u>: Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50

percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The market value of the structure should be:

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

The term does not include either:

- (i) A 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
- (ii) Alteration of a Historic Structure, provided that the alteration will not preclude the structure's continued designation as a Historic Structure.

For this definition, the value of improvements, modifications, additions and reconstruction of an existing building will be counted cumulatively for a period of ten (10) years.

- pp) <u>Variance</u>: A grant of relief from the floodplain requirements of this ordinance.
- qq) Water dependent use: 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, shipbuilding, or ship repair facilities. The term does not include long-term storage, manufacture, sales, or service facilities.
- rr) Water surface elevation: The height, in relation to a specific datum, of floods of various magnitudes and frequencies in the flood plains of riverine areas.

BEFORE THE JACKSON COUNTY PLANNING COMMISSION STATE OF OREGON, COUNTY OF JACKSON

IN THE MATTER OF CONSIDERATION OF A REMAND FROM THE BOARD OF OF COMMISSIONERS A TEXT THE **AMENDMENT** TO LAND DEVELOPMENT ORDINANCE TO REVISE THE FLOODPLAIN OVERLAY, SECTION 7.1.2, IN ORDER TO MEET THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) REQUIREMENTS FOR FLOODPLAIN MANAGEMENT IN JACKSON COUNTY. THE AMENDMENT ALSO REVISES (FLOODPLAIN 10.4.1(F) SECTIONS AREAS), AND 13.3(100) (DEFINITIONS, FLOOD OR FLOODING) TO COINCIDE WITH CHANGES TO SECTION 7.1.2. THESE REVISIONS COULD AFFECT PROPERTIES LOCATED WITHIN THE FEMA MAPPED FLOODPLAIN ON THE FLOOD INSURANCE RATE MAPS (FIRM) FOR JACKSON COUNTY. FILE NO. LRP2008-00009.

RECOMMENDATION FOR APPROVAL

RECITALS:

- Pursuant to Chapter 197 and 215 of the Oregon Revised Statutes, and in conformance with the Statewide Planning Goals, Jackson County's Comprehensive Plan (JCCP) and implementing ordinances have been acknowledged by the Oregon Land Conservation and Development Commission (LCDC).
- 2. The proposed text amendment to the Jackson County Land Development Ordinance was initiated by the Jackson County Board of Commissioners on July 16, 2009, Board Order 204-09, pursuant to LDO Section 3.8.2.
- 3. Pursuant to Oregon Revised Statute (ORS) 197.610 and Oregon Administrative Rule (OAR) 660, Division 18, notice was mailed to the State of Oregon Department of Land Conservation and Development Commission (DLCD) on June 8, 2009. The JCPC conducted the first evidentiary hearing on July 23, 2009. Subsequent public hearings were conducted on September 10, October 8 and December 10, 2009, and deliberations were concluded on this matter on January 14, 2010.

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- 4. A Recommendation for Approval was signed by the Planning Commission on January 14, 2010.
- 5. The Board of Commissioners conducted the first evidentiary hearing on May 5, 2010. Subsequent public hearings were conducted on June 16 and August 4, 2010. At the August 4, 2010 public hearing, the Board of Commissioners, by motion and vote, remanded the revised ordinance changes back to the Jackson County Planning Commission for the reasons below.
 - 5.1 In July, 2010, DLCD distributed to Jackson County a new Draft Oregon Model Companion Flood Damage Prevention Ordinance. Development Services staff discussed the changes and format with the Board and it was decided that reformatting the proposed floodplain ordinance to closely match the Oregon Model Ordinance would be appropriate. There was also a need to clarify language in the proposed revisions that would better guide the public regarding development within the mapped floodplains. The Board felt that the proposed revisions should be remanded back to the Jackson County Planning Commissions for their review and recommendation.
- 6. The Jackson County Planning Commission conducted public hearings on the revised ordinance changes on October 28, November 18, December 9, 2010, and January 27, 2011. On January 27, 2011, by motion and vote, the Planning Commission recommended approval of their changes to the Jackson County Board of Commissioners.

Now, therefore,

The Jackson County Planning Commission finds, concludes, and RECOMMENDS as follows:

FINDINGS:

The Planning Commission makes the following findings with respect to this remand of the text amendment to the Land Development Ordinance (LDO):

- Proper notice was given pursuant to ORS 197.610 and OAR 660-018 on October 6, 2010. Notice was sent to property owners whose property was within or partially within the FEMA mapped 100-year floodplain.
- 2. A properly published legal notice was in the Mail Tribune on October 17, 2010, for the first evidentiary hearing held before the JCPC on October 28, 2010. Subsequent public hearings were continued on November 18, December 9, 2010 and January 27, 2011.
- 3. The LDO Criteria for a legislative amendment to the LDO are found in Section 3.8.3.
- 4. Preliminary changes to Sections 7.1.2, 13.3(100) and 10.4.1(F) were submitted by staff for review. Section 7.1.2 was changed to Section 7.2 for formatting reasons. The final strikeout edition was reviewed by the Planning Commission and, by motion and vote, recommended approval of the section changes to the Board of Commissioners. The recommended revisions are attached as Exhibit 1.
 - 4.1 The Planning Commission was unable to resolve the question as to whether a Type 2 review was required for a floodplain development permit, where engineering analysis, calculations or modeling were required to satisfy criteria. The Planning Commission could not come to a majority opinion on this issue. The revised language in the proposed

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ordinance states that Floodplain Development permits would be processed as a Type 1 review, a ministerial review that does not require notice to adjacent property owners and the opportunity for a hearing. The reasoning with respect to Planning Commissioners differing recommendations is described below.

- 4.1.1 The Commissioners in favor of requiring a Type 2 review for applications that need engineering analysis, calculations or modeling to satisfy applicable criteria determined that the record contains evidence that LUBA and Jackson County Counsel believe a report from an engineer necessitates a discretionary decision and would require notice to adjacent property owners and the opportunity for a hearing. A Type 2 review is indicated because of the use of discretion by staff. These Commissioners believe the actions of development within the floodplain/floodway could affect the safety and livability of other property owners in the area and notice of floodplain/floodway development is important to the public.
- 4.1.2 The Commissioners in favor of a Type 1 review for all floodplain applications believe that requiring a Type 2 review is a further intrusion on private property rights. They state the current proposed language is adequate to assure that discretion is not being used by staff when they accept engineering analysis, calculations or modeling to satisfy applicable standards. The Commissioners believe the LUBA decision was specific to the Applegate River and to require the entire County to use the Type 2 process where it appears to be specific for only one area of the County is excessive.
- 4.1.3 The Planning Commission added language for replacement bridges and culverts located within a regulatory floodway stating that a Type 1 review was appropriate for these types of development. Because the Planning Commission could not come to a majority opinion on what type of review is required for applications with engineering analysis, calculations or modeling, the current language states that all floodplain reviews will be processed as Type 1 reviews, which would include replacement bridges and culverts located within a regulatory floodway. As such, the proposed language for replacement bridges and culverts is not necessary.

However, the Planning Commission recommends that should the Board of Commissioners determine that a Type 2 review for applications that need engineering analysis, calculations or modeling to satisfy applicable criteria, the following language should be included in Section 7.2.

"Replacement of bridges and culverts located in the floodway, as determined and mapped by FEMA, that necessitate a no-rise certification are allowed through a Type 1 review process, provided the replacement bridge and/or culvert is located along a similar or parallel alignment and contributes no additional material to the floodway."

5. The JCPC finds that the proposed amendments do not further restrict the residential use of private real property, farming or forest practices and do not reduce the fair market value of the property; thus the amendments are not subject to ORS 195.300-336. The text changes are to bring the LDO into compliance with National Flood Insurance Program (NFIP) requirements as directed by DLCD and FEMA. Compliance with the NFIP is required for Jackson County to participate in the NFIP, thereby allowing property owners within the unincorporated areas of Jackson County to purchase flood insurance. Non-compliance with the NFIP would remove

3-File No. LRP2008-00009 Floodplain Overlay Update

Jackson County from the flood insurance program and force property owners to pay flood insurance premiums much higher than those offered through participation in the NFIP.

- 6. The JCPC finds the proposed amendments will bring the LDO into compliance with NFIP requirements for development within the FEMA mapped 100-year floodplain and/or floodway as required by Statewide Planning Goal 7 and the Jackson County Comprehensive Plan Natural Hazards Element. The JCPC notes, however, that DLCD and FEMA will need to review the changes prior to the first evidentiary hearing before the Board of Commissioners.
- 7. FEMA has determined that the revisions to the LDO must be effective on May 3, 2011. Because of this time limit, the Planning Commission recommends the revision to the LDO be adopted by the Board of Commissioners through an Emergency Ordinance prior to May 3, 2011.

CONCLUSION:

The Jackson County Planning Commission adopts the recommendation as included in the record, including the attached text amendments to the LDO (Exhibit 1).

RECOMMENDATION:

Based on the evidence in the record, the Planning Commission finds the changes to LDO Sections 7.1.2 (now Section 7.2), 13.3(100) and 10.4.1(F) (Exhibit 1) are warranted and recommends adoption by the Board of Commissioners.

This recommendation for APPROVAL adopted this 10th day of Approval, 2011, at Medford, Oregon.

JACKSON COUNTY PLANNING COMMISSION

(Vote: Y=Yes; N=No; A=Abstain)

Don Greene, Chair

Richard B. Thierolf, Jr., Commissioner

Joel Ockunzzi, Commissioner

Yani Wouters, Commissioner

ATTEST:

Kelly Madding, Development Services Director

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Exhibit 1: LDO Text Amendment to Sections 7.1.2 (now Section 7.2), 10.4.1(F) and 13.3(100)

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7.2 Floodplain Overlay

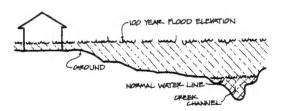
7.2.1) Statutory Authority

The State of Oregon has delegated the responsibility to local governments to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. The degree of flood protection required by this Section is necessary in order to participate in the National Flood Insurance Program and the Community Rating System (CRS). This participation is in the public interest, and the requirements of this Section are considered reasonable for regulatory purposes and are based on scientific and engineering considerations.

A) Warning and Disclaimer of Liability

The degree of flood protection required by this Section is required in order to participate in the National Flood Insurance Program and the Community Rating System (CRS). This participation is in the public interest and the requirements of this Section are considered reasonable for regulatory purposes and are based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Section does not imply that land outside the 100-year floodplain, or uses within such areas, will be free from flooding or flood damages for any size flood. This Section shall not create liability on the part of Jackson County, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damages that result from reliance on this Section or an administrative decision lawfully made hereunder.

B) Facts



The flood hazard areas of Jackson County are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

- These flood losses are caused by structures in flood hazard areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.
- Jackson County has the primary responsibility for planning, adoption and enforcement of land use regulations to accomplish proper floodplain management.

C) Purpose

The objectives of this Section are to:

- 1) Protect human life, health and property;
- 2) Minimize damage to public facilities and utilities such as water purification and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- 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 and emergency services associated with flooding and generally undertaken at the expense of the general public;
- 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 the areas of special flood hazard assume responsibility for their actions, and;
- 9) Manage the alteration of flood hazard areas and stream channels to minimize the impact of development on the natural and beneficial functions of the floodplain.

D) Methods of Reducing Flood Losses

In order to accomplish its purpose, this Section includes methods and provisions to:

1) Require that 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;

- Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
- Control filling, grading, dredging and other development which may increase flood damage or erosion;
- 4) Prevent or regulate the construction of flood barriers that will unnaturally divert flood waters or that may increase flood hazards to other lands;
- 5) Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters, and;
- 6) Coordinate with and supplement provisions of State of Oregon Specialty Codes enforced by the State of Oregon Building Codes Division.

E) Definitions

Unless specifically defined in Section 13.3(100), words or phrases used in Section 7.2 shall be interpreted according to their ordinary accepted meanings in the context of their use. Section 13.1, General Provisions, states "The contemporary edition of Webster's Third New International Dictionary (unabridged) (Merriam-Webster, Inc. Springfield MA 1986) as supplemented, is to be used as the source for these accepted meanings."

7.2.2) Applicability

Section 7.2 shall apply to all Areas of Special Flood Hazard within the jurisdiction of Jackson County. Nothing in Section 7.2 is intended to allow uses or structures that are otherwise prohibited by the zoning ordinance or Specialty Codes.

A) Basis for Area of Special Flood Hazard

The Area of Special Flood Hazard identified by the Federal Emergency Management Agency in its Flood Insurance Study (FIS) for Jackson County, Oregon and Unincorporated Areas, dated May 3, 2011, with accompanying Flood Insurance Rate Maps (FIRM) or Digital Flood Insurance Rate Maps (DFIRM), and other supporting data, are adopted by reference and declared a part of this Section. The FIS and the FIRM are on file at the office of the Jackson County Development Services, 10 S. Oakdale, Room 100, Medford, OR.

B) Coordination with Specialty Codes Adopted by the State of Oregon Building Codes Division

Pursuant to the requirement established in ORS 455 that the County administers and enforces the State of Oregon Codes, Jackson County does hereby acknowledge that the Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in Areas of Special Flood Hazard. Therefore, this Section is intended to be administered and enforced in conjunction with the Specialty Codes.

C) Establishment of Floodplain Development Permit

A Floodplain Development Permit shall be required prior to initiating development activities in any Areas of Special Flood Hazard established in Section A above.

A Floodplain Development Permit will be processed through a Type 1 Review.

D) Interpretation

In the application of this Section all provisions shall be:

- 1) Considered as minimum requirements; and,
- 2) Deemed neither to limit nor repeal any other powers granted under state statutes, including state Specialty Codes.

E) Exemptions

Finding 2, Policy B) of the Natural Hazards Element of the Comprehensive Plan states: "In order to assure maximum usefulness of flood prone areas, regulations should allow for seasonal variations in use. Temporary, removable structures should be allowed during drier months if their removal can be assured by late fall." A floodplain development permit is not required for the following uses:

- 1) Agriculture and grazing, or managing, growing, and harvesting of timber and other forest products;
- 2) Wildlife preserve, game farm, or fish hatchery which do not include structures, fill, or excavation;
- 3) Floating, fishing or swimming platforms that will be removed from the Area of Special Flood Hazard during high-water periods;
- 4) Water gauging stations;
- 5) Any emergency or disaster response operations activated by the Jackson County Emergency Operations Center to respond to flooding; and
- 6) Temporary emergency alteration of stream beds or banks as flood control measures immediately preceding or following periods of high water. The stream bed or bank will be restored to its pre-flood state within 30 days

after the high-water period unless an application for a development permit for the alteration has been submitted.

7.2.3) Administration

The Development Services Director is hereby appointed as the Floodplain Administrator who is responsible for administering and implementing the provisions of this Section.

A) Duties and Responsibilities of the Administrator

Duties of the Floodplain Administrator or staff designee shall include, but shall not be limited to:

- 1) Review all proposed development to determine whether it will be located in Areas of Special Flood Hazard or other flood-prone areas;
- 2) Review applications for new development or modifications of any existing development in Areas of Special Flood Hazard for compliance with the requirements of this Section;
- Review proposed development to assure that necessary permits have been received from governmental agencies from which approval is required by federal or state law, including but not limited to section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334 (U.S. Army Corps of Engineers (ASACE) and/or Oregon Department of State Lands (DSL)); the Endangered Species Act of 1973, 16 U.S.C. 1531-1544 (National Marine Fisheries Service (NMFS) and/or United States Fish and Wildlife Service (USFWS)); and State of Oregon Department of State Lands (DSL) permits. Copies of such permits shall be maintained on file;
- 4) Review all development permit applications to determine if proposed development is located in the floodway, and if so, ensure that the encroachment standards of Section 7.2.10 are met;
- 5) When Base Flood Elevation data or floodway data are not available, then the Floodplain Administrator or staff designee shall obtain, review and reasonably utilize any Base Flood Elevation and floodway data available from a Federal, state or other engineering source in order to administer the provisions of this Section;
- When Base Flood Elevations are not available, the Floodplain Administrator or staff designee shall require Base Flood elevations to be developed in accordance with Section 7.2.4(A)(3) to determine whether a proposed building site or subdivision will be reasonably safe from flooding;

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- 7) Where a determination is needed for the exact location of boundaries of the Areas of Special Flood Hazard including regulatory floodway (for example, where there appears to be a conflict between a mapped boundary and actual field conditions), the Floodplain Administrator or staff designee shall make the determination;
- 8) Issue floodplain development permits when the provisions of this Section have been met, or deny the same in the event of noncompliance;
- 9) Coordinate with the Building Official to ensure that applications for building permits comply with the requirements of this Section;
- 10) 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 BFE is available, of the lowest floor level, including basement, of all new construction or substantially improved buildings and structures, including manufactures dwellings;
- 11) Obtain, verify and record the actual elevation, in relation to the vertical datum used on the effective FIRM, or highest adjacent grade where no BFE is available, to which any new or substantially improved buildings or structures have been flood-proofed. When flood-proofing is utilized for a structure, the Floodplain Administrator or staff designee shall obtain certification of elevation to which the structure was flood-proofed from a registered professional engineer or architect;
- 12) Ensure that all records and certifications pertaining to the provisions of this Section are permanently maintained in Development Services and available for public inspection;
- Make periodic inspections in Areas of Special Flood Hazard to establish that development activities are being performed in compliance with this Section and verify that existing buildings and structures maintain compliance with this Section;
- 14) Coordinate with the Building Official to inspect areas where buildings and structures in Areas of Special Flood Hazard have been damaged, regardless of the cause of damage, and notify owners that permits may be required prior for repair, rehabilitation, demolition, relocation, or reconstruction of the building or structure, and;
- 15) Make substantial improvement or substantial damage determinations, based on criteria set forth in Section 7.2.5, for all structures located in Areas of Special Flood Hazard.

7.2.4 Application Requirements

- A) The floodplain development application shall include the following whenever applicable:
 - 1) A site plan drawn to scale with elevations of the project area, including the elevations at the development site, and the nature, location, dimensions of existing and proposed structures, earthen fill placement, storage of materials or equipment and drainage facilities;
 - 2) Delineation of flood hazard areas, floodway boundaries including base flood elevations or flood depth in AO zones, where available;
 - Where base flood elevations and/or floodways have not been determined, an applicant may submit a flood study analysis from an Oregon registered professional engineer certifying the base flood elevation(s) and/or floodway. The analysis will set forth the base flood elevation(s) and the location of the 100-year floodplain and floodway though hydrologic and hydraulic analyses performed in accordance with standard engineering practice as determined by the engineer. The calculated base flood elevation may be from mean sea level or may be based on an assumed elevation when tied to a benchmark as determined by the engineer. The location of the benchmark will be described in the flood study and shown on a map that must be included with the flood study. The County will accept the flood study without further analysis as meeting this standard.
 - 4) Certification from a registered professional engineer or architect that any proposed nonresidential flood-proofed structure will meet the floodproofing criteria of the NFIP and Specialty Codes;
 - 5) Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development (See Section 7.2.7);
 - 6) Proof that application has been made for necessary permits from other governmental agencies from which approval is required by Federal or state law.

B) Records and Documentation

- Copies of all necessary permits from other governmental agencies from which approval is required by Federal or state law must be provided prior to issuance of permits.
- 2) At or prior to the time of application for building permits, the applicant will submit to Development Services Planning and the Building Divisions a preliminary Elevation Certificate showing the base flood elevation, if known, and the lowest natural grade adjacent to the building site. Where

no Base Flood Elevation has been determined, the Elevation Certificate shall show the highest adjacent grade to the building site.

- 3) Prior to pouring the foundation, an Elevation Certificate showing the elevation of the lowest floor will be submitted;
- 4) In addition to the requirements of the Specialty Codes pertaining to occupancy, 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 Areas of Special Flood Hazard (A zones), the as-built elevation of the lowest floor, including basement or, where no Base Flood Elevation has been determined, the height above highest adjacent grade of the lowest floor; and
 - (b) For buildings and structures that have been flood-proofed, the applicant will submit a record of the actual elevation (in relation to mean sea level or based on an assumed elevation as determined by Section 7.2.4(A)(3)) to which the building or structure has been flood-proofed.
 - (c) The County will keep a permanent record of all Elevation and Flood-Proofing Certificates.
- 5) Failure to submit certification or failure to correct violations shall be cause for the Floodplain Administrator or Building Official to withhold a final inspection and/or occupancy until such deficiencies are corrected.
- C) Per Building Division requirements, Chapters 1420 and 1428 of the Codified Ordinances for Jackson County, Oregon, a Building permit will expire 180 days after issuance or upon expiration of the permit unless the permitted activity has commenced and thereafter is pursued to completion. Commencement of work includes start of construction.

7.2.5) Substantial Damage and Substantial Improvement Determination

For applications for permits to improve buildings and structures, including additions, repairs, renovations, and alterations, the Floodplain Administrator or staff designee, shall:

A) Require the applicant to obtain a professional appraisal of the market value of the building or structure before the proposed work is performed. When repair of damage is proposed, the market value of the building or structure shall be the market value before the damage occurred;

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- B) Compare the cost of improvement, the cost to repair the damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure. For determining whether the improvement is a substantial improvement, the value of improvements, modifications, additions and/or reconstruction of an existing building will be counted cumulatively for a period of ten (10) years;
 - (1) Except as indicated in subsections (2) through (4) below, all costs to repair substantial damage, including emergency repairs, including the costs of complying with any county, state or federal regulation must be included.
 - (2) The costs associated with the correction of pre-existing violations of state or local health, sanitary, or safety code specifications that were identified by the building official, the director of environmental health, or any other local code enforcement official prior to the improvement or repair and that are the minimum necessary to ensure safe living conditions shall not be included;
 - (3) Costs associated with the following items are not included:
 - (a) The preparation and approval of all required plans, calculations, certifications, and specifications;
 - (b) The performance of surveys or other geotechnical or engineering studies and resulting reports;
 - (c) Permit and review fees; and
 - (d) The construction, demolition, repair, or modification of outdoor improvements, including landscaping, fences, swimming pools, detached garages and sheds, etc.
 - (4) Proposed alterations of a designated historic building or structure are not to be considered substantial improvement unless the alteration causes a loss of said designation.
- C) Jackson County shall make the final determination of whether the proposed improvement and/or repair constitute a substantial improvement or substantial damage.

7.2.6) Temporary Encroachments in the Floodway

Temporary encroachments in the floodway for the purposes of capital improvement projects (including bridges) require a Floodplain Development Permit. No CLOMR/LOMR is required.

A) Application Requirements

The following requirements, as well as the applicable requirements of Section 7.2.4, will be included in a Floodplain Development Permit application under this section:

- (1) Identification of the temporary changes to the floodplain during a 100-year flooding event.
- (2) Identification of all insurable structures affected by any increase in the BFE during a 100-year flooding event.
- (3) The length of time the temporary structure or development will be allowed.

B) Permit Conditions

- (1) The permit will stipulate the days and dates the structure or other development will be on site. If a longer period is required, a new permit application must be submitted.
- (2) A flood warning system for the project will be required to allow equipment to be evacuated from the site and placed outside the floodplain.
- (3) Placement of equipment in the floodway is restricted to only that equipment which is absolutely necessary for the purposes of the project. All other accessory equipment and temporary structures (i.e. construction trailers) are restricted from the floodway.
- (4) Structures will be placed on site so that flood damages are minimized.
- (5) The applicant may be liable for any flood damages resulting from the temporary structure or development.

7.2.7 Alteration or Relocation of a Watercourse

- A) Development shall not diminish the carrying capacity of a watercourse. If any watercourse will be altered or relocated as a result of proposed development the applicant must submit certification by an Oregon registered professional engineer that, in the engineer's professional opinion and based upon analysis, the flood carrying capacity of the watercourse will not be diminished. The County will accept the certification without further analysis as meeting this standard.
- B) The alteration or relocation of a stream channel or watercourse is prohibited unless the applicant submits written verification from the Oregon Department of

Fish and Wildlife that the proposal will have minimal adverse impact on fish habitat.

- C) Altered riparian areas will be restored with native vegetation in accordance with a landscape plan that has been approved by the Oregon Department of Fish and Wildlife, per Section 8.6.
- D) The applicant will be responsible for obtaining all necessary permits from governmental agencies from which approval is required by Federal or state law, including but not limited to section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334 (U.S. Army Corps of Engineers (ASACE) and/or Oregon Department of State Lands (DSL)); the Endangered Species Act of 1973, 16 U.S.C. 1531-1544 (National Marine Fisheries Service (NMFS) and/or United States Fish and Wildlife Service (USFWS)); and State of Oregon Department of State Lands (DSL) permits...
- E) The applicant shall notify adjacent communities and Oregon Department of Land Conservation and Development prior to any alteration or relocation of the watercourse. Evidence of notification must be submitted to the Floodplain Administrator or staff designee, and to the Federal Emergency Management Agency.
- F) The applicant shall be responsible for ensuring necessary maintenance for the altered or relocated portion of the watercourse is provided so that the flood carrying capacity will not be diminished.
- G) The applicant shall meet the requirements to submit technical data in of Section 7.2.8 when an alteration of a watercourse results in the expansion, relocation or elimination of the special flood hazard area. Should an alteration or relocation of a watercourse result in the expansion, relocation or elimination of the special flood hazard area, a Conditional Letter of Map Revision shall be obtained from FEMA prior to an approval under this section. A Letter of Map Revision will also be required.

7.2.8) Map Revision

Required Technical Data:

- A) Within six months of project completion, an applicant who obtains an approved Conditional Letter of Map Revision (CLOMR) from FEMA, or whose development alters a watercourse, modifies floodplain boundaries or Base Flood Elevations shall obtain from FEMA a Letter of Map Revision (LOMR) reflecting the as-built changes to the FIRM.
- B) 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 application forms. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.

- Applicants shall be responsible for all costs associated with obtaining a CLOMR or LOMR from FEMA.
- D) The Floodplain Administrator or designee shall be under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR application, until the applicant demonstrates that the project will or has met all applicable requirements of Section 7.2.

7.2.9) Enclosed Areas Below the Lowest Floor Limited

To ensure that enclosed areas below the lowest floor will be used solely for parking vehicles, limited storage, or access to the building and not be finished for use as human habitation, the Floodplain Administrator or staff designee shall:

- Determine which applicants for new construction and/or substantial improvements have fully enclosed areas below the lowest floor that are greater than 4 feet;
- B) Have the property owner record a Deed Declaration, "NON-CONVERSION AGREEMENT FOR CONSTRUCTION WITHIN FLOOD HAZARD AREAS", on a form provided by Development Services. The Deed Declaration shall be recorded with the Jackson County Clerk's Office and a copy will be provided to Development Services.

7.2.10) Floodway Development

In areas designated as floodways, either on the FIRM or DFIRM, or by methods described in Section 7.2.4(A)(3), the following standards apply due to the extreme hazard resulting from velocity of flood waters which carry debris, potential projectiles, and have erosion potential:

- A) The placement or construction of any new building in the floodway, which does not replace an existing building, is prohibited. Replacement, repair, addition to, or reconstruction of any existing building in a floodway must comply with all applicable standards of this Section as well as 7.2.13;
 - If there is an area on the lot, parcel, or tract that is out of the floodway where the replacement of an existing building can be located, it must be replaced in a location outside of the floodway, if the area outside can accommodate the existing footprint and meet the dimensional and siting standards of this Ordinance; or
 - 2) If there is not an area on the lot, parcel, or tract outside of the floodway where a replacement building can be located, the replacement may be

located within the floodway in the same location of the existing building, subject to the standards of Section 7.2.10(C). The area displacement of the replacement building's footprint will not exceed the area displacement of the original building's footprint and the footprint must be in the same configuration and location as the existing footprint of the building. The standard of subsection 7.2.10(C) (no-rise analysis and certification) is not required if the replacement building is in the same footprint, location and area displacement of the existing building.

- The replacement of or addition to an existing building that is not within the existing building's footprint, location and configuration may occur provided the standard of subsection 7.2.10(C) is met and other applicable standards of Section 7.2 are met.
- B) Sand filter septic systems are prohibited in the floodway unless standards set forth in Section 7.2.10(C) are met;
- C) Except as provided in E) below, encroachments, including fill, new construction, substantial improvements, fences, and other development in the regulatory Floodway, or the floodway as determined in 7.2.4(A)(3), are prohibited unless certification by an Oregon registered professional engineer is provided demonstrating, through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that, in the engineer's opinion, such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge (no-rise analysis and certification). The County will accept the engineer's analysis, without further analysis by the County, as meeting this standard.
- D) Any fill allowed to be placed in the floodway shall be designed to be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour.
- E) Projects for fish enhancement and stream habitat restoration may be permitted in the floodway provided:
 - The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023);
 - A qualified professional (an Oregon registered professional engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practicable given the goals of the project. The County

- will accept the feasibility analysis and certification, without further analysis by the County, as meeting this standard;
- 3) No structures would be impacted by a potential rise in flood elevation; and,
- 4) An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged will be included as part of the local approval.
- F) The Floodplain Administrator or staff designee shall accept an Oregon licensed surveyor's or Oregon registered professional engineer's determination of the 100-year floodplain boundary and floodway boundary, as depicted on the Flood Insurance Rate Maps (FIRM) and/or Digital Flood Insurance Rate Maps (DFIRM). A survey (map) must include property boundaries, existing and proposed development and 100-year floodplain and/or floodway boundaries as depicted on the FIRM and/or DFIRM. The survey (map) must have the surveyor's or engineer's stamp included.
- G) Applicants shall obtain a CLOMR from FEMA before an encroachment, including fill, new construction, substantial improvement, and other development, into the floodway is permitted that will cause any increase in the Base Flood Elevation. Per Section 7.2.8, a LOMR will also be required.

7.2.11) Zones with Base Flood Elevations but No Floodway

- A) Prior to the cumulative effect analysis, the floodway boundaries must be determined by Section 7.2.4(A)(3) or as described in Section 7.2.12(B)(1).
- B) In areas within Zones A1-30 and AE on the community's FIRM with a base flood elevations, but where no regulatory floodway has been designated, new construction, substantial improvements, or other development (including fill) shall be prohibited, unless the applicant provides evidence from an Oregon registered professional engineer demonstrating, in the engineer's professional opinion, 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 (1) foot at any point within the community. The engineer will apply the cumulative effect analysis to the area of the river/stream upstream and downstream to a point where no increase in the Base Flood Elevation is determined by the Oregon registered professional engineer for the proposed development. The County will accept the engineer's cumulative effect analysis, without further analysis by the County, as meeting this For purposes of administering subsection (B), "anticipated standard. development" shall mean development for which an application is currently under review by Development Services for permit approval or a development

application which has been approved by Development Services but has not been initiated. The placement of any new building in the floodway which does not replace an existing building is prohibited.

- C) The Floodplain Administrator or staff designee shall accept an Oregon licensed surveyor's or Oregon registered professional engineer's determination of the 100-year floodplain boundary and floodway boundary, as depicted on the Flood Insurance Rate Maps (FIRM) and/or Digital Flood Insurance Rate Maps (DFIRM). A survey (map) must include property boundaries, existing and proposed development and 100-year floodplain and/or floodway boundaries as depicted on the FIRM and/or DFIRM. The survey (map) must have the surveyor's or engineer's stamp included.
- D) 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 costs associated with the CLOMR and LOMR process.

7.2.12) Zones Without Base Flood Elevations

The following standards, as well as applicable sections of Section 7.2.13, apply in Areas of Special Flood Hazard where no base flood elevation and floodway data have been provided (approximate A Zones):

- A) When Base Flood Elevations are not available from an engineering source, the Floodplain Administrator shall require Base Flood Elevations to be developed in accordance with Section 7.2.4(A)(3) of this ordinance to determine whether a proposed building site or subdivision will be reasonably safe from flooding.
- B) Encroachments, including structures or fill, located in an Area of Special Flood Hazard that are within an area equal to the width of the stream or fifty feet, whichever is greater (measured from the ordinary high water mark) shall meet the applicable standards of Section 7.2.10. This area of setback will be considered the floodway for development purposes. New buildings within the floodway are prohibited.
- C) The Floodplain Administrator or staff designee shall accept an Oregon licensed surveyor's or Oregon registered professional engineer's determination of the 100-year floodplain boundary and floodway boundary, as depicted on the Flood Insurance Rate Maps (FIRM) and/or Digital Flood Insurance Rate Maps (DFIRM). A survey (map) must include property boundaries, existing and proposed development and 100-year floodplain and/or floodway boundaries as

depicted on the FIRM and/or DFIRM. The survey (map) must have the surveyor's or engineer's stamp included.

7.2.13) Construction Standards and Building Design

Buildings and structures, including manufactured dwellings, within the scope of the Building Codes, including repair of substantial damage and substantial improvement of such existing buildings and structures, shall be designed and constructed in accordance with the flood-resistant construction provisions of these codes, including but not limited to Section R324 of the Residential Specialty Code, the Manufactured Dwelling Installation Specialty Code, and Section 1612 of the Structural Specialty Code.

- A) In all areas of special flood hazards (A & AO zones),
 - 1) New construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure;
 - 2) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
 - 3) New construction and substantial improvements shall be constructed using methods and practices that minimize flood damage, and;
 - 4) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

B) Specific Building Design and Construction Standards for Residential Construction (A Zones)

In addition to Section (A) above,

- New construction or the substantial improvement of any residential structure will have the lowest floor, including basement, elevated a minimum of one (1) foot above the base flood elevation. This includes floor framing, wood floor joist systems, beams, girders, ducts and all electrical components. If the substantial improvement includes a second story addition or the removal of a wall between a new addition and the existing dwelling, then both the existing dwelling and the addition must be elevated a minimum of one (1) foot above the base flood elevation. If the wall between a new addition and the existing dwelling will remain intact except for the addition of a standard doorway, then only the addition must be elevated;
- 2) Where Base Flood Elevations have not been determined, a flood study as explained in Section 7.2.4(A)(3) shall be submitted to determine Base

Flood Elevations. New construction or the substantial improvement of any residential building will meet the elevation requirements of 7.2.13(B)(1) above.

- 3) Any addition to a post-FIRM building (built after April 1, 1982) is considered new construction and must meet the requirements of this section regardless of the size or cost of the addition;
- 4) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or will be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by an Oregon registered professional engineer or architect or must meet or exceed the following minimum standards:
 - (a) A minimum of two (2) openings will be provided having a total net area of not less than one (1) square inch for every square foot of enclosed floor area subject to flooding (i.e., below base flood elevation). A window, door or garage door is not considered an opening:
 - (b) The bottom of all openings will be no higher than one (1) foot above grade; and
 - (c) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.
- 5) Types of Substantial Improvements

Basic types of substantial improvements are rehabilitations or reconstructions that do not increase square footage, and lateral or vertical additions that do increase square footage. In addition to the design and building standards of Section 7.2.13 (A) & (B), the following standards apply to these types of substantial improvements.

- (a) If the substantial improvement is the rehabilitation or reconstruction of an existing building where there is not an increase in square footage, the entire building must be elevated a minimum of one (1) foot above the base flood elevation. Where Base Flood Elevations have not been determined, see Section 7.2.13(B)(2) above for elevation requirements.
- (b) If the substantial improvement is a lateral addition where the existing footprint of the building increases, see Section 7.2.13(B)(1) above for elevation requirements. Where Base Flood

Elevations have not been determined, see Section 7.2.13(B)(2) above for elevation requirements.

(c) If the substantial improvement is a vertical addition to add a room or rooms on top of an existing building, the entire building must be elevated a minimum of one (1) foot above the base flood elevation. Where Base Flood Elevations have not been determined, see Section 7.2.13(B)(2) above for elevation requirements.

6) Manufactured Dwellings

- (a) If the manufactured dwelling is supported on solid foundations walls, the ground area reserved for the placement of a manufactured dwelling shall be a minimum of 12 inches above BFE unless the foundation walls are designed to automatically equalize hydrostatic forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - (i) A minimum of two (2) openings will be provided having a total net area of not less than one (1) square inch for every square foot of enclosed floor area subject to flooding (i.e., below base flood elevation). A window, door or garage door is not considered an opening;
 - (ii) The bottom of all openings will 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 flood waters.
- (b) The lowest floor of a manufactured dwelling must be elevated such that the bottom of the longitudinal chassis frame beam is a minimum of one (1) foot above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques). The construction of the manufactured dwelling must meet the applicable requirements of Section 7.2.

- (c) Electrical crossover connections shall be a minimum of one (1) foot above BFE.
- (d) A manufactured dwelling which has incurred substantial damage as a result of a flood will be elevated on a permanent foundation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. All applicable requirements of Section 7.2 must be met.

C) Nonresidential Construction

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

- 1) Be flood-proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- 2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
- 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 or staff designee;
- 4) Nonresidential structures that are elevated, not flood-proofed, must meet residential standards described in Section 7.2.13 (B);
- 5) Applicants flood-proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood-proofed level (e.g. a building flood-proofed to the base flood level will be rated as one foot below).
- 6) Substantial Improvements for Nonresidential Construction

In addition to the requirements for nonresidential construction, substantial improvements to nonresidential structures, the following standards also apply:

(a) A substantial improvement addition to a nonresidential may be either elevated or flood-proofed. If flood-proofing is used, the wall between the addition and the original structure must be floodproofed. (b) When the substantial improvement is a full or partial vertical addition, the entire structure must elevated or flood-proofed.

D) Below-grade Crawl Spaces

Below-grade crawlspaces are allowed, unless no base flood elevations are available, subject to the following standards as found in *FEMA Technical Bulletin* 11-01, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas:

- 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 allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
- 2) The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
- Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes the foundation walls of the crawlspace used to elevate the building. Per Section 7.2.13 (B)(1), floor framing, wood floor joist systems, beams, girders, ducts and all electrical components must be elevated a minimum of one (1) foot above BFE.
- 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. Per Section 7.2.13 (B)(1), floor framing, wood floor joist systems, beams, girders, ducts and all electrical components must be elevated a minimum of one (1) foot above BFE.
- 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 top of the crawlspace foundation wall, must not exceed four (4) feet at any point. The height limitation is the

maximum allowable unsupported wall height according to the engineering analyses and Building Code requirements for flood hazard areas.

- 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.

Floor Joist

4 ft Maximum

Crawlspace

Flood Vent

Lowest Adjacent Grade

For more detailed information refer to FEMA Technical Bulletin 11-01.

There will be increased insurance cost associated with below-grade crawlspaces. There is a charge added to the basic policy premium for a below-grade crawlspace.

E) Standards for Shallow Flooding Areas (AO Zones)

Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from 1 to 3 feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is often characterized as sheet flow. In these areas Section 7.2.13(A) and the following provisions shall apply:

- New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least three feet if no depth number is specified). This includes floor framing, wood floor joist systems, beams, girders, ducts and all electrical components.
- 2) New construction and substantial improvements of nonresidential structures within AO zones shall either:
 - (a) Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified). This includes floor framing, wood floor joist systems, beams, girders, ducts and all electrical components; or
 - (b) Together with attendant utility and sanitary facilities, be completely flood-proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect, and;
 - (c) Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

F) Fences and Walls in Areas of Special Flood Hazard

Fencing and walls located in the special flood hazard area require floodplain a development permit.

G) Accessory Structures

Relief from the elevation or dry flood-proofing standards may be granted for new and replacement, or substantially improved accessory structures containing no more than 200 square feet. Such a structure must meet the following standards:

- It shall 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;
- 2) Toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality shall not be stored below BFE, or where no BFE is available lower than three feet above grade, unless confined in a tank installed in compliance with this Section;
- 3) Services such as electrical and heating equipment shall be elevated or flood-proofed to or above the base flood elevation, and;
- 4) It shall be 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
 - (a) Provide a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (b) The bottom of all openings shall be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening;
 - (c) 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.

H) Recreational Vehicles in Areas of Special Flood Hazard

Recreational Vehicles, defined in Section 13.3(100), located in all Areas of Special Flood Hazard may be occupied subject to the following standards:

- 1) Recreational or camping vehicles will not be used for temporary housing to accommodate visitors of the current resident more than 30 days in any 12 month period.
- A maximum of one (1) self-contained recreational or camping vehicle may be used for recreational purposes for up to three (3) months in any 12 month period on vacant property with the owner's consent, subject to the provisions of this Section.
- 3) Not more than one (1) self-contained camping vehicle may be used as temporary housing for not more than 180 days on property owned by the owner of said vehicle, and only after permits have been issued for construction of the first dwelling, or during remodeling or replacement of a

lawfully established dwelling. Such uses are subject to full compliance with the provisions of this Section and health and sanitation regulations.

4) Any electrical panel or outlet proposed to service a recreational vehicle shall meet the requirement of Section 7.2.13(A).

1) Critical Facilities

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Area of Special Flood Hazard. Construction of new critical facilities shall be permissible within the Area of Special Flood Hazard if no feasible alternative site is available. Access elevated to or above the level of the Base Flood Elevation shall be provided to all critical facilities to the maximum extent possible. Flood-proofing 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. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

J) Tanks

- New and replacement underground tanks in flood hazard areas shall 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 base flood.
- 2) New and replacement above-ground tanks in flood hazard areas shall be:
 - (a) Attached to and elevated above the base flood elevation (or depth number in AO zones) on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the base flood; or be
 - (b) Anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the base flood.

K) Utilities

- All new and replacement water supply systems will be designed to minimize or eliminate infiltration of floodwaters into the system;
- New and replacement sanitary sewage systems will be designed to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters;

- Consistent with the Oregon Department of Environmental Quality, on-site waste disposal systems will be located to avoid impairment to them or contamination from them during flooding;
- 4) Underground public sewer lines will be certified by an Oregon registered professional engineer to minimize or eliminate infiltration of floodwaters into the systems and discharge from the systems into floodwaters. The County will accept the engineer's certification without further analysis by the County as meeting this standard; and
- All other underground public utility lines will be certified by an Oregon registered professional engineer to minimize or eliminate infiltration of floodwaters into the systems. The County will accept the engineer's certification without further analysis by the County as meeting this standard

L) Aggregate Mining Operations

- Applications for aggregate mining or surface mining operations within the Area of Special Flood Hazard or floodway will provide evidence that the mining will not cause an increase in flooding potential or stream bank erosion adjacent to, upstream or downstream from the operation; and
- Approval of application for aggregate mining or surface mining operations will be conditioned to require that all mining and processing equipment and new stockpiles of mined or processed materials will be removed from the 100-year floodplain during the period of November 1 through April 30, unless the operation will be protected by a dike that is of sufficient width and height to prevent the base flood from inundating the site.

M) Development on Areas Surrounded by Floodplain

Building and other development on islands or other topographic features within or surrounded by the floodplain will be subject to the following:

- 1) Verification by an Oregon registered professional engineer or geologist that the island or other topographic feature is a stable land form and will not be subject to erosion during a 100-year flood;
- 2) Submission of topographic information from a registered surveyor showing the topography of the area (island); and
- 3) The roadway to the development site will be located or constructed in such a way as not to increase flood elevations or create an obstruction in the floodway, and must be designed to provide safe passage to and from the site during a flood event.

7.2.14) Variance Procedures and Criteria

A) Variance

Variances to the Floodplain Overlay will be processed through a Type 2 review.

- 1) An application for a variance must be submitted to Jackson County on the form provided by the County and include at a minimum the same information required for a development permit and an explanation for the basis for the variance request.
- 2) The burden to show that the variance is warranted and meets the criteria set out herein is on the applicant.
- 3) Upon consideration of the criteria in Section 7.2.14(B) (Criteria for Variances) and the purposes of this Section, the County may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Section.
- 4) The Floodplain Administrator or staff designee shall maintain a permanent record of all variances and report any variance to the Federal Emergency Management Agency upon request.

B) Criteria for Variances

- 1) Variances shall not be issued within a designated regulatory Floodway if any increase in flood levels during the base flood discharge would result.
- 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. As the lot size increases the technical justification required for issuing the variance increases.
- 3) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 4) Variances shall only be issued upon a:
 - (a) showing of good and sufficient cause;
 - (b) determination that failure to grant the variance would result in exceptional hardship to the applicant, and;

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- (c) 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.
- 5) Variances may be issued for a water dependent use provided that the:
 - (a) criteria of Section 7.2.14(B)(1-4) are met, and;
 - (b) structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- 6) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Jackson County Register of Historic Landmarks, without regard to the procedures set forth in this section.
- Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
- C) The decision to either grant or deny a variance shall be in writing and shall set forth the reasons for such approval or denial. If the variance is granted, the property owner shall be put on notice along with the written decision that the permitted building will have its lowest floor below the base flood elevation and that the cost of flood insurance likely will be commensurate with the increased flood damage risk.

7.2.15) Violation and Enforcement

No structure or land shall hereafter be located, extended, converted or altered unless in full compliance with the terms of Section 7.2 and other applicable regulations. Enforcement of a violation of Section 7.2 is processed in accordance with the provisions of the Jackson County Codified Ordinance Chapters 202 and 203, as applicable. Sections 1.8 and 2.6.7 are also applicable to violations of Section 7.2.

SECTION 10.4.1

F) Floodplain Areas

The County may restrict divisions in floodplain areas to protect the health, safety, and welfare of the present and future population of the areas, and to ensure that all divisions conform to Section 7.1.2, "Floodplain Overlay." Such restrictions or exclusions will be clearly labeled on the tentative plan and final plat. Floodplain boundaries will be identified on the final plat.

Subdivisions and Partitions

Subdivisions and partitions greater than 50 lots or 5 acres, whichever is the lesser, are subject to the following standards:

- 1) Partitions and subdivisions shall be consistent with the need to minimize flood damage and ensure that building sites will be reasonably safe from flooding:
- 2) Partition and subdivision development plans shall include the mapped flood hazard zones from the effective FIRM, if available
- 3) For approximate A zones, Base Flood Elevation data shall be generated and/or provided for partitions, subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty lots or five acres, whichever is less.

OR

Base Flood Elevation data shall be generated and/or provided for partitions, subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty lots or five acres, whichever is less. If proposed development will not be within the mapped FEMA 100-year floodplain (approximate A Zone), a Deed Declaration, Land Division – Floodplain Overlay Existing, shall be completed and recorded with Jackson County for each lot which has floodplain identified on the lot and will be recorded with the final plat. The Deed Declaration will indicate a lot has not been shown to be suitable for development within the flood hazard area and a floodplain development permit to establish base flood elevations, and 100-year floodplain and floodway boundaries is required prior to development within the flood hazard boundary.

- Partitions and subdivisions shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize or eliminate damage and infiltration of floodwaters. 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.
- New and replacement on-site waste disposal systems shall be located and constructed to avoid functional impairment, or contamination from them, during flooding;
- 6) Partitions and subdivisions 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 all proposed and existing structures.

CHAPTER 13.3: DEFINITIONS

- 100) <u>FLOOD OR FLOODING</u>: A general and temporary condition of partial or complete inundation of normally dry land areas from: (1) The overflow of inland waters; and/or, (2) The unusual and rapid accumulation or runoff of surface waters from any source.
 - a) <u>Accessory Structure:</u> A structure on the same or adjacent parcel as a principal structure, the use of which is incidental and subordinate to the principal structure.
 - b) Addition: An improvement that increases the square footage of a structure.
 - c) <u>Adequate opening(s) (Fences):</u> The openings in the fence that allow flood waters to pass without creating a backwater condition.
 - d) Annual period of flood risk: Late October to May.
 - e) Area of shallow flooding: A designated AO or AH Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet, and/or where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.
 - f) Area of Special Flood Hazard: The land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. Also referred to as the 100-year floodplain. Designation on maps always includes the letter A. Also known as the Special Flood Hazard Area (SFHA).
 - g) <u>Bankfull stage</u>: The stage or elevation at which water overflows the natural banks of streams or other waters of this state and begins to inundate the upland. In the absence of physical evidence, the two (2)-year recurrence interval flood elevation may be used to approximate the bankfull stage (top of bank). (OAR 141-085-0010(2) & 660-023-0090)
 - h) <u>Base flood</u>: The flood having a one percent (1%) chance of being equaled or exceeded in any given year, i.e., the 100-year flood.
 - i) Base flood elevation (BFE): 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.
 - h) <u>Basement</u>: The portion of a structure with its floor subgrade (below ground level) on all sides.
 - j) <u>Below-grade Crawlspace</u>: An enclosed area below the base flood elevation in which the interior grade is not more than two (2) feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed four (4) feet at any point.
 - k) Building: See "Structure".
 - l) <u>Critical facility</u>: (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 critical 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 critical facilities; and
- (vii) Structures and equipment in government communication centers and other facilities required for emergency response.
- m) Datum: The vertical datum is a base measurement point (or set of points) from which all elevations are determined. Historically, that common set of points has been the National Geodetic Vertical Datum of 1929 (NAVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88).
- n) <u>Development</u>: Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.

Development does not include¹:

- (i) Signs, markers, aids, etc. placed by a public agency to serve the public; and
- (ii) Driveways, parking lots, or other open space use areas where no alteration of topography occurs.
- o) <u>Digital FIRM (DFIRM)</u>: 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.
- p) <u>Encroachment</u>: The advancement or infringement of uses, fill, excavation, buildings, permanent structures or other development into a floodway which may impede or alter the flow capacity of the floodplain.
- q) <u>Elevated building</u>: A non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- r) <u>Existing building or structure</u>: a structure for which the "start of construction commenced before April 1, 1982.
- s) <u>Federal Emergency Management Agency (FEMA)</u>: The agency with the overall responsibility for administering the National Flood Insurance Program (NFIP).
- t) Flood Insurance Rate Map (FIRM): An official map of a community, issued by the Federal Insurance Administration, delineating the areas of special flood hazard and/or risk premium zones applicable to the community.
- u) Flood Insurance Study: The official report by the Federal Insurance Administration evaluating flood hazards and containing flood profiles, floodway boundaries and water surface elevations of the base flood.
- v) <u>Floodproofing</u>: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.
- w) Floodway: The channel of a river or other watercourse and those portions of the floodplain adjoining the channel required to discharge the

¹ Work exempt from Oregon Residential Specialty Code, Section R105.2 requires a Floodplain Development Permit unless specifically exempted by definition in this ordinance.

- base flood without cumulatively increasing the water surface elevation more than one foot.
- x) <u>Floodway fringe</u>: That area of the floodplain lying outside of the floodway, but still subject to inundation by waters of a base flood.
- y) <u>Highest adjacent grade (HAG)</u>: The highest natural elevation of the ground surface prior to construction, adjacent to the proposed walls of a structure. Refer to the Elevations Certificate, FEMA Form 81-31, for more HAG information.
- z) <u>Historic structure</u>: Any historic structure listed on the *Jackson County Register of Historic Landmarks* or the *National Register of Historic Places*.
- aa) <u>Letter of Map Change (LOMC)</u>: An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:
 - (i) Letter of Map Amendment (LOMA)

 A revision based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a special flood hazard area;
 - (ii) Letter of Map Revision (LOMR)

 A revision based on technical data showing, usually due to manmade changes, changes to flood zones, flood elevations, or floodplain and floodway delineations. One common type of LOMR, a LOMR-F, is a determination that a structure of parcel has been elevated by fill above the Base Flood Elevation and is excluded from the special flood hazard area;
 - (iii) Conditional Letter of Map Revision (CLOMR)

 A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.
- bb) Lowest floor: The lowest floor of the lowest enclosed area (including basement). This includes any interior finishes, all floor framing, wood floor joist systems, beams, girders, or ducts. An unfinished or flood resistant enclosure used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a structure's lowest floor provided that the enclosed area is built and maintained in accordance with the applicable design requirements of the Specialty Codes and this ordinance. The lowest floor of a manufactured dwelling is the bottom of the longitudinal chassis frame beam in Azones.
- Manufactured dwelling or manufactured home: 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 terms "Manufactured Dwelling" and "Manufactured Home" do not include a "Recreational Vehicle."
- dd) Mean sea level: For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or North American Vertical Datum (NAVD) of 1988 or other datum, to which Base Flood Elevations shown on a community's FIRM are referenced.

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- ee) New construction: A structure for which the "start of construction" commenced after April 1, 1982, and includes subsequent substantial improvements to the structure.
- ff) Nonresidential building: A building used for commercial, industrial, or other accessory uses. A building which is not used as a dwelling.
- gg) Priority Persistent Pollutant: A substance that is toxic and either persists in the environment or accumulates in the tissues of humans, fish, wildlife or plants. Oregon DEQ has developed a Priority Persistent Pollutant List that meets this definition.
- hh) Reasonably safe from flooding: Base flood waters will not inundate the land or damage structures and that any subsurface waters related to the base flood will not damage existing or proposed buildings.
- ii) Recreational vehicle: A vehicle which is:
 - (i) Built on a single chassis;
 - (ii) 400 square feet or less when measured at the largest horizontal projection;
 - (iii) Designed to be self-propelled or permanently towed by a light duty truck, and:
 - (iv) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- jj) <u>Rehabilitation & Reconstruction:</u> An improvement to an existing structure which does not affect the external dimensions of the structure.
- Start of construction: Includes substantial improvement, and means the kk) date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home or manufactured dwelling on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.
- II) <u>Structure</u>: A walled and roofed building, a manufactured dwelling, a modular or temporary building, or a gas or liquid storage tank that is principally above ground.
- mm) <u>Substantial damage</u>: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of its market value before the damage occurred.
- nn) <u>Substantial improvement</u>: Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50

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percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The market value of the structure should be:

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

The term does not include either:

- (i) A 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
- (ii) Alteration of a Historic Structure, provided that the alteration will not preclude the structure's continued designation as a Historic Structure.

For this definition, the value of improvements, modifications, additions and reconstruction of an existing building will be counted cumulatively for a period of ten (10) years.

- oo) <u>Variance</u>: A grant of relief from the floodplain requirements of this ordinance.
- pp) Water dependent use: 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, shipbuilding, or ship repair facilities. The term does not include long-term storage, manufacture, sales, or service facilities.
- qq) <u>Water surface elevation</u>: The height, in relation to a specific datum, of floods of various magnitudes and frequencies in the flood plains of riverine areas.

