ARTICLE 5. SPECIAL PURPOSE DISTRICTS

SECTION 5.0000. SPECIAL PURPOSE DISTRICTS

A special purpose district is an overlay district which may be combined with any portion of any zone as appropriate to the purpose of the district. The regulations of a special purpose district may add to or modify the requirements of the underlying zone and the regulations of the special purpose district and the zone shall all apply. Where the requirements of a special purpose overlay district and the underlying base zone conflict, the regulations that are more restrictive shall control. The boundaries of special purpose districts are shown on the Clatsop County Land and Water Development Map and Columbia River Estuary Resource Base Maps. These maps are hereby adopted by this reference as a part of this Ordinance.

Each special purpose district and the abbreviated designation suffix are listed in Table 5.1.

SPECIAL PURPOSE OVERLAY (ABBREVIATION)	BOUNDARY
Airport (AO)	
Aquifer Reserve (ARO)	
Beaches and Dunes (BDO)	All beach and dune landforms to the eastern limit of Highway 101.
Destination Resort (DRO)	
Dredged Material Disposal (DMD)	The area of Dredged Material Disposal identified on the Columbia River Estuary Resource Base Maps dated September 30, 1983.

Table 5.1 Special Purpose Overlays, Abbreviations, and Boundaries

SPECIAL PURPOSE OVERLAY (ABBREVIATION)	BOUNDARY
Flood Hazard (FHO)	 The areas of flood hazards identified by the Federal Emergency Management Agency (FEMA) in reports entitled: The Flood Insurance Study (FIS), #41007CV001B and #41007CV002B, dated June 20, 2018, Version Number 2.3.2.0, for unincorporated areas of Clatsop County and accompanying Digital Flood Insurance Rate Maps (DFIRM) and Flood Boundary and Floodway maps dated effective June 20, 2018; and The Flood Insurance Study (FIS) #41007CV001A and #41007CV002A, dated September 17, 2010, for unincorporated areas of Clatsop County and Flood Boundary and Flood Boundary and Flood Boundary and #41007CV002A, dated September 17, 2010, for unincorporated areas of Clatsop County and Flood Boundary and Flood Boundary and Flood Boundary and Flood Boundary and Floodway maps dated
Geologic Hazard (GHO)	effective September 17, 2010. Areas identified by the Oregon Department of Geology and Mineral Industries (DOGAMI) as having a moderate, high or very high likelihood of landslide activity.
Mitigation Site Reserve (MIT)	The area of Mitigation identified on the Columbia River Estuary Resource Base Maps dated September 30, 1983.
Planned Development (PDO)	
Quarry and Mining (QMO)	
Restoration Inventory Sites (RIS)	The area of Restoration identified on the Columbia River Estuary Resource Base Maps dated September 30, 1983.
Rural Community (RCO)	
Sensitive Bird Habitat (SBHO)	

SPECIAL PURPOSE OVERLAY (ABBREVIATION)	BOUNDARY
Shoreland (SO)	 Elk Creek Estuary Coastal Shorelands boundary as identified on the Elk Creek Estuary Map of the Elk Creek Estuary section of the Estuarine Resources and Coastal Shorelands Element of the Clatsop County Comprehensive Plan dated September 30, 1983; and Necanicum River Estuary Coastal Shorelands boundary as identified on the Elk Creek Estuary Map of the Elk Creek Estuary section of the Estuarine Resources and Coastal Shorelands Element of the Clatsop County Comprehensive Plan dated September 30, 1983; and Columbia River Estuary Coastal Shorelands boundary as identified on the Columbia River Estuary Resource Maps dated July 2002; and Coastal Shorelands boundary as identified on the Ocean and Coastal Lake Shorelands Maps of the Ocean and Coastal Lake Shorelands Element of the Clatsop County Comprehensive Plan dated September 30, 1983.

SECTION 5.1000. FLOOD HAZARD OVERLAY (FHO)

Section 5.1010. Purpose

The purpose of the flood hazard overlay district is to identify those areas of the County subject to the hazards of periodic flooding and establish standards and regulations to reduce flood damage or loss of life in those areas. This district shall apply to all areas of special flood hazards within the unincorporated areas of Clatsop County as identified on Flood Insurance Rate Maps (FIRM) and Flood Boundary and Floodway Maps. In advancing these principles and the general purposes of the Clatsop County County Comprehensive Plan, the specific objectives are:

- 1) To promote the general health, welfare and safety of the County;
- 2) To prevent the establishment of certain structures and land uses unsuitable for human habitation because of the danger of flooding, unsanitary conditions or other hazards;
- 3) To minimize the need for rescue and relief efforts associated with flooding;
- 4) To help maintain a stable tax base by providing for sound use and development in flood- prone areas and to minimize prolonged business interruptions;
- 5) To minimize damage to public facilities and utilities located in flood hazard areas;
- 6) To insure that potential home and business buyers are notified that property is in a flood area.

The areas of special flood hazard are identified in "The Flood Insurance Study (FIS) #41007CV001B and #41007CV002B, dated June 20, 2018, Version Number 2.3.2.0, for unincorporated areas of Clatsop County" and in "The Flood Insurance Study (FIS) #41007CV001A and #41007CV002A, dated September 17, 2010, for unincorporated areas of Clatsop County".

Section 5.1020. Definitions

The following words and phrases shall be interpreted so as to give them the meanings they have in common usage and to give this chapter its most reasonable application:

"ACCESSORY STRUCTURE" means a structure on the same or adjacent parcel as a principal structure, the use of which is incidental and subordinate to the principal structure. A separate insurable building should not be classified as an accessory or appurtenant structure

"ALTERATION OF A WATERCOURSE" includes, but is not limited to, any dam, culvert, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area or capacity, which may alter, impede, retard or change the direction and/or velocity of the riverine flow of water during conditions of the base flood.

"AREA OF SHALLOW FLOODING" means a designated AO or AH zone on the Flood Insurance Rate Map (FIRM) with a one percent or greater chance of flooding to an average depth of 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" is the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Zone designations on FIRMs include the letters A or V. Also known as the Special Flood Hazard Area (SFHA)

"**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.

"**BASE FLOOD ELEVATION (BFE)**" means the water surface elevation during the base flood in relation to a specified datum. The Base Flood Elevation (BFE) is depicted on the FIRM to the nearest foot and in the FIS to the nearest 0.1-foot.

"**BASEMENT**" means any area of the building having its floor subgrade (below ground level) on all sides.

"**BELOW-GRADE CRAWLSPACE**" means an enclosed area below the base flood elevation in which the interior grade is not more than two 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.

"**BREAKAWAY WALL**" means a wall that is not a part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

"BUILDING" means a building or structure subject to building codes.

"BUILDING CODES" means the combined specialty codes adopted under ORS 446.062, 446.185, 447.020 (2), 455.020 (2), 455.496, 455.610, 455.680, 460.085, 460.360, 479.730 (1) or 480.545, but does not include regulations adopted by the State Fire Marshal pursuant to ORS chapter 476 or ORS 479.015 to 479.200 and 479.210 to 479.220.

"COASTAL HIGH-HAZARD AREA" means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any

other area subject to high velocity wave action from storms or seismic sources. The area is designated in the FIRM as Zone V1-V30, VE or V.

"CRITICAL FACILITIES" means those structures or facilities which produce, use, or store highly volatile, flammable, explosive, toxic, and/or water-reactive materials; hospitals, nursing homes, and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood; police stations, fire stations, vehicle and equipment storage facilities, and emergency operations centers that are needed for flood response activities before, during, and after a flood; and public and private facilities that are vital to maintaining or restoring normal services to flooded areas before, during and after a flood.

"DATUM" is a base measurement point (or set of points) from which all elevations are determined. Historically, that common set of points has been the National Geodetic Vertical Datum of 1929 (NAVD29). The vertical datum currently adopted by the federal government as a basis for measuring heights is the North American Vertical Datum of 1988 (NAVD88).

"DEVELOPMENT" means any manmade change to improved or unimproved real property, 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.

"**DIGITAL FIRM (DFIRM)**," means Digital Flood Insurance Rate Map. It depicts flood risk and zones and flood risk information The DFIRM presents the flood risk information in a format suitable for electronic mapping applications.

"ENCROACHMENT" means the advancement or infringement of uses, fill, excavation, buildings, permanent structures or other development into a floodway which may impede or alter the flow capacity of a floodplain.

"ELEVATED BUILDING" means a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.

"EXISTING BUILDING OR STRUCTURE" means a structure for which the "start of construction" commenced before July 3, 1978.

"EXISTING MANUFACTURED HOME PARK OR SUBDIVISION" means one in which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed is completed before the effective date of Clatsop County's floodplain management regulations July 3, 1978. The "construction of facilities includes, at a

minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.

"FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)" means the agency with the overall responsibility for administering the National Flood Insurance Program.

"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 HAZARD BOUNDARY MAP" means the official map used by the Federal Insurance Administrator where the boundaries of the areas of special flood hazard have been designated.

"FLOOD INSURANCE RATE MAP (FIRM)" means an official map of a community, on which the Federal Insurance administrator has delineated both the special hazard areas and the risk premium zones applicable to the community.

"FLOOD INSURANCE STUDY (FIS)" means the official report provided by the Federal Insurance Administrator that includes flood profiles, the flood boundary-floodway map and the water surface elevation of the base flood.

"FLOOD PROOFING" means any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

"FLOODPLAIN ADMINISTRATOR" means the Community Development Director, or an individual or committee that is designated by the Director, to implement and administer the provisions of this ordinance.

"FLOODWAY" 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.

"HIGHEST ADJACENT GRADE" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"HISTORIC STRUCTURE" means a structure that is:

1) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary

of the Interior as meeting the requirements for individual listing on the National Register;

- Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or to a district preliminarily determined by the Secretary to qualify as a registered historic district;
- Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- 4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (A) By an approved state program as determined by the Secretary of the Interior, or
 - (B) Directly by the Secretary of the Interior in states without approved programs.

"**LATERAL ADDITION**" means an addition that requires a foundation to be built outside of the foundation footprint of the existing building.

"LETTER OF MAP CHANGE (LOMC)" means an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and Flood Insurance Studies. LOMCs are issued in the following categories:

Letter of Map Amendment (LOMA)

A revision based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a special flood hazard area.

Letter of Map Revision (LOMR)

A revision based on technical data showing that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination that a structure of parcel has been elevated by fill above the base flood elevation and is excluded from the special flood hazard area.

Letter of Map Revision Based on Fill – (LOMR-F)

A modification of the Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (FIRM), based on the placement of fill outside the existing regulatory floodway.

Conditional Letter of Map Revision (CLOMR)

A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does NOT amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.

"LOWEST FLOOR" 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 chapter.

"MANUFACTURED DWELLING" (aka manufactured housing) means 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. The term "manufactured dwelling" does not include a recreational vehicle.

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

"**MEAN SEA LEVEL (MSL)**" means the North American Vertical Datum (NGVD) of 1988 or other datum, to which base flood elevations shown on the flood insurance rate map are referenced.

"**NATURAL ELEVATION**" means the elevation of natural grade, or the grade in existence before July 3, 1978.

"**NEW CONSTRUCTION**" means a structure for which the "start of construction" commenced after July 3, 1978 and includes subsequent substantial improvements to the structure.

"NEW MANUFACTURED HOME PARK OR SUBDIVISION" means a manufactured home park or subdivision for which the construction of facilities for serving the 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 on or after the effective date of floodplain management regulations adopted by Clatsop County.

"**RECREATION VEHICLE**" means a vehicle which is (1) built on a single chassis, (2) four hundred (400) square feet or less when measured at the largest horizontal

projection, (3) designed to be self-propelled or permanently towed by a light-duty truck, and (4) designed primarily not for use as temporary living quarters for recreational, camping, travel or seasonal use.

"SPECIAL FLOOD HAZARD AREA (SFHA)" means areas subject to inundation from the waters of a one-hundred-year flood.

"START OF CONSTRUCTION" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement was within one hundred eighty 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 a slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and walkways; nor does it include excavation for a basement, footings, piers or foundation 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.

"STRUCTURE" means a walled and roofed building, a manufactured dwelling, a modular or temporary building, or a gas or liquid storage tank that is principally above ground.

"SUBSTANTIAL DAMAGE" means the damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damage condition would equal or exceed 50-percent of the market value of the structure before the damage occurred.

"SUBSTANTIAL IMPROVEMENT" means any repair, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "repetitive loss" or "substantial damage," regardless of the actual repair work performed. The market value of the structure should be:

(1) the appraised value of the structure prior to the start of the initial repair or improvement, or

- (2) in the case of damage, the value of the structure prior to the damage occurring. This term includes structures which have incurred "substantial damage", regardless of the actual amount of repair work performed. The term does not include either:
 - (a) A project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
 - (b) Alteration of an Historic Structure, provided that the alteration will not preclude the structure's continued designation as an Historic Structure.

"**VERTICAL ADDITION**" means the addition of a room or rooms on top of an existing building.

"WATERCOURSE" means a lake, river, creek, stream, wash, arroyo, channel or other topographic feature in, on, through, or over which water flows at least periodically.

"WATER-DEPENDENT" means a use or use and activity which can only be carried out on, in or adjacent to water areas because the use requires access to the waterbody for water-borne transportation, recreation, energy production, or source of water.

"WATER SURFACE ELEVATION" means the height, in relation to mean sea level, of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

Section 5.1030. 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, including state building codes.

Section 5.1040. Floodplain Administrator Duties and Responsibilities

1) Permit Review

The Floodplain Administrator duties shall include, but not be limited to, the following:

(A) Review all development permit applications to determine whether proposed new development will be located in Areas of Special Flood Hazard and to determine that all new development complies with the requirements of this ordinance;

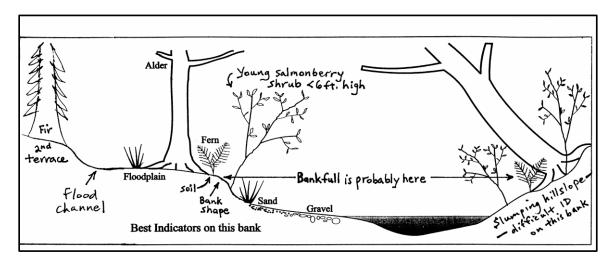
- (B) Review applications for modifications of any existing development in Areas of Special Flood Hazard for compliance with the requirements of this ordinance;
- (C) Review proposed development to assure that necessary permits have been received from those Federal, State or local governmental agencies from which prior approval is required. Copies of such permits shall be provided and maintained on file.
- (D) Review all development permit applications for property in a Special Flood Hazard Area to determine if the proposed development is located in the floodplain or floodway, and if located in a floodway, ensure that the encroachment standards of Section 5.1140 are met.
- (E) Issue floodplain development permits when the provisions of this ordinance have been met, or disapprove the same in the event of noncompliance;
- (F) Coordinate with the Building Official to assure that applications for buildings permits comply with the requirements of this ordinance.
- 2) Use of Base Flood Data
 - (A) Interpret flood hazard area boundaries, provide available flood hazard information, and provide base flood elevations, where they exist;
 - (B) When Base Flood Elevation data or floodway data are not available, then the Floodplain Administrator 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 ordinance.
 - (C) When Base Flood Elevations or other current engineering data are not available, the Floodplain Administrator shall take into account the flood hazards, to the extent they are known, to determine whether a proposed building site will be reasonably safe from flooding.
- 3) Interpretation of FIRM Boundaries
 - (A) Make interpretations, as needed, of the exact location of boundaries of the Areas of Special Flood Hazard, including regulatory floodways (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 5.1090.
- 4) Obtain and Maintain Information
 - (A) Obtain, verify and record the actual elevation in relation to the vertical datum used on the effective FIRM, or highest adjacent grade where no BFE is available, of the lowest floor level, including basements and belowgrade crawlspaces, of all new construction or substantially improved buildings and structures.
 - (B) Obtain, verify and record the actual elevation, in relation to the vertical datum used on the effective FIRM, or highest adjacent grade where no

BFE is available, to which any new or substantially improved buildings or structures have been flood-proofed. When flood-proofing is utilized for a structure, the Floodplain Administrator shall obtain certification of design criteria from a registered professional engineer or architect;

- (C) Ensure that all records pertaining to the provisions of this ordinance are permanently maintained in the office of Community Development and shall be open for public inspection.
- (D) Make inspections in Areas of Special Flood Hazard to determine whether development has been undertaken without issuance of a floodplain development permit, ensure that development is undertaken in accordance with this ordinance, and verify that existing buildings and structures maintain compliance with this ordinance;
- (E) Coordinate with the Building Official to inspect areas where buildings and structures in flood hazard areas have been damaged, regardless of the cause of damage, and notify owners that permits may be required prior to repair, rehabilitation, demolition, relocation, or reconstruction of the building or structure;
- (F) Make Substantial Damage or Substantial Damage determinations based on criteria set forth in Section 5.1110 of this ordinance.

Section 5.1050. Alteration of Water Courses

1) The bankfull flood carrying capacity of the altered or relocated portion of the water course shall not be diminished. Prior to issuance of a floodplain development permit, the applicant must submit a description of the extent to which any water course will be altered or relocated as a result of the proposed development and submit certification by a registered professional engineer that the bankfull flood carrying capacity of the water course will not be diminished.



- 2) The applicant shall notify adjacent communities, the U.S. Army Corps of Engineers, Oregon Department of State Lands, and Oregon Department of Land Conservation and Development prior to any alteration or relocation of a water source. Evidence of notification must be submitted to the floodplain administrator and to the Federal Emergency Management Agency.
- 3) The applicant shall be responsible for providing the necessary maintenance for the altered or relocated portion of the watercourse so that the flood carrying capacity will not be diminished.
- 4) The applicant shall meet the requirements to submit technical data in Section 5.1200 when the alteration of a watercourse, including the placement of culverts, results in the relocation or elimination of the special flood hazard area.

Section 5.1060. Non-Conversion of Enclosed areas below the Lowest Floor

To ensure that the areas below the BFE continue to be used solely for parking vehicles, limited storage, or access to the building and not be finished for use as human habitation without first becoming fully compliant with the floodplain management ordinance in effect at the time of conversion, the Floodplain Administrator shall:

- 1) Determine which applicants for new construction and/or substantial improvements have fully enclosed areas below the lowest floor that are 5 feet or higher;
- 2) Enter into a "NON-CONVERSION AGREEMENT FOR CONSTRUCTION WITHIN FLOOD HAZARD AREAS" or equivalent with Clatsop County. The agreement shall be recorded with the Clatsop County Clerk as a deed restriction. The non-conversion agreement shall be in a form acceptable to the Floodplain Administrator and County Counsel; and
- 3) Have the authority to inspect any area of a structure below the base flood elevation to ensure compliance upon prior notice of at least 72 hours.

Section 5.1070. Floodplain Inspection and Enforcement

- 1) The Administrator or designee shall make periodic inspections of floodplain areas to establish that development activities within the floodplain are being performed in compliance with an approved floodplain development permit. The Administrator or designee shall prepare a field report listing non-complying conditions to be delivered to the Code Compliance Officer within 5 business days.
- 2) Upon receipt of the report the Code Compliance Officer shall take action in accordance with Clatsop County Code of Regulations to effect the abatement of such violation.

3) If the violation is not resolved through code enforcement the Floodplain Administrator shall request to the Administrator of Federal Insurance Administration a declaration for denial of insurance, stating that the property is in violation of a cited statute or local law, regulation or ordinance, pursuant to section 1316 of the National Flood Insurance Act of 1968 as amended.

Section 5.1080. Warning and Disclaimer of Liability

The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on engineering and scientific considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade 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 a liability on the part of Clatsop County or by an officer, or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made there under.

Section 5.1090. Appeals

An appeal of a Floodplain Administrator decision pursuant to this chapter may be appealed in accordance with Section 2.2190. Appeals of a decision by the Hearings Officer pursuant to this chapter may be appealed in accordance with Clatsop County Code of Regulations.

Section 5.1100. Permit Procedures

A Floodplain Development Permit shall be obtained before construction or development begins within any area of special flood hazard. Application for a Floodplain Development Permit shall be made to the Floodplain Administrator on forms furnished by the Administrator or the Administrator's designee prior to starting development activities. Specifically, the following information is required:

- 1) Application Stage:
 - Plans in duplicate drawn to scale with elevations of the project area and the nature, location, dimensions of existing and proposed structures, earthen fill placement, storage of materials or equipment and drainage facilities.
 - (B) Delineation of flood hazard areas, floodway boundaries including base flood elevations, or flood depth in AO zones, where available;
 - (C) For all proposed structures, elevation in relation to the highest adjacent grade and the base flood elevation, or flood depth in AO zones, of the:
 - 1. lowest enclosed area, including crawlspace or basement floor;
 - 2. bottom of the lowest horizontal structural member in coastal high hazard areas (V Zones);

- 3. top of the proposed garage slab, if any, and;
- 4. next highest floor
- (D) Locations and sizes of all flood openings;
- (E) Elevation to which any non-residential structure will be flood-proofed;
- (F) Certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the floodproofing criteria of the NFIP and building codes;
- (G) Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development;
- 2) Construction Stage:
 - (A) For all new construction and substantial improvements, the permit holder shall provide to the Floodplain Administrator an as-built certification of the floor elevation or flood-proofing level immediately after the lowest floor or flood-proofing is placed and prior to further vertical construction.
 - (B) Any deficiencies identified by the Floodplain Administrator shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator to issue a stop-work order for the project.
- 3) Certificate of Occupancy
 - (A) In addition to the requirements of the building codes pertaining to certificate of occupancy, prior to the final inspection the owner or authorized agent shall submit the following documentation that has been prepared and sealed by a registered surveyor or engineer;
 - 1. For elevated buildings and structures in non-coastal Areas of Special Flood Hazard (A zones), the elevation of the lowest floor, including basement or where no base flood elevation is available the height above highest adjacent grade of the lowest floor;
 - 2. For buildings and structures in coastal Areas of Special Flood Hazard (V zones), the elevation of the bottom of the lowest horizontal structural member supporting the lowest floor.
 - (B) Failure to submit certification or failure to correct violations shall be cause for the Building Official to withhold a certificate of occupancy or delay a final building inspection until such deficiencies are corrected.
- 4) Expiration of Floodplain Development Permit
 - (A) Floodplain development permit shall expire 180 days after issuance unless the permitted activity has been substantially begun and thereafter is pursued to completion.
 - (B) Commencement of work includes start of construction, when the permitted work requires a building permit.

Section 5.1110. Substantial Damage and Substantial Improvement Determination

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

- 1) Estimate the market value, or require the applicant to obtain a professional appraisal of the market value, of the building or structure before the proposed work is performed; when repair of damage is proposed, the market value of the building or structure shall be the market value before the damage occurred;
- 2) Compare the cost of improvement, the cost to repair the damaged building to its pre-damaged condition, or the combined costs of improvements and repairs, if applicable, to the market value of the building or structure;
 - (Å) Except as indicated in subsections (D) and (E) below, all costs to repair substantial damage, including emergency repairs, must be included;
 - (B) The costs associated with the correction of pre-existing violations of state or local health, sanitary, or safety code specifications that were identified by the building official, the director of environmental health, or any other local code enforcement official prior to the improvement or repair and that are the minimum necessary to ensure safe living conditions shall not be included;
 - (C) Except as indicated in subsections (d) and (e) below, the costs of complying with any county, state, or federal regulation other than those described in subsection (b) must be included;
 - (D) Costs associated with the following items are not included:
 - 1. The preparation and approval of all required plans, calculations, certifications, and specifications;
 - 2. The performance of surveys or other geotechnical or engineering studies and resulting reports;
 - 3. Permit and review fees;
 - 4. The construction, demolition, repair, or modification of outdoor improvements, including landscaping, fences, swimming pools, detached garages and sheds, etc.;
 - (E) Proposed alterations of a designated historic building or structure is not to be considered substantial improvement unless the alteration causes a loss of said designation.
- 3) The Floodplain Administrator shall make the final determination of whether the proposed improvement and/or repair constitutes a substantial improvement or substantial damage;
- 4) The Floodplain Administrator shall notify the applicant of the results of the determination by letter,
- 5) Applicant has the right to appeal the determination pursuant to Section 5.1090.

Section 5.1120. Variances

A request for a variance from a standard contained in this chapter shall be reviewed in

accordance with the procedures of Section 2.8000-2.8030. The burden to show that the variance is warranted and meets the criteria is on the applicant.

When considering a variance application, the deciding body shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:

- 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 and floodplain management program 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; and,
- 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.

Upon consideration of the factors identified above and the purposes of this ordinance, the deciding body may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

The floodplain administrator shall maintain a permanent record of all variances and report any variances to the Federal Emergency Management Agency upon request.

The following standards are applicable to a variance request, not those of Section 2.8010:

1) Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items 1-11 in Section 5.1120 have been fully considered. As the lot size

increases the technical justification required for issuing the variance increases Variances shall only be issued upon:

(A) A showing of good and sufficient cause,

2)

- (B) A determination that failure to grant the variance would result in exceptional hardship to the applicant, and
- (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 ordinances.
- 3) Variances shall not be issued within any 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 may be issued for a water dependent use provided that
 - (A) The criteria of paragraphs (1) through (4) of this section are met, and;
 - (B) The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.
- 6) Variances may be issued for the repair restoration or rehabilitation 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 this section.
- 7) 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.
- 8) Variances may be issued 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 and otherwise complies with building codes.
- 9) When a variance is granted, the county shall give written notice to the property owner within five days after the decision is final. The notice shall state that:
 - (A) The structure or manufactured home will be allowed to be built or placed with the lowest floor elevation at or below the base flood elevation, and
 - (B) That the issuance of the variance to construct a structure below the base flood level will result in increased premium rates for flood insurance as high as twenty-five dollars for every one hundred dollars of insurance coverage, and
 - (C) Such construction below the base flood level increases the risk to life and property.

- (D) The above notification shall be maintained with a record of all variance actions.
- 10) Variance Time Limit. Authorization of a variance shall conform to the requirements of Section 2.8030.

Section 5.1130. Development Standards

1) General Standards

In all areas of special flood hazards as presented on the FIRM, the following standards shall apply for all new construction and substantial improvements: (A) Subdivisions:

- 1. All proposed new development and subdivisions shall be consistent with the need to minimize flood damage and ensure that building sites will be reasonably safe from flooding.
- 2. Residential building lots shall have adequate buildable area outside of floodways.
- 3. All new development proposals and subdivision preliminary plats/development plans shall include the mapped flood hazard zones from the effective FIRM.
- 4. Base flood elevation data shall be generated and/or provided for subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty lots or five acres, whichever is less.
- 5. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated and/or provided for subdivision proposals and all other proposed developments that contain at least 50 lots or five acres, whichever is less.
- 6. All new development in a subdivision shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize flood damage.
- 7. All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards. In AO and AH zones, drainage paths shall be provided to guide floodwater around and away from all proposed and existing structures.
- (B) Coastal High Hazard Area:
 - In coastal high hazard areas (V Zones), alteration of sand dunes shall be prohibited unless it has been demonstrated by engineering analysis that the alteration will not increase potential flood damage.
- (C) Tsunami Inundation Zone:
 - New essential and new special occupancy structures shall not be constructed in the Tsunami Inundation Zone. The Tsunami Inundation Zone may include V, A, and potentially other flood

zones. If an exception is granted then the Coastal High Hazard Area construction standards in this ordinance shall apply to the building of these new structures in the Tsunami Inundation Zone.

- (D) Building Design and Construction:
 - Buildings and structures, including manufactured dwellings, within the scope of the building codes, including repair of substantial damage and substantial improvement of such existing buildings and structures, shall be designed and constructed in accordance with the flood-resistant construction provisions of these codes, including but not limited to Section R322 of the Residential Specialty Code and Section 1612 of the Structural Specialty Code.
- (E) Construction Materials and Methods:
 - 1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - 2. All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
 - 3. Electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities shall be elevated to one foot above flood level so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (F) Review of Development Permits:
 - 1. Where elevation data is not available, either through the flood insurance study or from other administrative source, applications for development 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 elevate to at least two feet above grade in these zones may result in higher insurance rates.
- (G) Anchoring:
 - 1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
 - 2. All manufactured dwellings 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.
- (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; and
- C) On-site 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) Foundation Protection: A registered professional civil engineer shall develop or review the structural design, specifications and plans for the foundation of the building and shall certify that the design and methods of construction are in accordance with accepted practices to withstand flotation, collapse, lateral movement, erosion and scour, undermining, and the effects of water and wind acting simultaneously on all building components during the base flood.
- 2) Specific Standards

In all areas of special flood hazards where base flood elevation data has been provided (Zones A1-A30, AH and AE) as set forth in this ordinance, the following provisions are required:

- (A) Manufactured Dwellings:
 - 1. New and replacement manufactured dwellings are within the scope of the building codes; and,
 - 2. All new manufactured dwellings and replacement manufactured dwellings shall be installed using methods and practices which minimize flood damage and shall be securely anchored to prevent flotation, collapse and lateral movement during the base flood. Methods of anchoring include, but are not limited to, use of over-the-top or frame ties to ground anchors. Additional techniques may be found in FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
 - Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 5.1130(1)(E), above.
 - 4. Electrical crossover connections shall be a minimum of 12 inches above BFE.
- (B) Critical Facilities:

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA). 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 BFE

(or depth number in AO zones) or to the height of the 0.2 percent (500year) flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances or persistent organic pollutants as defined by the Oregon Department of Environmental Quality will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

- (C) Residential Construction:
 - 1. New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of one foot above the base flood elevation.
 - 2. Fully enclosed areas below the lowest floor that are subject to flooding 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 (1) 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 (1) foot above grade; and
 - c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (D) Non-Residential Construction:

New construction or substantial improvement of any commercial, industrial, or other non-residential structure shall either have the lowest floor, including basement, elevated to a minimum of 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 water tight 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 standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design,

specifications and plans. Such certification shall be provided as set forth in Section 5.1060(2).

- 4. Applicants floodproofing non-residential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building floodproofed to the base flood level will be rated as one foot below).
- 5. If construction will be elevated instead of floodproofed, fully enclosed areas below the lowest floor that are subject to flooding 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 (1) 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 (1) foot above grade; and
 - c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (E) Below-grade crawl spaces:
 - 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 2) below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.
 - The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
 - 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 be either placed above the BFE or sealed from floodwaters.

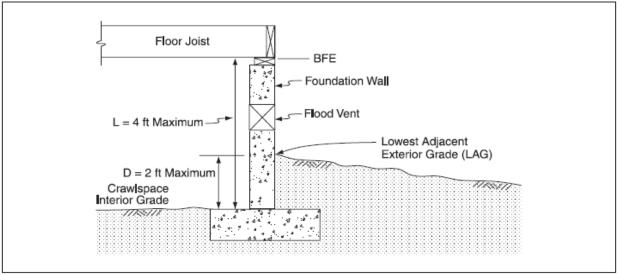


Figure 2: Requirements for below-grade crawlspace construction. (Provided by FEMA)

- 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 crawlspace shall not be temperature controlled.
- 7. 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.
- 8. 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.

- 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.
- 10. If the crawlspace provisions listed in 1) through 8) above are used written notice shall be given that the structure will be rated for flood insurance as having its lowest floor below the base flood elevation, and that the cost of flood insurance will be commensurate with that rating.
- (F) Fences and Walls:
 - 1. New fencing shall be designed to collapse under conditions of the base flood or to allow the passage of water by having flaps or openings in the areas at or below the base flood elevation sufficient to allow flood water and associated debris to pass freely.
- (G) On-site Sewage Systems:
 - Soil absorption systems shall be located outside of flood hazard areas. Where suitable soil absorption sites outside of the flood hazard area are not available, the soil absorption site is permitted to be located within the flood hazard area provided it is located to minimize the effects of inundation under conditions of the base flood.
 - 2. Mound systems in flood hazard areas shall be prohibited.
- (H) Tanks:
 - 1. Underground tanks in flood hazard areas shall be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the design flood.
 - 2. Above-ground tanks in flood hazard areas shall be:
 - 3. Attached to and elevated to or above the base flood elevation (or depth number in AO zones) on a supporting structure that is designed to prevent flotation, collapse or lateral movement during conditions of the design flood; or be
 - 4. Anchored or otherwise designed and constructed to prevent flotation, collapse or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the design flood.
 - 5. Tank inlets, fill openings, outlets and vents shall be:
 - a. A minimum of 2 feet above BFE or fitted with covers designed to prevent the inflow of floodwater or outflow of the contents of the tank during conditions of the design flood; and
 - b. Anchored to prevent lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of

buoyancy, during conditions of the design flood.

- Recreation Vehicle: In A1-30, AH, and AE Zones, all recreational vehicles to be placed on a site must:
 - 1. Be on the site for fewer than 180 consecutive days, and
 - 2. Be fully licensed and highway ready; or
 - 3. Be elevated and anchored.
- (J) Accessory Structures:
 - 1. Relief from the elevation or dry flood-proofing standards may be granted for an accessory structure containing no more than 200 square feet and not exceeding one story in height. Such a structure must meet the following standards:
 - 2. The accessory structure is not temperature controlled;
 - 3. The accessory structure shall be located on property with a dwelling;
 - 4. The accessory structure shall not be used for human habitation and shall be used solely for parking of vehicles or storage of items having low damage potential when submerged.
 - 5. Toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality shall not be stored below BFE, or where no BFE is available lower than three feet above grade, unless confined in a tank installed in compliance with this ordinance;
 - 6. The accessory structure shall be constructed of flood resistant materials.
 - 7. The accessory structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of flood waters;
 - 8. The accessory structure shall be firmly anchored to prevent flotation;
 - 9. All service facilities, such as electrical and heating equipment associated with the accessory structure, shall be elevated or flood proofed to or above the flood protection elevation, and;
 - It shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect, or
 - a. Provide a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - b. The bottom of all openings shall be no higher than one foot above the higher of the exterior or interior grade or floor

immediately below the opening;

- c. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions without manual intervention.
- (K) Temporary Structures, Storage, and Bridges:
 - 1. A floodplain development permit is required for construction or placement of temporary structures, temporary storage associated with non-residential uses, and temporary bridges located in areas of special flood hazard:
 - 2. Temporary structures, not including bridges, shall be limited as to time of service, but shall not be permitted for more than 90 days. The Floodplain Administrator is authorized to grant a one-time extension, not to exceed 45 days, for demonstrated cause; such cause shall reaffirm the temporary nature of the structure. Temporary structures shall be anchored to prevent flotation, collapse, or lateral movement.
 - 3. Temporary storage of materials shall be limited as to time of service, but shall not be permitted for more than 90 days. The Floodplain Administrator is authorized to grant a one-time extension, not to exceed 45 days, for demonstrated cause; such cause shall reaffirm the temporary nature of the storage. Stored material shall be anchored or contained to prevent flotation or release outside the assigned storage area. Hazardous materials or materials deemed to be persistent organic pollutants by the Oregon Department of Environmental Quality shall not be stored in the floodway.
 - 4. Temporary encroachments in the floodway for the purposes of capital improvement projects (including bridges) require a floodplain development permit. No CLOMR/LOMR is required.

Section 5.1140. Development in Floodways

- Except as provided in paragraphs (3) and (4), encroachments, including fill, new construction, substantial improvements, and other development are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that such encroachments shall not result in any increase in base flood or floodway elevations when compared to pre-project conditions.
- 2) Any fill allowed to be placed in the floodway shall be designed to be stable under conditions of flooding, including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and flood-related erosion and scour.

- 3) Applicants shall obtain a Conditional Letter of Map Revision (CLOMR) before an encroachment in the floodway is permitted that will cause any increase in the base flood elevation. Applicants must obtain a Letter of Map Revision (LOMR) no later than six months after project completion.
- 4) Construction of new fencing is prohibited, unless the fencing is designed to collapse or break-away, and is anchored at one end and cabled together so as to not create debris. As an alternative to a break-away design, a new fence may be designed to allow the passage of water by having a flap or opening in the areas at or below the base flood elevation sufficient to allow floodwaters to pass freely.

Section 5.1150. Zones with Base Flood Elevation but no Floodway

- 1) In areas within Zones A1-30 and AE on the community's FIRM with a base flood elevation, or where a base flood elevation is developed according to Section 5.1130(2) but where no regulatory floodway has been designated, new construction, substantial improvements, or other development (including fill) shall be prohibited, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- 2) Applicants of proposed projects that increase the base flood elevation more than one foot should obtain from FEMA a Conditional Letter of Map Revision (CLOMR) before the project may be permitted. Applicants must obtain a Letter of Map Revision (LOMR) no later than six months after project completion.

Section 5.1160. Zones Without Base Flood Elevations

- 1) These standards apply in riverine areas of special flood hazard where no base flood elevation data have been provided (A Zones):
- 2) When base flood elevation or floodway data have not been identified by FEMA in a Flood Insurance Study and /or Flood Insurance Rate Maps, the Floodplain Administrator shall obtain, review, and reasonably utilize scientific or historic base flood elevation and floodway data available from a federal, state, or other source, in order to administer this ordinance. If data are not available from any source, only then subsection 3 shall apply.
- 3) Where the floodplain administrator has obtained base flood elevation data, applicants of proposed projects that increase the base flood elevation more than one foot shall obtain from FEMA a Conditional Letter of Map Revision (CLOMR) before the project may be permitted. Applicants must obtain a Letter of Map Revision (LOMR) no later than six months after project completion.
- 4) In special flood hazard areas without base flood elevation data, no encroachments, including structures or fill, shall be located in an Area of Special Flood Hazard within an area equal to the width of the stream or fifty feet, whichever is greater, measured from the ordinary high water mark, unless a base

flood elevation is developed by a licensed professional engineer.

Section 5.1170. Coastal High Hazard Area

All other development in coastal high hazard areas (V Zones) for which specific provisions are not specified in this ordinance or building codes, shall:

- 1) All new construction and substantial improvements in Zones V1-V30 and VE (V if base flood elevation data is available) shall be elevated on pilings and columns so that:
 - (A) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated a minimum of one foot above the base flood level; and
 - (B) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent change of being equaled or exceeded in any given year (100-year mean recurrence interval).
- 2) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of 1(A) and 1(B) of this section.
- 3) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1-30, VE and V, and whether or not such structures contain a basement. The local administrator shall maintain a record of all such information.
- 4) All new construction shall be located landward of the reach of mean high tide.
- 5) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 - (A) Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and

- (B) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural. Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year (100year mean recurrence interval).
- 6) If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.
- 7) Prohibit the use of fill for structural support of buildings.
- 8) Prohibit man-made alteration of sand dunes which would increase potential flood damage.
- All manufactured homes to be placed or substantially improved within Zones V1-V30, V and VE that are:
 - (A) Outside of a manufactured home park or subdivision;
 - (B) In a new manufactured home park or subdivision;
 - (C) In an expansion to an existing manufactured home park or subdivision, or
 - (D) In an existing manufactured home park or subdivision on which a manufactured home has incurred substantial damage as the result of a flood

shall comply with the requirements of Section 5.1170(1)-(8). Manufactured homes placed or substantially improved on all other sites in an existing manufactured home park or subdivision shall comply with the requirements of Section 5.1130(2)(A).

- 10) Recreational vehicles places on sites within Zones V1-V30, V and VE shall:
 - (A) Be on the site for fewer than 180 consecutive days;
 - (B) Be fully licensed and ready for highway use, on its wheels or jacking systems and attached to the site only by quick disconnect type utilities and security devices, and have to permanently attached additions; or
 - (C) Meet the requirements of Section 5.1170(1)-(8).

Section 5.1180. Non-Coastal High Hazard Areas

- 1) All development in non-coastal high hazard areas (A zones) for which specific provisions are not specified in this ordinance or building codes, shall:
- 2) Be located and constructed to minimize flood damage;
- 3) Be designed so as not to impede flow of flood waters under base flood conditions;
- 4) If located in a floodway, meet the limitations of Section 5.1150 of this ordinance;
- 5) Be anchored to prevent flotation or lateral movement resulting from hydrostatic loads, including the effects of buoyancy, during conditions of the design flood;

- 6) Be constructed of flood damage-resistant materials; and
- 7) Have electric service and or mechanical equipment elevated above the base flood elevation (or depth number in AO zones), except for minimum electric service required to address life safety and electric code requirements.

Section 5.1190. Specific Standards for Areas of Shallow Flooding (AO and AH Zone)

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

- 1) New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building, a minimum of one foot above the depth number specified on the FIRM (at least two feet if no depth number is specified).
- 2) New construction and substantial improvements of nonresidential structures within AO zones shall either:
 - (A) Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified); or
 - (B) Together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in section 5.1130(2)(E).
- 3) Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
- 4) Recreational vehicles placed on sites within AO zones on the community's FIRM either:
 - (A) Be on the site for fewer than 180 consecutive days, and
 - (B) Be fully licensed and ready for high use, 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; or
 - (C) Meet the requirements of Section 5.1170(1)-(8).

Section 5.1200. Requirement to Submit New Technical Data

- 1) Within six months of project completion, an applicant who obtains an approved Conditional Letter of Map Revision (CLOMR) from FEMA, or whose development modifies floodplain boundaries, modifies base flood elevations, or alters a watercourse, shall obtain from FEMA a Letter of Map Revision (LOMR) reflecting the as-built changes to the FIRM.
- 2) It is the responsibility of the applicant to have technical data prepared in a format required for a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) and to submit such data to FEMA on the appropriate application forms. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.
- 3) Clatsop County shall be under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR application, until the applicant demonstrates that the project will or has met the requirements of this code and all applicable State and Federal laws.

SECTION 5.2000. TSUNAMI INUNDATION ZONE

Section 5.2010. Review Required

Pursuant to OAR 632-05-050 Tsunami Inundation Zone, persons proposing new construction of or the conversion to essential facilities, hazardous facilities, major structures, or special occupancy structures are required to contact the Oregon Department of Geology and Mineral Industries (DOGAMI) at the earliest reasonable date for a consultation regarding the requirements of ORS 455.446 and 455.447 that pertain to their proposed facility or structure. As used in this section, "essential facility" means hospitals and other medical facilities having surgery and emergency treatment areas, fire and police stations, tanks or other structures containing housing or supporting water or fire suppression materials or equipment required for the protection of essential or hazardous facilities or special occupancy structures, emergency vehicle shelters and garages, structures and equipment in emergency-preparedness centers, standby power generating equipment for essential facilities, and structures and equipment in government communication centers and other facilities required for emergency response. As used in this section, "hazardous facility" means structures housing supporting or containing sufficient quantities of toxic or explosive substances to be of danger to the safety of the public if released. As used in this section, "special occupancy structure" means covered structures whose primary occupancy is public assembly with a capacity greater than 300 persons, buildings with a capacity greater than 250 individuals for every public, private or parochial school through secondary level or child care centers, buildings for colleges or adult education schools with a capacity greater than 500 persons, medical facilities with 50 or more resident, incapacitated patients not included in facilities mentioned above, jails and detention facilities, and all structures and occupancies with a capacity greater than 5,000 persons.

Section 5.2020. Verification of Review

Prior to the issuance of a development permit for a regulated structure or facility, the developer of that structure or facility shall present verification of consultation with DOGAMI, or verification of an exception.