

**ARTICLE 17.00
FLOOD PLAIN OVERLAY ZONE**

17.01 PURPOSE

The Flood Plain (FP) Overlay Zone is a superimposed zone applied in combination with existing identified zones for the purpose of promoting the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specified areas.

17.02 AREAS OF SPECIAL FLOOD HAZARD

The boundaries of areas recognized as Flood Plains (FP) shall be the boundaries of special flood hazard areas which are areas subject to a one percent or greater chance of flooding in any given year, identified by the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled "The Flood Insurance Study for Union County, Oregon", dated November 1979.

The Flood Plain Overlay Zone is identified on the Union County Zoning Maps as a superimposed zone. In addition, where base flood elevation data has been provided by the FEMA, the Federal Flood Insurance and Floodway Maps are hereby adopted by reference and declared to be a supplemental part of this ordinance. These maps may be periodically revised or modified by FEMA in accordance with prescribed procedures pursuant to Section 206 of the Flood Disaster Protection Act of 1973(PL92-234). These changes are technical in nature and are made in order to reflect new or revised data on base flood elevations, ground elevations, flood control structures or other factors. In order to employ the best available information and maintain compliance with Federal Flood Insurance Program regulations, Union County shall utilize any such revisions or modifications upon their effective date.

Where base flood elevation data has not been provided by FEMA, the County Building Inspector shall obtain, review, and reasonably utilize any base flood elevation data from Federal, State or other sources, in order to administer residential and non-residential construction within potential special flood hazard areas. When no base data exists, the zoning and building permit applications shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness shall be made, where available, through the use of historical data, high water marks, photographs of past flooding, etc.

17.03 LIMITATIONS

The areas within the FP Overlay Zone shall be regulated by the following general and specific standards in combination with the applicable underlying zone, e.g., FP/R-1. The outright and conditional uses permitted in accordance with the provisions of the underlying zones shall be permitted only where the FP general and specific standards can be complied with.

1. General Standards.

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

A. Filing of a development permit or building permit, where applicable, shall be obtained before construction or development begins within any area of special flood hazard. Development permits are required for all structures including manufactured homes and for all other development including fill, except low investment structures; building permits shall be for all structures. Application for a development and building permit shall be made to and maintained by the County Building Inspector and findings submitted to the County Planning Department. Specifically, the following information is required for development permits:

- (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 non-residential structure meet the flood proofing criteria in Section 17.03 1. B.
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and
- (5) If the Building Inspector determines an alteration to a watercourse could have an effect on a neighboring community, such community shall be involved in the review of the development permit.

B. ANCHORING.

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- (2) All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:
 - (a) Over-the-top ties be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, with mobile homes less than 50 feet long requiring one additional tie per side.
 - (b) Frame ties be provided at each corner of the mobile home with five additional ties per side at intermediate points, with mobile homes less than 50 feet long requiring four additional ties per side.
 - (c) All components of the anchoring system be capable of carrying a force of 4,800 pounds; and
 - (d) Any additions to the mobile home be similarly anchored.

- (3) An alternative method of anchoring may involve a system designed to withstand a wind force of 90 miles-per-hour or greater. Certification must be provided to the County Building Inspector that this standard has been met.
- (4) 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 FEMAS's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

C. 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 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.

D. 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
- (3) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

E. 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 for 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.

F. ALTERATION TO WATERCOURSES.

No development activity shall alter a water course which will reduce its carrying capacity.

G. LOW INVESTMENT ACCESSORY STRUCTURES.

- (1) Obtain a building permit prior to construction.
- (2) Be anchored in compliance with Section 17.03 1. B. (1).

2. SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data has been provided the following provisions are required:

A. Residential Construction.

- (1) New construction and substantial improvement of any residential structure shall have the lowest floor, including the basement, elevated to or 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:
 - (a) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
 - (b) The bottom of all openings shall be no higher than one foot above grade.
 - (c) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

B. NON-RESIDENTIAL CONSTRUCTION

New construction and substantial improvement of any commercial, industrial or non-residential structure other than low investment accessory structures shall either have the lowest floor, including the basement, elevated to the level

of the base flood elevation, or together with the attendant utility and sanitary facilities, shall:

- (1) Be flood proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water.
- (2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy, and
- (3) Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the County Building Inspector.

C. MOBILE HOMES

- (1) Mobile homes shall be anchored in accordance with Section 17.03 1. B.
- (2) For new mobile home parks and mobile home subdivisions, or expansions to existing mobile home parks and mobile home subdivisions, or existing mobile home parks and mobile home subdivisions where the repair, reconstruction or improvements of the streets, utilities and pads equals or exceeds 50 percent of value of the streets, utilities and pads before the repair, reconstruction or improvements has commenced, and for mobile homes not placed in a mobile home park or mobile home subdivision, require that:
 - (a) Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above the base flood level.
 - (b) Adequate surface drainage and access for a hauler are provided, and
 - (c) In the instance of elevation on pilings, that:
 - I. Lots are large enough to permit steps.
 - II. Piling foundations are placed in stable soil no more than 10 feet apart, and
 - III. Re-reinforcement is provided for pilings more than 6 feet above the ground level.
- (3) No mobile home shall be placed in a floodway, except in an existing mobile home park or existing mobile home subdivision.

D. MANUFACTURED HOMES

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 or above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection 17.03 1. B.

E. **FLOODWAYS.**

Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and have erosion potential, the following provisions apply:

- (1) Encroachments are prohibited, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) If Section (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 17.03 limitations.
- (3) Prohibit the placement of any manufactured homes, except in an existing manufactured home park or existing manufactured home subdivision.

17.04 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this section 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 section 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 section shall not create liability on the part of Union County, or the Federal Emergency Management Agency for any flood damages that result from reliance on this section or any administrative decision lawfully made thereafter.