

CITY OF SHERWOOD, OR

ORDINANCE NO. 87-867

AN ORDINANCE AMENDING CITY FLOOD PLAIN REGULATIONS, AS PREVIOUSLY ADOPTED IN THE 1986 COMMUNITY DEVELOPMENT CODE BY ORDINANCE NO. 86-851, AND ESTABLISHING AN EFFECTIVE DATE.

---

WHEREAS, the Community Development Code includes Section 2.114 which controls and regulates the use of and development in, flood plain areas within the City, as designated on the Official City Zoning Map.

WHEREAS, flood plain ordinances are based in part on Federal Emergency Management Agency (FEMA) standards, and the City's ordinance must comply with certain minimum criteria in those standards for the community to maintain eligibility in the National Flood Insurance Program.

WHEREAS, FEMA recently updated their flood plain standards, necessitating a like updating of City ordinances, and furthermore the review of FEMA standards clarified or corrected several ambiguities in City flood plain regulations, particularly with respect to definitions of the various components of the flood plain.

WHEREAS, the Oregon Department of Land Conservation and Development (DLCD), and Region X of FEMA, have reviewed the draft City Flood Plain ordinance, and suggested certain amendments, which were subsequently incorporated into the draft.

WHEREAS, the City Planning Commission considered the revised Flood Plain regulations at their April 20, 1987 meeting, held a public hearing on May 18, 1987, and recommends adoption of the revised Flood Plain regulations.

WHEREAS, the City Council received the Commission's recommendation, and held a second public hearing on July 8, 1987.

NOW, THEREFORE, THE CITY OF SHERWOOD ORDAINS AS FOLLOWS:

Section 1. Public Hearings. That the revisions to Section 2.114 of the Community Development Codes, and associated definitions, were subject to a public hearing on July 8, 1987, and all interested parties were afforded an opportunity to be heard and to present and rebut evidence.

Section 2. Findings of Fact. After full and due consideration of the revised Flood Plain regulations, the Council finds the proposed changes to conform to the requirements of Section 4.203.01 of the Community Development Code, and with FEMA regulations.

Section 3. Definitions. Sections 1.202.49 through 1.202.52 are hereby repealed, and new sections, to read as follows, are hereby APPROVED AND ADOPTED:

.49 Flood Plain: The flood hazard area adjoining a river, stream, or other water course, that is subject to inundation by a base flood. The flood plain includes the floodway, flood fringe, and the City greenway, as defined by this Code.

.50 Floodway: The channel of a river, stream, or other watercourse, and the adjoining areas of the flood plain, required to discharge the base flood without cumulatively increasing the water surface elevation of said watercourse by more than one (1) foot.

.51 Flood Fringe: The area of the flood plain lying outside of the floodway.

.52 Base Flood: The flood having a one percent (1%) chance of being equalled or exceeded in any given year. Also referred to as the "100-year flood".

Section 4. Flood Plain Regulations: Section 2.114, of Community Development Code, as adopted by Ordinance No. 86-851, is hereby repealed in its entirety, and a new Section 2.114, attached as Exhibit "A" and made a part hereto by reference, is hereby APPROVED AND ADOPTED.

Section 5. Effective Date: This Ordinance shall become effective thirty (30) days after approval and adoption.

Duly passed by the City Council on this 8 day of July, 1987.

Polly Blankenbaker  
Polly Blankenbaker, Recorder

Approved by the Mayor this 10<sup>th</sup> day of July, 1987.

Norma Jean Oyler  
Norma Jean Oyler, Mayor  
City of Sherwood

	<u>AYE</u>	<u>NAY</u>
Oyler	<u>✓</u>	_____
Birchill	<u>✓</u>	_____
Stewart	<u>✓</u>	_____
Nightingale	<u>✓</u>	_____
Chavez	<u>✓</u>	_____

EXHIBIT "A"

**2.114      FLOOD PLAIN (FP)**

**2.114.01    Purpose**

- A. The FP zoning district is an overlay district that controls and regulates flood hazard areas, in order to protect the public health, safety and general welfare; to reduce potential flood damage losses; and to protect floodways and natural drainageways from encroachment by uses which may adversely affect waterflow and subsequent upstream or downstream flood levels. The FP zone shall be applied to all areas within the base flood, and shall supplement the regulations of the underlying zoning district.
  
- B. FP zoning districts are defined as areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Sherwood, Oregon," dated July 6, 1981, with accompanying Flood Insurance Maps, or as otherwise identified in accordance with Section 2.114.01.C. The Flood Insurance Study is adopted by reference as part of this Code, and is on file in the office of the City Public Works Director.
  
- C. When base flood elevation data is not available from the Flood Insurance Study, the City shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source, and standards developed by the Federal Emergency Management Agency, in order to administer the provisions of this Code.

**2.114.02    Greenways**

The FP zoning districts overlaying the Rock Creek and Cedar Creek flood plains are designated greenways in accordance with Section V of the Community Development Plan. All development in these two flood plains shall be governed by the policies in Section V, and Section 5.600 of this Code, in addition to the requirements of Section 2.114.

## 2.114.03 Development Application

- A. In the FP zone the following uses are permitted as conditional uses, subject to the provisions of Section 2.114 and Section 4.300:
  - 1. Any permitted or conditional use allowed in the underlying zoning district, when located within the flood fringe only, as specifically defined by this Code. Only those uses defined in Section 2.114.04 are allowed within the floodway.
- B. A conditional use permit (CUP) shall be approved before any use, construction, fill, alteration of a flood plain, floodway, or watercourse, or any other development begins within any FP zone, except as provided in Section 2.114.04.
- C. Application for a CUP for development in a flood plain shall conform to the requirements of Section 4.300 and may include, but is not limited to, plans and scale drawings showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, fill, storage of materials, and drainage facilities.
- D. The following specific information is required in a flood plain CUP application and shall be certified and verified by a Registered Civil Engineer or Architect:
  - 1. Elevations in relation to mean sea level of the lowest floor (including basement) of all structures;
  - 2. Elevations in relation to mean sea level to which any structure has been floodproofed;
  - 3. That the floodproofing methods for any structure meet the requirements of Section 2.114.07.
  - 4. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development.
  - 5. A base flood survey and impact study made by a Registered Civil Engineer.

6. Proof that all necessary notifications have been sent to, and permits have been obtained from, those Federal, State, or other local government agencies for which prior approval of the proposed development is required.
  7. Any other information required by Section 2.114, by any applicable Federal regulations, or as otherwise determined by the City to be necessary for the full and proper review of the application.
- E. Where elevation data is not available either through the Flood Insurance Study, or from other sources as per Section 2.114.01.C, a CUP for development in the flood plain shall be reviewed using other relevant data, as determined by the City, such as historical information, high water marks, and other evidence of past flooding. The City may require utility structures and habitable building floor elevations, and building flood proofing, to be at least two (2) feet above the probable base flood elevation, in such circumstances where more definitive flood data is not available.

#### 2.114.04 Exceptions

In the FP zone the following uses are permitted outright, and do not require a CUP, provided that floodway flow, or flood plain capacity, will not be significantly impeded, as determined by the City:

- A. Agricultural uses, provided that associated structures are not allowed, except for temporary building and boundary fences that do not significantly impede the movement of flood waters and flood-carried materials.
- B. Open space, park and recreational uses, and minor associated structures, if otherwise allowed in the underlying zoning district, that do not significantly impede the movement of floodwaters and flood-carried materials.
- C. Other accessory uses allowed in the underlying zoning district that do not involve structures, and will not, in the City's determination, materially alter the stability or storm drainage absorption capability of the flood plain.

## **2.114.05 Prohibited Uses**

In the FP zone the following uses are expressly prohibited:

- A. The storage or processing of materials that are buoyant, flammable, contaminants, explosive, or otherwise potentially injurious to human, animal or plant life.
- B. Public and private sewerage treatment systems, including drainfields, septic tanks and individual package treatment plants.
- C. Any use not permitted in the underlying zoning district.
- D. Any use that, in the City's determination, will materially alter the stability or storm drainage absorption capability of the flood plain.
- E. Any use that, in the City's determination, could create an immediate or potential hazard to the public health, safety and welfare, if located in the flood plain.
- F. Any use or encroachment located in the floodway, including fill, new construction, or improvements to existing developments, except as otherwise allowed by Section 2.114.04.

## **2.114.06 Flood Plain Development**

### **A. Flood Plain Alterations**

#### **1. Flood Plain Survey**

The flood plain, including the floodway and flood fringe areas, shall be surveyed by a Registered Civil Engineer, and approved by the City, based on the findings of the Flood Insurance Study and other available data. Such delineation shall be based on mean sea level data and be field-located from recognized valid benchmarks.

#### **2. Grading Plan**

Alteration of the existing topography of flood plain areas may be made upon approval of a grading plan by the City. The plan shall include both existing and proposed topography and a plan for alternate drainage. Contour

intervals for existing and proposed topography shall be included and shall be not more than one (1) foot for ground slopes up to five percent (5%) and for areas immediately adjacent to a stream or drainageway, two (2) feet for ground slopes between five and ten percent (5% - 10%), and five (5) feet for greater slopes.

### **3. Fill and Diked Lands**

- a. Proposed flood plain fill or diked lands may be developed if a site plan for the area to be altered within the flood plain is prepared and certified by a Registered Civil Engineer and approved by the Commission pursuant to the applicable provisions of this Code.
- b. Vehicular access shall be provided from a street above the elevation of the base flood to any proposed fill or dike area if the area supports structures for human occupancy. Unoccupied fill or dike areas shall be provided with emergency vehicle access.

### **4. Alteration Site Plan**

The certified site plan prepared by a Registered Civil Engineer or Architect for an altered flood plain area shall show that:

- a. Proposed improvements will not alter the flow of surface water during flooding such as to cause a compounding of flood hazards or changes in the direction or velocity of flood water flow.
- b. No structure, fill, storage, impervious surface or other uses alone, or in combination with existing or future uses, will materially reduce the capacity of the flood plain or increase flood heights.
- c. Proposed flood plain fill or diked areas will benefit the public health, safety and welfare and incorporate adequate erosion and storm drainage controls, such as pumps, dams and gates.
- d. No serious environmental degradation shall occur to the natural features and existing ecological balance of upstream and downstream areas.



- e. Ongoing maintenance of altered areas is provided so that flood-carrying capacity will not be diminished by future erosion, settling, or other factors.

## 5. Subdivisions

All proposed subdivisions or land partitions within a FP zone shall:

- a. Be designed to include adequate drainage to reduce exposure to flood damage, and have public sewer, gas, electrical and other utility systems so located and constructed to minimize potential flood damage.
- b. For each parcel or lot intended for structures, a building site shall be provided, which is at, or above, the base flood elevation, and meets all setback standards of the underlying zoning district.

## 2.114.07 Flood Plain Structures

Structures in the FP zone shall be subject to the following conditions, in addition to the standards of the underlying zoning district:

### A. Generally

- 1. All structures, including utility equipment, and manufactured housing, shall be anchored to prevent lateral movement, flotation, or collapse during flood conditions, and shall be constructed of flood-resistant materials, to standards approved by the City, State Structural and Plumbing Speciality Codes, and applicable building codes.
- 2. The lowest floor elevation of a structure designed for human occupancy shall be at least one and one-half (1 1/2) feet above the base flood elevation and the building site shall comply with the provisions of Section 2.114.07.A.
- 3. The lower portions of all structures shall be flood-proofed according to the provisions of the State Structural and Plumbing Specialty Codes, at least to an elevation of one and one-half (1 1/2) feet above the base flood elevation.

4. The finished ground elevation of any underfloor crawl space shall be above the grade elevation of an adjacent street, or natural or approved drainageway unless specifically approved by the City. A positive means of drainage from the low point of such crawl space shall be provided.

#### **B. Utilities**

1. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities located within structures 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.
2. Electrical service equipment, or other utility structures, shall be constructed at or above the base flood elevation. All openings in utility structures shall be sealed and locked.
3. Water supply and sanitary sewer systems shall be approved by the Washington County Health Department, and shall be designed to minimize or eliminate the infiltration of floodwaters into the systems, or any discharge from the systems into floodwaters.

#### **C. Residential Structures**

1. All residential structures shall have the lowest floor, including 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 (2) 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.
- 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. Nonresidential Construction**

- 1. All commercial, industrial or other nonresidential structures shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
  - a. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
  - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
  - c. Be certified by a Registered Professional Engineer or Architect that the design and methods of construction are in accordance with accepted standards of practice for meeting all provisions of Section 2.114.
  - d. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as per Section 2.114.08.C2.

**2.114.09 Additional Requirements**

- A. Dimensional standards for developments in the FP zone shall be the same as in the underlying zoning district, except as provided in Section 2.114.09.B.
- B. Approval of a site plan pursuant to Section 5.100, may be conditioned by the City to protect the best interests of the surrounding area or the community as a whole, and to carry out the terms of the Comprehensive Plan. These conditions may include, but are not limited to:

1. Increasing the required lot sizes, yard dimensions, street widths, or off-street parking spaces.
2. Limiting the height, size, or location of buildings.
3. Controlling the location and number of vehicle access points.
4. Limiting the number, size, location, or lighting of signs.
5. Requiring diking, fencing, screening, landscaping, or other facilities to protect the proposed development, or any adjacent or nearby property.
6. Designating sites for open space or water retention purposes.
7. Construction, implementation, and maintenance of special drainage facilities and activities.