



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

2/3/2010

TO: Subscribers to Notice of Adopted Plan

or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Lafayette Plan Amendment

DLCD File Number 002-09

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, February 16, 2010

This amendment was submitted to DLCD for review prior to adoption 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 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 THAT IT WAS MAILED TO DLCD. AS A RESULT, YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE

DATE SPECIFIED.

Cc: Jim Jacks, City of Lafayette

Gloria Gardiner, DLCD Urban Planning Specialist

Gary Fish, DLCD Regional Representative Chris Shirley, DLCD Regional Representative



2 DLCD

Notice of Adoption

This Form 2 must be mailed to DLCD within 5-Working Days after the Final
Ordinance is signed by the public Official Designated by the jurisdiction
and all other requirements of ORS 197.615 and OAR 660-018-000

DEPT OF

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JAN 26 2010

AND DEVELOPMENT

JAND DELIVER

Jurisdiction: City of Lafayette	Local file number:	TA 09-02	
Date of Adoption: 1/14/10	Date Mailed: 1/26/	10 hand delivered	
Was a Notice of Proposed Amendment (Form 1) mai	led to DLCD? X Yes	☐ No Date: 10/30/09	
Comprehensive Plan Text Amendment	☐ Comprehensive	e Plan Map Amendment	
Land Use Regulation Amendment			
☐ New Land Use Regulation	Other:		
Summarize the adopted amendment. Do not use	technical terms. Do no	ot write "See Attached".	
Lafayette floodplain regulations were amended to state Incorporated Cities, March 2, 2010, and to add languag Building Code.			
Does the Adoption differ from proposal? Please se	elect one		
The proposal did not have as much of the language from version has. The final has a lot of minor word and phras		nance as the final adopted	
Plan Map Changed from:	to:		
Zone Map Changed from:	to:		
Location:		Acres Involved:	
Specify Density: Previous:	New:		
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 Amendme	nt		
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 imme	diate adoption?	Yes No	

DLCD file No Please list all affected Sta	ite or Federal Agencies, L	ocal Governments or Specia	al Districts:
Oregon Department of Land	d Conservation and Develop	ment. FEMA.	
Local Contact: Jim Jacks	, Mid-Will. Valley COG	Phone: (503) 540-1619	Extension:
Address: 105 High Street SE		Fax Number: 503-588-6094	
City: Salem, OR	Zip: 97301	E-mail Address: jjacks@mwvcog.org	

ADOPTION SUBMITTAL REQUIREMENTS

This Form 2 must be received by DLCD no later than 5 days after the ordinance has been signed by the public official designated by the jurisdiction to sign the approved ordinance(s) per ORS 197.615 and OAR Chapter 660, Division 18

- 1. This Form 2 must be submitted by local jurisdictions only (not by applicant).
- 2. When submitting, please print this Form 2 on light green paper if available.
- Send this Form 2 and One (1) Complete Paper Copy and One (1) Electronic Digital CD (documents and maps) of the Adopted Amendment to the address in number 6:
- Electronic Submittals: Form 2 Notice of Adoption will not be accepted via email or any
 electronic or digital format at this time.
- The Adopted Materials must include the final decision signed by the official designated by the jurisdiction.
 The Final Decision must include approved signed ordinance(s), finding(s), exhibit(s), and any map(s).
- DLCD Notice of Adoption must be submitted in One (1) Complete Paper Copy and One (1)
 Electronic Digital CD via United States Postal Service, Common Carrier or Hand Carried to
 the DLCD Salem Office and stamped with the incoming date stamp, (for submittal instructions,
 also see # 5)] MAIL the PAPER COPY and CD 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

- Submittal of this Notice of Adoption must include the signed ordinance(s), finding(s), exhibit(s) and any other supplementary information (see ORS 197.615).
- Deadline to appeals to LUBA is calculated twenty-one (21) days from the receipt (postmark date) of adoption (see ORS 197.830 to 197.845).
- In addition to sending the Form 2 Notice of Adoption to DLCD, please notify persons who participated in the local hearing and requested notice of the final decision at the same time the adoption packet is mailed to DLCD (see <u>ORS 197.615</u>).
- Need More Copies? You can now access these forms online at http://www.lcd.state.or.us/. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518.

BEFORE THE CITY COUNCIL FOR THE CITY OF LAFAYETTE, OREGON

An Ordinance Amending the Lafayette Zoning and)
Development Ordinance Adopting the 2009 Flood)
Insurance Study and Digital Flood Insurance Rate)
Map

ORDINANCE NO. 604

THE CITY COUNCIL (the "Council") OF THE CITY OF LAFAYETTE, OREGON (the "City") sat for the transaction of City business on Thursday, January 14, 2010 at 6:30 p.m. in the Council chambers at City Hall.

WHEREAS, the Federal Emergency Management Agency issued the "The Flood Insurance Study for Yamhill County, Oregon and Incorporated Areas," dated March 2, 2010, with accompanying Flood Insurance Rate Maps (FIRM) and the City of Lafayette must amend the Lafayette Zoning and Development Ordinance with the amendments effective no later than March 2, 2010; and.

WHEREAS, on December 17, 2009, the Planning Commission conducted a public hearing regarding Planning File Text Amendment 09-02, an application by the City of Lafayette to amend the Lafayette Zoning and Development Ordinance, Chapter 2.112, Flood Plain Overlay District, to adopt the 2009 Flood Insurance Study and Digital Flood Insurance Rate Map, at which time the public was given a full opportunity to be present and heard on the matter; and

WHEREAS, on December 17, 2009, the Planning Commission met to consider the proposed action, considered the information provided by City staff and the public, and upon deliberation, voted to recommend to the City Council approval of the proposed amendments; and

WHEREAS, on January 14, 2010, the City Council met to consider the proposed action, considered the information provided by City staff and the public and, received and approved the recommendation of the Planning Commission.

NOW THEREFORE, THE CITY OF LAFAYETTE, OREGON, ORDAINS AS FOLLOWS:

Section 1. The City Council of the City of Lafayette does hereby adopt the Memo dated January 14, 2010, which includes those certain findings of fact, conclusionary findings and supporting documentation attached hereto as Exhibit 'A' and by this reference made a part hereof.

<u>Section 2</u>. The City Council of the City of Lafayette does hereby amend the Lafayette Zoning and Development Ordinance Chapter 2.112, Flood Plain Overlay District, adopting language contained in the attached document identified as Exhibit 'B' and by this reference made a part hereof.

Section 3. The City Council of the City of Lafayette deems and desires it necessary for the preservation of the health, peace, and safety of the City of Lafayette that this Ordinance take effect on March 2, 2010, and therefore an emergency is hereby declared to exist and this Ordinance shall be in full force and effect on March 2, 2010.

Ordinance 604

ADOPTED by the Council on the 14th day of January 2010.

VOTE: Ayes: 6 Nays: 0 Abstentions: 0 Absent: 0 Vacancies: 0

APPROVED: ATTEST:

Justin Boone, City Administrator

Mayor Chris/Heisler

Ordinance 604

TO:

LAFAYETTE CITY COUNCIL

FROM:

JIM JACKS, CITY PLANNER

SUBJ:

TEXT AMENDMENT 09-02: ADOPT UPDATED DIGITAL FLOOD

INSURANCE RATE MAP AND FLOOD INSURANCE STUDY

DATE:

JANUARY 14, 2010

BACKGROUND

Throughout the nation the Federal Emergency Management Agency (FEMA) has been working for several years to change from the paper copies of the Flood Insurance Rate Map (FIRM) to a digital version. The maps for several counties in Oregon have already been changed to the digital version.

Lafayette, Yamhill County and all the other incorporated cities in the county are in receipt of a letter dated September 2, 2009 from FEMA and two compact discs with electronic files of the Digital Flood Insurance Rate Maps (DFIRM) and the Flood Insurance Study (FIS). Lafayette, Yamhill County and all the other incorporated cities in the county must amend their local zoning codes to adopt the new DFIRM and FIS and ensure the amendments are effective on or before March 2, 2010.

If the amendments are not effective on or before March 2, 2010, the City of Lafayette will be suspended from the National Flood Plain Insurance Program (NFIP). The existing flood plain insurance policies for structures in the 100-year flood plain will no longer be effective. New policies, claims for flood damage, and existing policy renewals will not be allowed by FEMA.

To meet the March 2, 2010 deadline the Planning Commission conducted a public hearing on December 17, 2009 and unanimously passed a motion recommending the City Council approve the proposed amendments. The City Council public hearing has been properly noticed for January 14, 2010.

In addition to the Digital Flood Insurance Rate Maps and the Flood Insurance Study the State building code includes some provisions that must be incorporated into the Lafayette Zoning and Development Ordinance's (LZDO) flood plain regulations. Clarifications issued by the Region X office of FEMA are also proposed to be amended into the LZDO. Finally, some language from the State Model Flood Plain Ordinance is proposed to be amended into the LZDO.

A note of clarification: Earlier in 2009 the City Council adopted numerous housekeeping and substantive amendments to the LZDO (Text Amendment 09-01), including the Flood Plain Overlay District. They have been effective for several weeks and are the base language for these proposed flood plain amendments.

PURPOSE

The purpose of this Memo is to provide a "mark-up copy" of the of the amendments to Section 2.112, Flood Plain Overlay District (FP), that are needed to adopt the digital Flood Insurance Rate Maps (DFIRM), the Flood Insurance Study (FIS), the State building code provisions, the FEMA Region X clarifications, and the State Model Ordinance language.

This Memo also includes findings to support adoption of the proposed amendments and it includes a summary of the proposed amendments.

FINDINGS AND CONCLUSIONS FOR TEXT AMENDMENT 09-02

- 1. Plan Amendment 09-02 is a Legislative amendment to the Lafayette Zoning and Development Ordinance (LZDO). The LZDO does not include approval criteria for text amendments to the LZDO, but it does include procedural items that are addressed in Findings 2 4 below. Findings 5 and 6 address the applicable Comprehensive Plan Policies and the Statewide Planning Goals, respectively.
- 2. The LZDO, Section 3.101.04, Type IV Actions, states a Type IV action must be initiated by City staff, the Planning Commission or the City Council. Text Amendment 09-02 was initiated by City staff. The LZDO proposed amendments comply with Section 3.101.04.
- 3. Section 3.207, Type IV Actions, calls for a public hearing by a majority of the Planning Commission on all amendments to the LZDO (3.207.02, A, 1). The Planning Commission public hearing on December 17, 2009, was attended by four of the seven appointed Commissioners. The Planning Commission hearing meets the requirement of 3.207.02, A, 1.
- 4. Section 3.207.02, B, calls for the Planning Commission to make a recommendation to the City Council. On December 17, 2009, the Planning Commission unanimously passed a motion recommending the City Council approve the proposed amendments. The Planning Commission recommendation meets the requirement of Section 3.207.02, B.
- 5. The flood hazard areas of the City are subject to periodic inundation which results in (1) loss of life and property, (2) health and safety hazards, (3) disruption of commerce and governmental services, (4) extraordinary public expenditures for flood protection and relief, and (5) impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. The proposed amendments to the Flood Plain Overlay District and the Type I process will promote the public health, safety, and general welfare of its citizenry.
- 6. Flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to the flood loss. The proposed amendments will promote the reduction of flood losses.

7. Findings related to the Comprehensive Plan Policies.

Many of the proposed amendments are required by the Federal Emergency Management Agency and the State building code. Some of the proposed amendments clean-up awkward language and clarify unclear language.

The Lafayette Comprehensive Plan Policies were reviewed and it was concluded that only the following policy applies.

Natural Hazards Policy 2-2: "The City shall continue participation in the HUD Flood Insurance Program."

The amendments are required if the City is to continue to participate in the National Flood Insurance Program. FEMA has released the new digital Flood Insurance Rate Maps and Flood Insurance Study and the City must amend the LZDO to properly adopt the FEMA documents. The amendments propose changes that will be adopted and effective on or before March 2, 2010, thereby ensuring the City will continue to participate in the National Flood Insurance Program. Policy 2-2 is met.

The proposed amendments meet applicable Comprehensive Plan Policies.

8. Findings related to the Statewide Planning Goals.

A. Goal 1, Citizen Involvement.

Goal 1 applies. The Planning Commission conducted a properly noticed public hearing on December 17 and the City Council will conduct a properly noticed public hearing on January 14, 2009. The process is a Legislative process because the proposed amendments affect properties and property owners Citywide and because they propose changes to the laws of the City. Public notice has been provided in accordance with the LZDO for Legislative public hearings by the Planning Commission and the City Council. Goal 1 is met.

B. Goal 2. Land Use Planning.

Goal 2 applies. The 45-day notice prior to the first evidentiary hearing (Planning Commission on December 17, 2009) to the Department of Land Conservation and Development (DLCD) was provided to notify and garner comments from those parties on the DLCD notification list. Goal 2 is met

C. Goal 3. Agricultural Lands.

Goal 3 does not apply because agricultural lands are not affected by the proposed amendments.

D. Goal 4. Forest Lands.

Goal 4 does not apply because forest lands are not affected by the proposed amendments.

E. Goal 5. Natural Resources, Scenic and Historic Areas, and Open Spaces.

Goal 5 does not apply because natural resources, scenic and historic and open spaces are not affected by the proposed amendments.

F. Goal 6. Air, Water and Land Resources Quality.

Goal 6 does not apply because air, water and land resource quality are not affected by the proposed amendments.

G. Goal 7. Areas Subject to Natural Hazards.

Goal 7 applies. The proposed amendments will help to ensure structures are not constructed in the floodway and that structures constructed in the area of special flood hazard (100-year flood plain) have their lowest floor at least 1-foot above the 100-year flood height and that manufactured homes have their lowest floor at least 18 inches above the 100-year flood height. Goal 7 is met.

H. Goal 8, Recreation Needs.

Goal 8 does not apply because the proposed amendments do not relate to recreation.

I. Goal 9. Economic Development.

Goal 9 does not apply because the proposed amendments do not relate to economic development.

J. Goal 10. Housing.

Goal 10 does not apply because the proposed amendments do not relate to housing.

K. Goal 11. Public Facilities and Services.

Goal 11 does not apply because the proposed amendments do not relate to public facilities or services.

L. Goal 12. Transportation.

Goal 12 does not apply because the proposed amendments do not relate to transportation facilities.

M. Goal 13. Energy Conservation.

Goal 13 does not apply because the proposed amendments do not relate to energy conservation

N. Goal 14. Urbanization.

Goal 14 does not apply because the proposed amendments do not relate to the urban growth boundary.

O. Goal 15 for the Willamette River Greenway and Goals 16 – 19 for the Coastal Goals.

Goals 15 - 19 do not apply because the City is not on the Willamette River or on the coast.

The proposed amendments are consistent with the applicable Statewide Planning Goals.

SUMMARY OF PROPOSED AMENDMENTS

The following lists the Sections proposed to be amended and summarizes the amendments.

2.112.01 Purpose.

Add language to be consistent with the State Model Flood Plain Ordinance (MO) whose language comes from the Code of federal Regulations 44 (CFR 44).

2.112.02 Definitions.

Add, delete and change definitions to be more consistent with the MO. The MO definitions come from the federal Code of Federal Regulations 44 (CFR 44) and are more accurate than the definitions in the LZDO. Important definitions proposed to be added are (1) "Below Grade Crawlspace," (2) "Critical Facility" and (3) "Substantial Damage." Some terms are proposed to be deleted such as "Flood Boundary Floodway Map" because Lafayette uses the Flood Insurance Rate Map – there is no Flood Boundary Floodway Map for Lafayette.

2.112.03 General Provisions.

Primarily, the amendments add language in the MO which comes from the CFR 44 language. This section includes the most important amendment which is the lead-in section wherein the new title of the 2009 Flood Insurance Study replaces the title of the old 1980 Flood Insurance Study.

The City Administrator, or designee, is appointed as the "local administrator." Language is added at 2.112.03, E, establishes a Flood Plain Development Permit Application and its contents. Later, Section 2.112.10 establishes that the Planning Commission hears appeals of a staff decision on a Flood Plain Development Permit.

Subsection D makes it clear that a Flood Plain Development Permit is a Type I-A decision which is consistent with the Type I – IV system set forth in LZDO, Section 3.101.01, A, and that when structures related to permitted and conditional uses in the underlying zone are proposed to be located in the area of special flood hazard (the 100-year flood plain), a Flood Plain Development Permit is required.

Subsection E is a new section that establishes a Flood Plain Development Permit Application. This language has been added since the Planning Commission hearing and recommendation. It was inadvertently omitted in the prior versions of the proposed language. Subsection E says an application must be submitted with sufficient information so the decision authority can conclude the flood plain requirements are met.

2.112.04 Uses – Exempt.

Minor changes to be consistent with the MO.

2.112.05 Uses – Permitted.

Minor changes to be consistent with the MO. The lead-in sentence is consistent with 2.112.03, D, by stating that when structures related to permitted and conditional uses in the underlying zone are proposed to be located in the area of special flood hazard (the 100-year flood plain), a Flood Plain Development Permit is required. The current language requiring the lowest floor be at the 100-year flood elevation is not consistent with State Statute and must be changed. It is proposed to be changed to be at least one foot above the 100-year flood elevation to comply with State Statute.

2.112.06 Conditional Use Procedures and Requirements.

This section is proposed to be deleted because it is not clear why it is needed to issue a Flood Plain Development Permit. It does not appear to be needed because the City Administrator has the authority to issue a Flood Plain Development Permit for all development. The State's Model Flood Plain Ordinance does not include a conditional use permit process. The federal Flood Plain Insurance Program does not require a conditional use permit process. Requiring a Planning Commission public hearing and a 2 to 3 month process to make a decision for a Flood Plain Development Permit is inappropriate.

2.110.07 Flood Protection Standards

This section is significantly amended to make it consistent with the MO. Its main sections are A - O. Significant changes are proposed to A, B, C, F, G, H, I, and L. Subsections M, Below Grade Crawlspaces, N, Recreational Vehicles, O, Review of Building Permits, and P, Before Regulatory Floodway, are proposed to be added.

Subsection L, Floodways, Subsubsection 3, is proposed to be significantly augmented regarding manufactured homes to be consistent with federal requirements.

Subsection L, Floodways, Subsubsection 5, is proposed to be added to allow projects for stream habitat restoration consistent with FEMA, Region X, requirements.

Subsection M, Below Grade Crawlspaces, is proposed to be added. The addition is critical because in the western United States, most residences are built with a crawlspace and this language allows crawlspaces to be constructed and not be considered a basement.

The current language throughout 2.112.07 requiring the lowest floor be <u>at</u> the 100-year flood elevation is not consistent with State Statute which requires the lowest floor to be <u>at least one foot above</u> the 100-year flood elevation and manufactured homes to be <u>at least</u> 18 inches above.

2.112.08 Generalized Flood Plain Areas.

Minor changes to be consistent with the MO.

2.112.09 Variances and 2.112.10, Variance Criteria.

The current variance language in these two sections is proposed to be deleted and replaced by language from the MO in Section 2.112.09, Variances For Flood Plain Development, and 2.112.10, Variance Criteria. The federal National Flood Plain Insurance Program includes criteria tailored to flood plain situations. The MO's language reflects the flood plain criteria.

2.112.10 Variance Criteria.

The current 2.112.10 is renamed Appeals of Flood Plain Development Permits. Typically, Flood Plain Development Permits are based on clear and objective standards with no discretion needed, thus the decisions can be a Type I-A with no comment period and no appeal. An example of an objective criterion is, foundation venting is required and there must be at least 1 square inch of vent for every square foot of enclosed crawlspace area. Occasionally, there may be a situation where discretion would enter into a Flood Plain Development Permit and in that case a Type I-B process would be used which includes a comment period and an appeal to the Planning Commission whose decision would be in accordance with Section 2.112.10.

2.112.11 Critical Facilities

This is a proposed new section to be consistent with the MO.

2.112.12 Warning and Disclaimer of Liability

The current 2.112.11 is renumbered to be 2.112.12. No change to the language is proposed.

End of Summary of Proposed Amendments.

"MARK- UP COPY" OF THE PROPOSED AMENDMENTS

The proposed deletions are in strikeout and additions are in bold italics.

When the City Council is adopting an Ordinance, a "clean copy" document showing the amended language will be an Exhibit to the Ordinance. The Ordinance will follow the public hearing and deliberation by the City Council. The following outline shows the location of the flood plain section in Chapter 2.

CHAPTER 2, ZONING

SECTION 2.100, ZONING DISTRICTS

- 2.101, RA ZONE (Residential Acreage)
- 2.102, R-1 ZONE (Residential Low Density)
- 2.103, R-2 ZONE (Residential Medium Density)
- 2.104, RC ZONE (Residential Commercial)
- 2.105, C-1 ZONE (Commercial Core)
- 2.106, C-2 ZONE (Commercial General)
- 2.107, I ZONE (Industrial)
- 2.108, P ZONE (Public and Semi-Public)
- 2.109, NC ZONE (Neighborhood Commercial)
- 2.110, Reserved for future use.
- 2.111, R-D ZONE (Restricted Development Overlay)
- 2.112, F-P ZONE (Floodplain Overlay)
- 2.113, LUO ZONE (Limited Use Overlay)

Chapter 2 of the LZDO, Section 2.112, the Flood Plain Overlay District, is proposed to be amended as shown on the following pages.

2.100 ZONING DISTRICTS.

2.112 FLOOD PLAIN OVERLAY DISTRICT (FP)

2.112.01 Purpose

- **A.** The purpose of the Flood Plain Overlay Zone is to:
 - A1. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.
 - **B2**. Minimize expenditure of public money for flood control projects, rescue and relief efforts in areas subject to flooding.
 - **G3**. Minimize flood damage to new construction by elevating or flood proofing all structures.

- D4. Control the alteration of natural flood plains, stream channels, and natural protective barriers which hold, accommodate or channel flood waters.
- **E5**. Control filling, grading, dredging and other development which may be subject to or increase flood damage.
- F6. Prevent or regulate the construction of flood barriers which may increase flood hazards in other areas.
- G7. Comply with the requirements of the Federal Insurance Administration to qualify the City of Lafayette for participation in the National Flood Insurance Program.
- H8. Minimize flood insurance premiums paid by the citizens of the City of Lafayette by reducing potential hazards due to flood damage.
- **19**. Implement the flood plain policies in the City of Lafayette Comprehensive Plan.
- B. To accomplish its purposes, the Flood Plain Overlay Zone includes the following methods and provisions for reducing flood losses:
 - 1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities.
 - 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
 - 3. Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
 - 4. Controlling filling, grading, dredging, and other development which may increase flood damage.
 - 5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.

6. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances.

2.112.02 Definitions

For purposes of this Overlay Zone, the following terms shall mean:

- A. Accessory Structure Sheds or small garages that are exempt form elevation or flood proofing requirements. This definition shall be limited to detached structures less than 480 square feet in area.
- B. Area of Special Flood Hazard Land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

 Designation on maps always includes the letter A.
- C. Base Flood Level The flood level having a one (1) percent chance of being equaled or exceeded in any given year (100 year flood plain).
- D. Below-Grade Crawlspace An enclosed area below the base flood elevation in which the interior grade is not more than 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 4 feet at any point.
- **DE**. Conveyance Refers to the carrying capacity of all or a part of the flood plain. It reflects the quantity and velocity of flood waters. Conveyance is measured in cubic feet per second (CFS). If the flow is 30,000 CFS at a cross section, this means that 30,000 cubic feet of water pass through the cross section each second.
- F. Critical Facility A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.
- EG. Development Any activity that has the potential to causer erosion or increase the velocity or depth of floodwater. Development may include, but is not limited to, residential and non-residential structures, fill, utilities, transportation facilities, and the storage and stockpiling of buoyant or hazardous materials. 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.

- **FH.** Encroachment Any obstruction in the flood plain which affects flood flows.
- GI. Existing Mobile/Manufactured Home Park or Manufactured Home Subdivision A parcel (or contiguous parcels) of land divided into two or more mobile/manufactured home lots for rent or sale A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the spaces or lots on which the mobile/manufactured homes are is to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of this Ordinance the city's original flood plain regulations or amendments to the flood plain regulations.
- HJ. Expansion to an Existing Mobile/Manufactured Home Park or Manufactured Home Subdivision The preparation of additional sites by the construction of facilities for servicing the **spaces or** lots on which the mobile/manufactured homes are to be affixed (including the installation of utilities, **the construction of streets, and** either final site grading or pouring of concrete pads, or the construction of streets).
- **IK.** FEMA The Federal Emergency Management Agency, the federal organization responsible for administering the National Flood Insurance Program.
- JL. Fill The placement of any material on the land for the purposes of increasing its elevation in relation to that which exists. Fill material includes, but is not limited to, the following: soil, rock, concrete, bricks, wood stumps, wood, glass, garbage, plastics, metal, etc.
- KM. Flood or Flooding A general and temporary condition of partial or complete inundation of usually normally dry land areas from (1) the overflow of inland or tidal waters or (2) the unusual and rapid accumulation of runoff of surface waters from any source.
- L. Flood Boundary Floodway Map (FBFM) The map portion of the Flood Insurance Study (FIS) issued by the Federal Insurance Agency on which is delineated the Flood Plan, Floodway (and Floodway Fringe), and cross sections (referenced in the text portion of the FIS).
- MN. Flood Insurance Rate Map (FIRM) The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards (100-year flood plain) and the risk premium zones applicable to the community and is on file with the City of Lafayette.

- NO. Flood Insurance Study (FIS) The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary Floodway m Insurance Rate Map and the water surface elevation of the base flood and is on file with the City of Lafayette.
- O. Flood Plain Lands within the City that are subject to a one (1) percent or greater chance of flooding in any given year as identified on the official zoning maps of the City of Lafayette.
- P. Flood Proofing A combination of structural or non-structural provisions, changes, or adjustments to structures, land or waterways for the reduction or elimination of flood damage to properties, water and sanitary facilities, structures and contents of buildings in a flood hazard area.
- Q. Floodway The channel of a river or other watercourse and the adjacent land areas that must remain unobstructed to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. Once established, nothing can be placed in the floodway that would cause any rise in the base flood elevation.
- R. Floodway Fringe The area of the flood plain lying outside of the floodway as delineated on the FBFM FIRM where encroachment by development will not increase the flood elevation more than one foot during the occurrence of the base flood discharge.
- S. Hazardous Material Combustible, flammable, corrosive, explosive, toxic or radioactive substance which is potentially harmful to humans and the environment.
- T. Lowest floor means the **The** lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.
- U. Manufactured home means a A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes, the term "manufactured home" also includes mobile homes as defined in sub Q., of this Section. For insurance and floodplain management purposes, the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

- V. Manufactured home park or subdivision means a A parcel or lot (or contiguous parcels or lots) of land divided into two or more manufactured home lots for rent or sale developed with manufactured homes placed on designated areas (typically referred to as a "space") and the manufactured home occupant rents the space.
- W. Manufactured home subdivision A subdivision wherein only manufactured homes may be placed on the lots created by the subdivision.
- WX. Mean sea level Means, for For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum the North American Vertical Datum of 1988 (NAVD88), to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
- XY. Mobile home means a vehicle or structure, transportable in one or more sections, which is eight feet or more in width, is 32 feet or more in length, is built on a permanent chassis to which running gear is or has been attached, and is designed to be used as a dwelling with or without permanent foundation when connected to the required utilities. Such definition does not include any recreational vehicle as defined by sub T., of *in* this Section.
- ¥Z. New Construction- Any structure(s) for which the start of construction commenced on or after the original effective date of the Floodplain Overlay Zone.
- AA. New Manufactured Home Park or New Manufactured Home Subdivision A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the spaces or lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is started on or after the effective date of the city's original flood plain regulations or amendments to the flood plain regulations.
- **ZBB**. Obstruction Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure or matter in, along, across or projecting into any channel, watercourse, or regulatory flood hazard area which may impede, retard or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water, or that it is placed where the flow of water might carry the same downstream to the damage of life or property.

AACC. Recreational vehicle - Means a "camper," "motor home," "travel trailer," as defined in ORS 801.180, 801.350, and 801.565 that is intended for human occupancy and is equipped with plumbing, sinks, or toilet, and does not meet the definition of a mobile home in sub V., of this Section As defined in ORS 446.003(33), a vehicle with or without motive power, that is designed for human occupancy and to be used temporarily for recreational, seasonal or emergency purposes, and as further defined by rule, and is designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

BBDD. Start of Construction - Includes substantial improvement, and means the date the building permit was issued, provided the actual start of reconstruction, placement construction. repair. improvement was within 180 days of the permit date. The actual start means either the first placement or permanent construction of a structure (other than a mobile/manufactured home) on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling, nor does it include the installation of streets and/or walkways: nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not used as part of the main structure.

For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

For a structure (other than a mobile/manufactured home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation.

For mobile/manufactured homes not within a mobile/manufactured home park or manufactured home subdivision, "start of construction" means affixing of the mobile/manufactured home to its permanent site. For mobile/manufactured homes within mobile/manufactured home parks or manufactured home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile/manufactured home is to be affixed (including at a minimum, the construction of streets with final site grading or the pouring of concrete pads, and installation of utilities) is completed.

- EE. State Building Code The combined specialty codes adopted by the State of Oregon.
- CCFF. Structure Roofed buildings that have two or more walls, and A walled and roofed building, including a gas or liquid storage tank s that are is principally above ground.
- GG. Substantial Damage Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- DDHH.Substantial Improvement Any repair, reconstruction, addition, rehabilitation or other improvement s of a structure, the cost of which exceeds 50% of the market or assessed value of the structure before the start of construction of the improvement. either:
 - 1. Before the improvement or repair is started; or
 - 2. If the structure has been damaged and is being restored, before the damage occurred. For **the** purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences , whether or not that alteration affects the external dimensions of the structure s. The term does not include:
 - a. Any project **for improvement of a structure** to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local building code enforcement official and which are the minimum necessary to assure safe living conditions -, or
 - b. Any alteration of a structure listed on the National Register of Historic Places or State Inventory of Historic Places, provided, the alteration will not preclude the structure's continued designation as an historic structure.
- II. Variance A grant of relief from the requirements of the Flood Plain Overlay Zone which permits construction in a manner that would otherwise be prohibited by the Flood Plain Overlay Zone.
- JJ. Water Dependent A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

EEKK. Watercourse - A natural or artificial channel in which a flow of water occurs either continually or intermittently in *the* identified floodplain.

2.112.03 General Provisions.

The following regulations apply to all lands in identified flood plains as shown graphically on the zoning maps. The flood plain is those areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Lafayette. Oregon," dated August 1, 1980, with accompanying Flood Insurance Rate Maps "The Flood Insurance Study for Yamhill County, Oregon and Incorporated Areas", dated March 2, 2010, with accompanying Flood Insurance Rate Maps (FIRM). The report and maps are incorporated in the overlay zone by this reference and The Flood Insurance Study and Flood Insurance Rate Maps are hereby adopted by reference and declared to be part of the Flood Plain Overlay District and are on file at the City of Lafayette City Hall. When base flood elevation data has not been provided, the City Administrator, or designee, shall have the authority to determine the location of the boundaries of the floodplain where there appears to be a conflict between a mapped boundary and the actual field conditions, provided a record is maintained of any such determination.

- A. The City Administrator, or designee, is appointed as the local administrator to administer and implement the Flood Plain Overlay District by deciding Flood Plain Development Permit Applications, and interpreting the Flood Insurance Rate Map and the requirements of the Flood Plain Overlay District in accordance with its provisions. Duties of the City Administrator, or designee, shall include, but not be limited to:
 - 1. Review all **Flood Plain D**development **P**permits to determine that the permit requirements **and provisions** of this ordinance have been satisfied **are met**.
 - 2. Review all **Flood Plain D**development **P**permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 - 3. Review all *Flood Plain D*development *P*permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that *ensure* the encroachment provisions of Section 2.112.07, L, 1, *Floodways*, are met.
- B. Use of Other Base Flood Data: When base flood elevation data has not been provided on the FIRM Flood Insurance Rate Map (A Zone) or

Flood Insurance Study in accordance with Section 2.112.03, General Provisions,, or when more detailed data is available, the City Administrator, or designee, shall obtain, review, and reasonably utilize any base flood elevation **and floodway** data available from a federal, state or other source, in order to administer the provisions of this Section the **Flood Plain Overlay District**.

- C. Information to be Obtained and Maintained:
 - 1. From the developer of the property, obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures.
 - 2. For all new or substantially improved flood proofed structures:
 - c. Verify and record the actual elevation as furnished by the developer (in relation to mean sea level), and,
 - b. Maintain any flood-proofing certifications required by this Section.
 - 3. Maintain for public inspection all records pertaining to the provisions of this Ordinance.
 - 1. Where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or required as in Section 2.112.03, B, Use of Other Base Flood Data, obtain and record the actual elevation, in relation to mean sea level, of the lowest floor, including basements and below-grade crawlspaces, of all new or substantially improved structures, and record whether or not the structure contains a basement.
 - 2. For new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or as required in Section 2.112.03, B, Use of Other Base Flood Data:
 - i. Verify and record the actual elevation in relation to mean sea level, and
 - ii. Maintain the floodproofing certifications required in the Flood Plain Overlay District.
 - 3. Maintain for public inspection all records pertaining to the provisions of the Flood Plain Overlay District.

- D. A Flood Plain Development Permit for development related to P permitted and conditional uses in the underlying district, but not exempt, activities in the flood area of special flood hazard shall be reviewed as a Type I-A action or Type I-B if interpretation or the exercise of policy or legal judgment is included. Activities requiring conditional use approval shall be reviewed as a Type II action.
- E. Establishment of Flood Plain Development Permit Application.
 - 1. Except as set forth in Sections 2.112.04, for exempt uses, and 2.112.07, D, for accessory structures, below, a Flood Plain Development Permit application shall be submitted for structures, including manufactured homes, as defined in Section 2.112.02, Definitions, and for all development, including fill and other activities, as defined in Section 2.112.02, Definitions. A Flood Plain Development Permit shall be approved before construction or development begins within any area of special flood hazard established in Section 2.112.03, General Provisions.
 - 2. A Flood Plain Development Permit Application shall be submitted on forms provided by the City, filed with the City Recorder and accompanied by the appropriate fee.
 - 3. A Flood Plain Development Permit shall be reviewed and decided by the City Administrator, or designee, as a Type I-A action. If a Flood Plain Development Permit decision involves an interpretation or the exercise of policy or legal judgment, the application shall be processed as a Type I-B action.
 - 4. A Flood Plain Development Permit decision involving an interpretation or the exercise of policy or legal judgment may be appealed by those aggrieved by the decision or by any taxpayer consistent with Section 2.112.10, Appeals of Flood Plain Development Permits.
 - 5. Application Contents.
 - a. It shall be the applicant's responsibility to submit a complete application which addresses the provisions and standards of Sections 2.112.03, General Provisions, 2.112.04, Uses Exempt, 2.112.05, Uses Permitted, 2.112.07, Flood Protection Standards, and 2.112.08, Generalized Floodplain Areas. The application shall include plans in duplicate drawn to scale. Building

Permit Application materials may be used for partial fulfillment of the application contents requirements provided they address 5, b-f, below. The Flood Plain Development Permit Application shall include the following and the City Administrator, or designee, may require the applicant to submit additional information deemed necessary to show compliance with Section 2.112, Flood Plain Overlay District:

- b. The nature, location, dimensions, and elevations of:
 - i. The subject property,
 - ii. Existing and proposed structures,
 - iii. Existing and proposed fill,
 - iv. Existing and proposed storage for materials, and
 - v. Existing and proposed drainage facilities.
- c. An Elevation Certificate showing, in relation to mean sea level, the elevation of the lowest floor, including basement, of all structures.
- d. Elevation in relation to mean sea level of floodproofing in any structure.
- e. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing standards in Subsection 2.112.07, C.
- f. Description of the extent to which a watercourse will be altered or relocated as a result of the proposed development.

2.112.04 Uses - Exempt

Within a FP (FLOOD PLAIN) the Flood Plain Overlay zone District no uses, structures, vehicles, and premises shall be used or established, except as provided in the applicable underlying zone and the provisions of this overlay zone district. Except as provided herein all uses and floodplain development shall be subject to issuance of a determination Flood Plain Development Permit or a conditional use permit as provided in Sections 2.112.05 and 2.112.06. The following uses are exempt from the regulations of this overlay zone:

- A. Signs, markers, aids, etc., placed by a public agency to serve the public.
- B. Driveways, parking lots and other open space use areas where no alteration of topography will occur.
- C. Minor Routine maintenance and repairs or alterations to existing structures provided the alterations maintenance and repairs do not increase the size or intensify the use of the structure, and do not constitute "substantial improvement" as defined in Section 2.112.02.
- D. Customary dredging associated with channel maintenance consistent with applicable State or Federal law.
- ED. Placement Replacement of utility facilities necessary to serve established and permitted uses within flood plain areas of special flood hazard, such as telephone poles. This exemption does not apply to buildings, substations, electric meters, power transformers or other types similar of flood plain development electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities in areas of special flood hazard.

2.112.05 Uses - Permitted

If otherwise allowed as a permitted or conditional use in the underlying zone, dwellings, a manufactured home on a lot, a manufactured home in a manufactured home park, and other structures that involve a building permit, including the placement of fill to elevate a structure, may be allowed subject to a written determination (flood plain development permit) that an approved Flood Plain development Permit showing the following requirements are met or will be met as construction occurs:

- A. The structure *or fill* is not located within a floodway.
- B. The required elevation to which the lowest floor of the structure must be elevated can be determined from the Flood Insurance Study, Flood Insurance Rate Map, or consistent with Section 2.112.03, B, Use of Other Base Flood Data.
- C. The structures will be located on natural grade or compacted fill.
- D. The lowest floor will be elevated to **at least** one (1) foot above the level of the base flood elevation and the anchoring requirements in Section 2.112.07 F **will be met**.

- E. The Building Official has determined that any construction and substantial improvements below base flood level meet the requirements of Section 2.112.07, A. 4 Flood Protection Standards.
- F. The building permit specifies the required elevation of the lowest floor, and shows any anchoring and venting requirements and requires provision of certification under Section 2.112.06 C., prior to occupancy.
- G. A certificate signed by a licensed surveyor or civil engineer certifying that the lowest floor including basement, is at or above the specific minimum least one (1) foot above the base flood elevation, is submitted to the City Administrator, or designee, prior to use of the structure.
- H. No alteration of topography beyond the perimeter of the structure is proposed.
- A recreational vehicle may be located parked or stored in a floodplain only during the non-flood season (June 1 through September 30), an area of special flood hazard, provided ; it is not used for human habitation and it is fully licensed and ready for highway use ; or meet the requirements for manufactured homes.

A recreation all vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and, has no permanently attached additions.

J. Customary dredging associated with channel maintenance consistent with applicable State or Federal law.

2.112.06 Conditional Use Procedures and Requirements Reserved.

- A. Except as provided in Section 2.112.04 and 2.112.05, a conditional use permit shall be obtained before construction or development begins within the Flood Plain Overlay Zone. The conditional use permit shall include conditions ensuring that the Flood Protection standards in Section 2.112.07 are met.
- B. When base flood elevation data and floodway data have not been provided in accordance with Section 2.112.03, the applicant, with the assistance of the City Administrator, or designee, shall obtain any base flood elevation data or evidence available from a Federal, State or other source in order to determine compliance with the flood protection standards. If data is insufficient, the City Administrator, or designee, may require that the applicant provide data derived by standard engineering methods.

- C. Prior to occupancy the applicant shall provide a certificate signed by a licensed surveyor or civil engineer certifying that the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved manufactured homes and structures meets the requirements of Sections 2.112.07 A., B., and, C.
- D. In addition to other information required in a conditional use application, the application shall include:
 - 1. Land elevation in mean sea level data at development site and topographic characteristics of the site.
 - 1. Base flood level expressed in mean sea level data on the site.
 - 3. Plot plan showing property location, floodplain, and floodway boundaries where applicable, boundaries and the location and floor elevations of existing and proposed development, or the location of grading or filling where ground surface modifications are to be undertaken.
 - 4. Any additional statements and maps providing information demonstrating existing or historical flooding conditions or characteristics which may aid in determining compliance with the flood protection standards of this overlay zone.
- E. Factors of Consideration In reviewing a conditional use application for a development permit, the following factors shall be considered in making a decision on approval or denial of the permit:
 - 1. The danger to life and property due to increased flood heights or velocities caused by encroachments.
 - 2. The danger that materials may be swept on to other lands or downstream to the injury of others.
 - 3. The proposed water supply and sanitation systems and the ability of those systems to prevent disease, contamination and unsanitary conditions.
 - 4. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - 5. The importance to the community of the service provided by the proposed facility.

- 6. The requirements of the facility for a waterfront location.
- The availability of alternative locations not subject to flooding for the proposed use.
- 8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- 9. The relationship of the proposed use to the comprehensive plan and flood plain management program for the area.
- 10. The safety of access to property in times of flood for ordinary and emergency vehicles.
- 11. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.
- 12. Such other factors which are relevant to the purpose of this Section.
- F. Imposition of Conditions: The City may attach such conditions deemed necessary to further the purpose of this Section. Such conditions may include, but are not limited to:
 - 1. Limitations on periods of use and operation.
 - 2. Imposition of operation controls, sureties, and deed restrictions.
 - 3. Flood-proofing measures.

2.112.07 Flood Protection Standards

In all areas of identified flood plain **special flood hazard**, the following requirements apply:

A. Dwellings and Manufactured Homes Residential Construction, Except Manufactured Homes

- 1. New residential construction , and substantial improvement of any residential structures , location of a manufactured home on a lot or in a manufactured home park or park expansion approved after adoption of this ordinance shall :
- H have the lowest floor, including basement, elevated on a permanent foundation to at least one (1) foot above the base flood elevation; and

- 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- 2. Manufactured homes shall be anchored in accordance with subsection 2.112.07, F; and
- 3. No manufactured home shall be placed in a floodway, except in an existing manufactured home park.
- 4. No manufactured home shall be placed in a floodway, except in an existing manufactured home park.
- a. No manufactured home shall be placed in a floodway, except in an existing manufactured home park.
- b. The bottom of all openings shall be no higher than one foot above grade.
 - 6. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
 - B. Manufactured h Homes in existing manufactured home parks
 - 1. All manufactured homes shall be elevated on a permanent foundation such that the finished floor of the manufactured home is elevated at least 18 inches (46 cm) above the base flood elevation and is securely anchored to an adequately anchored foundation system to resist flotation, collapse and

lateral movement when the manufactured home is to be placed or substantially improved on a site that is:

- a. Outside of a manufactured home park or subdivision,
- b. In a new manufactured home park or subdivision,
- c. In an expansion area to an existing manufactured home park or manufactured home subdivision, or
- d. In an existing manufactured home park or manufactured home subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood:
- 2. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or manufactured home subdivision that are not subject to the provisions of (1) above, shall be elevated so that either:
 - a. The finished floor of the manufactured home is at least 18 inches (46 cm) above the base flood elevation, or
 - b. The manufactured home chassis is supported by reinforced piers, or other foundation elements of at least equivalent strength, that are no less than 36 inches in height above grade and are securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

Manufactured homes placed on sites within existing manufactured home parks must be anchored to a permanent foundation and either:

- 1. Have the lowest floor at, or above, the base flood elevation; or,
- 2. Have the chassis supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.

Manufactured homes outside existing manufactured home parks must meet the requirements for residential structures.

C. Non-residential development – Nonresidential Construction

New construction and substantial improvement of any commercial, industrial or other non-residential structures shall either have the lowest

floor, including basement, elevated to **at least** one (1) foot above the base flood elevation or, together with attendant utility and sanitary facilities, shall:

- 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 standards in this subsection and subsection 2.112.07, G., are satisfied. This certificate shall include the specific elevation (in relation to mean sea level) to which such structures are flood-proofed design and methods of construction are in accordance with accepted standards of practice for meeting provisions of Section 2.112.07, C, based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in the Flood Plain Overlay District.
 - a. For all new or substantially improved floodproofed structures where elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 2.112.03, B, the City Administrator, or designee shall:
 - i. Obtain and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed, and
 - ii. Maintain the floodproofing certifications required in Section 2.112.03, C.
- 4. Non-residential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in 2.112.07, A, 4 **2, Residential Construction, Except Manufactured Homes**.
- 5. Applicants flood-proofing non-residential buildings shall be notified by the City of Lafayette that flood insurance premiums will be based on rates that are one (1) foot below the flood-proofed level (e.g. a building constructed flood-proofed to the base flood level will be rated as one (1) foot below that the base flood level).

- D. Accessory Structures such as sheds or detached garages may be exempt from elevation and flood-proofing standards providing the following development standards are met:
 - 1. The structure cannot be more than 480 square feet in area and shall not be used for human habitation or be the location of appliances such as freezers;
 - 2. Shall be **resistant to flood damage and be** designed to have low potential for flood damage;
 - 3. Shall be constructed and placed on the building site so as to offer minimum resistance to the flow of floodwater; and,
 - 4. Shall be firmly anchored *consistent with Section 2.112.07*, *F* to prevent flotation which may result in damage to other structures *and vented consistent with Section 2.112.07*, *A*, *2*;
 - 5. Shall be used only for the parking of vehicles and the storage of items with a low damage potential, including but not limited to items unlikely to be damaged by flood water such as lawn furniture and garden tools; and
 - 6. Electrical, heating, ventilation, plumbing, air-conditioning equipment and other similar service facilities shall be elevated at least one (1) foot above the base flood elevation.

E. Fill

- 1. Any fill or materials proposed must be shown to have a beneficial purpose and the amount thereof not greater than is necessary to achieve that purpose as demonstrated by a plan submitted by the owner showing the uses to which the filled land will be put and the final dimensions for the proposed fill or other materials.
- 2. Such fill or other materials shall be **compacted and** protected against erosion by rip-rap, vegetation cover, or bulk heading.

F. Anchoring

- 1. All new construction and substantial improvements shall be anchored to prevent floatation, collapse, or lateral movement of the structure.
- 2. All manufactured homes shall be anchored to resist prevent floatation, collapse or lateral movement by providing over-the top

and frame ties to ground anchors. Specific requirements shall be that:, and shall be installed using methods and practices that minimize flood damage. 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).

- a. Over-the-top ties be provided at each of the four corners of the manufactured home with two additional ties per side at intermediate locations with manufactured homes more than 50 feet long requiring only one additional tie per side.
- b. Frame ties be provided at each corner of the home with five additional ties per side at intermediate points with manufactured homes less than 50 feet long requiring only four ties per side.
 - c. All components of the anchoring system be capable of carrying a force of 4,800 pounds.
 - d. Any additions or expansions to the manufactured home be similarly anchored.
- 3. An alternative method of anchoring may involve a system designed to withstand a wind force of 90 miles per hour or greater (must be certified).

G. Construction materials and methods

- 1. All new construction and substantial improvements below *the* base flood level *elevation* shall be constructed with materials and utility equipment resistant to flood damage, and the design and methods of construction are in accord with accepted standards of practice based on an engineer's or architect's review of the plans and specifications. *Utility equipment shall be at least one (1) foot above the base flood elevation*.
- 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage s.
- 3. 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.

H Utilities

- 1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system as approved by the State Health Division.
- 2. New and replacement sanitary sewage systems shall be designed and located to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters contamination consistent with the requirements of the Oregon State Department of Environmental Quality.
- 3. Electrical, heating, ventilation, plumbing, and air-conditioning equipment shall be designed and/or elevated so as to prevent water from entering or accumulating within the components during conditions of flooding.
- 4. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality regulations.
- 1. <u>Developments, Generally.</u> Subdivision and PUD Proposals.

Residential developments involving more than one single-family dwelling, including subdivisions, manufactured home parks, multiple-family dwellings and planned developments including development regulated under A, and C, shall meet the following requirements:

- 1. Be designed to minimize flood damage. Subdivision and PUD proposals shall be consistent with the need to minimize flood damage.
- 2. Have Subdivision and PUD proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- 3. Have **Subdivision and PUD proposals shall provide** adequate drainage provided to reduce exposure to flood damage.
- 4. Where B base flood elevation data shall be has not been provided by the developer. In cases where no base flood elevation is available, analysis by standard engineering methods will be required, or is not available from another authoritative source, it shall be generated by the applicant for subdivision and PUD

proposals and other proposed developments which contain at least 50 lots or 5 acres, whichever is less.

- J. Storage of m Materials and e Equipment
 - Materials that are buoyant, flammable, obnoxious, toxic or otherwise injurious to persons or property, if and can be transported by floodwaters, are prohibited. Storage of materials and equipment not having these characteristics is permissible only if the materials and equipment have low-damage potential and are anchored or are readily removable from the area within the time available after **flood** forecasting and warning.
- K. Alteration of **w W**atercourses (floodways)
 - When considering a conditional use permit to the approval of a Flood Plain Development Permit would allow alteration or modification of a watercourse in the (floodway) the following shall apply:
 - 1. Adjacent communities, the Oregon Division Department of State Lands and the Department of Land Conservation and Development shall be notified prior to any alteration or relocation of a watercourse and evidence of such notification shall be submitted to the Federal Insurance Administration.
 - 2. Maintenance shall be provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

L. Floodways

- Located within areas of *special* flood plain *hazard* established in Section 2.112.03 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential the following provisions shall apply in addition to the requirement in I.: (These provisions shall also apply to areas within a flood plain where a floodway has not been technically determined and the base flood level is three (3) or more feet above the land surface:)
- 1. Prohibit encroachments, including fill, new construction, substantial improvements and other development unless , in the Flood Plain Development Permit, processed as a Type I-B action, a technical evaluation is provided by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the

- base flood discharge. This evaluation may be submitted to the Federal Emergency Management Agency for technical review.
- 2. If Subsection 1 above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 2.112.07.
- 3. Prohibit the placement of any manufactured homes except in an existing manufactured home park. Except as provided in Subsections a and b, below, the installation of a manufactured home is prohibited in accordance with the 2002 Oregon Manufactured Dwelling Park Specialty Code.
 - a. A manufactured home existing in the floodway may remain provided the placement was permitted at the time of the original installation, and its continued use is not a threat to life, health, property, or the general welfare of the public.
 - b. A manufactured home existing in the floodway may be replaced with a manufactured home provided the existing manufactured home was permitted at the time of the original installation, the replacement manufactured home will not be a threat to life, health, property, or the general welfare of the public, and it meets the following criteria:
 - i. As required by 44 CFR Chapter 1, Subpart 60.3(d)(3), it must be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the manufactured dwelling and any accessory buildings, accessory structures, or any property improvements (encroachments) will not result in any increase in flood levels during the occurrence of the base flood discharge.
 - ii. The replacement manufactured dwelling and any accessory buildings or accessory structures (encroachments) shall have the finished floor elevated a minimum of 18 inches (46 cm) above the base flood elevation as identified on the Flood Insurance Rate Map.
 - iii. The replacement manufactured dwelling is placed and secured to a foundation support system

- designed by an Oregon professional engineer or architect and approved by the authority having jurisdiction.
- iv. The replacement manufactured dwelling, its foundation supports, and any accessory buildings, accessory structures, or property improvements (encroachments) do not displace water to the degree that it causes a rise in the water level or diverts water in a manner that causes erosion or damage to other properties;
- v. The location of a replacement manufactured dwelling is allowed by the local planning department's ordinances; and
- vi. Any other requirements deemed necessary by the authority having jurisdiction.
- 4. The area below the lowest floor shall remain open and unenclosed to allow the unrestricted flow of flood waters beneath the structure.
- 5. Projects for stream habitat restoration may be permitted in the floodway provided:
 - a. The project qualifies for a Department of the Army, Portland District "Regional General Permit for Stream Habitat Restoration" (NWP-2007-1023); and,
 - b. A qualified professional (a Registered Professional Engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and,
 - c. No structures would be impacted by a potential rise in flood elevation; and
 - d. An agreement to monitor the project, correct problems, and ensure the flood carrying capacity remains unchanged is included as part of the local approval.
- M. Below-Grade Crawlspace.

- 1. A below-grade crawlspace is allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, "Crawlspace Construction for Buildings Located in Special Flood Hazard Areas." For structures with a below grade crawlspace the National Flood Insurance Program requires increased insurance premium costs due to a charge that is added to the basic policy premium for the below-grade crawlspace. Contact an insurance agent for more information.
 - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
 - b. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
 - c. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.
 - d. Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.

- e. The interior grade of a crawlspace below the BFE must not be more than two (2)feet below the lowest adjacent exterior grade.
- f. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
- g. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.
- h. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.
- 2. For more detailed information refer to FEMA Technical Bulletin 11-01, including the diagrams that illustrate the 2-foot and 4-foot rules, and note the State building code requirements require the lowest floor to be at least 1-foot above the Base Flood Elevation for residential structures.

N. Recreational Vehicles.

- 1. A recreational vehicle in a recreational vehicle park shall:
 - a. Be on the site for fewer than 180 consecutive days.
 - b. Be fully licensed and ready for highway use;
 - c. Be on its wheels or jacking system;
 - d. Have no permanently attached additions; and

e. Be attached to the site only by quick disconnect type devices for utilities and security systems, or meet the requirements of Section 2.112.07, B, 2, above, and the elevation and anchoring requirements for manufactured homes.

2. A recreational Vehicle not in a recreational vehicle park shall:

- a. Be fully licensed and ready for highway use;
- b. Be on its wheels or jacking system;
- c. Have no permanently attached additions; and
- d. Be attached to the site only by quick disconnect type devices for electricity.

O. Review of Building Permits.

Where elevation data is not available through the Flood Insurance Study, FIRM, or from another authoritative source (2.112.03, B), the decision for the Flood Plain Development Permit related to the building permit shall be processed as a Type I-B action and applications for building permits shall be reviewed to ensure the proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

P. Before Regulatory Floodway.

In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

2.112.08 Generalized Flood Plain Areas

Where elevation data is generalized, such as the unnumbered A zones on the FIRM, conditional use **Flood Plain Development** p **P**ermits shall include a review and determination that proposed construction will be reasonably safe from

flooding and meet the flood protection standards. In determining whether the proposed flood plain development is reasonably safe, applicable criteria shall include, among other things, the use of historical data, high water marks, photographs of past flooding, or data (e.g. an engineering study or soil and landscape analysis) may be submitted by qualified professionals that demonstrate the site is not in a floodplain. In such cases, a letter of map amendment may be required by the City Administrator, or designee. Failure to elevate the lowest floor at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.

2.112.09 Variances For Flood Plain Development

- A. A variance may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the criteria in Section 2.112.10.
- B. A community shall notify the applicant in writing over the signature of a community official that: (1) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage; and, (2) such construction below the base flood level increases risk to life and property. Such notification shall be maintained with a record of all variance actions as required in subsection C.
- C. A community shall: (1) maintain a record of all variance actions, including justification for their issuance; and, (2) report such variances issued in its annual report submitted to the Administrator.

2.112.10 Variance Criteria

The following criteria shall be used to review variance applications.

- A. Variances shall only be issued upon a showing that:
 - 1. There is a good and sufficient cause;
 - 2. That failure to grant the variance would result in exceptional hardship to the applicant;
 - 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;

- 4. The variance is the minimum necessary, considering the flood hazard, to afford relief;
- 5. The variance will be consistent with the intent and purpose of the provision being varied;
- 6. There has not been a previous land use action approved on the basis that variances would not be allowed; and
- 7. The new construction or substantial improvement is not within any designated regulatory floodway, or if located in a floodway, no increase in base flood discharge will result.
- A. The Planning Commission shall decide requests for Variances from the requirements of the Flood Plain Overlay District consistent with the Type II process.
- B. In deciding upon such applications, the Planning Commission shall consider all technical evaluations, all relevant factors, Subsection E, below, standards specified in other sections of the Zoning and Development Ordinance, and the following factors:
 - 1. The danger that materials may be swept onto other lands to the injury of others.
 - 2. The danger to life and property due to flooding or erosion damage.
 - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - 4. The importance of the services provided by the proposed facility to the community.
 - 5. The necessity to the facility of a waterfront location, where applicable.
 - 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - 7. The compatibility of the proposed use with existing and anticipated development.

- 8. The relationship of the proposed use to the comprehensive plan, the underlying zone for the subject property, and the Flood Plain Overlay Zone for that area.
- 9. The safety of access to the property in times of flood for ordinary and emergency vehicles.
- 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site.
- 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- C. Upon consideration of the factors of Subsection 2.112.09, B, 1 11, the Planning Commission may approve, approve with conditions or deny the variance as it deems necessary to implement the Flood Plain Overlay District.
- D. The City Administrator, or designee, shall maintain the records of all variance actions and report variances to the Federal Insurance Administration upon request.
- E. Conditions for Variances.
 - 1. Generally, the only condition under which a variance from the elevation standard may be approved is for new construction and substantial improvements to be erected on a lot of one-half acre or less contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items 2.112.09, B, 1 11, have been fully considered. As the lot size increases, the technical justification required for approving the variance increases.
 - 2. Variances may be approved for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in Section 2.112.09, Variance Procedure.
 - 3. Variances shall not be approved within a designated floodway if any increase in flood levels during the base flood discharge would result.

- 4. Variances shall only be approved upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 5. Variances shall only be approved upon:
 - a. A showing of good and sufficient cause.
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant.
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or regulations.
- 6. 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.
- 7. Variances may be approved for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except 2.112.09, E, 1, and otherwise complies with Sections 2.112.07, F, Anchoring, G, Construction Materials and Methods, and H, Utilities.
- 8. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

2.112.10 Appeals of Flood Plain Development Permits

A. The Planning Commission shall review and decide appeals of the City Administrator, or designee, decision for a Type I-B Flood Plain

Development Permit Application and Interpretations. An appeal of the Planning Commission's decision shall be reviewed and decided by the City Council.

- B. In deciding appeals, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of the Zoning and Development Ordinance, and the following factors:
 - 1. The danger that materials may be swept onto other lands to the injury of others.
 - 2. The danger to life and property due to flooding or erosion damage.
 - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - 4. The importance of the services provided by the proposed facility to the community.
 - 5. The necessity to the facility of a waterfront location, where applicable.
 - 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - 7. The relationship of the proposed use to the comprehensive plan, the underlying zone for the subject property, and the Flood Plain Overlay Zone for that area.
 - 8. The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - 9. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site.
 - 10. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- C. Upon consideration of the factors of Subsection 2.112.10, B, 1-10, the Planning Commission may approve, approve with conditions or

deny the Flood Plain Development Permit Application or Interpretation as it deems necessary to implement the Flood Plain Overlay Zone.

D. The City Administrator, or designee, shall maintain the records of all appeal applications.

2.112.11 Critical Facilities

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should be elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. Floodproofing and sealing measures shall be taken to ensure that toxic substances 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.

2.112.112 Warning and Disclaimer of Liability

The degree of flood protection required by this overlay zone is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on occasion. Flood heights may be increased by man-made or natural causes. This zone does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This zone will not create liability on the part of the City of Lafayette, any officer or employee thereof or the Federal Insurance Administration for any flood damages that result from reliance on this chapter or any decision lawfully made thereunder.

End of proposed Flood Plain Overlay District amendments.

TO:

LAFAYETTE CITY COUNCIL

FROM:

JIM JACKS, CITY PLANNER

SUBJ:

TEXT AMENDMENT 09-02: ADOPT UPDATED DIGITAL FLOOD

INSURANCE RATE MAP AND FLOOD INSURANCE STUDY

DATE:

JANUARY 14, 2010

BACKGROUND

Throughout the nation the Federal Emergency Management Agency (FEMA) has been working for several years to change from the paper copies of the Flood Insurance Rate Map (FIRM) to a digital version. The maps for several counties in Oregon have already been changed to the digital version.

Lafayette, Yamhill County and all the other incorporated cities in the county are in receipt of a letter dated September 2, 2009 from FEMA and two compact discs with electronic files of the Digital Flood Insurance Rate Maps (DFIRM) and the Flood Insurance Study (FIS). Lafayette, Yamhill County and all the other incorporated cities in the county must amend their local zoning codes to adopt the new DFIRM and FIS and ensure the amendments are effective on or before March 2, 2010.

If the amendments are not effective on or before March 2, 2010, the City of Lafayette will be suspended from the National Flood Plain Insurance Program (NFIP). The existing flood plain insurance policies for structures in the 100-year flood plain will no longer be effective. New policies, claims for flood damage, and existing policy renewals will not be allowed by FEMA.

To meet the March 2, 2010 deadline the Planning Commission conducted a public hearing on December 17, 2009 and unanimously passed a motion recommending the City Council approve the proposed amendments. The City Council public hearing has been properly noticed for January 14, 2010.

In addition to the Digital Flood Insurance Rate Maps and the Flood Insurance Study the State building code includes some provisions that must be incorporated into the Lafayette Zoning and Development Ordinance's (LZDO) flood plain regulations. Clarifications issued by the Region X office of FEMA are also proposed to be amended into the LZDO. Finally, some language from the State Model Flood Plain Ordinance is proposed to be amended into the LZDO.

A note of clarification: Earlier in 2009 the City Council adopted numerous housekeeping and substantive amendments to the LZDO (Text Amendment 09-01), including the Flood Plain Overlay District. They have been effective for several weeks and are the base language for these proposed flood plain amendments.

PURPOSE

The purpose of this Memo is to provide a "mark-up copy" of the of the amendments to Section 2.112, Flood Plain Overlay District (FP), that are needed to adopt the digital Flood Insurance Rate Maps (DFIRM), the Flood Insurance Study (FIS), the State building code provisions, the FEMA Region X clarifications, and the State Model Ordinance language.

This Memo also includes findings to support adoption of the proposed amendments and it includes a summary of the proposed amendments.

FINDINGS AND CONCLUSIONS FOR TEXT AMENDMENT 09-02

- 1. Plan Amendment 09-02 is a Legislative amendment to the Lafayette Zoning and Development Ordinance (LZDO). The LZDO does not include approval criteria for text amendments to the LZDO, but it does include procedural items that are addressed in Findings 2 4 below. Findings 5 and 6 address the applicable Comprehensive Plan Policies and the Statewide Planning Goals, respectively.
- 2. The LZDO, Section 3.101.04, Type IV Actions, states a Type IV action must be initiated by City staff, the Planning Commission or the City Council. Text Amendment 09-02 was initiated by City staff. The LZDO proposed amendments comply with Section 3.101.04.
- 3. Section 3.207, Type IV Actions, calls for a public hearing by a majority of the Planning Commission on all amendments to the LZDO (3.207.02, A, 1). The Planning Commission public hearing on December 17, 2009, was attended by four of the seven appointed Commissioners. The Planning Commission hearing meets the requirement of 3.207.02, A, 1.
- 4. Section 3.207.02, B, calls for the Planning Commission to make a recommendation to the City Council. On December 17, 2009, the Planning Commission unanimously passed a motion recommending the City Council approve the proposed amendments. The Planning Commission recommendation meets the requirement of Section 3.207.02, B.
- 5. The flood hazard areas of the City are subject to periodic inundation which results in (1) loss of life and property, (2) health and safety hazards, (3) disruption of commerce and governmental services, (4) extraordinary public expenditures for flood protection and relief, and (5) impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. The proposed amendments to the Flood Plain Overlay District and the Type I process will promote the public health, safety, and general welfare of its citizenry.
- 6. Flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to the flood loss. The proposed amendments will promote the reduction of flood losses.

7. Findings related to the Comprehensive Plan Policies.

Many of the proposed amendments are required by the Federal Emergency Management Agency and the State building code. Some of the proposed amendments clean-up awkward language and clarify unclear language.

The Lafayette Comprehensive Plan Policies were reviewed and it was concluded that only the following policy applies.

Natural Hazards Policy 2-2: "The City shall continue participation in the HUD Flood Insurance Program."

The amendments are required if the City is to continue to participate in the National Flood Insurance Program. FEMA has released the new digital Flood Insurance Rate Maps and Flood Insurance Study and the City must amend the LZDO to properly adopt the FEMA documents. The amendments propose changes that will be adopted and effective on or before March 2, 2010, thereby ensuring the City will continue to participate in the National Flood Insurance Program. Policy 2-2 is met.

The proposed amendments meet applicable Comprehensive Plan Policies.

8. Findings related to the Statewide Planning Goals.

A. Goal 1, Citizen Involvement.

Goal 1 applies. The Planning Commission conducted a properly noticed public hearing on December 17 and the City Council will conduct a properly noticed public hearing on January 14, 2009. The process is a Legislative process because the proposed amendments affect properties and property owners Citywide and because they propose changes to the laws of the City. Public notice has been provided in accordance with the LZDO for Legislative public hearings by the Planning Commission and the City Council. Goal 1 is met.

B. Goal 2. Land Use Planning.

Goal 2 applies. The 45-day notice prior to the first evidentiary hearing (Planning Commission on December 17, 2009) to the Department of Land Conservation and Development (DLCD) was provided to notify and garner comments from those parties on the DLCD notification list. Goal 2 is met.

C. Goal 3. Agricultural Lands.

Goal 3 does not apply because agricultural lands are not affected by the proposed amendments.

D. Goal 4. Forest Lands.

Goal 4 does not apply because forest lands are not affected by the proposed amendments.

E. Goal 5. Natural Resources, Scenic and Historic Areas, and Open Spaces.

Goal 5 does not apply because natural resources, scenic and historic and open spaces are not affected by the proposed amendments.

F. Goal 6. Air, Water and Land Resources Quality.

Goal 6 does not apply because air, water and land resource quality are not affected by the proposed amendments.

G. Goal 7. Areas Subject to Natural Hazards.

Goal 7 applies. The proposed amendments will help to ensure structures are not constructed in the floodway and that structures constructed in the area of special flood hazard (100-year flood plain) have their lowest floor at least 1-foot above the 100-year flood height and that manufactured homes have their lowest floor at least 18 inches above the 100-year flood height. Goal 7 is met.

H. Goal 8, Recreation Needs.

Goal 8 does not apply because the proposed amendments do not relate to recreation.

I. Goal 9. Economic Development.

Goal 9 does not apply because the proposed amendments do not relate to economic development.

J. Goal 10. Housing.

Goal 10 does not apply because the proposed amendments do not relate to housing.

K. Goal 11. Public Facilities and Services.

Goal 11 does not apply because the proposed amendments do not relate to public facilities or services.

L. Goal 12. Transportation.

Goal 12 does not apply because the proposed amendments do not relate to transportation facilities.

M. Goal 13. Energy Conservation.

Goal 13 does not apply because the proposed amendments do not relate to energy conservation.

N. Goal 14. Urbanization.

Goal 14 does not apply because the proposed amendments do not relate to the urban growth boundary.

O. Goal 15 for the Willamette River Greenway and Goals 16 – 19 for the Coastal Goals.

Goals 15 - 19 do not apply because the City is not on the Willamette River or on the coast.

The proposed amendments are consistent with the applicable Statewide Planning Goals.

SUMMARY OF PROPOSED AMENDMENTS

The following lists the Sections proposed to be amended and summarizes the amendments.

2.112.01 Purpose.

Add language to be consistent with the State Model Flood Plain Ordinance (MO) whose language comes from the Code of federal Regulations 44 (CFR 44).

2.112.02 Definitions.

Add, delete and change definitions to be more consistent with the MO. The MO definitions come from the federal Code of Federal Regulations 44 (CFR 44) and are more accurate than the definitions in the LZDO. Important definitions proposed to be added are (1) "Below Grade Crawlspace," (2) "Critical Facility" and (3) "Substantial Damage." Some terms are proposed to be deleted such as "Flood Boundary Floodway Map" because Lafayette uses the Flood Insurance Rate Map – there is no Flood Boundary Floodway Map for Lafayette.

2.112.03 General Provisions.

Primarily, the amendments add language in the MO which comes from the CFR 44 language. This section includes the most important amendment which is the lead-in section wherein the new title of the 2009 Flood Insurance Study replaces the title of the old 1980 Flood Insurance Study.

The City Administrator, or designee, is appointed as the "local administrator." Language is added at 2.112.03, E, establishes a Flood Plain Development Permit Application and its contents. Later, Section 2.112.10 establishes that the Planning Commission hears appeals of a staff decision on a Flood Plain Development Permit.

Subsection D makes it clear that a Flood Plain Development Permit is a Type I-A decision which is consistent with the Type I – IV system set forth in LZDO, Section 3.101.01, A, and that when structures related to permitted and conditional uses in the underlying zone are proposed to be located in the area of special flood hazard (the 100-year flood plain), a Flood Plain Development Permit is required.

Subsection E is a new section that establishes a Flood Plain Development Permit Application. This language has been added since the Planning Commission hearing and recommendation. It was inadvertently omitted in the prior versions of the proposed language. Subsection E says an application must be submitted with sufficient information so the decision authority can conclude the flood plain requirements are met.

2.112.04 Uses – Exempt.

Minor changes to be consistent with the MO.

2.112.05 Uses – Permitted.

Minor changes to be consistent with the MO. The lead-in sentence is consistent with 2.112.03, D, by stating that when structures related to permitted and conditional uses in the underlying zone are proposed to be located in the area of special flood hazard (the 100-year flood plain), a Flood Plain Development Permit is required. The current language requiring the lowest floor be at the 100-year flood elevation is not consistent with State Statute and must be changed. It is proposed to be changed to be at least one foot above the 100-year flood elevation to comply with State Statute.

2.112.06 Conditional Use Procedures and Requirements.

This section is proposed to be deleted because it is not clear why it is needed to issue a Flood Plain Development Permit. It does not appear to be needed because the City Administrator has the authority to issue a Flood Plain Development Permit for all development. The State's Model Flood Plain Ordinance does not include a conditional use permit process. The federal Flood Plain Insurance Program does not require a conditional use permit process. Requiring a Planning Commission public hearing and a 2 to 3 month process to make a decision for a Flood Plain Development Permit is inappropriate.

2.110.07 Flood Protection Standards

This section is significantly amended to make it consistent with the MO. Its main sections are A - O. Significant changes are proposed to A, B, C, F, G, H, I, and L. Subsections M, Below Grade Crawlspaces, N, Recreational Vehicles, O, Review of Building Permits, and P, Before Regulatory Floodway, are proposed to be added.

Subsection L, Floodways, Subsubsection 3, is proposed to be significantly augmented regarding manufactured homes to be consistent with federal requirements.

Subsection L, Floodways, Subsubsection 5, is proposed to be added to allow projects for stream habitat restoration consistent with FEMA, Region X, requirements.

Subsection M, Below Grade Crawlspaces, is proposed to be added. The addition is critical because in the western United States, most residences are built with a crawlspace and this language allows crawlspaces to be constructed and not be considered a basement.

The current language throughout 2.112.07 requiring the lowest floor be <u>at</u> the 100-year flood elevation is not consistent with State Statute which requires the lowest floor to be <u>at least one foot above</u> the 100-year flood elevation and manufactured homes to be <u>at least</u> 18 inches above.

2.112.08 Generalized Flood Plain Areas.

Minor changes to be consistent with the MO.

2.112.09 Variances and 2.112.10, Variance Criteria.

The current variance language in these two sections is proposed to be deleted and replaced by language from the MO in Section 2.112.09, Variances For Flood Plain Development, and 2.112.10, Variance Criteria. The federal National Flood Plain Insurance Program includes criteria tailored to flood plain situations. The MO's language reflects the flood plain criteria.

2.112.10 Variance Criteria.

The current 2.112.10 is renamed Appeals of Flood Plain Development Permits. Typically, Flood Plain Development Permits are based on clear and objective standards with no discretion needed, thus the decisions can be a Type I-A with no comment period and no appeal. An example of an objective criterion is, foundation venting is required and there must be at least 1 square inch of vent for every square foot of enclosed crawlspace area. Occasionally, there may be a situation where discretion would enter into a Flood Plain Development Permit and in that case a Type I-B process would be used which includes a comment period and an appeal to the Planning Commission whose decision would be in accordance with Section 2.112.10.

2.112.11 Critical Facilities

This is a proposed new section to be consistent with the MO.

2.112.12 Warning and Disclaimer of Liability

The current 2.112.11 is renumbered to be 2.112.12. No change to the language is proposed.

End of Summary of Proposed Amendments.

"MARK- UP COPY" OF THE PROPOSED AMENDMENTS

The proposed deletions are in strikeout and additions are in bold italics.

When the City Council is adopting an Ordinance, a "clean copy" document showing the amended language will be an Exhibit to the Ordinance. The Ordinance will follow the public hearing and deliberation by the City Council. The following outline shows the location of the flood plain section in Chapter 2.

CHAPTER 2, ZONING

SECTION 2.100, ZONING DISTRICTS

- 2.101, RA ZONE (Residential Acreage)
- 2.102, R-1 ZONE (Residential Low Density)
- 2.103, R-2 ZONE (Residential Medium Density)
- 2.104, RC ZONE (Residential Commercial)
- 2.105, C-1 ZONE (Commercial Core)
- 2.106, C-2 ZONE (Commercial General)
- 2.107, I ZONE (Industrial)
- 2.108, P ZONE (Public and Semi-Public)
- 2.109, NC ZONE (Neighborhood Commercial)
- 2.110, Reserved for future use.
- 2.111, R-D ZONE (Restricted Development Overlay)
- 2.112, F-P ZONE (Floodplain Overlay)
- 2.113, LUO ZONE (Limited Use Overlay)

Chapter 2 of the LZDO, Section 2.112, the Flood Plain Overlay District, is proposed to be amended as shown on the following pages.

2.100 ZONING DISTRICTS.

2.112 FLOOD PLAIN OVERLAY DISTRICT (FP)

2.112.01 Purpose

- **A.** The purpose of the Flood Plain Overlay Zone is to:
 - A1. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.
 - B2. Minimize expenditure of public money for flood control projects, rescue and relief efforts in areas subject to flooding.
 - **G3**. Minimize flood damage to new construction by elevating or flood proofing all structures.

- D4. Control the alteration of natural flood plains, stream channels, and natural protective barriers which hold, accommodate or channel flood waters.
- **E5**. Control filling, grading, dredging and other development which may be subject to or increase flood damage.
- **F6**. Prevent or regulate the construction of flood barriers which may increase flood hazards in other areas.
- G7. Comply with the requirements of the Federal Insurance Administration to qualify the City of Lafayette for participation in the National Flood Insurance Program.
- H8. Minimize flood insurance premiums paid by the citizens of the City of Lafayette by reducing potential hazards due to flood damage.
- **19**. Implement the flood plain policies in the City of Lafayette Comprehensive Plan.
- B. To accomplish its purposes, the Flood Plain Overlay Zone includes the following methods and provisions for reducing flood losses:
 - 1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities.
 - 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
 - 3. Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
 - 4. Controlling filling, grading, dredging, and other development which may increase flood damage.
 - 5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.

6. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances.

2.112.02 Definitions

For purposes of this Overlay Zone, the following terms shall mean:

- A. Accessory Structure Sheds or small garages that are exempt form elevation or flood proofing requirements. This definition shall be limited to detached structures less than 480 square feet in area.
- B. Area of Special Flood Hazard Land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. **Designation on maps always includes the letter A.**
- C. Base Flood Level The flood level having a one (1) percent chance of being equaled or exceeded in any given year (100 year flood plain).
- D. Below-Grade Crawlspace An enclosed area below the base flood elevation in which the interior grade is not more than 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 4 feet at any point.
- **DE**. Conveyance Refers to the carrying capacity of all or a part of the flood plain. It reflects the quantity and velocity of flood waters. Conveyance is measured in cubic feet per second (CFS). If the flow is 30,000 CFS at a cross section, this means that 30,000 cubic feet of water pass through the cross section each second.
- F. Critical Facility A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.
- EG. Development Any activity that has the potential to causer erosion or increase the velocity or depth of floodwater. Development may include, but is not limited to, residential and non-residential structures, fill, utilities, transportation facilities, and the storage and stockpiling of buoyant or hazardous materials. 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.

- **FH.** Encroachment Any obstruction in the flood plain which affects flood flows.
- GI. Existing Mobile/Manufactured Home Park or Manufactured Home Subdivision A parcel (or contiguous parcels) of land divided into two or more mobile/manufactured home lots for rent or sale A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the spaces or lots on which the mobile/manufactured homes are is to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of this Ordinance the city's original flood plain regulations or amendments to the flood plain regulations.
- HJ. Expansion to an Existing Mobile/Manufactured Home Park or Manufactured Home Subdivision The preparation of additional sites by the construction of facilities for servicing the **spaces or** lots on which the mobile/manufactured homes are to be affixed (including the installation of utilities, **the construction of streets, and** either final site grading or pouring of concrete pads, or the construction of streets).
- **IK.** FEMA The Federal Emergency Management Agency, the federal organization responsible for administering the National Flood Insurance Program.
- JL. Fill The placement of any material on the land for the purposes of increasing its elevation in relation to that which exists. Fill material includes, but is not limited to, the following: soil, rock, concrete, bricks, wood stumps, wood, glass, garbage, plastics, metal, etc.
- KM. Flood or Flooding A general and temporary condition of partial or complete inundation of usually normally dry land areas from (1) the overflow of inland or tidal waters or (2) the unusual and rapid accumulation of runoff of surface waters from any source.
- L. Flood Boundary Floodway Map (FBFM) The map portion of the Flood Insurance Study (FIS) issued by the Federal Insurance Agency on which is delineated the Flood Plan, Floodway (and Floodway Fringe), and cross sections (referenced in the text portion of the FIS).
- MN. Flood Insurance Rate Map (FIRM) The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards (100-year flood plain) and the risk premium zones applicable to the community and is on file with the City of Lafayette.

- NO. Flood Insurance Study (FIS) The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary Floodway m Insurance Rate Map and the water surface elevation of the base flood and is on file with the City of Lafayette.
- O. Flood Plain Lands within the City that are subject to a one (1) percent or greater chance of flooding in any given year as identified on the official zoning maps of the City of Lafayette.
- P. Flood Proofing A combination of structural or non-structural provisions, changes, or adjustments to structures, land or waterways for the reduction or elimination of flood damage to properties, water and sanitary facilities, structures and contents of buildings in a flood hazard area.
- Q. Floodway The channel of a river or other watercourse and the adjacent land areas that must remain unobstructed to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot. Once established, nothing can be placed in the floodway that would cause any rise in the base flood elevation.
- R. Floodway Fringe The area of the flood plain lying outside of the floodway as delineated on the FBFM *FIRM* where encroachment by development will not increase the flood elevation more than one foot during the occurrence of the base flood discharge.
- S. Hazardous Material Combustible, flammable, corrosive, explosive, toxic or radioactive substance which is potentially harmful to humans and the environment.
- T. Lowest floor means the *The* lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.
- U. Manufactured home means a **A** structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes, the term "manufactured home" also includes mobile homes as defined in sub Q., of this Section. For insurance and floodplain management purposes, the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

- V. Manufactured home park or subdivision means a A parcel or lot (or contiguous parcels or lots) of land divided into two or more manufactured home lots for rent or sale developed with manufactured homes placed on designated areas (typically referred to as a "space") and the manufactured home occupant rents the space.
- W. Manufactured home subdivision A subdivision wherein only manufactured homes may be placed on the lots created by the subdivision.
- WX. Mean sea level Means, for For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or ether datum the North American Vertical Datum of 1988 (NAVD88), to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
- XY. Mobile home means a vehicle or structure, transportable in one or more sections, which is eight feet or more in width, is 32 feet or more in length, is built on a permanent chassis to which running gear is or has been attached, and is designed to be used as a dwelling with or without permanent foundation when connected to the required utilities. Such definition does not include any recreational vehicle as defined by sub T., of *in* this Section.
- ¥Z. New Construction- Any structure(s) for which the start of construction commenced on or after the original effective date of the Floodplain Overlay Zone.
- AA. New Manufactured Home Park or New Manufactured Home Subdivision A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the spaces or lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is started on or after the effective date of the city's original flood plain regulations or amendments to the flood plain regulations.
- **ZBB**. Obstruction Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure or matter in, along, across or projecting into any channel, watercourse, or regulatory flood hazard area which may impede, retard or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water, or that it is placed where the flow of water might carry the same downstream to the damage of life or property.

AACC. Recreational vehicle - Means a "camper," "motor home," "travel trailer," as defined in ORS 801.180, 801.350, and 801.565 that is intended for human occupancy and is equipped with plumbing, sinks, or toilet, and does not meet the definition of a mobile home in sub V., of this Section As defined in ORS 446.003(33), a vehicle with or without motive power, that is designed for human occupancy and to be used temporarily for recreational, seasonal or emergency purposes, and as further defined by rule, and is designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

BBDD. Start of Construction - Includes substantial improvement, and means the date the building permit was issued, provided the actual start of repair, reconstruction. placement construction. improvement was within 180 days of the permit date. The actual start means either the first placement or permanent construction of a structure (other than a mobile/manufactured home) on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling, nor does it include the installation of streets and/or walkways: nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not used as part of the main structure.

For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

For a structure (other than a mobile/manufactured home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation.

For mobile/manufactured homes not within a mobile/manufactured home park or manufactured home subdivision, "start of construction" means affixing of the mobile/manufactured home to its permanent site. For mobile/manufactured homes within mobile/manufactured home parks or manufactured home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the mobile/manufactured home is to be affixed (including at a minimum, the construction of streets with final site grading or the pouring of concrete pads, and installation of utilities) is completed.

- EE. State Building Code The combined specialty codes adopted by the State of Oregon.
- CCFF. Structure Roofed buildings that have two or more walls, and A walled and roofed building, including a gas or liquid storage tank s that are is principally above ground.
- GG. Substantial Damage Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- DDHH.Substantial Improvement Any repair, reconstruction, addition, rehabilitation or other improvement s of a structure, the cost of which exceeds 50% of the market or assessed value of the structure before the start of construction of the improvement. either:
 - 1. Before the improvement or repair is started; or
 - 2. If the structure has been damaged and is being restored, before the damage occurred. For *the* purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences , whether or not that alteration affects the external dimensions of the structure s. The term does not include:
 - a. Any project **for improvement of a structure** to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local building code enforcement official and which are the minimum necessary to assure safe living conditions -, or
 - b. Any alteration of a structure listed on the National Register of Historic Places or State Inventory of Historic Places, provided, the alteration will not preclude the structure's continued designation as an historic structure.
- II. Variance A grant of relief from the requirements of the Flood Plain Overlay Zone which permits construction in a manner that would otherwise be prohibited by the Flood Plain Overlay Zone.
- JJ. Water Dependent A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

EEKK. Watercourse - A natural or artificial channel in which a flow of water occurs either continually or intermittently in *the* identified floodplain.

2.112.03 General Provisions.

The following regulations apply to all lands in identified flood plains as shown graphically on the zoning maps. The flood plain is those areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Lafayette, Oregon," dated August 1, 1980, with accompanying Flood Insurance Rate Maps "The Flood Insurance Study for Yamhill County, Oregon and Incorporated Areas", dated March 2, 2010, with accompanying Flood Insurance Rate Maps (FIRM). The report and maps are incorporated in the overlay zone by this reference and The Flood Insurance Study and Flood Insurance Rate Maps are hereby adopted by reference and declared to be part of the Flood Plain Overlay District and are on file at the City of Lafayette City Hall. When base flood elevation data has not been provided, the City Administrator, or designee, shall have the authority to determine the location of the boundaries of the floodplain where there appears to be a conflict between a mapped boundary and the actual field conditions, provided a record is maintained of any such determination.

- A. The City Administrator, or designee, is appointed as the local administrator to administer and implement the Flood Plain Overlay District by deciding Flood Plain Development Permit Applications, and interpreting the Flood Insurance Rate Map and the requirements of the Flood Plain Overlay District in accordance with its provisions. Duties of the City Administrator, or designee, shall include, but not be limited to:
 - 1. Review all **Flood Plain D**development **P**permits to determine that the permit requirements **and provisions** of this ordinance have been satisfied **are met**.
 - 2. Review all **Flood Plain D**development **P**permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
 - 3. Review all *Flood Plain D*development *P*permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that *ensure* the encroachment provisions of Section 2.112.07, L, 1, *Floodways*, are met.
- B. Use of Other Base Flood Data: When base flood elevation data has not been provided on the FIRM Flood Insurance Rate Map (A Zone) or

Flood Insurance Study in accordance with Section 2.112.03, General Provisions,, or when more detailed data is available, the City Administrator, or designee, shall obtain, review, and reasonably utilize any base flood elevation **and floodway** data available from a federal, state or other source, in order to administer the provisions of this Section the **Flood Plain Overlay District**.

- C. Information to be Obtained and Maintained:
 - 1. From the developer of the property, obtain and record the actual elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures.
 - 2. For all new or substantially improved flood proofed structures:
 - c. Verify and record the actual elevation as furnished by the developer (in relation to mean sea level), and,
 - Maintain any flood-proofing certifications required by this Section.
 - 3. Maintain for public inspection all records pertaining to the provisions of this Ordinance.
 - 1. Where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or required as in Section 2.112.03, B, Use of Other Base Flood Data, obtain and record the actual elevation, in relation to mean sea level, of the lowest floor, including basements and below-grade crawlspaces, of all new or substantially improved structures, and record whether or not the structure contains a basement.
 - 2. For new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or as required in Section 2.112.03, B, Use of Other Base Flood Data:
 - i. Verify and record the actual elevation in relation to mean sea level, and
 - ii. Maintain the floodproofing certifications required in the Flood Plain Overlay District.
 - 3. Maintain for public inspection all records pertaining to the provisions of the Flood Plain Overlay District.

- D. A Flood Plain Development Permit for development related to P permitted and conditional uses in the underlying district, but not exempt, activities in the flood area of special flood hazard shall be reviewed as a Type I-A action or Type I-B if interpretation or the exercise of policy or legal judgment is included. Activities requiring conditional use approval shall be reviewed as a Type II action.
- E. Establishment of Flood Plain Development Permit Application.
 - 1. Except as set forth in Sections 2.112.04, for exempt uses, and 2.112.07, D, for accessory structures, below, a Flood Plain Development Permit application shall be submitted for structures, including manufactured homes, as defined in Section 2.112.02, Definitions, and for all development, including fill and other activities, as defined in Section 2.112.02, Definitions. A Flood Plain Development Permit shall be approved before construction or development begins within any area of special flood hazard established in Section 2.112.03, General Provisions.
 - 2. A Flood Plain Development Permit Application shall be submitted on forms provided by the City, filed with the City Recorder and accompanied by the appropriate fee.
 - 3. A Flood Plain Development Permit shall be reviewed and decided by the City Administrator, or designee, as a Type I-A action. If a Flood Plain Development Permit decision involves an interpretation or the exercise of policy or legal judgment, the application shall be processed as a Type I-B action.
 - 4. A Flood Plain Development Permit decision involving an interpretation or the exercise of policy or legal judgment may be appealed by those aggrieved by the decision or by any taxpayer consistent with Section 2.112.10, Appeals of Flood Plain Development Permits.
 - 5. Application Contents.
 - a. It shall be the applicant's responsibility to submit a complete application which addresses the provisions and standards of Sections 2.112.03, General Provisions, 2.112.04, Uses Exempt, 2.112.05, Uses Permitted, 2.112.07, Flood Protection Standards, and 2.112.08, Generalized Floodplain Areas. The application shall include plans in duplicate drawn to scale. Building

Permit Application materials may be used for partial fulfillment of the application contents requirements provided they address 5, b-f, below. The Flood Plain Development Permit Application shall include the following and the City Administrator, or designee, may require the applicant to submit additional information deemed necessary to show compliance with Section 2.112, Flood Plain Overlay District:

- b. The nature, location, dimensions, and elevations of:
 - i. The subject property,
 - ii. Existing and proposed structures,
 - iii. Existing and proposed fill,
 - iv. Existing and proposed storage for materials, and
 - v. Existing and proposed drainage facilities.
- c. An Elevation Certificate showing, in relation to mean sea level, the elevation of the lowest floor, including basement, of all structures.
- d. Elevation in relation to mean sea level of floodproofing in any structure.
- e. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing standards in Subsection 2.112.07, C.
- f. Description of the extent to which a watercourse will be altered or relocated as a result of the proposed development.

Within a FP (FLOOD PLAIN) the Flood Plain Overlay zone District no uses, structures, vehicles, and premises shall be used or established, except as provided in the applicable underlying zone and the provisions of this overlay zone district. Except as provided herein all uses and floodplain development shall be subject to issuance of a determination Flood Plain Development Permit or a conditional use permit as provided in Sections 2.112.05 and 2.112.06. The following uses are exempt from the regulations of this overlay zone:

- A. Signs, markers, aids, etc., placed by a public agency to serve the public.
- B. Driveways, parking lots and other open space use areas where no alteration of topography will occur.
- C. Minor Routine maintenance and repairs or alterations to existing structures provided the alterations maintenance and repairs do not increase the size or intensify the use of the structure, and do not constitute "substantial improvement" as defined in Section 2.112.02.
- D. Customary dredging associated with channel maintenance consistent with applicable State or Federal law.
- ED. Placement Replacement of utility facilities necessary to serve established and permitted uses within flood plain areas of special flood hazard, such as telephone poles. This exemption does not apply to buildings, substations, electric meters, power transformers or other types similar of flood plain development electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities in areas of special flood hazard.

2.112.05 Uses - Permitted

If otherwise allowed as a permitted or conditional use in the underlying zone, dwellings, a manufactured home on a lot, a manufactured home in a manufactured home park, and other structures that involve a building permit, including the placement of fill to elevate a structure, may be allowed subject to a written determination (flood plain development permit) that an approved Flood Plain development Permit showing the following requirements are met or will be met as construction occurs:

- A. The structure *or fill* is not located within a floodway.
- B. The required elevation to which the lowest floor of the structure must be elevated can be determined from the Flood Insurance Study, Flood Insurance Rate Map, or consistent with Section 2.112.03, B, Use of Other Base Flood Data.
- C. The structures will be located on natural grade or compacted fill.
- D. The lowest floor will be elevated to **at least** one (1) foot above the level of the base flood elevation and the anchoring requirements in Section 2.112.07 F **will be met**.

- E. The Building Official has determined that any construction and substantial improvements below base flood level meet the requirements of Section 2.112.07, A. 4 Flood Protection Standards.
- F. The building permit specifies the required elevation of the lowest floor, and shows any anchoring and venting requirements and requires provision of certification under Section 2.112.06 C., prior to occupancy.
- G. A certificate signed by a licensed surveyor or civil engineer certifying that the lowest floor including basement, is at or above the specific minimum least one (1) foot above the base flood elevation, is submitted to the City Administrator, or designee, prior to use of the structure.
- H. No alteration of topography beyond the perimeter of the structure is proposed.
- A recreational vehicle may be located parked or stored in a floodplain only during the non-flood season (June 1 through September 30), an area of special flood hazard, provided , it is not used for human habitation and it is fully licensed and ready for highway use , or meet the requirements for manufactured homes.

A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and, has no permanently attached additions.

J. Customary dredging associated with channel maintenance consistent with applicable State or Federal law.

2.112.06 Conditional Use Procedures and Requirements Reserved.

- A. Except as provided in Section 2.112.04 and 2.112.05, a conditional use permit shall be obtained before construction or development begins within the Flood Plain Overlay Zone. The conditional use permit shall include conditions ensuring that the Flood Protection standards in Section 2.112.07 are met.
- B. When base flood-elevation data and floodway data have not been provided in accordance with Section 2.112.03, the applicant, with the assistance of the City Administrator, or designee, shall obtain any base flood elevation data or evidence available from a Federal, State or other source in order to determine compliance with the flood protection standards. If data is insufficient, the City Administrator, or designee, may require that the applicant provide data derived by standard engineering methods.

- C. Prior to occupancy the applicant shall provide a certificate signed by a licensed surveyor or civil engineer certifying that the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved manufactured homes and structures meets the requirements of Sections 2.112.07 A., B., and, C.
- D. In addition to other information required in a conditional use application, the application shall include:
 - 1. Land elevation in mean sea level data at development site and topographic characteristics of the site.
 - 1. Base flood level expressed in mean sea level data on the site.
 - 3. Plot plan showing property location, floodplain, and floodway boundaries where applicable, boundaries and the location and floor elevations of existing and proposed development, or the location of grading or filling where ground surface modifications are to be undertaken.
 - 4. Any additional statements and maps providing information demonstrating existing or historical flooding conditions or characteristics which may aid in determining compliance with the flood protection standards of this overlay zone.
- E. Factors of Consideration In reviewing a conditional use application for a development permit, the following factors shall be considered in making a decision on approval or denial of the permit:
 - 1. The danger to life and property due to increased flood heights or velocities caused by encroachments.
 - The danger that materials may be swept on to other lands or downstream to the injury of others.
 - The proposed water supply and sanitation systems and the ability
 of those systems to prevent disease, contamination and unsanitary
 conditions.
 - 4. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - The importance to the community of the service provided by the proposed facility.

- 6. The requirements of the facility for a waterfront location.
- 7. The availability of alternative locations not subject to flooding for the proposed use.
- 8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- 9. The relationship of the proposed use to the comprehensive plan and flood plain management program for the area.
- 10. The safety of access to property in times of flood for ordinary and emergency vehicles.
- 11. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters expected at the site.
- 12. Such other factors which are relevant to the purpose of this Section.
- F. Imposition of Conditions: The City may attach such conditions deemed necessary to further the purpose of this Section. Such conditions may include, but are not limited to:
 - 1. Limitations on periods of use and operation.
 - Imposition of operation controls, sureties, and deed restrictions.
 - 3. Flood-proofing measures.

2.112.07 Flood Protection Standards

In all areas of identified flood plain **special flood hazard**, the following requirements apply:

- A. Dwellings and Manufactured Homes Residential Construction, Except
 Manufactured Homes
 - 1. New residential construction , and substantial improvement of any residential structures , location of a manufactured home on a lot or in a manufactured home park or park expansion approved after adoption of this ordinance shall :
 - H have the lowest floor, including basement, elevated on a permanent foundation to at least one (1) foot above the base flood elevation; and

- 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- 2. Manufactured homes shall be anchored in accordance with subsection 2.112.07, F; and
- 3. No manufactured home shall be placed in a floodway, except in an existing manufactured home park.
- 4. No manufactured home shall be placed in a floodway, except in an existing manufactured home park.
 - a. No manufactured home shall be placed in a floodway, except in an existing manufactured home park.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
 - B. Manufactured h Homes in existing manufactured home parks
 - 1. All manufactured homes shall be elevated on a permanent foundation such that the finished floor of the manufactured home is elevated at least 18 inches (46 cm) above the base flood elevation and is securely anchored to an adequately anchored foundation system to resist flotation, collapse and

lateral movement when the manufactured home is to be placed or substantially improved on a site that is:

- a. Outside of a manufactured home park or subdivision,
- b. In a new manufactured home park or subdivision,
- c. In an expansion area to an existing manufactured home park or manufactured home subdivision, or
- d. In an existing manufactured home park or manufactured home subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood;
- 2. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or manufactured home subdivision that are not subject to the provisions of (1) above, shall be elevated so that either:
 - a. The finished floor of the manufactured home is at least 18 inches (46 cm) above the base flood elevation, or
 - b. The manufactured home chassis is supported by reinforced piers, or other foundation elements of at least equivalent strength, that are no less than 36 inches in height above grade and are securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

Manufactured homes placed on sites within existing manufactured home parks must be anchored to a permanent foundation and either:

- 1. Have the lowest floor at, or above, the base flood elevation; or,
- 2. Have the chassis supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade.

Manufactured homes outside existing manufactured home parks must meet the requirements for residential structures.

C. Non-residential development – Nonresidential Construction

New construction and substantial improvement of any commercial, industrial or other non-residential structures shall either have the lowest

floor, including basement, elevated to **at least** one (1) foot above the base flood elevation or, together with attendant utility and sanitary facilities, shall:

- 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 standards in this subsection and subsection 2.112.07, G., are satisfied. This certificate shall include the specific elevation (in relation to mean sea level) to which such structures are flood-proofed design and methods of construction are in accordance with accepted standards of practice for meeting provisions of Section 2.112.07, C, based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in the Flood Plain Overlay District.
 - a. For all new or substantially improved floodproofed structures where elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 2.112.03, B, the City Administrator, or designee shall:
 - i. Obtain and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed, and
 - ii. Maintain the floodproofing certifications required in Section 2.112.03, C.
- 4. Non-residential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in 2.112.07, A, 4 **2**, **Residential Construction**, **Except Manufactured Homes**.
- 5. Applicants flood-proofing non-residential buildings shall be notified by the City of Lafayette that flood insurance premiums will be based on rates that are one (1) foot below the flood-proofed level (e.g. a building constructed flood-proofed to the base flood level will be rated as one (1) foot below that the base flood level).

- D. Accessory Structures such as sheds or detached garages may be exempt from elevation and flood-proofing standards providing the following development standards are met:
 - 1. The structure cannot be more than 480 square feet in area and shall not be used for human habitation or be the location of appliances such as freezers;
 - 2. Shall be **resistant to flood damage and be** designed to have low potential for flood damage;
 - 3. Shall be constructed and placed on the building site seas to offer minimum resistance to the flow of floodwater; and,
 - 4. Shall be firmly anchored *consistent with Section 2.112.07*, *F* to prevent flotation which may result in damage to other structures *and vented consistent with Section 2.112.07*, *A*, 2;
 - 5. Shall be used only for the parking of vehicles and the storage of items with a low damage potential, including but not limited to items unlikely to be damaged by flood water such as lawn furniture and garden tools; and
 - 6. Electrical, heating, ventilation, plumbing, air-conditioning equipment and other similar service facilities shall be elevated at least one (1) foot above the base flood elevation.

E. Fill

- 1. Any fill or materials proposed must be shown to have a beneficial purpose and the amount thereof not greater than is necessary to achieve that purpose as demonstrated by a plan submitted by the owner showing the uses to which the filled land will be put and the final dimensions for the proposed fill or other materials.
- 2. Such fill or other materials shall be **compacted and** protected against erosion by rip-rap, vegetation cover, or bulk heading.

F. Anchoring

- 1. All new construction and substantial improvements shall be anchored to prevent floatation, collapse, or lateral movement of the structure.
- 2. All manufactured homes shall be anchored to resist prevent floatation, collapse or lateral movement by providing over-the-top

and frame ties to ground anchors. Specific requirements shall be that:, and shall be installed using methods and practices that minimize flood damage. 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).

- a. Over-the-top ties be provided at each of the four corners of the manufactured home with two additional ties per side at intermediate locations with manufactured homes more than 50 feet long requiring only one additional tie per side.
- b. Frame ties be provided at each corner of the home with five additional ties per side at intermediate points with manufactured homes less than 50 feet long requiring only four ties per side.
 - c. All components of the anchoring system be capable of carrying a force of 4,800 pounds.
 - d. Any additions or expansions to the manufactured home be similarly anchored.
- An alternative method of anchoring may involve a system designed to withstand a wind force of 90 miles per hour or greater (must be certified).

G. Construction materials and methods

- 1. All new construction and substantial improvements below *the* base flood level *elevation* shall be constructed with materials and utility equipment resistant to flood damage, and the design and methods of construction are in accord with accepted standards of practice based on an engineer's or architect's review of the plans and specifications. *Utility equipment shall be at least one (1) foot above the base flood elevation.*
- 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage s.
- 3. 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.

H. Utilities

- 1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system as approved by the State Health Division.
- 2. New and replacement sanitary sewage systems shall be designed and located to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters contamination consistent with the requirements of the Oregon State Department of Environmental Quality.
- 3. Electrical, heating, ventilation, plumbing, and air-conditioning equipment shall be designed and/or elevated so—as to prevent water from entering or accumulating within the components during conditions of flooding.
- 4. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality regulations.
- 1. <u>Developments, Generally.</u> Subdivision and PUD Proposals.

Residential developments involving more than one single family dwelling, including subdivisions, manufactured home parks, multiple-family dwellings and planned developments including development regulated under A, and C, shall meet the following requirements:

- 1. Be designed to minimize flood damage. Subdivision and PUD proposals shall be consistent with the need to minimize flood damage.
- 2. Have Subdivision and PUD proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.
- 3. Have Subdivision and PUD proposals shall provide adequate drainage provided to reduce exposure to flood damage.
- 4. Where B base flood elevation data shall be has not been provided by the developer. In cases where no base flood-elevation is available, analysis by standard engineering methods will be required, or is not available from another authoritative source, it shall be generated by the applicant for subdivision and PUD

proposals and other proposed developments which contain at least 50 lots or 5 acres, whichever is less.

J. Storage of m Materials and e Equipment

- Materials that are buoyant, flammable, obnoxious, toxic or otherwise injurious to persons or property, if **and can be** transported by floodwaters, are prohibited. Storage of materials and equipment not having these characteristics is permissible only if the materials and equipment have low-damage potential and are anchored or are readily removable from the area within the time available after **flood** forecasting and warning.

K. Alteration of **w W**atercourses (floodways)

- When considering a conditional use permit to the approval of a Flood Plain Development Permit would allow alteration or modification of a watercourse in the (floodway) the following shall apply:
- 1. Adjacent communities, the Oregon Division Department of State Lands and the Department of Land Conservation and Development shall be notified prior to any alteration or relocation of a watercourse and evidence of such notification shall be submitted to the Federal Insurance Administration.
- Maintenance shall be provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

L. Floodways

- Located within areas of **special** flood plain **hazard** established in Section 2.112.03 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential the following provisions shall apply in addition to the requirement in I.: (These provisions shall also apply to areas within a flood plain where a floodway has not been technically determined and the base flood level is three (3) or more feet above the land surface:)
- 1. Prohibit encroachments, including fill, new construction, substantial improvements and other development unless , in the Flood Plain Development Permit, processed as a Type I-B action, a technical evaluation is provided by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the

- base flood discharge. This evaluation may be submitted to the Federal Emergency Management Agency for technical review.
- 2. If Subsection 1 above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 2.112.07.
- 3. Prohibit the placement of any manufactured homes except in an existing manufactured home park. Except as provided in Subsections a and b, below, the installation of a manufactured home is prohibited in accordance with the 2002 Oregon Manufactured Dwelling Park Specialty Code.
 - a. A manufactured home existing in the floodway may remain provided the placement was permitted at the time of the original installation, and its continued use is not a threat to life, health, property, or the general welfare of the public.
 - b. A manufactured home existing in the floodway may be replaced with a manufactured home provided the existing manufactured home was permitted at the time of the original installation, the replacement manufactured home will not be a threat to life, health, property, or the general welfare of the public, and it meets the following criteria:
 - i. As required by 44 CFR Chapter 1, Subpart 60.3(d)(3), it must be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the manufactured dwelling and any accessory buildings, accessory structures, or any property improvements (encroachments) will not result in any increase in flood levels during the occurrence of the base flood discharge.
 - ii. The replacement manufactured dwelling and any accessory buildings or accessory structures (encroachments) shall have the finished floor elevated a minimum of 18 inches (46 cm) above the base flood elevation as identified on the Flood Insurance Rate Map.
 - iii. The replacement manufactured dwelling is placed and secured to a foundation support system

- designed by an Oregon professional engineer or architect and approved by the authority having jurisdiction.
- iv. The replacement manufactured dwelling, its foundation supports, and any accessory buildings, accessory structures, or property improvements (encroachments) do not displace water to the degree that it causes a rise in the water level or diverts water in a manner that causes erosion or damage to other properties;
- v. The location of a replacement manufactured dwelling is allowed by the local planning department's ordinances; and
- vi. Any other requirements deemed necessary by the authority having jurisdiction.
- 4. The area below the lowest floor shall remain open and unenclosed to allow the unrestricted flow of flood waters beneath the structure.
- 5. Projects for stream habitat restoration may be permitted in the floodway provided:
 - a. The project qualifies for a Department of the Army, Portland District "Regional General Permit for Stream Habitat Restoration" (NWP-2007-1023); and,
 - b. A qualified professional (a Registered Professional Engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and,
 - c. No structures would be impacted by a potential rise in flood elevation; and
 - d. An agreement to monitor the project, correct problems, and ensure the flood carrying capacity remains unchanged is included as part of the local approval.
- M. Below-Grade Crawlspace.

- 1. A below-grade crawlspace is allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, "Crawlspace Construction for Buildings Located in Special Flood Hazard Areas." For structures with a below grade crawlspace the National Flood Insurance Program requires increased insurance premium costs due to a charge that is added to the basic policy premium for the below-grade crawlspace. Contact an insurance agent for more information.
 - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
 - b. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
 - c. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.
 - d. Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.

- e. The interior grade of a crawlspace below the BFE must not be more than two (2)feet below the lowest adjacent exterior grade.
- f. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
- g. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.
- h. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.
- 2. For more detailed information refer to FEMA Technical Bulletin 11-01, including the diagrams that illustrate the 2-foot and 4-foot rules, and note the State building code requirements require the lowest floor to be at least 1-foot above the Base Flood Elevation for residential structures.

N. Recreational Vehicles.

- 1. A recreational vehicle in a recreational vehicle park shall:
 - a. Be on the site for fewer than 180 consecutive days.
 - b. Be fully licensed and ready for highway use;
 - c. Be on its wheels or jacking system;
 - d. Have no permanently attached additions; and

e. Be attached to the site only by quick disconnect type devices for utilities and security systems, or meet the requirements of Section 2.112.07, B, 2, above, and the elevation and anchoring requirements for manufactured homes.

2. A recreational Vehicle not in a recreational vehicle park shall:

- a. Be fully licensed and ready for highway use;
- b. Be on its wheels or jacking system;
- c. Have no permanently attached additions; and
- d. Be attached to the site only by quick disconnect type devices for electricity.

O. Review of Building Permits.

Where elevation data is not available through the Flood Insurance Study, FIRM, or from another authoritative source (2.112.03, B), the decision for the Flood Plain Development Permit related to the building permit shall be processed as a Type I-B action and applications for building permits shall be reviewed to ensure the proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

P. Before Regulatory Floodway.

In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

2.112.08 Generalized Flood Plain Areas

Where elevation data is generalized, such as the unnumbered A zones on the FIRM, conditional use **Flood Plain Development** p **P**ermits shall include a review and determination that proposed construction will be reasonably safe from

flooding and meet the flood protection standards. In determining whether the proposed flood plain development is reasonably safe, applicable criteria shall include, among other things, the use of historical data, high water marks, photographs of past flooding, or data (e.g. an engineering study or soil and landscape analysis) may be submitted by qualified professionals that demonstrate the site is not in a floodplain. In such cases, a letter of map amendment may be required by the City Administrator, or designee. Failure to elevate the lowest floor at least two feet above the highest adjacent grade in these zones may result in higher insurance rates.

2.112.09 Variances For Flood Plain Development

- A. A variance may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with the criteria in Section 2.112.10.
- B. A community shall notify the applicant in writing over the signature of a community official that: (1) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25.00 for \$100.00 of insurance coverage; and, (2) such construction below the base flood level increases risk to life and property. Such notification shall be maintained with a record of all variance actions as required in subsection C.
- C. A community shall: (1) maintain a record of all variance actions, including justification for their issuance; and, (2) report such variances issued in its annual report submitted to the Administrator.

2.112.10 Variance Criteria

The following criteria shall be used to review variance applications.

- A. Variances shall only be issued upon a showing that:
 - 1. There is a good and sufficient cause;
 - That failure to grant the variance would result in exceptional hardship to the applicant;
 - 3. 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:

- 4. The variance is the minimum necessary, considering the flood hazard, to afford relief:
- 5. The variance will be consistent with the intent and purpose of the provision being varied;
- 6. There has not been a previous land use action approved on the basis that variances would not be allowed; and
- 7. The new construction or substantial improvement is not within any designated regulatory floodway, or if located in a floodway, no increase in base flood discharge will result.
- A. The Planning Commission shall decide requests for Variances from the requirements of the Flood Plain Overlay District consistent with the Type II process.
- B. In deciding upon such applications, the Planning Commission shall consider all technical evaluations, all relevant factors, Subsection E, below, standards specified in other sections of the Zoning and Development Ordinance, and the following factors:
 - 1. The danger that materials may be swept onto other lands to the injury of others.
 - 2. The danger to life and property due to flooding or erosion damage.
 - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - 4. The importance of the services provided by the proposed facility to the community.
 - 5. The necessity to the facility of a waterfront location, where applicable.
 - 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - 7. The compatibility of the proposed use with existing and anticipated development.

- 8. The relationship of the proposed use to the comprehensive plan, the underlying zone for the subject property, and the Flood Plain Overlay Zone for that area.
- 9. The safety of access to the property in times of flood for ordinary and emergency vehicles.
- 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site.
- 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- C. Upon consideration of the factors of Subsection 2.112.09, B, 1 11, the Planning Commission may approve, approve with conditions or deny the variance as it deems necessary to implement the Flood Plain Overlay District.
- D. The City Administrator, or designee, shall maintain the records of all variance actions and report variances to the Federal Insurance Administration upon request.
- E. Conditions for Variances.
 - 1. Generally, the only condition under which a variance from the elevation standard may be approved is for new construction and substantial improvements to be erected on a lot of one-half acre or less contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items 2.112.09, B, 1 11, have been fully considered. As the lot size increases, the technical justification required for approving the variance increases.
 - 2. Variances may be approved for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in Section 2.112.09, Variance Procedure.
 - 3. Variances shall not be approved within a designated floodway if any increase in flood levels during the base flood discharge would result.

- 4. Variances shall only be approved upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 5. Variances shall only be approved upon:
 - a. A showing of good and sufficient cause.
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant.
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or regulations.
- 6. 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.
- 7. Variances may be approved for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except 2.112.09, E, 1, and otherwise complies with Sections 2.112.07, F, Anchoring, G, Construction Materials and Methods, and H, Utilities.
- 8. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

2.112.10 Appeals of Flood Plain Development Permits

A. The Planning Commission shall review and decide appeals of the City Administrator, or designee, decision for a Type I-B Flood Plain

Development Permit Application and Interpretations. An appeal of the Planning Commission's decision shall be reviewed and decided by the City Council.

- B. In deciding appeals, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of the Zoning and Development Ordinance, and the following factors:
 - 1. The danger that materials may be swept onto other lands to the injury of others.
 - 2. The danger to life and property due to flooding or erosion damage.
 - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - 4. The importance of the services provided by the proposed facility to the community.
 - 5. The necessity to the facility of a waterfront location, where applicable.
 - 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - 7. The relationship of the proposed use to the comprehensive plan, the underlying zone for the subject property, and the Flood Plain Overlay Zone for that area.
 - 8. The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - 9. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site.
 - 10. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- C. Upon consideration of the factors of Subsection 2.112.10, B, 1 10, the Planning Commission may approve, approve with conditions or

deny the Flood Plain Development Permit Application or Interpretation as it deems necessary to implement the Flood Plain Overlay Zone.

D. The City Administrator, or designee, shall maintain the records of all appeal applications.

2.112.11 Critical Facilities

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should be elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. Floodproofing and sealing measures shall be taken to ensure that toxic substances 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.

2.112.142 Warning and Disclaimer of Liability

The degree of flood protection required by this overlay zone is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on occasion. Flood heights may be increased by man-made or natural causes. This zone does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This zone will not create liability on the part of the City of Lafayette, any officer or employee thereof or the Federal Insurance Administration for any flood damages that result from reliance on this chapter or any decision lawfully made thereunder.

End of proposed Flood Plain Overlay District amendments.

EXHIBIT "B" Text Amendment 09-02 Flood Plain Overlay District Amendments

2.112 FLOOD PLAIN OVERLAY DISTRICT (FP)

2.112.01 Purpose

- **A.** The purpose of the Flood Plain Overlay Zone is to:
 - 1. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.
 - 2. Minimize expenditure of public money for flood control projects, rescue and relief efforts in areas subject to flooding.
 - 3. Minimize flood damage to new construction by elevating or flood proofing all structures.
 - 4. Control the alteration of natural flood plains, stream channels, and natural protective barriers which hold, accommodate or channel flood waters.
 - 5. Control filling, grading, dredging and other development which may be subject to or increase flood damage.
 - 6. Prevent or regulate the construction of flood barriers which may increase flood hazards in other areas.
 - 7. Comply with the requirements of the Federal Insurance Administration to qualify the City of Lafayette for participation in the National Flood Insurance Program.
 - 8. Minimize flood insurance premiums paid by the citizens of the City of Lafayette by reducing potential hazards due to flood damage.
 - 9. Implement the flood plain policies in the City of Lafayette Comprehensive Plan.
- B. To accomplish its purposes, the Flood Plain Overlay Zone includes the following methods and provisions for reducing flood losses:
 - 1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which

- result in damaging increases in erosion or in flood heights or velocities.
- 2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- 3. Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters.
- 4. Controlling filling, grading, dredging, and other development which may increase flood damage.
- 5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.
- 6. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances.

2.112.02 Definitions

For purposes of this Overlay Zone, the following terms shall mean:

- A. Accessory Structure Sheds or small garages that are exempt form elevation or flood proofing requirements. This definition shall be limited to detached structures less than 480 square feet in area.
- B. Area of Special Flood Hazard Land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letter A.
- C. Base Flood Level The flood level having a one (1) percent chance of being equaled or exceeded in any given year (100 year flood plain).
- D. Below-Grade Crawlspace An enclosed area below the base flood elevation in which the interior grade is not more than 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 4 feet at any point.
- E. Conveyance Refers to the carrying capacity of all or a part of the flood plain. It reflects the quantity and velocity of flood waters. Conveyance is measured in cubic feet per second (CFS). If the flow is 30,000 CFS at a

- cross section, this means that 30,000 cubic feet of water pass through the cross section each second.
- F. Critical Facility A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use or store hazardous materials or hazardous waste.
- G. Development Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.
- H. Encroachment Any obstruction in the flood plain which affects flood flows.
- I. Existing Manufactured Home Park or Manufactured Home Subdivision A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the spaces or lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the city's original flood plain regulations or amendments to the flood plain regulations.
- J. Expansion to an Existing Manufactured Home Park or Manufactured Home Subdivision - The preparation of additional sites by the construction of facilities for servicing the spaces or lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or pouring of concrete pads).
- K. FEMA The Federal Emergency Management Agency, the federal organization responsible for administering the National Flood Insurance Program.
- L. Fill The placement of any material on the land for the purposes of increasing its elevation in relation to that which exists. Fill material includes, but is not limited to, the following: soil, rock, concrete, bricks, wood stumps, wood, glass, garbage, plastics, metal, etc.
- M. Flood or Flooding A general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of

- inland or tidal waters or (2) the unusual and rapid accumulation of runoff of surface waters from any source.
- N. Flood Insurance Rate Map (FIRM) The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards (100-year flood plain) and the risk premium zones applicable to the community and is on file with the City of Lafayette.
- O. Flood Insurance Study (FIS) The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Insurance Rate Map and the water surface elevation of the base flood and is on file with the City of Lafayette.
- P. Flood Proofing A combination of structural or non-structural provisions, changes, or adjustments to structures, land or waterways for the reduction or elimination of flood damage to properties, water and sanitary facilities, structures and contents of buildings in a flood hazard area.
- Q. Floodway The channel of a river or other watercourse and the adjacent land areas that must remain unobstructed to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.
- R. Floodway Fringe The area of the flood plain lying outside of the floodway as delineated on the FIRM where encroachment by development will not increase the flood elevation more than one foot during the occurrence of the base flood discharge.
- S. Hazardous Material Combustible, flammable, corrosive, explosive, toxic or radioactive substance which is potentially harmful to humans and the environment.
- T. Lowest floor The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.
- U. Manufactured home A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes, the term "manufactured home" also includes mobile homes as defined in sub Q., of this Section. For insurance and floodplain management purposes, the term "manufactured"

- home" does not include park trailers, travel trailers, and other similar vehicles.
- V. Manufactured home park A parcel or lot (or contiguous parcels or lots) developed with manufactured homes placed on designated areas (typically referred to as a "space") and the manufactured home occupant rents the space.
- W. Manufactured home subdivision A subdivision wherein only manufactured homes may be placed on the lots created by the subdivision.
- X. Mean sea level For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum of 1988 (NAVD88), to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
- Y. Mobile home means a vehicle or structure, transportable in one or more sections, which is eight feet or more in width, is 32 feet or more in length, is built on a permanent chassis to which running gear is or has been attached, and is designed to be used as a dwelling with or without permanent foundation when connected to the required utilities. Such definition does not include any recreational vehicle as defined in this Section.
- Z. New Construction- Any structure(s) for which the start of construction commenced on or after the original effective date of the Floodplain Overlay Zone.
- AA. New Manufactured Home Park or New Manufactured Home Subdivision A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the spaces or lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is started on or after the effective date of the city's original flood plain regulations or amendments to the flood plain regulations.
- BB. Obstruction Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure or matter in, along, across or projecting into any channel, watercourse, or regulatory flood hazard area which may impede, retard or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such

- water, or that it is placed where the flow of water might carry the same downstream to the damage of life or property.
- CC. Recreational vehicle As defined in ORS 446.003(33), a vehicle with or without motive power, that is designed for human occupancy and to be used temporarily for recreational, seasonal or emergency purposes, and as further defined by rule, and is designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.
- DD. Start of Construction - Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement or permanent construction of a structure (other than a mobile/manufactured home) on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling, nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

- EE. State Building Code The combined specialty codes adopted by the State of Oregon.
- FF. Structure A walled and roofed building, including a gas or liquid storage tank s that is principally above ground.
- GG. Substantial Damage Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- HH. Substantial Improvement Any repair, reconstruction, or improvement of a structure, the cost of which exceeds 50% of the market value of the structure either:

- 1. Before the improvement or repair is started; or
- 2. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences , whether or not that alteration affects the external dimensions of the structure. The term does not include:
 - a. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
 - b. Any alteration of a structure listed on the National Register of Historic Places or State Inventory of Historic Places.
- II. Variance A grant of relief from the requirements of the Flood Plain Overlay Zone which permits construction in a manner that would otherwise be prohibited by the Flood Plain Overlay Zone.
- JJ. Water Dependent A structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.
- KK. Watercourse A natural or artificial channel in which a flow of water occurs either continually or intermittently in the identified floodplain.

2.112.03 General Provisions.

The following regulations apply to those areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Yamhill County, Oregon and Incorporated Areas," dated March 2, 2010, with accompanying Flood Insurance Rate Maps (FIRM). The Flood Insurance Study and Flood Insurance Rate Maps are hereby adopted by reference and declared to be part of the Flood Plain Overlay District and are on file at the City of Lafayette City Hall. When base flood elevation data has not been provided, the City Administrator, or designee, shall have the authority to determine the location of the boundaries of the floodplain where there appears to be a conflict between a mapped boundary and the actual field conditions, provided a record is maintained of any such determination.

A. The City Administrator, or designee, is appointed as the local administrator to administer and implement the Flood Plain Overlay District by deciding Flood Plain Development Permit Applications, and interpreting

the Flood Insurance Rate Map and the requirements of the Flood Plain Overlay District in accordance with its provisions. Duties of the City Administrator, or designee, shall include, but not be limited to:

- 1. Review Flood Plain Development Permits to determine that the permit requirements and provisions of this ordinance are met.
- 2. Review Flood Plain Development Permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
- 3. Review Flood Plain Development Permits to determine if the proposed development is located in the floodway. If located in the floodway, ensure the encroachment provisions of Section 2.112.07, L, Floodways, are met.
- B. Use of Other Base Flood Data: When base flood elevation data has not been provided on the Flood Insurance Rate Map (A Zone) or Flood Insurance Study in accordance with Section 2.112.03, General Provisions, the City Administrator, or designee, shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, to administer the provisions of the Flood Plain Overlay District.
- C. Information to be Obtained and Maintained:
 - 1. Where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or required as in Section 2.112.03, B, Use of Other Base Flood Data, obtain and record the actual elevation, in relation to mean sea level, of the lowest floor, including basements and below-grade crawlspaces, of all new or substantially improved structures, and record whether or not the structure contains a basement.
 - 2. For new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, Flood Insurance Rate Map, or as required in Section 2.112.03, B, Use of Other Base Flood Data:
 - Verify and record the actual elevation in relation to mean sea level, and
 - ii. Maintain the floodproofing certifications required in the Flood Plain Overlay District.

- 3. Maintain for public inspection all records pertaining to the provisions of the Flood Plain Overlay District.
- D. A Flood Plain Development Permit for development related to permitted and conditional uses in the underlying district in the area of special flood hazard shall be reviewed as a Type I-A action or Type I-B if interpretation or the exercise of policy or legal judgment is included.
- E. Establishment of Flood Plain Development Permit Application.
 - 1. Except as set forth in Sections 2.112.04, for exempt uses, and 2.112.07, D, for accessory structures, below, a Flood Plain Development Permit application shall be submitted for structures, including manufactured homes, as defined in Section 2.112.02, Definitions, and for all development, including fill and other activities, as defined in Section 2.112.02, Definitions. A Flood Plain Development Permit shall be approved before construction or development begins within any area of special flood hazard established in Section 2.112.03, General Provisions.
 - 2. A Flood Plain Development Permit Application shall be submitted on forms provided by the City, filed with the City Recorder and accompanied by the appropriate fee.
 - 3. A Flood Plain Development Permit shall be reviewed and decided by the City Administrator, or designee, as a Type I-A action. If a Flood Plain Development Permit decision involves an interpretation or the exercise of policy or legal judgment, the application shall be processed as a Type I-B action.
 - 4. A Flood Plain Development Permit decision involving an interpretation or the exercise of policy or legal judgment may be appealed by those aggrieved by the decision or by any taxpayer consistent with Section 2.112.10, Appeals of Flood Plain Development Permits.
 - 5. Application Contents.
 - a. It shall be the applicant's responsibility to submit a complete application which addresses the provisions and standards of Sections 2.112.03, General Provisions, 2.112.04, Uses Exempt, 2.112.05, Uses Permitted, 2.112.07, Flood Protection Standards, and 2.112.08, Generalized Floodplain Areas. The application shall include plans in duplicate drawn to scale. Building Permit Application materials may be used for partial fulfillment of the application contents requirements

provided they address 5, b-f, below. The Flood Plain Development Permit Application shall include the following and the City Administrator, or designee, may require the applicant to submit additional information deemed necessary to show compliance with Section 2.112, Flood Plain Overlay District:

- b. The nature, location, dimensions, and elevations of:
 - i. The subject property,
 - ii. Existing and proposed structures,
 - iii. Existing and proposed fill,
 - iv. Existing and proposed storage for materials, and
 - v. Existing and proposed drainage facilities.
- c. An Elevation Certificate showing, in relation to mean sea level, the elevation of the lowest floor, including basement, of all structures.
- d. Elevation in relation to mean sea level of floodproofing in any structure.
- e. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing standards in Subsection 2.112.07, C.
- f. Description of the extent to which a watercourse will be altered or relocated as a result of the proposed development.

2.112.04 Uses - Exempt

Within the Flood Plain Overlay District no uses, structures, vehicles, and premises shall be used or established, except as provided in the applicable underlying zone and the provisions of this overlay district. Except as provided herein all uses and floodplain development shall be subject to issuance of a Flood Plain Development Permit. The following uses are exempt from the regulations of this overlay zone:

A. Signs, markers, aids, etc., placed by a public agency to serve the public.

- B. Driveways, parking lots and other open space use areas where no alteration of topography will occur.
- C. Routine maintenance and repairs to existing structures provided the maintenance and repairs do not increase the size or intensify the use of the structure, and do not constitute "substantial improvement" as defined in Section 2.112.02.
- D. Replacement of utility facilities necessary to serve established and permitted uses within areas of special flood hazard, such as telephone poles. This exemption does not apply to buildings, substations, electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities in areas of special flood hazard.

2.112.05 Uses - Permitted

If otherwise allowed as a permitted or conditional use in the underlying zone, dwellings, a manufactured home on a lot, a manufactured home in a manufactured home park, and other structures that involve a building permit, including the placement of fill to elevate a structure, may be allowed subject to an approved Flood Plain development Permit showing the following requirements are met or will be met as construction occurs:

- A. The structure or fill is not located within a floodway.
- B. The required elevation to which the lowest floor of the structure must be elevated can be determined from the Flood Insurance Study, Flood Insurance Rate Map, or consistent with Section 2.112.03, B, Use of Other Base Flood Data.
- C. The structures will be located on natural grade or compacted fill.
- D. The lowest floor will be elevated at least one (1) foot above the base flood elevation and the anchoring requirements in Section 2.112.07, F, will be met.
- E. The Building Official has determined that any construction and substantial improvements below base flood level meet the requirements of Section 2.112.07, Flood Protection Standards.
- F. The building permit specifies the required elevation of the lowest floor, and shows any anchoring and venting requirements.
- G. A certificate signed by a licensed surveyor or civil engineer certifying that the lowest floor including basement, is at least one (1) foot above the base

- flood elevation, is submitted to the City Administrator, or designee, prior to use of the structure.
- H. No alteration of topography beyond the perimeter of the structure is proposed.
- I. A recreational vehicle may be parked or stored in an area of special flood hazard, provided it is not used for human habitation and it is fully licensed and ready for highway use.
 - A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and, has no permanently attached additions.
- J. Customary dredging associated with channel maintenance consistent with applicable State or Federal law.

2.112.06 Reserved.

2.112.07 Flood Protection Standards

In all areas of special flood hazard, the following requirements apply:

- A. Residential Construction, Except Manufactured Homes
 - 1. New construction and substantial improvement of residential structures shall have the lowest floor, including basement, elevated on a permanent foundation at least one (1) foot above the base flood elevation; and
 - 2. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - b. The bottom of all openings shall be no higher than one foot above grade.

c. Openings may be equipped with screens, louvers, or other coverings or devices provided they permit the automatic entry and exit of floodwaters.

B. Manufactured Homes

- 1. All manufactured homes shall be elevated on a permanent foundation such that the finished floor of the manufactured home is elevated at least 18 inches (46 cm) above the base flood elevation and is securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement when the manufactured home is to be placed or substantially improved on a site that is:
 - a. Outside of a manufactured home park or subdivision,
 - b. In a new manufactured home park or subdivision,
 - c. In an expansion area to an existing manufactured home park or manufactured home subdivision, or
 - d. In an existing manufactured home park or manufactured home subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood;
- 2. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or manufactured home subdivision that are not subject to the provisions of (1) above, shall be elevated so that either:
 - a. The finished floor of the manufactured home is at least 18 inches (46 cm) above the base flood elevation, or
 - b. The manufactured home chassis is supported by reinforced piers, or other foundation elements of at least equivalent strength, that are no less than 36 inches in height above grade and are securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

C. Nonresidential Construction

New construction and substantial improvement of any commercial, industrial or other non-residential structures shall either have the lowest floor, including basement, elevated at least 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.
- 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 Section 2.112.07, C, based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the Building Official as set forth in the Flood Plain Overlay District.
 - a. For all new or substantially improved floodproofed structures where elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 2.112.03, B, the City Administrator, or designee shall:
 - Obtain and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed, and
 - ii. Maintain the floodproofing certifications required in Section 2.112.03, C.
- 4. Non-residential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in 2.112.07, A, 2, Residential Construction, Except Manufactured Homes.
- 5. Applicants flood-proofing non-residential buildings shall be notified by the City of Lafayette that flood insurance premiums will be based on rates that are one (1) foot below the flood-proofed level (e.g. a building flood-proofed to the base flood level will be rated as one (1) foot below the base flood level).
- D. Accessory Structures such as sheds or detached garages may be exempt from elevation and flood-proofing standards providing the following development standards are met:

- 1. The structure cannot be more than 480 square feet in area and shall not be used for human habitation or be the location of appliances such as freezers;
- 2. Shall be resistant to flood damage and be designed to have low potential for flood damage;
- 3. Shall be constructed and placed on the building site to offer minimum resistance to the flow of floodwater;
- 4. Shall be firmly anchored consistent with Section 2.112.07, F, to prevent flotation which may result in damage to other structures and vented consistent with Section 2.112.07, A, 2;
- 5. Shall be used only for the parking of vehicles and the storage of items with a low damage potential, including but not limited to items unlikely to be damaged by flood water such as lawn furniture and garden tools; and
- 6. Electrical, heating, ventilation, plumbing, air-conditioning equipment and other similar service facilities shall be elevated at least one (1) foot above the base flood elevation.

F. Fill

- 1. Any fill or materials proposed must be shown to have a beneficial purpose and the amount thereof not greater than is necessary to achieve that purpose as demonstrated by a plan submitted by the owner showing the uses to which the filled land will be put and the final dimensions for the proposed fill or other materials.
- 2. Such fill or other materials shall be compacted and protected against erosion by rip-rap, vegetation cover, or bulk heading.

F. Anchoring

- 1. All new construction and substantial improvements shall be anchored to prevent floatation, collapse, or lateral movement of the structure.
- 2. All manufactured homes shall be anchored to prevent floatation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. 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).

G. Construction Materials and Methods

- 1. All new construction and substantial improvements below the base flood elevation shall be constructed with materials resistant to flood damage. Utility equipment shall be at least one (1) foot above the base flood elevation.
- 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage s.
- 3. 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.

H. Utilities

- 1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- 2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
- 3. Electrical, heating, ventilation, plumbing, and air-conditioning equipment shall be designed and/or elevated to prevent water from entering or accumulating within the components during conditions of flooding.
- 4. Onsite waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality regulations.

I. Subdivision and PUD Proposals

- 1. Subdivision and PUD proposals shall be consistent with the need to minimize flood damage.
- 2. Subdivision and PUD proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

- 3. Subdivision and PUD proposals shall provide adequate drainage to reduce exposure to flood damage.
- 4. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated by the applicant for subdivision and PUD proposals and other proposed developments which contain at least 50 lots or 5 acres, whichever is less.

J. Storage of Materials and Equipment

Materials that are buoyant, flammable, toxic or otherwise injurious to persons or property, and can be transported by floodwaters, are prohibited. Storage of materials and equipment not having these characteristics is permissible only if the materials and equipment have low-damage potential and are anchored or are readily removable from the area within the time available after flood forecasting and warning.

K. Alteration of Watercourses (floodways)

When the approval of a Flood Plain Development Permit would allow alteration or modification of a watercourse in the floodway the following shall apply:

- 1. Adjacent communities, the Oregon Department of State Lands and the Department of Land Conservation and Development shall be notified prior to any alteration or relocation of a watercourse and evidence of such notification shall be submitted to the Federal Insurance Administration.
- 2. Maintenance shall be provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

L. Floodways

Located within areas of special flood hazard established in Section 2.112.03 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential the following provisions shall apply in addition to the requirement in I.: (These provisions shall also apply to areas within a flood plain where a floodway has not been technically determined and the base flood level is three (3) or more feet above the land surface:)

- 1. Prohibit encroachments, including fill, new construction, substantial improvements and other development unless, in the Flood Plain Development Permit, processed as a Type I-B action, a technical evaluation is provided by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. This evaluation may be submitted to the Federal Emergency Management Agency for technical review.
- 2. If Subsection 1 above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 2.112.07.
- 3. Except as provided in Subsections a and b, below, the installation of a manufactured home is prohibited in accordance with the 2002 Oregon Manufactured Dwelling Park Specialty Code.
 - a. A manufactured home existing in the floodway may remain provided the placement was permitted at the time of the original installation, and its continued use is not a threat to life, health, property, or the general welfare of the public.
 - b. A manufactured home existing in the floodway may be replaced with a manufactured home provided the existing manufactured home was permitted at the time of the original installation, the replacement manufactured home will not be a threat to life, health, property, or the general welfare of the public, and it meets the following criteria:
 - i. As required by 44 CFR Chapter 1, Subpart 60.3(d)(3), it must be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the manufactured dwelling and any accessory buildings, accessory structures, or any property improvements (encroachments) will not result in any increase in flood levels during the occurrence of the base flood discharge.
 - ii. The replacement manufactured dwelling and any accessory buildings or accessory structures (encroachments) shall have the finished floor elevated a minimum of 18 inches (46 cm) above the base flood elevation as identified on the Flood Insurance Rate Map.

- iii. The replacement manufactured dwelling is placed and secured to a foundation support system designed by an Oregon professional engineer or architect and approved by the authority having jurisdiction.
- iv. The replacement manufactured dwelling, its foundation supports, and any accessory buildings, accessory structures, or property improvements (encroachments) do not displace water to the degree that it causes a rise in the water level or diverts water in a manner that causes erosion or damage to other properties;
- v. The location of a replacement manufactured dwelling is allowed by the local planning department's ordinances: and
- vi. Any other requirements deemed necessary by the authority having jurisdiction.
- 4. The area below the lowest floor shall remain open and unenclosed to allow the unrestricted flow of flood waters beneath the structure.
- 5. Projects for stream habitat restoration may be permitted in the floodway provided:
 - a. The project qualifies for a Department of the Army, Portland District "Regional General Permit for Stream Habitat Restoration" (NWP-2007-1023); and,
 - b. A qualified professional (a Registered Professional Engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and,
 - c. No structures would be impacted by a potential rise in flood elevation; and
 - d. An agreement to monitor the project, correct problems, and ensure the flood carrying capacity remains unchanged is included as part of the local approval.
- M. Below-Grade Crawlspace

- 1. A below-grade crawlspace is allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, "Crawlspace Construction for Buildings Located in Special Flood Hazard Areas." For structures with a below grade crawlspace the National Flood Insurance Program requires increased insurance premium costs due to a charge that is added to the basic policy premium for the below-grade crawlspace. Contact an insurance agent for more information.
 - a. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
 - b. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
 - c. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.
 - d. Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.
 - e. The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.

- f. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
- g. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.
- h. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.
- For more detailed information refer to FEMA Technical Bulletin 11-01, including the diagrams that illustrate the 2-foot and 4-foot rules, and note the State building code requirements require the lowest floor to be at least 1-foot above the Base Flood Elevation for residential structures.

N. Recreational Vehicles

- 1. A recreational vehicle in a recreational vehicle park shall:
 - a. Be on the site for fewer than 180 consecutive days;
 - b. Be fully licensed and ready for highway use;
 - c. Be on its wheels or jacking system;
 - d. Have no permanently attached additions; and
 - e. Be attached to the site only by quick disconnect type devices for utilities and security systems, or meet the requirements of Section 2.112.07, B, 2, above, and the elevation and anchoring requirements for manufactured homes.

2. A recreational Vehicle not in a recreational vehicle park shall:

- a. Be fully licensed and ready for highway use;
- b. Be on its wheels or jacking system;
- c. Have no permanently attached additions; and
- d. Be attached to the site only by quick disconnect type devices for electricity.

O. Review of Building Permits

Where elevation data is not available through the Flood Insurance Study, FIRM, or from another authoritative source (2.112.03, B), the decision for the Flood Plain Development Permit related to the building permit shall be processed as a Type I-B action and applications for building permits shall be reviewed to ensure the proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

P. Before Regulatory Floodway

In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development, including fill, shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

2.112.08 Generalized Flood Plain Areas

Where elevation data is generalized, such as the unnumbered A zones on the FIRM, Flood Plain Development Permits shall include a review and determination that proposed construction will be reasonably safe from flooding and meet the flood protection standards. In determining whether the proposed flood plain development is reasonably safe, applicable criteria shall include, among other things, the use of historical data, high water marks, photographs of past flooding, or data (e.g. an engineering study or soil and landscape analysis) may be submitted by qualified professionals that demonstrate the site is not in a floodplain. In such cases, a letter of map amendment may be required by the City Administrator, or designee. Failure to elevate the lowest floor at least two

feet above the highest adjacent grade in these zones may result in higher insurance rates.

2.112.09 Variances For Flood Plain Development

- A. The Planning Commission shall decide requests for Variances from the requirements of the Flood Plain Overlay District consistent with the Type II process.
- B. In deciding upon such applications, the Planning Commission shall consider all technical evaluations, all relevant factors, Subsection E, below, standards specified in other sections of the Zoning and Development Ordinance, and the following factors:
 - 1. The danger that materials may be swept onto other lands to the injury of others.
 - 2. The danger to life and property due to flooding or erosion damage.
 - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 - 4. The importance of the services provided by the proposed facility to the community.
 - 5. The necessity to the facility of a waterfront location, where applicable.
 - 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
 - 7. The compatibility of the proposed use with existing and anticipated development.
 - 8. The relationship of the proposed use to the comprehensive plan, the underlying zone for the subject property, and the Flood Plain Overlay Zone for that area.
 - 9. The safety of access to the property in times of flood for ordinary and emergency vehicles.
 - 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site.

- 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- C. Upon consideration of the factors of Subsection 2.112.09, B, 1 11, the Planning Commission may approve, approve with conditions or deny the variance as it deems necessary to implement the Flood Plain Overlay District.
- D. The City Administrator, or designee, shall maintain the records of all variance actions and report variances to the Federal Insurance Administration upon request.
- E. Conditions for Variances.
 - Generally, the only condition under which a variance from the elevation standard may be approved is for new construction and substantial improvements to be erected on a lot of one-half acre or less contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items 2.112.09, B, 1 11, have been fully considered. As the lot size increases, the technical justification required for approving the variance increases.
 - 2. Variances may be approved for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in Section 2.112.09, Variance Procedure.
 - Variances shall not be approved within a designated floodway if any increase in flood levels during the base flood discharge would result.
 - 4. Variances shall only be approved upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - 5. Variances shall only be approved upon:
 - A showing of good and sufficient cause.
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant.

- c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or regulations.
- 6. 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.
- 7. Variances may be approved for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except 2.112.09, E, 1, and otherwise complies with Sections 2.112.07, F, Anchoring, G, Construction Materials and Methods, and H, Utilities.
- 8. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

2.112.10 Appeals of Flood Plain Development Permits

- A. The Planning Commission shall review and decide appeals of the City Administrator, or designee, decision for a Type I-B Flood Plain Development Permit Application and Interpretations. An appeal of the Planning Commission's decision shall be reviewed and decided by the City Council.
- B. In deciding appeals, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of the Zoning and Development Ordinance, and the following factors:
 - 1. The danger that materials may be swept onto other lands to the injury of others.
 - 2. The danger to life and property due to flooding or erosion damage.

- 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
- 4. The importance of the services provided by the proposed facility to the community.
- 5. The necessity to the facility of a waterfront location, where applicable.
- 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
- 7. The relationship of the proposed use to the comprehensive plan, the underlying zone for the subject property, and the Flood Plain Overlay Zone for that area.
- 8. The safety of access to the property in times of flood for ordinary and emergency vehicles.
- 9. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site.
- 10. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- C. Upon consideration of the factors of Subsection 2.112.10, B, 1 10, the Planning Commission may approve, approve with conditions or deny the Flood Plain Development Permit Application or Interpretation as it deems necessary to implement the Flood Plain Overlay Zone.
- D. The City Administrator, or designee, shall maintain the records of all appeal applications.

2.112.11 Critical Facilities

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should be elevated three feet above the base flood elevation or to the height of the 500-year flood, whichever is higher.

Floodproofing and sealing measures shall be taken to ensure that toxic substances 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.

2.112.142 Warning and Disclaimer of Liability

The degree of flood protection required by this overlay zone is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on occasion. Flood heights may be increased by man-made or natural causes. This zone does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This zone will not create liability on the part of the City of Lafayette, any officer or employee thereof or the Federal Insurance Administration for any flood damages that result from reliance on this chapter or any decision lawfully made thereunder.