

153.037 FLOOD HAZARD OVERLAY ZONE, OR FHO DISTRICT

Proposed changes from David Lentzner, DLCD on June 4, 2018

4. DEFINITIONS

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.

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, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days. For insurance purposes the term “manufactured home” does not include park trailers, travel trailers, and other similar vehicles.~~ The term “manufactured dwelling” does not include a “recreational vehicle.”

Start of Construction Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement ~~rehabilitation, addition~~ 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 the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations 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 that alteration affects the external dimensions of the building.

Structure means a walled and roofed building, a modular or temporary building, or including a gas or liquid storage tank that is principally above ground.

Substantial Improvement means any ~~repair~~, reconstruction, ~~rehabilitation, addition~~ or other improvement of a structure, the cost of which equals or exceeds 50 percent 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 purpose of this definition, “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor or other

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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 **provided that the alteration will not preclude the structure's continued designation as a "historic structure."**

5B should be 7B.
5C should be 7C.

6. ADMINISTRATION

C.2) Use of Other Base Flood Data

- (a) When base flood elevation data has not been provided in accordance with Section 3B, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, the City Manager may 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 5B, SPECIFIC STANDARDS, and 5C, ENCROACHMENTS.
- (b) **Provide Base Flood Elevation and Freeboard When base flood elevation has been provided, the local floodplain administrator shall provide it to the Building Official along with freeboard requirements established in Section 7B, SPECIFIC STANDARDS**

3B doesn't exist in this section. Should be 5B

C. New Section Requirement to Submit New Technical Data

Notify FEMA within six months of project completion when an applicant had obtained a Conditional Letter of Map Revision (CLOMR) from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Revision (LOMR).

7. PROVISIONS FOR FLOOD HAZARD REDUCTION

B. 3) Manufactured Homes

- a) All manufactured homes to be placed or substantially improved within Zones A1- 30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is two feet above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of subsection 5A-(1).

5A-1 should be 7A-1.

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b) All manufactured homes to be placed or substantially improved on sites shall be elevated on a permanent foundation such that the bottom of the longitudinal chassis frame beam shall be at or above the Base Flood Elevation (BFE) and be securely anchored to an adequately designed foundation system to resist floatation, collapse and lateral movement. Electrical crossover connections shall be a minimum of 12 inches above the BFE. Crossover ducts are allowed below the BFE, but shall be constructed to prevent floodwaters from entering or accumulating within system components. This may require an engineer's certification.

I agree with David's comment. Combine the two requirements.

note DL – I don't understand the distinction between these two subsections, they seem to administer the same thing but have slightly different requirements. Oregon building code requires the provisions of b) – I would recommend combining the zone designations and anchoring requirements from a) with the elevation requirements for the frame beam and crossover connections in b), unless I am misunderstanding a distinction. A two foot elevation standard for the lowest floor is also considered to be compliant with the elevation requirement if that is preferred (the longitudinal chassis beam at BFE ends up with lowest floor elevated about 18")

C. Encroachments. The cumulative effect of any proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than one foot at any point within the flood zone.

note DL – It is unclear to me what this refers to – this is a rule that already applies throughout an AE Zone study with floodway. Development in the fringe does not increase the BFE and development in the floodway must show no rise. There is a provision for development in AE Zones where no floodway has been mapped, where each development must provide information about rise, so that the one-foot surcharge does not get surpassed. You may not have any areas in the City with AE zones and no floodway (and are also not tidally influenced, where a floodway surcharge cannot be calculated), but FEMA does like the language to still be included. The sections of the state model code for this provision are as follows:

a) *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.*

I support these amendments to encroachment wording.

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b) Applicants of proposed projects that increase the Base Flood Elevation more than one foot shall obtain from FEMA a Conditional Letter of Map Revision (CLOMR) before the project may be permitted. As soon as possible, but no later than 6 months after project completion, an application for a Letter of Map Revision (LOMR) shall be submitted by the applicant to FEMA. The applicant is responsible for paying any costs associated with the CLOMR and LOMR process.

D. Standards for Shallow Flooding Areas (AO Zones).

d) 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 facility construction within the SFHA shall have the lowest floor elevated three (3) feet above BFE 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 the BFE. 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 BFE shall be provided to all critical facilities to the extent possible.

Agreed. Critical facilities applies to all zones, not just AO zones.

note DL – the placement of this section indicates to me that it only applies in AO Zones. I would recommend breaking it out as subsection E of Section 7 PROVISIONS FOR FLOOD HAZARD REDUCTION.

3) Recreational Vehicles. Recreational vehicles may occupy a site in a Special 13 Flood Hazard Area for periods of 180 consecutive days or greater providing they are fully licensed and ready for highway use, on its wheels or a jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions. Recreational vehicles that do not meet these criteria become manufactured homes and must be anchored and elevated pursuant to §153.037 (5)(A)(1)(b) of this ordinance.