



Oregon

Theodore R. Kubongoski, Governor

Department of Land Conservation and Development

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Salem, OR 97301-2540

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www.lcd.state.or.us



NOTICE OF ADOPTED AMENDMENT

2/23/2010

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

FROM: Plan Amendment Program Specialist

SUBJECT: City of Glendale Plan Amendment
DLCD File Number 001-10

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: Friday, March 05, 2010

This amendment was not submitted to DLCD for review prior to adoption pursuant to OAR 660-18-060, the Director or any person is eligible to appeal this action to LUBA under ORS 197.830 to 197.845.

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 Acknowledgment or 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. NO LUBA Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.

Cc: Betty Stanfill, City of Glendale
Gloria Gardiner, DLCD Urban Planning Specialist

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DLCD

Notice of Adoption

In person electronic mailed

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FEB 11 2010

LAND CONSERVATION
AND DEVELOPMENT
For Office Use Only

This Form 2 must be mailed to DLCD within **5-Working Days after the Final Ordinance is signed** by the public Official Designated by the jurisdiction and all other requirements of ORS 197.615 and OAR 660-018-000

Jurisdiction: **City of Glendale**

Local file number: **03-2010**

Date of Adoption: **2-8-2010**

Date Mailed: **2-11-2010**

Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? Yes No Date:

Comprehensive Plan Text Amendment

Comprehensive Plan Map Amendment

Land Use Regulation Amendment

Zoning Map Amendment

New Land Use Regulation

Other:

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

New wording was added to the existing Flood Hazard Overlay section of the Glendale Zoning and Land Development Ordinance to include Methods of Reducing Flood Losses, additional requirements for Development Permit application, additional definitions, additional variance procedures, expanded requirements for manufactured homes, new subsections regarding Below-Grade Crawl Spaces, Floodways, and Critical Facilities to achieve compliance with new regulations for NFIP.

Does the Adoption differ from proposal? Please select one

No. There were no map changes within the City of Glendale.

Plan Map Changed from:

to:

Zone Map Changed from:

to:

Location:

Acres Involved:

Specify Density: Previous:

New:

Applicable statewide planning goals:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Was an Exception Adopted? YES NO

Did DLCD receive a Notice of Proposed Amendment...

45-days prior to first evidentiary hearing?

Yes No

If no, do the statewide planning goals apply?

Yes No

If no, did Emergency Circumstances require immediate adoption?

Yes No

DLCD File No. 001-10 (18110) [15990]

DLCD file No. _____

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

City of Glendale, Oregon

Local Contact: **Betty Stanfill**

Phone: (541) 832-2106 Extension:

Address: PO Box 361

Fax Number: 541-832-3221

City: **Glendale**

Zip: 97442

E-mail Address: glendale@tymewyse.com

ADOPTION SUBMITTAL REQUIREMENTS

This Form 2 must be received by DLCD no later than 5 days after the ordinance has been signed by the public official designated by the jurisdiction to sign the approved ordinance(s) per ORS 197.615 and OAR Chapter 660, Division 18

1. This Form 2 must be submitted by local jurisdictions only (not by applicant).
2. When submitting, please print this **Form 2** on light green paper if available.
3. Send this Form 2 and One (1) Complete Paper Copy and One (1) Electronic Digital CD (documents and maps) of the Adopted Amendment to the address in number 6:
4. **Electronic Submittals: Form 2 – Notice of Adoption will not be accepted via email or any electronic or digital format at this time.**
5. The Adopted Materials must include the final decision signed by the official designated by the jurisdiction. The Final Decision must include approved signed ordinance(s), finding(s), exhibit(s), and any map(s).
6. **DLCD Notice of Adoption must be submitted in One (1) Complete Paper Copy and One (1) Electronic Digital CD via United States Postal Service, Common Carrier or Hand Carried to the DLCD Salem Office and stamped with the incoming date stamp.** (for submittal instructions, also see # 5)) **MAIL the PAPER COPY and CD of the Adopted Amendment to:**

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

7. Submittal of this Notice of Adoption must include the signed ordinance(s), finding(s), exhibit(s) and any other supplementary information (see ORS 197.615).
8. Deadline to appeals to LUBA is calculated **twenty-one (21) days** from the receipt (postmark date) of adoption (see ORS 197.830 to 197.845).
9. In addition to sending the Form 2 - Notice of Adoption to DLCD, please notify persons who participated in the local hearing and requested notice of the final decision at the same time the adoption packet is mailed to DLCD (see ORS 197.615).
10. **Need More Copies?** You can now access these forms online at <http://www.lcd.state.or.us/>. You may also call the DLCD Office at (503) 373-0050; or Fax your request to: (503) 378-5518.

**ORDINANCE 03-2010 AMENDING ORDINANCE 01-2005, CHAPTER 3
FOR COMPLIANCE WITH FEMA REGULATIONS OF 2010**

CHAPTER 3 - OVERLAY PROTECTION AREAS

Establishment of Overlay Protection Zones

3.0.10 Purpose.

The purpose of an overlay zone is to provide protection and to maintain quality of life for the City's residents. This is accomplished by requiring that specific development standards be applied to areas of natural hazards in order to minimize damage to residents and property, while protecting valuable natural resources that minimize hazard conditions within the City.

3.0.20 Interpretation.

In interpreting this chapter, all provisions shall be considered as minimum requirements, liberally construed in favor of the governing body, and deemed neither to limit nor repeal any other powers granted under Oregon statutes.

3.0.30 Warning and Disclaimer of Liability.

The degree of flood and slope hazard protection required by this chapter is considered reasonable for regulatory purposes and is based upon scientific and engineering considerations, recognizing that larger floods and slope hazards can and will occur on rare occasions, and that these hazards may be exacerbated by human activity or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding, flood damages, landslides, or other slope hazards. The provisions of this chapter and this ordinance shall not create liability on the part of the City of Glendale, Douglas County, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages or slope hazard conditions that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

3.0.40 Determination of Applicability Prior to Annexation.

Annexation of lands to the City requires a determination of existing flood and slope hazards. Any hazards identified on the land to be annexed shall be amended to the official maps. If the annexation is initiated by the City, the City shall pay the cost of determination of hazards; if annexation is initiated by a property owner, the property owner is responsible for determining the existence of hazards on the property or properties being annexed. Amendment of hazard maps shall require review and approval of the City Council.

Flood Hazard Overlay (FHO)

3.1.10 Purpose.

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

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

3.1.11 Methods of reducing Flood Losses

In order to accomplish its purposes, these flood provisions include methods and provisions for:

- (1) Restricting or prohibiting uses which are dangerous to health safety, and property due to water or erosion hazards, or which result in damaging increase in erosion or in flood heights or velocities;
- (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- (4) Controlling filling, grading, dredging, and other development which may increase flood damage
- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas;
- (6) Coordinating and supplementing the provisions of the state building code with local land use and development regulations.

3.1.20 Applicability.

The Flood Hazard Overlay shall apply to all areas of special flood hazard within the jurisdiction of the City of Glendale, Douglas County, Oregon.

The Flood Hazard Overlay, FHO appears on the zoning map as a single cross-hatch area. When this designation appears overlaid on a zone, all regulations and requirements of the underlying zone and the FHO will apply.

3.1.30 Requirements for a Development Permit.

A development permit shall be obtained before construction or development begins within any area of flood hazard. This permit shall be for all structures including manufactured homes, and for all development including fill, storage of materials and other activities as set forth in this chapter.

3.1.40 Application for a Development Permit.

Application for a development permit in a flood hazard area shall include an Engineer's Report furnished to the City of Glendale. This report will be reviewed and approved by the City's Engineer at the expense of the applicant. This report 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, grading, filling, storage of materials, drainage, facilities and the location of the foregoing. Specifically, the following information is required:

- A. Elevation in relation to mean sea level of the lowest floor, including the basement of all existing and proposed structures.
- B. Elevation in relation to mean sea level of flood proofing in any structure.
- C. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in this chapter.
- D. Description of the extent to which a watercourse will be altered or relocated as a result of the proposed development.
- E. Address all applicable permits and indicate the status of all applications from those Federal, State and local government agencies from which prior approval is required.
- F. Where base flood elevation data is provided through the Flood Insurance Study, FIS, obtain and record that actual elevation (in relation to mean sea level) of the lowest floor (including basements and below-grade crawl spaces) of all new or substantially improved structures, and whether or not the structure contains a basement.
- G. For all new or substantially improved flood proofed structures where base flood elevation data is provided through the Flood Insurance Study, FIS:

1. Verify and record the actual elevation (in relation to mean sea level), and;
2. Provide the flood proofing certifications required in this Chapter.

H. Provide to the City, analysis and findings pertaining to the provisions of this ordinance and specifically this section.

The City of Glendale will maintain the flood proofing certifications required in this Section and all documentation provided by the Applicant's Engineer for the permanent record.

3.1.50 Definitions.

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

When there are conflicts, definitions included within the Flood Hazard Overlay, Section 3.1.50 take precedence over the definitions included in Section 1.1.20. However, where this section and another city ordinance or another section of this ordinance conflict or overlap whichever imposes the more stringent restrictions shall prevail.

Appeal. A request for review of the City Manager/Recorder's interpretation of any provision of the Flood Hazard Overlay, or a request for a variance from the provisions of the Flood Hazard Overlay.

Area of Shallow Flooding. A designated AO or AH area on the Flood Insurance Rate Map. The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow, also known as sheet flow, may be evident. AO is characterized as sheet flow and AH indicates ponding.

Area of Special Flood Hazard. The land in the flood plain within a community subject to a 1% or greater chance of flooding in any given year. Designation on National Flood Insurance Administration Flood Insurance Rate Maps always includes the letters A or V.

Base Flood. The flood having a 1% chance of being equaled or exceeded in any given year. Also referred to as the "100-Year Flood." Designation on National Flood Insurance Administration Flood Insurance Rate Maps always includes the letters A or V.

Basement. Any area of the building having its floor sub grade (below ground level) on all sides.

Below-Grade Crawl Space 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 crawl space to the top of the crawl space foundation, does not exceed 4 feet at any point.

Critical Facility A facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

Development. Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the areas of specified flood hazard.

Elevated Building For insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

Existing Manufactured Home Park or Subdivision. A manufactured home park subdivision for which the construction of facilities for servicing 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 before the effective date of the adopted floodplain management regulations.

Expansion of an Existing Manufactured Home Park or Subdivision. The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads.)

Flood or Flooding. A general and temporary condition of partial or complete inundation of normally dry land areas from:

- A. The overflow of inland or tidal waters and/or
- B. The unusual and rapid accumulation of runoff of surface waters from any source.

Flood Insurance Rate Map. The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium areas applicable to the community. Flood Insurance Rate Maps are often referenced as "FIRM."

Flood Insurance Study. 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 Prevention Variance. A grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Lowest Floor. 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, 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.

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

New Construction. Structures for which the "start of construction" commenced on or after the effective date of this ordinance.

Recreational Vehicle. A vehicle which is:

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

Request for Review. A request for a review of the interpretation of any of the flood provisions or a request for a variance as defined herein.

State Building Code. The combined specialty codes.

Start of Construction. Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; 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.

Structure. A walled and roofed building including a gas or liquid storage tank that is principally above ground.

Substantial Damage. 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. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure either:

- A. Before the improvement or repair is started, or
 - B. If the structure has been damaged and is being restored, before the damage occurred.
- For the purposes of this definition “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

- A. 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
- B. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.

3.1.60 General Provisions.

Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled “The Flood Insurance Study for Douglas County, Oregon and Incorporated Areas” dated February 17, 2010 with the accompanying Flood Insurance Maps are hereby adopted by reference and declared to be part of this ordinance. The Flood Insurance Study is on file at the City Hall, 124 Third Street, Glendale, Oregon.

The best available information for flood hazard area identification as outlined in this Flood Hazard Overlay shall be the basis for regulation until a new Flood Insurance Rate Map is issued which incorporates the data utilized in this overlay.

3.1.70 Administration.

- A. Establishment of Development Permit. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 3.1.60, General Provisions. The permit shall be for all structures including manufactured homes, as set forth in Section 3.1.50 Definitions, and for all other development including fill and other activities, also as set forth in Definitions.
- B. Designation of the City Manager/Recorder. The City Manager/Recorder is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.
- C. Duties and Responsibilities of the City Manager/Recorder. Duties of the City Manager/Recorder shall include, but not be limited to:
 - 1. Permit Review.
 - a. Review all development permits to determine that the permit requirements have been satisfied.

- b. Review all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
 - c. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 3.1.80 (B)(5)(a) are met.
 - d. City Manager/Recorder may, at his or her sole discretion, submit development permits to the City planner for review and approval at the expense of the applicant.
2. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 3.1.60, Basis for Establishing the Areas of Special Flood Hazard, the City Manager/Recorder shall obtain, review and reasonably utilize any base flood elevation and floodway data available from the federal government, state government, or other source, in order to administer Sections 3.1.80(B)(1), Specific Standards, Residential Construction, and 3.1.80(B)(2), Specific Standards, Nonresidential Construction and Section 3.1.80(B)(5), Specific Standards, Floodways.
3. Information to be Obtained and Maintained.
- a. Where base flood elevation data is provided through the Flood Insurance Study or required as in Section 3.1.70(C)(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.
 - b. For all new or substantially improved flood-proofed structures, verify and record the actual elevation (in relation to mean sea level).
 - c. Maintain for public inspection all records pertaining to the provisions of this ordinance.
4. Alteration of Watercourses.
- a. Notify adjacent communities and the Oregon Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
5. Interpretation of the FIRM Boundaries. Make interpretations where needed as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions).
6. Variance Procedures.

- (1) Generally, the only condition under which a flood prevention 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 all items listed under Flood Prevention Variance Procedure have been fully considered. As the lot size increases, the technical justification required for issuing the flood prevention variance increases.
- (2) Flood Prevention Variances may be issued for the reconstruction, rehabilitation or restoration 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.
- (3) Flood Prevention Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
- (4) Flood Prevention Variances shall only be issued upon a determination that the flood prevention variance is the minimum necessary, considering the flood hazard, to afford relief.
- (5) Flood Prevention Variances shall only be issued upon:
 - a. A showing of good and sufficient cause
 - b. A determination that failure to grant the flood prevention variance would result in exceptional hardship to the applicant
 - c. A determination that the granting of a flood prevention variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in this section, or conflict with existing local laws or ordinances.
- (6) Flood Prevention 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, flood prevention variances from the flood elevations should be quite rare.
- (7) Flood Prevention Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of flood proofing than watertight or dry-flood proofing, where it can be determined that such action will have low damage potential, complies with all other flood prevention variance criteria except this Section, and otherwise complies with Section 3.1.80(A)(1).
- (8) Any applicant to whom a flood prevention variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

- (9) The applicant's engineer shall address the following: all technical evaluations, all relevant factors and standards specified in other sections of this ordinance. The applicant's engineer shall include the following in a report addressing what is applicable. The City's engineer will then review and approve the report at the expense of the applicant.
- (a) The danger that materials may be swept onto other lands to the injury of others;
 - (b) The danger to life and property due to flooding or erosion damage;
 - (c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (d) The importance of the services provided by the proposed facility to the community
 - (e) The necessity to the facility of a waterfront location, where applicable;
 - (f) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (g) The compatibility of the proposed use with existing and anticipated development;
 - (h) The relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
 - (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (j) 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,
 - (k) 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.

3.1.80 Provisions for Flood Hazard Protection.

A. General Standards. In all areas of special flood hazards the following standards are required.

1. Anchoring.

- a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- b. 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 Areas" guidebook for additional techniques).

2. Construction Materials and Methods.
 - a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - c. Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

3. Utilities.
 - a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 - b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood water 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.

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

5. Review of Building Permits. All applications in the floodway are required to provide a no rise engineered certificate.
Where elevation data is not available either through the Flood Insurance Study or from another authoritative source as referenced in Section 3.1.70(C)(2), applications for building permits shall include an engineer's analysis sufficient to assure that the 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 two feet above grade in these areas may result in higher insurance rates.

B. Specific Standards. In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 3.1.60 Basis for Establishing the Areas of Flood Hazard, or Section 3.1.70(C)(2) Use of Other Base Flood Data, the following provisions are required:

1. Residential Construction. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of one (1) foot above the base flood elevation.

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 flood waters. 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 flood waters.

2. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall either have the lowest floor, including basement, elevated at or above the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- a. Be flood-proofed so that below the base flood level the structure is water tight 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 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 3.1.70(C).
- d. Nonresidential structures that are elevated, not flood-proofed, must meet the same standards for space below the lowest floor as described in Section 3.1.80(B)(1) Specific Standards, Residential Construction.
- e. Applicants flood-proofing nonresidential buildings shall be notified flood insurance premiums will be based on rates that are one foot below the flood-

proofed level (e.g. a building constructed to the base flood level will be rated one foot below that level).

3. Manufactured Homes.

- a. All manufactured homes to be placed or substantially improved on sites:
- (i) Outside of a manufactured home park or subdivision
 - (ii) In a new manufactured home park or subdivision,
 - (iii) In an expansion to an existing manufactured home park or subdivision, or
 - (iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood;

shall be elevated on a permanent foundation such that the finished floor of the manufactured home is elevated to a minimum 18 inches (46 cm) above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse and lateral movement.

- b. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH and AE on the community’s FIRM that are not subject to the above manufactured home provisions be elevated so that either:
- (i) The finished floor of the manufactured home is elevated to a minimum of 18 inches (46 cm) above the base flood elevation, or
 - (ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, or lateral movement.

4. Recreational Vehicles. Recreational vehicles placed on sites within areas A1-30, AH, and AE on the communities’ FIRM shall either:

- 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 system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
- c. Meet the requirements of Section 3.1.80(B)(3) Specific Standards, Manufactured Homes, and the elevation and anchoring requirements for manufactured homes.

5. Floodways. Located within areas of special flood hazard established in this chapter are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:
 - a. Prohibit encroachments, 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.
 - b. If Section 3.1.80(B)(5)(a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 3.1.80, Provisions for Flood Hazard Reduction.

3.1.90 Below-Grade Crawl Spaces – Administered by State Building Codes Dept.

Below-grade crawl spaces 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 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.
2. The crawlspace is an enclosed area below the base flood elevation (BFE) and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.
3. Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE/
4. Any building utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters.

5. The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.
6. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
7. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.
8. The velocity of floodwaters at the site should not exceed five (5) feet per second, or other foundation types should be used.

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

3.1.91 **Before Regulatory Floodway.** In areas where a regulatory floodway has not been designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, 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.

3.1.92 **Floodways**

Located within areas of special flood hazard established in Section 3.1.60 are areas designated as floodways. Since the floodway is an extremely hazardous area due to velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

1. Except as provided in paragraph 3, below, prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
2. If Section 3.1.80(2) is satisfied, all new construction and substantial improvement shall comply with all applicable flood hazard reduction provisions of Section 3.1.80, Provisions for Flood Hazard Reduction.
3. Projects for stream habitat restoration may be permitted in the floodway provided:
 - (a) The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023); and,

- (b) A qualified professional (a Registered Professional Engineer, or staff of NRCS; the county; or fisheries, natural resources or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and,
 - (c) No structures would be impacted by a potential rise in flood elevation; and,
 - (d) An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included as part of the local approval.
4. New installation of manufactured dwellings are prohibited (2002 Oregon Manufactured Dwelling and Park Specialty Code). Manufactured dwellings may only be located in floodways according to one of the following conditions:
- (a) If the manufactured dwelling already exists in the floodway, the placement was permitted at the time of the original installation, and the continued use is not a threat to life, health, property or the general welfare of the public; or
 - (b) A new manufactured dwelling is replacing an existing manufactured dwelling whose original placement was permitted at the time of installation and the replacement home will not be a threat to life, health, property or the general welfare of the public and it meets the following criteria:
 1. As required by 44 CFR Chapter 1, Subpart 60.3(d)(3), it must be demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the manufactured dwelling and any accessory buildings, accessory structures or any property improvements (encroachments) will not result in any increase in flood levels during the occurrence of the base flood discharge;
 2. The replacement manufactured dwelling and any accessory buildings or accessory structures (encroachments) shall have the finished floor elevated to a minimum of 18 inches (46 cm.) above the BFE as identified on the Flood Insurance Rate Map.
 3. The replacement manufactured dwelling is placed and secured to a foundation support system designed by an Oregon professional engineer or architect and approved by the authority having jurisdiction.
 4. The replacement manufactured dwelling, its foundations supports, and any accessory buildings, accessory structures, or property improvements (encroachments) do not displace water to the degree that it causes a rise in the water level or diverts water in a manner that causes erosion or damage to other properties;
 5. The location of a replacement manufactured dwelling is allowed by the local planning department's ordinances; and
 6. Any other requirements deemed necessary by the authority having jurisdiction.

3.1.93 Critical Facility

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA)(100-year floodplain).


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 or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Flood proofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation should be provided to all critical facilities to the extent possible.

Effective Date

This Ordinance shall take effect immediately upon adoption by the Glendale City Council in order to meet the FEMA deadline for National Flood Insurance Program compliance.

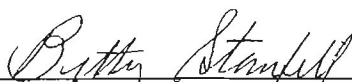
PASSED AND ADOPTED by the City Council of the City of Glendale this 8th day of February, 2010 by a unanimous vote.

APPROVED by the Mayor this 8th day of February, 2010.



Fred Jensen, Mayor

Attest:



Betty Stanfill, City Recorder

CITY OF GLENDALE
124 THIRD ST.
P.O. BOX 361
GLENDALE, OR 97442



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*Attn: Plan Amendment Specialist
Dept. of Land Conservation & Development
635 Capitol St. NE, Suite 150
Salem, OR. 97301-2540*