



Oregon

Theodore R. Kulongoski, Governor

Department of Land Conservation and Development

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www.lcd.state.or.us

NOTICE OF ADOPTED AMENDMENT

July 11, 2008

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

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: City of Durham Plan Amendment
DLCD File Number 001-08



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: July 28, 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.**

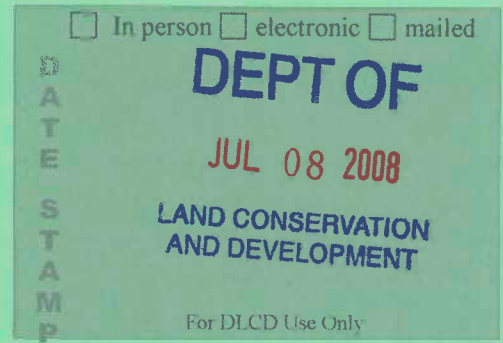
Cc: Doug White, DLCD Community Services Specialist
Christine Shirley, FEMA Specialist
Ed Moore, DLCD Regional Representative
Roland Signett, City of Durham

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PROP 2

DLCD

Notice of Adoption



**THIS FORM MUST BE MAILED TO DLCD
 WITHIN 5 WORKING DAYS AFTER THE FINAL DECISION
 PER ORS 197.610, OAR CHAPTER 660 - DIVISION 18**

Jurisdiction: **City of Durham**

Local file number: **244-08**

Date of Adoption: **6/24/2008**

Date Mailed: **7/2/2008**

Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? **Select one** Date: **3/18/2008**

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".

Amends the Flood Damage Prevention Ordinance as follows:

Adds definitions, provides penalties for non-compliance, provides that when the flood damage ordinance conflicts or overlaps other regulations the more strict applies. Provides standards for interpretation and disclaimer of liability. Names the building official as the Local Floodplain Administrator.

Provides guidelines for siting critical facilities and floodproofing requirements.

Provides standards for below-grade crawlspace

Does the Adoption differ from proposal? No, no explanation is necessary

Plan Map Changed from:

to:

Zone Map Changed from:

to:

Location:

Acres Involved:

Specify Density: Previous:

New:

Applicable statewide planning goals:

- | | | | | | | | | | | | | | | | | | | |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
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| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

DLCD 001-08 (16781)

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. _____

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

Local Contact: **Roland Signett**

Phone: **(503) 639-6851** Extension:

Address: **17160 SW Upper Boones Ferry Rd**

Fax Number: **503-598-8595**

City: **Durham**

Zip:

E-mail Address: **cityofdurham@comcast.net**

ADOPTION SUBMITTAL REQUIREMENTS

This form must be mailed to DLCD within 5 working days after the final decision
per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and TWO Complete Copies (documents and maps) 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**

2. Electronic Submittals: At least **one** hard copy must be sent by mail or in person, but you may also submit an electronic copy, by either email or FTP. You may connect to this address to FTP proposals and adoptions: **webserver.lcd.state.or.us**. To obtain our Username and password for FTP, call Mara Ulloa at 503-373-0050 extension 238, or by emailing **mara.ulloa@state.or.us**.

3. Please Note: 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 not be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **TWENTY-ONE (21) days** of the date, the Notice of Adoption is sent to DLCD.

6. In addition to sending the Notice of Adoption to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

**ORDINANCE NO. 244-08, AN ORDINANCE OF THE CITY OF DURHAM,
OREGON AMENDING ORDINANCE NO. 219-04, AN ORDINANCE,
RELATING TO FLOOD DAMAGE PREVENTION**

Whereas, the Federal Emergency Management Agency (“FEMA”) requires the City to restrict development activity in the floodplain if City residents are to be entitled to purchase flood insurance, now therefore

The City Council of Durham, Oregon ordains as follows:

SECTION 1.0
DEFINITIONS

Unless specifically defined below, 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.

*“**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. Designation on maps always includes the letters A or V.*

*“**BASE FLOOD**” means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the “100 – year flood.” Designation on maps always includes the letters A or V.*

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

*“**CRITICAL FACILITY**” means 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**” means 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 or storage of equipment or materials located within the area of special flood hazard.*

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

“FLOOD” OR “FLOODING” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters and/or
- (2) The unusual and rapid accumulation of runoff of surface waters from any source.

“FLOOD INSURANCE RATE MAP (FIRM)” means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

“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.

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

“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 4.2-1(2).

“MANUFACTURE 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 attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle”.

“NEW CONSTRUCTION” means structures for which the “start of construction” commenced 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 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 site, such as the pouring of a slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation of a basement, footing, piers or foundation, or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not the 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” means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure:

- (1) before the improvement or repair, or
- (2) 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

- (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 State inventory of Historic Places.

“WATER DEPENDENT” means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operation

SECTION 2.0
GENERAL PROVISIONS

2.1 LANDS TO WHICH THIS ORDINANCE APPLIES

This ordinance shall apply to all areas of special flood hazards within the jurisdiction of Durham, Oregon.

2.2 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 the City of Durham," dated February 18, 2005, with accompanying Flood Insurance Maps is hereby adopted by reference and declared to be a part of this ordinance. The Flood Insurance study is on file at 17160 S.W. Upper Boones Ferry Rd., Durham, Oregon 97224.

2.3 *PENALTIES FOR NONCOMPLIANCE*

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. A failure or refusal to comply with any provision of this ordinance constitutes a Violation. The City shall have any and all remedies available to it to remedy a failure or refusal to comply and to prevent future noncompliance in addition to prosecution for a Violation.

2.4 *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.

2.5 *INTERPRETATION*

In the interpretation and application of this ordinance, all provisions shall be:

- (1) Considered as minimum requirements;*
- (2) Liberally construed in favor of the governing body, and,*
- (3) Deemed neither to limit or repeal any other powers granted under State statutes.*

2.6 *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. Flood heights may be increased by man-made or natural causes. This Ordinance shall not constitute a representation by the City of Durham or its officials, employees, agents and contractors that compliance with the provisions of this Ordinance shall cause any property or any use of property that is allowed by this Ordinance to be safe from flooding or flood damage.

SECTION 3.0 ADMINISTRATION

3.1 ESTABLISHMENT OF DEVELOPMENT PERMIT

3.1-1 Development permit Required

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 2.2. 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."

3.2 DESIGNATION OF THE ADMINISTRATION

The Building Official is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.

3.3 DUTIES AND RESPONSIBILITIES OF THE BUILDING OFFICIAL

The Building Official is hereby designated as the Local Floodplain Administrator, whose duties shall include, but not be limited to:

3.3-1 Permit Review

- (1) Review all development permits to determine that the permit requirements of this ordinance have been satisfied.
- (2) 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.
- (3) 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 4.3(1) are met.

3.3-2 Use of Other Base Flood Data

When base flood elevation data has not been provided in accordance with Section 2.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the Building Official shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Sections 4.2, SPECIFIC STANDARDS, and 4.3 FLOODWAYS.

3.3-3 Information to be obtained and maintained

- (1) Where the base flood elevation data is provided through the Flood Insurance Study or required as in Section 3.3-2, obtain the record of 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 floodproofed structures:
 - (i) verify and record the actual elevation (in relation to mean sea level), and
 - (ii) maintain the floodproofing certification required in Section 4.2-2(3)
- (3) Maintain for public inspection all records pertaining to the provisions of this ordinance.

3.3-4 Alterations of watercourses

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

3.3-5 Interpretation of FIRM Boundaries

Make interpretations where needed, as to the 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). The person contesting the location of the boundary shall be given reasonable opportunity to appeal the interpretation. 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).

PROVISIONS FOR FLOOD HAZARD REDUCTION

4.1 GENERAL STANDARDS

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

4.1-1 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).

4.1-2 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 to minimize flood damage.
- (3) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

4.1-3 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 system into flood waters, and,
- (3) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

4.1-4 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 base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for the subdivision proposals and other proposed developments which contain at least 50 lots or 5 acres (whichever is less).

4.1-5 Review of Building Permits

Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (section 3.3-2), applications for building permits shall be reviewed 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 zones may result in higher insurance rates.

4.2 SPECIFIC STANDARDS

In all areas of special flood hazards where the base flood elevation data has been provided as set forth in Section 2.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD or Section 3.3-2, Use of other Base Flood data, the following provisions are required:

4.2-1 Residential Construction

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

4.2-2 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 base flood elevation; or, together with attendant utility and sanitary facilities shall:

- (1) be floodproofed so that the below base flood level the structure is watertight with walls substantially impermeable to the passage of water,
- (2) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy,
- (3) be certified by a registered professional engineer or architect that the design 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 4.3-3(2).
- (4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in Section 5.2-1(2).
- (5) Applicants floodproofing nonresidential buildings shall be notified that the flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).

4.2-3 Manufactured Homes

All manufactured homes to be placed or substantially improved with Zones A1-30, AH and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home a minimum of one foot above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection 4.1-1(2).

4.2-4 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 4.2-3 above and the elevation and anchoring requirements for manufactured homes.

4.3 FLOODWAYS

Located within areas of special flood hazard established in Section 3.2 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:

- (1) Prohibit encroachments, including fill, new construction, substantial improvements, and other developments unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analysis 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 4.3(1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 4.0, PROVISIONS FOR FLOOD HAZARD REDUCTION.

4.4 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 may 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. Floodproofing 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 shall be provided to all critical facilities to the extent possible.

4.5 BELOW-GRADE CRAWLSPACE CONSTRUCTION

Below-grade crawlspaces are allowed in the Special Flood Hazard Area subject to the following standards:

- i. *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.

- ii. 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.*
- iii. 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 joist, 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.*
- iv. 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.*
- v. The interior grade of a crawlspace below the BFE must not be more than two (2) feet below the lowest adjacent exterior grade.*
- vi. 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 floor hazard areas.*
- vii. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.*

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

SECTION 5.0
REPEAL


5.0 ORDINANCE 145-87 is hereby repealed as to any and all building permits that the City may issue on and after the effective date of this Ordinance.

First Reading this 27th day of May, 2008.

Second Reading and Passage this 24th day of June, 2008.

CITY OF DURHAM

By:


Gery Schirado, Mayor

ATTEST:


Roland Signett, City Administrator/Recorder

City of Durham
17400 SW Upper Beavers Ferry
Durham, OR 97224



ATT: Plan Amendment Specialist
DLCD
635 Capitol St. NE, Suite 150
Salem, OR 97301-2540