



#### 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

11/25/2009

TO: Subscribers to Notice of Adopted Plan

or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: City of Siletz Plan Amendment

DLCD File Number 001-09

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. 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, December 08, 2009

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: Sheryl Simmons, City of Siletz

Gloria Gardiner, DLCD Urban Planning Specialist

Chris Shirley, FEMA Specialist

# **DLCD**

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



| Jurisdiction: City of Siletz   | Local file number: Ord. 186                   |
|--|---|
| Date of Adoption: November 12, 2009  | Date Mailed: November 16, 2009                |
| Was a Notice of Proposed Amendment (Form 1) ma   | ailed to DLCD? Select oneDate: 8-28-09        |
| Comprehensive Plan Text Amendment  | Comprehensive Plan Map Amendment              |
|  | Zoning Map Amendment                          |
| New Land Use Regulation  | Other:  |
| Summarize the adopted amendment. Do not use t  | echnical terms. Do not write "See Attached".  |
| Ordinance repealing City of Siletz Ordinance #108 and a The purpose of the ordinance is to incorporate the Flood Study (FIS) as set forth in the final flood determination is hazard area development standards. | Insurance Rate Map (FIRM) and Flood Insurance |
| Does the Adoption differ from proposal? No.  |   |
| 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   | · Vac   |
| Did DLCD receive a Notice of Proposed Amendmen   |   |
| 45-days prior to first evidentiary hearing?  | ✓ Yes □ No □ Yes □ No                         |
| If no, do the statewide planning goals apply?  If no, did Emergency Circumstances require immed  | - 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1      |
|  |   |
| DLCD File No. 001-09 (17805) [15839]   |   |

|   |            | Local Governments or Special Districts:  ncy (FEMA); Oregon Emergency  Management (OEM) |
|---|------------|---|
| Local Contact: Sheryl.  Address: P.O. Box 3 | Simmons    | Phone: (541)444-2521 Extension:   |
| Address: P.O. Box 3                         | 8          | Fax Number: 541 - 444 7371  |
| City: Siletz                                | Zip: 97388 | E-mail Address: chiletz@gwestoffice. net  |

### ADOPTION SUBMITTAL REQUIREMENTS

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

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

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

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

#### Ordinance No. 186

City of Siletz Flood Plain Management Ordinance Repealing Ordinance No. 108

#### Section 1.0

#### STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES

#### 1.1 STATUTORY AUTHORIZATION

The Legislature of the State of Oregon has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the City Council of the City of Siletz, Oregon does ordain as follows:

#### 1.2 FINDINGS OF FACT

- (1) The flood hazard areas of the City of Siletz are subject to periodic inundation which results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards, which increase flood heights and velocities, and when adequately anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated, or otherwise protected from flood damage also contribute to the flood loss.

#### 1.3 STATEMENT OF PURPOSE

It is the purpose of this ordinance to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money and costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
- (6) To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (7) To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- (8) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

#### 1.4 METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, this ordinance includes methods and provisions for:

- (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; and
- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas.

## Section 2.0 DEFINITIONS

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application.

"APPEAL" means a request for a review of the Planning Commission and City Council's interpretation of any provision of this ordinance or a request for a variance.

"AREA OF SHALLOW FLOODING" means a designated AO or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

"AREA OF SPECIAL FLOOD HAZARD" means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

"BASE FLOOD," means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A or V.

"DEVELOPMENT" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

"FLOOD" OR "FLOODING," means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters; and/or
- (2) The unusual and rapid accumulation of runoff of surface waters from any source.

"FLOOD INSURANCE RATE MAP (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

<u>"FLOOD INSURANCE STUDY"</u> means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

<u>"FLOODWAY"</u> means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

"LOWEST FLOOR" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance found at Section 5.2-1(2).

"MANUFACTURED HOME" means a structure, transportable in one or more sections, which is built on a 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 park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days.

"MANUFACTURED HOME PARK OR SUBDIVISION" means a parcel (or contiguous parcels) or land divided into five or more manufactured home lots for rent or sale.

"NEW CONSTRUCTION" means structure for which the "start of construction" commenced on or after the effective date of this ordinance.

"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 of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; not does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling unit or not part of the main structure.

"STRUCTURE" means a walled and roofed building including a gas or liquid storage tank that is principally above ground.

<u>"SUBSTANTIAL IMPROVEMENT"</u> means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure either:

- (1) before the improvement or repair is started; or
- 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, however, include either:

- (1) any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions; or
- (2) any alteration of a structure listed on the National Register of Historic Places or a State of Inventory of Historic Places.

"VARIANCE" means a grant of relief from the requirements of this ordinance, which permits construction in a manner that would otherwise be prohibited by this ordinance.

#### Section 3.0 GENERAL PROVISIONS

#### 3.1 LAND TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazard within the jurisdiction of the City of Siletz.

#### 3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Lincoln County and Incorporated Areas" dated December 18, 2009, with accompanying Flood Insurance Rate Maps (FIRM) is hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study is on file at the Siletz City Hall, Siletz, Oregon.

#### 3.3 ABROGATION AND GREATER RESTRICTIONS

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

#### 3.4 INTERPRETATION

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

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and

(3) Deemed neither to limit nor repeal any other powers granted under State Statutes.

#### 3.5 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance 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 ordinance shall not create liability on the part of the City of Siletz, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

#### Section 4.0 ADMINISTRATION

#### 4.1 ESTABLISHMENT OF DEVELOPMENT PERMIT

#### 4.1-1 Development Permit Required

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.2. The permit shall be for all structures including manufactured homes, as set forth in the "DEFINITIONS," and for all development including fill and other activities, also set forth in the "DEFINITIONS."

#### 4.1-2 Application for Development Permit

Application for a development permit shall be made on forms furnished by the City Recorder and may include but not be limited to; plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- (1) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
- (2) Elevation in relation to mean sea level to which any structure has been flood proofed:
- (3) Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in Section 5.2-2; and
- (4) Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

#### 4.2 DESIGNATION OF THE CITY COUNCIL

The City Council is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.

#### 4.3 DUTIES AND RESPONSIBILITIES OF THE CITY COUNCIL

Duties of the City Council shall include, but not be limited to:

#### 4.3-1 Permit Review

- Review all development permits to determine that the permit requirements of this ordinance have been satisfied.
- (2) Review all 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 all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 5.3(1) are met.

#### 4.3-2 Use of other Base Flood Data

When base flood elevation data has not been provided in accordance with Section 3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the City Council obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Sections 5.2 SPECIFIC STANDARDS and 5.3 FLOODWAYS.

#### 4.3-3 <u>Information to be Obtained and Maintained</u>

- (1) Where base flood elevation data is provided through the Flood Insurance Study or required as in Section 4.3-2, obtain and record the actual elevation (in relation to mean seal level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
- (2) For all new or substantially improved flood proofed structures:
  - (i) verify and record the actual elevation (in relation to mean sea level); and
  - (ii) maintain the flood proofing certifications required in Section 4.1(3).
- (3) Maintain for public inspection all records pertaining to the provisions of this ordinance.

#### 4.3-4 <u>Alteration of Watercourses</u>

(1) Notify adjacent communities and the Dept. of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

(2) Require that maintenance be provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

#### 4.3-5 <u>Interpretation of FIRM Boundaries</u>

Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided by Section 4.4.

#### 4.4 VARIANCE PROCEDURES

#### 4.4-1 Appeal Board

- (1) The Appeal Board as established by the Siletz City Council shall hear and decide appeals and requests for variances from the requirements of this ordinance.
- (2) The Appeal Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the City Council in the enforcement or administration of this ordinance.
- (3) In passing upon such applications, the Appeal Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
  - (i) the danger that materials may be swept onto other lands to the injury of others;
  - (ii) the danger to life and property due to flooding or erosion damage;
  - (iii) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
  - (iv) the importance of the services provided by the proposed facility to the community;
  - (v) the necessity to the facility of a waterfront location, where applicable;
  - (vi) the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
  - (vii) the compatibility of the proposed use with existing and anticipated development;
  - (viii) the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
  - (ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;
  - (x) 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; and
  - (xi) 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.

- (4) Upon consideration of the factors of Section 4.4-1(4) and the purposes of this ordinance, the Appeal Board may attach such conditions to the granting of variances, as it deems necessary to further the purposes of this ordinance.
- (5) The City Recorder shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

#### 4.4-2 Conditions for Variances

- (1) Generally, the only conditions under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (i-xi) in Section 4.4-1(4) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
- (2) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this section.
- (3) Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- (4) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (5) Variances shall only be issued upon:
  - (i) a showing of good and sufficient cause;
  - (ii) a determination that failure to grant the variance would result in exceptional hardship to applicant;
  - (iii) 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 as identified in Section 4.1-4(4), or conflict with existing local laws or ordinances.
- (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 issued for nonresidential buildings in very limited circumstances to allow a lesser degree of flood proofing than watertight or dry-flood proofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except 4.4-2(1), and otherwise complies with Sections 5.1-1 and 5.1-2 of the GENERAL STANDARDS.

(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.

## Section 5.0 PROVISIONS FOR FLOOD HAZARD REDUCTION

#### 5.1 GENERAL STANDARDS

In all areas of special flood hazards, the following standards are required:

#### 5.1-1 Anchoring

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- All manufactured homes must likewise be anchored to prevent flotation, 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).

#### 5.1-2 <u>Construction Materials and Methods</u>

- (1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- (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.

#### 5.1-3 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 systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and
- On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

#### 5.1-4 Subdivision Proposals

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
- (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
- (4) Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

#### 5.1-5 Review of Building Permits

Where elevation data is not available through Flood Insurance Study or from another authoritative source (Section 4.3-2), applications for building permits shall be reviewed to assure that 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 evaluate at least two feet above grade in these zones may result in higher insurance rates.

#### 5.2 SPECIFIC STANDARDS

- (1) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to at least one foot above base flood elevation.
- (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:
  - (i) 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.
  - (ii) The bottom of all openings shall be no higher than one foot above grade.
  - (iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

#### 5.2-2 <u>Nonresidential Construction</u>

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to at least one 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 hydrodynamic loads and effects of buoyancy;

- (3) be certified by a registered engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 4.3-3(2).
- (4) Nonresidential structures that are elevated, not flood proofed, must meet the same standards for space below the lowest floor as described in 5.2-1(2).
- (5) Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g., a building constructed to the base flood level will be rated as one foot below that level).

#### 5.2-3 <u>Manufactured Homes</u>

All manufactured homes to be placed or substantially improved within Zones A1-30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at least eighteen inches above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection 5.1-1(2).

#### 5.2-4 Below Grade Crawl Spaces

Below-grade crawlspaces are allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas:

- (1) The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section 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.
- (2) The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
- (3) Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.

- (4) Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.
- (5) The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.
- (6) The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the 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.
- (7) There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.
- (8) The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

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

#### 5.2-5 Recreational Vehicles

A recreational vehicle placed as otherwise permitted by applicable city ordinances shall:

- (1) Be located on site fewer than 180 consecutive days;
- (2) Be fully licensed for highway use;
- (3) Be on its wheels or jacking system;
- (4) Be attached to the site only by quick disconnect type utilities and security devices; and
- (5) Have no permanently attached additions.

#### 5.3 FLOODWAYS

Located within areas of special flood hazard established in Section 3.2 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- (1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) If Section 5.3(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 5.0, PROVISIONS FOR FLOOD HAZARD REDUCTION.
- (3) Pursuant to Section 3-2.4.2 of the Oregon Manufactured Dwelling and Parks Specialty Code as enacted by OAR 918-500-020, new installation of manufactured dwellings is prohibited except where such installation is replacing an existing, lawfully placed manufactured dwelling and the installation complies with all other applicable provisions of this section.

| ADOPTED BY following vote: | THE City Council of the City of Siletz, Oregon on this 12th day of, 2009, by the |
|----------------------------|--|
| Yeas:                      | 5  |
| Nays:                      | 0  |

ATTEST:

City Recorder

Absent: O

Lesly Steller



