



# Oregon

Theodore R. Kulongoski, Governor

## Department of Land Conservation and Development

635 Capitol Street, Suite 150

Salem, OR 97301-2540

(503) 373-0050

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www.lcd.state.or.us

### NOTICE OF ADOPTED AMENDMENT

March 4, 2008

TO: Subscribers to Notice of Adopted Plan  
or Land Use Regulation Amendments

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: City of Vernonia Plan Amendment  
DLCD File Number 001-07



The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. A copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures\*

### **DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: March 20, 2008**

This amendment was submitted to DLCD for review 45 days prior to adoption. Pursuant to ORS 197.830 (2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

**\*NOTE: THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.**

Cc: Doug White, DLCD Community Services Specialist  
Christine Shirley, FEMA Specialist  
Aldie Howard, City of Vernonia

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# NOTICE OF ADOPTION

DEPT OF

This form must be mailed to DLCD not later than 5 working days after adoption  
ORS 197.615 and OAR Chapter 660, Division 18

FEB 28 2008

See reverse side for submittal requirements

LAND CONSERVATION  
AND DEVELOPMENT

Jurisdiction City of Vernonia

Local File # \_\_\_\_\_

Date of Adoption February 19, 2008

Date Mailed hand delivered 2/27/08

Date the Notice of Proposed Amendment was mailed to DLCD \_\_\_\_\_

Comprehensive Plan Text Amendment

Comprehensive Plan Map Amendment

Land Use Regulation Amendment

Zoning Map Amendment

New Land Use Regulation

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached."

Amends Flood Damage Prevention Ordinance

Describe how the adopted amendment differs from the proposed amendment. If it is the same, write "Same." If you did not give notice of the proposed amendment, write "N/A."

Plan Map Change From \_\_\_\_\_ to \_\_\_\_\_

Zone Map Change From \_\_\_\_\_ to \_\_\_\_\_

Location: \_\_\_\_\_ Acres Involved: \_\_\_\_\_

Specify Density: Previous Density \_\_\_\_\_ New Density \_\_\_\_\_

Applicable Goals: \_\_\_\_\_ Was an Exception adopted?  Yes  No

DLCD File #

001-07 (16216)

DLCD Appeal Deadline \_\_\_\_\_



Did DLCD receive a Notice of Proposed Amendment 45 days prior to the final hearing?

Yes  No:  The Statewide Planning Goals do not apply  
 Emergency Circumstances Required Expedited Review

Affected State or Federal Agencies, Local Governments or Special Districts: \_\_\_\_\_  
\_\_\_\_\_

Local Contact: Aldie Howard Phone: 503-429-5291  
Address: 1001 Bridge St Vernonia OR 97064

## SUBMITTAL REQUIREMENTS

ORS 197.615 and OAR Chapter 660, Division 18

1. Send this Form and **One (1) Copy** of the Adopted Amendment to:

**Department of Land Conservation and Development  
1175 Court Street, N.E.  
Salem, Oregon 97310-0590**

2. Submit **one (1) copy** of adopted material, if copies are bounded please submit one complete copies of documents and maps.
3. Adopted materials must be sent to DLCD not later than **five (5) working days** following the date of the final decision on the amendment.
4. Submittal of this Notice of Adoption **must** include the text of the amendment plus adopted **findings** and supplementary information.
5. The deadline to appeal will be extended if you do not submit this Notice of Adoption within five working days of the final decision. Appeals to LUBA may be filed within 21 days of the date Notice of Adoption is sent to DLCD.
6. In addition to sending Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

If you need more copies of this form, please call the DLCD at 503-373-0050 or this form may be duplicated on green paper.

# NOTICE OF PROPOSED AMENDMENT

This form must be received by DLCD at least 45 days prior to the final hearing  
ORS 197.610 and OAR Chapter 660, Division 18

See reverse side for submittal requirements

Jurisdiction City of Veneta, Oregon

Date of Final Hearing 7-7-2008 Local File # 02851

Has this proposal been previously submitted to DLCD?  Yes  No  Date

- Comprehensive Plan Text Amendment  Comprehensive Plan Map Amendment  
 Land Use Regulation Amendment  Zoning Map Amendment  
 New Land Use Regulation

Briefly summarize the proposal. Do not use technical terms. Do not write "See Attached."

THIS PROPOSAL DETAILS FLOOD  
DAMAGE PREVENTION, ESTABLISHES  
DIRECTIONS FOR ACTIVITY IN THE  
FLOODWAY AND FLOOD PLAIN.

Plan Map Change From \_\_\_\_\_ to \_\_\_\_\_

Zone Map Change From \_\_\_\_\_ to \_\_\_\_\_

Location: \_\_\_\_\_ Acres Involved: \_\_\_\_\_

Specified change in Density: Current Density \_\_\_\_\_ Proposed Density \_\_\_\_\_

Applicable Goals: \_\_\_\_\_ Is an Exception proposed?  Yes  No

Affected State or Federal Agencies, Local Governments or Special Districts: \_\_\_\_\_

DCA, FEMA, LANS & EMB

Local Contact: Arlene Howard Phone: \_\_\_\_\_

Address: 1001 Bridge St, Veneta OR  
97664

DLCD File # \_\_\_\_\_ Date Rec'd \_\_\_\_\_ # Days Notice \_\_\_\_\_



Ordinance 851  
An Ordinance of the City of Vernonia, Oregon Enacting  
Flood Damage Prevention Provisions and  
Repealing Ordinances 845, 725, 722, 712, 633 and 554

**Section 1.0 [Statutory Authorization, Findings of Fact, Purpose, and Objectives.]**

- 1.1 Statutory Authorization. The Legislature of the State of Oregon has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Council of the City of Vernonia, State of Oregon, does repeal Ordinance 725 and does ordain as follows:
- 1.2 Statement of Purpose. It is the purpose of this ordinance to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:
- (1) To protect human life and health;
  - (2) To minimize expenditure of public money and costly flood control projects;
  - (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
  - (4) To minimize prolonged business interruptions;
  - (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in the Flood Plain Management Area;
  - (6) To help maintain a stable tax base by providing for the sound use and development of the Flood Plain Management Area so as to minimize future flood blight areas;
  - (7) To provide a tool for potential buyers to utilize in determining if property is in an area of special flood hazard; and
  - (8) To ensure that those who occupy the areas of special flood hazard assume responsibility for their action.

**Section 2.0 [Definitions.]**

Unless specifically defined, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance it's most reasonable application. Likewise, these definitions are specific to flood plain

management and not to be interpreted for any other document, unless context is taken in whole when used to refer to this document.

“Appeal” means a request for a review of the interpretation of any provision of this ordinance or a request for a variance.

“Area of Special Flood Hazard” means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year (100 year), as depicted on the current effective FIRM. Designation on maps always includes the letter A.

“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 letter A.

“Basement” means any area of a building having its floor subgrade (below ground level) on all sides.

“Design Flood Elevation” means a depth of flooding having a 1% chance of being equaled or exceeded in any given year (100 year) as defined by the Army Corps of Engineers, Draft Flood Hazard Study, City of Vernonia, Oregon, as revised February 7, 2008 or the Federal Emergency Management Agency, Flood Insurance Study, dated August 16, 1988, whichever is higher.

“Development” means any man-made change to improved or unimproved real estate, including but not limited to a building or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the Flood Plain Management Area.

“Flood” or “Flooding” means a general and temporary condition or 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 or surface waters from any source.

“Flood Insurance Rate Map (FIRM)” means the official map of the Federal Insurance Administration that includes flood profiles, the Flood Boundary – Floodway Map, and the water surface elevation of the base flood.

“Flood Insurance Study” means the official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway map, and the water surface elevation of the base flood.

“Flood Hazard Study” means the report and accompanying map (Draft Flood Hazard Study, City of Vernonia, Oregon, as revised February 7, 2008) provided by the Army Corps of Engineers that includes flood profiles, flood inundation areas, floodway, and 1% flood elevations.



“Flood of Record” means high water marks as maintained by the City of Vernonia.

“Flood Plain Management Area” means the land area inside the 0.2% (500 year) Flood Inundation Area as shown on the map accompanying the Army Corps of Engineers, Draft Flood Hazard Study, City of Vernonia, Oregon, as revised February 7, 2008, or as depicted on the FIRM, whichever is greater.

“Floodway” means the channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the design flood without cumulatively increasing the water surface elevation more than one foot. Once established, nothing can be placed in a floodway that would cause any rise in Design Flood Elevation.

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

“Manufactured Home” means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes the term “manufactured home” also includes park trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term “manufactured home” does not include park trailers, travel trailers, and other similar vehicles.

“Market Value” means the value of the building:

- 1) as determined by the assessor’s real market value or the appraised value of the structure prior to the start of the repair or improvement, or
- 2) in the case of damage, the assessor’s real market value or the appraised value of the structure prior to the damage occurring.

“New Construction” means structures for which the “start of construction” commences on or after the effective date of this ordinance.

“Recreational Vehicle” means a vehicle that is:

- (1) Built on a single chassis;
- (2) 400 square feet or less when measured at the largest horizontal projection;
- (3) Designed to be self-propelled or permanently towable by a light duty truck; and
- (4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

“Start of Construction” includes substantial improvement, and means the date of building permit was issued provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. 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 including a gas or liquid storage tank that is principally above ground.

“Substantial Damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

“Substantial Improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commenced, whether or not that alteration affects the external dimensions of the structure for the purpose of any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

- (1) Before the improvement or repair is started; or,
- (2) If the structure has been damaged and is being restored, to the condition of the structure before the damage occurred.

The term does not include, either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or
- (2) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

“Variance” means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

### **Section 3.0 [General Provisions.]**

- 3.1 Lands to which this Ordinance Applies. The ordinance shall apply to the Flood Plain Management Area within the jurisdiction of the City of Vernonia.
- 3.2 Basis for Establishing the Flood Plain Management Area and Design Flood Elevation. The Flood Plain Management Area is defined as the 0.2 % Inundation Area as shown on the map accompanying the Army Corps of Engineers “Draft Flood Study for the City of Vernonia” as revised February 7, 2008 or as the Area of Special Flood Hazard identified by the Federal Insurance Administration, Flood Insurance Study dated August 16, 1988, whichever is greater. The Design Flood Elevation is the depth of flooding having a 1% chance of being equaled or exceed in



any given year as defined by the Army Corps of Engineers, Draft Flood Hazard Study, City of Vernonia, Oregon, as revised February 7, 2008 or the Federal Emergency Management Agency, Flood Insurance Study, dated August 16, 1988, whichever is higher. The Draft Flood Hazard Study and the Flood Insurance Study are on file at Vernonia City Hall, 1001 Bridge Street, Vernonia OR 97064.

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

#### **Section 4.0 [Administration.]**

##### **4.1 Establishment of Flood Plain Development Permit.**

4.1.1 Flood Plain Development Permit Required. A Flood Plain Development Permit shall be obtained before construction or development begins within the Flood Plain Management Area established in Section 3.2. The permit shall be for all structures including manufactured homes, as set forth in the 'Definitions,' and for all development including fill and other activities, also as set forth in the 'Definitions.'

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

- (1) Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
- (2) Elevation in relation to mean sea level to which any structure has been floodproofed;
- (3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 5.2.2; and
- (4) Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

- 4.2 Designation of the Planning Commission. The Planning Commission is hereby appointed to administer and implement this ordinance by granting or denying Flood Plain development permit applications in accordance with its provisions. The City may appoint another Designee as it chooses by a vote of the council.
- 4.3 Duties and Responsibilities of the Planning Commission or Designee. Duties of the Planning Commission or Designee shall include, but not be limited to:
- 4.3.1 Permit Review
- (1) Review all Flood Plain development permits to determine that the permit requirements of this ordinance have been satisfied
  - (2) Review all Flood Plain development permits to determine that all necessary permits have been obtained from those Federal State or local governmental agencies from which prior approval is required.
  - (3) Review all Flood Plain development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 5.4.1 are met.
- 4.3.2 Use of other Design Flood Data. When Design Flood Elevation data has not been provided in accordance with Section 3.2, the Planning Commission shall obtain, review, and reasonably utilize any Design Flood Elevation and floodway data available from a Federal, State or other source, in order to administer Sections 5.2, Specific Standards, and 5.4 Floodways.
- 4.3.3 Substantial Damage Determination Process. The cost of improvements or repair shall be determined in accordance with the following guidelines:
- (1) Except as indicated in subsections (4) and (5) below, all costs associated with the repair of "substantial damage," including emergency repairs, must be included.
  - (2) The costs associated with the correction of pre-existing violations of state or local health, sanitary, or safety code specifications that have been identified in writing prior to the improvement of repair by the building official, the director of environmental health, or any other local code enforcement official and that are the minimum necessary to assure safe living conditions, should not be included.
  - (3) Except as indicated in subsections (4) and (5) below, the costs of complying with any county, state, or federal regulation other than those costs described in subsection (2) must be included.



(4) Costs associated with the following items are not to be included:

- a. The preparation and approval of all required plans, calculations, certifications, and specifications;
- b. The performance of surveys or other geotechnical or engineering studies and the resulting reports;
- c. Permit and review fees assessed by the city or others;
- d. The construction, demolition, repair, or modification of outside improvements, including landscaping, fences, swimming pools, detached garages, etc.

(5) Proposed alteration of a designated historic building or structure is not to be considered a substantial improvement, unless the alteration causes a loss of the said designation.

The building official or city's designee shall make the final determination of whether the proposed building's or structure's improvement constitutes a "substantial improvement" or "substantial damage" to the subject building or structure.

#### 4.3.4 Information to be Obtained and Maintained.

(1) Where Design Flood Elevation data is provided as in Section 3.2 or as in Section 4.3.2, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

(2) For all new or substantially improved flood proofed structures where Design Flood Elevation data is provided as in Section 3.2 or as in Section 4.3.2:

- a. Verify and record the actual elevation (in relation to mean sea level to which the structure was floodproofed); and
- b. Maintain the flood proofing certifications required in Section 5.2.2(1).

(3) Maintain for public inspection all records pertaining to the provisions of this ordinance.

#### 4.3.5 Alteration of Water Courses.

(1) Notify adjacent communities and the Department of Land Conservation and Development as to any alteration or relocation of

water course, and submit evidence of such notification to the Federal Insurance Administration, and

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

4.3.6 Interpretation of Flood Plain Management Area Boundaries. Make interpretations where needed, as to exact location of the boundaries of the Flood Plain Management Area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation to the Planning Commission or the City's Designee. Such appeals shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program (44 CFR 59-76).

## **Section 5.0 [Provisions for Flood Hazard Reduction.]**

5.1 General Standards. In the Flood Plain Management Area, the following standards are required:

### 5.1.1 Anchoring

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- (2) All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to; use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

### 5.1.2 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 service facilities shall be designed and/or other wise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (4) Consideration will be given to new technologies only after being reviewed and adopted by FEMA.



### 5.1.3 Utilities

- (1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (2) New and replacement sanitary 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.

### 5.1.4 Subdivision Proposals

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

5.1.5 Review of Flood Plain and Building Permits. Where elevation data is not available either through flood insurance studies (Section 3.2) or from another authoritative source (Section 4.3.2), applications for floodplain development and building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least three feet above the highest adjacent grade in these zones may result in higher insurance rates and/or refusal of the city to grant a permit.

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

- (1) The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B below.

Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.

(2) The crawlspace is an enclosed area below Design Flood Elevation 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 Design Flood Elevation 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 Design Flood Elevation. The recommended construction practice is to elevate the bottom of joists and all insulation above Design Flood Elevation.

(4) Any building utility systems within the crawlspace must be elevated above Design Flood Elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the Design Flood Elevation or sealed from floodwaters.

(5) The interior grade of a crawlspace below the Design Flood Elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

(6) The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.

(7) There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.



(8) The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

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

5.2 Specific Standards. In the Flood Plain Management Area where Design Flood Elevation data has been provided as set forth in Section 3.2 or Section 4.3.2, the following provisions are required:

5.2.1 Residential Construction.

(1) New construction and substantial improvement, as defined in Section 2.0, of any residential structure shall have the lowest floor, including basement, elevated to a minimum of three (3) feet above Design Flood Elevation as defined in Section 2.0., but no less than one (1) foot above the Flood of Record.

(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 floodwater. 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.
- d. Flood vents are required in a garage if the garage is below the Design Flood. Elevation

5.2.2 Non Residential Construction. New construction and substantial improvement, as defined in Section 2.0, of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated or flood proofed to a minimum of three (3) feet above Design Flood Elevation as defined in Section 2.0., but no less than one (1) foot above the Flood of Record.

Alternatively, any new construction or substantial improvement of any commercial, industrial, or other nonresidential structure, together with attendant utility and sanitary facilities, shall:

- (1) Be flood proofed so that below the Design Flood Elevation the structure is watertight with walls substantially impermeable to the passage of water;

(2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;

(3) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in Section 4.3.4(2).

(4) Nonresidential structures that are elevated, not flood proofed, must meet the same standards for space below the lowest floor as described in 5.2.1.2.

(5) Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based upon rates that are one (1) foot below the flood proofed level (e.g., a building constructed to the Design Flood Elevation will be rated as one foot below that level).

5.2.3 Manufactured Homes. All manufactured homes to be placed or substantially improved, as defined in Section 2.0, shall have the lowest floor, including basement, elevated to a minimum of three (3) feet above Design Flood Elevation as defined in Section 2.0, but no less than one (1) foot above the Flood of Record.

The manufactured home shall be anchored to an adequately anchored foundation system in accordance with the provision of subsection 5.1.1.2.

Recreational Vehicles. Recreational vehicles placed on sites are required to either:

(1) Be on the site for fewer than 180 consecutive days,

(2) Be fully licensed and ready for highway 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

(3) Meet the requirements of 5.2.3 above.

5.3 Base Flood Elevations with no Floodways. In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within a special flood hazard area, 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.

5.4 Floodways. Located within the Flood Plain Management Area are areas designated as floodways. Since the floodway is an entirely hazardous area



due to the velocity of flood waters which carry debris, potential projectiles, and erosion potentials, the following provisions apply:

- 5.4.1 Prohibit encroachments, including fill, new construction, substantial improvements and other development unless certification by a registered profession engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of a design flood discharge.
- 5.4.2 If Section 5.4.1 is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provision of Section 5.0, Provisions for Flood Hazard Reduction.

#### **Section 6.0 [Violation and Fine.]**

- 6.1 A violation of any provision of this ordinance shall, upon conviction, be punishable by a fine of not more than \$500.00. A violation of this ordinance shall be considered a separate offense for each day the violation continues.
- 6.2 In case a building or other structure is or is proposed to be located, constructed, maintained, repaired, altered or used, or land is or is proposed to be used, in violation of this ordinance, the building or land thus in violation shall constitute a nuisance and the City may, as an alternative to other remedies that are legally available for enforcing this ordinance, institute injunction, mandamus, abatement or other appropriate proceedings to prevent, enjoin temporarily or permanently, abate or remove the unlawful location, construction, maintenance, repair, alteration or use.
- 6.3 Subject to removal. A building, sited upon property in violation of this ordinance, shall be subject to removal from such property. However, the building owner must be given a reasonable opportunity to bring the property into compliance before action for removal can be taken. If action finally is taken by the appropriate authority to bring compliance, the expenses involved may be made a lien against the property.

#### **Section 7.0 [Warning and Disclaimer of Liability.]**

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the City of Vernonia or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made there under.

**Section 8.0 [Effective Date.]**

Under the provisions of the City of Vernonia Charter of 1998, Chapter VIII, Section 32, the provisions of this Ordinance shall become effective on the thirtieth (30th) day after its adoption and authentication.

**Section 9 [Recorders Duties.]**

The City Recorder is hereby directed, upon its adoption and authentication, to number this Ordinance as the next adopted ordinance of the City of Vernonia.

May be read in full if requested:

Adopted as read by title only this 7 day of February 2008, by the following vote:

Ayes 4 Nays: \_\_\_\_\_ Abstain: \_\_\_\_\_ Absent: 1

Adopted as read by title only this 7 day of February 2008, by the following vote:

Ayes 4 Nays: \_\_\_\_\_ Abstain: \_\_\_\_\_ Absent: 1

Signed this 7<sup>th</sup> day of February 2008

Sally Harrison  
Sally Harrison, Mayor

Attest: Joann M Glass  
Joann Glass, City Recorder