MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Meeting date:	October 2, 2019				
Department:	Public Works	Agenda Planning Date:	Sept. 26, 2019	Time required:	10 min
☐ Audio/Visual aids					
Contact:	Brandon Reich	Phone:	503-566-4175		
Department Head Signature:	Brian Nicholas				

TITLE	Continued public hearing to consider amendments to the Marion County Urban and Rural Zone Codes adopting revised floodplain maps for the area near Turner and amendments to comply with the National Flood Insurance Program
Issue, Description & Background	After the flooding Turner experienced in January 2012, the city requested a reevaluation of the floodplain maps in the city and nearby areas. The city worked with a consultant to develop a new study of the floodplain and Marion County staff has been participating in the remapping process. The study applies new, more accurate topographic information. As a result of the study, the floodway and floodplain will widen in some locations and narrow in others, and base flood elevations will generally increase. Marion County must adopt the revised maps provided by FEMA and regulate development to the new maps in order for the county, and its citizens, to be able to continue participating in the National Flood Insurance Program. The revised maps go into effect on October 18, 2019. On July 17, 2019, the board adopted an order initiating consideration of the amendments and scheduling a public hearing for August 28, 2019. At the hearing, staff presented new information that the FEMA required changes to the county floodplain code to comply with National Flood Insurance Program requirements. The board continued the hearing to October 2, 2019, to consider those amendments.
Financial Impacts:	None.
Impacts to Department & External Agencies	None.
Options for Consideration:	1. The board may approve the amendments to the Marion County Urban and Rural Zone Codes. 2. The board may approve the amendments with modifications or changes. 3. The board may decline to approve the amendments.
Recommendation:	Staff recommends the board of commissioners approve the amendments to the Marion County Urban and Rural Zone Codes adopting new FEMA floodplain maps for the area near Turner and amendments to comply with the National Flood Insurance Program, and direct staff to return with an ordinance reflecting their decision.
List of attachments:	Staff Report with amendments

MARION COUNTY BOARD OF COMMISSIONERS

Board Session Agenda Review Form

Presenter: Brandon Reich

Copies of completed paperwork sent to the following: (Include names and e-mail addresses.)

Copies to: Brandon Reich - breich@co.marion.or.us

Marion County
OREGON

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MEMORANDUM

TO: Marion County Board of Commissioners

FROM: Marion County Public Works – Brandon Reich, Senior Planner

SUBJECT: Amendments to Marion County Urban and Rural Zone Code Chapters 16 and 17 to adopt new floodplain maps for the area near Turner

DATE: August 21, 2019

BACKGROUND

After the flooding Turner experienced in January 2012, the city requested re-evaluation of the floodplain maps in the city and nearby. The city worked with a consultant to develop a new study of the floodplain and Marion County staff has been participating in the remapping process. The revised maps go into effect on October 18, 2019.

COMMENTS

No comments were received at the time this staff report was prepared.

FACTS AND ANALYSIS

The Code of Federal Regulations, Title 44, Section 60.3, states that the Federal Insurance Administrator shall provide the data upon which floodplain management regulations are based. It further establishes standards the local community shall require for development in floodplains once the Federal Insurance Administrator provides notice of floodplain mapping (44 CFR 60.3(d)). On April 18, 2019, FEMA notified the county that new flood insurance rate maps for the area in and around Turner go into effect on October 18, 2019. The maps must be adopted by the county before that date in order that the county, and property owners in the county, may continue to participate in the National Flood Insurance Program.

Marion County Code Titles 17.178 and 16.19 implement the development standards required by FEMA for county participation in the National Flood Insurance Program. MCC 17.178.030 and 16.19.100 adopt the most recent floodplain data provided by FEMA by referencing the date of the most recent Flood Insurance Study provided by FEMA.

The revised study incorporates new, more accurate topographic information. As a result of the study, the floodway and floodplain will widen in locations and narrow in others and base flood elevations will generally increase. The federal data was only able to be challenged by providing new or revised engineering information which would be reviewed by FEMA and considered for inclusion in the study. No new or revised engineering information was provided to FEMA during the appeal period.

Jointly, the City of Turner, Marion County, FEMA Region X, and the Oregon Department of Land Conservation and Development engaged in extensive outreach regarding the revised maps. The jurisdictions and agencies held public meetings, mailed notices, and published notices in the newspaper to bring awareness of the map changes, to answer questions about the new maps and to encourage people to purchase flood insurance ahead of the map changes in order to possibly acquire a grandfathered rate for their insurance premium.

Additionally, Turner is working with Marion County and other jurisdictions and service districts in the Mill Creek watershed area to identify feasible mitigation projects that could reduce the impacts of flooding on communities in this area. Preliminary results of the study should be available soon and Planning staff will discuss those results with the Marion County Board of Commissioners at a future meeting.

Finally, there are a number of amendments that FEMA requires be incorporated into the county floodplain code in order that the code continues to maintain compliance with minimum standards for participation in the National Floodplain Insurance Program. These amendments fall into five general categories:

1. **Amendments to comply with NFIP insurance standards**. Having these in the code better ensures that structures being built are able to obtain flood insurance or better rates of flood insurance (such as the amendments to the purpose section of the code).

2. **Amendments to incorporate administrative duties that Planning is already doing**, such as issuing letters for substantial improvement determination.

3. **Amendments to reflect coordination with building codes**, such as the references to the Oregon Manufactured Dwelling Installation Specialty Code. These amendments help to streamline the process for property owners by including references to construction requirements in the floodplain code.

4. **Amendments to the wording of standards**, which change the wording to match NFIP requirements but don't appear to cause development standards to change.

5. **Substantive amendments**:
    a. Small accessory structures can no longer be exempted from the requirements of the floodplain overlay zone.
    b. Accessory structures (appurtenances) are limited in size to 200 square feet for residential (or 400 square feet on property greater than 2 acres and that can meet a setback minimum of 20 feet) and 120 square feet for non-residential.
    c. Adds ability to use a recreational vehicle as a hardship dwelling in the floodplain if it meets standards for manufactured home placement.

RECOMMENDATION

Planning staff recommends the Board of Commissioners approve amending the Marion County Urban and Rural Zone Codes by adopting new FEMA floodplain maps for the area near Turner and amending the floodplain code to ensure compliance with the National Flood Insurance Program.

Attachment:

Proposed Amendments

Proposed Amendments

ADDITIONS IN BOLD AND UNDERLINED
~~DELETIONS IN STRIKEOUT~~
Staff comments in **inverse**/shaded fonts.

Chapter 16.19

FLOODPLAIN OVERLAY ZONE

Sections:

16.19.000 Purpose.

The flood hazard areas of Marion County are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses may be caused by the cumulative effect of obstructions in special flood hazard areas which increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

The State of Oregon has in ORS 197.175 delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry. The purpose of the floodplain overlay zone **therefore** is to **promote public health, safety, and general welfare, and to minimize public and private losses due to flooding in flood hazard areas by provisions designed to**:

A. Protect human life and health;

B. Minimize expenditure of public money for costly flood control projects;

C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

D. Minimize prolonged business interruptions;

E. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in special flood hazard areas;

F. Help maintain a stable base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding;

G. Notify potential buyers that the property is in a special flood hazard area.

H. Notify those who occupy special flood hazard areas that they assume responsibility for their actions.

I. Participate in and maintain eligibility for flood insurance and disaster relief.

In order to accomplish its purpose, this Chapter includes methods and provisions for:

A. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.

B. Minimize expenditure of public money for flood control projects, rescue and relief efforts in areas subject to flooding.

C. Minimize flood damage to new construction by elevating or floodproofing all structures.

D. Control the alteration of natural floodplains, stream channels and natural protective barriers**,** which ~~hold,~~ **help** accommodate or channel floodwaters.

E. Control filling, grading, dredging and other development which may be subject to or increase flood damage.

F. Prevent or regulate the construction of flood barriers which **will unnaturally divert flood waters or** may increase flood hazards in other areas.

G. Comply with the requirements of the Federal Insurance Administration to qualify Marion County for participation in the National Flood Insurance Program.

H. Minimize flood insurance premiums paid by the citizens of Marion County by reducing potential hazards due to flood damage.

I. Implement the floodplain policies in the Marion County Comprehensive Plan. [Ord. 1301 § 4 (Exh. A), 2010; Ord. 1094 § 6, 1998; Ord. 863 § 5, 1990. UZ Ord. § 19.00.]

Changes required by FEMA to comply with the NFIP.

16.19.010 Definitions.
For purposes of this overlay zone the following terms shall mean:

A. "Accessory" means a building, structure, vehicle, or use which is incidental and subordinate to and dependent upon the primary use on the lot.

B. "Area of shallow flooding" means a designated AO or AH Zone on **a community's** ~~the~~ Flood Insurance Rate Map (FIRM). ~~The base flood depths range from~~ **with a one percent or greater annual chance of flooding to an average depth of** one to three feet~~;~~ **where** a clearly defined channel does not exist~~;~~ **where** the path of flooding is unpredictable**,** and ~~indeterminate; and~~ **where** velocity flow may be evident. ~~AO~~ **Such flooding** is characterized ~~as sheet flow and AH indicates~~ **by** ponding **or sheet flow**.

C. "Area of special flood hazard" means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map

(FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous in meaning and definition with the phrase "area of special flood hazard".

D. ~~C.~~ "Base flood ~~level~~" means the flood level having a one percent chance of being equaled or exceeded in any given year ~~(100-year floodplain).~~

E. "Base flood elevation (BFE)" means the elevation to which floodwater is anticipated to rise during the base flood.

F. ~~D.~~ "Basement" means any area of a building having its floor subgrade (below ground level**)** on all sides**.**~~)~~ ~~and not meeting the requirements for crawlspace construction in FEMA Technical Bulletin 11-01.~~

G. "Below-grade crawl space" means 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 crawlspace to the top of the crawlspace foundation, does not exceed 4 feet at any point.

H. ~~E.~~ "Critical facility" means any buildings or locations vital to the emergency response effort (e.g., emergency operations centers, 911 centers, police and fire stations, municipal water distribution and storage systems, hospitals, road departments and select roads and bridges, radio and TV stations and towers), and buildings or locations that, if damaged, would create secondary disasters (e.g., hazardous materials facilities, water and wastewater distribution and treatment facilities, schools, nursing homes, natural gas and petroleum pipelines, and prison or jail facilities).

I. ~~F.~~ "Conveyance" means the carrying capacity of all or a part of the floodplain. It reflects the quantity and velocity of floodwaters. Conveyance is measured in cubic feet per second (CFS). If the flow is 30,000 CFS at a cross-section, this means that 30,000 cubic feet of water pass through the cross-section each second.

~~G. "Existing manufactured home park or subdivision" is one in which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed was completed before the effective date (August 15, 1979) of the community's floodplain management regulations. The construction of facilities includes, at a minimum, the installation of utilities, construction of streets, and either final site grading or the pouring of concrete pads.~~

The Oregon Specialty Codes do not distinguish between new and existing manufactured home parks or subdivisions and apply the same standards to both, so this definition is unnecessary.

J. "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.

K. ~~H.~~ "Encroachment" means any obstruction in the floodplain which affects flood flows.

L. ~~I.~~ "Flood" or "flooding" means**:**

1. A ~~a~~ general and temporary condition of partial or complete inundation of ~~usually~~ **normally** dry land areas from**:**

a. The overflow of inland or tidal waters.

b. The ~~the~~ unusual and rapid accumulation of runoff of surface waters from any source.

c. Mudslides (i.e. mudflows) which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the

surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1)(a) of this definition.

M. ~~J.~~ "Flood boundary floodway map (FBFM)" means the map portion of the Flood Insurance Study (FIS) issued by the Federal Insurance Agency on which is delineated the floodplain, floodway (and floodway fringe) and cross-sections (referenced in the text portion of the FIS).

~~K. "Floodplain development" means any manmade 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 floodplain.~~

N. ~~L.~~ "Floodway fringe" means the area of the floodplain lying outside of the floodway as delineated on the FBFM **or FIRM** where encroachment by development will not increase the flood elevation more than one foot during the occurrence of the base flood discharge.

O. ~~M.~~ "Floodplain" means lands within the county that are subject to a one percent or greater chance of flooding in any given year and other areas as identified on the official zoning maps of Marion County. **"Floodplain" includes the "Areas of special flood hazard" identified within Marion County by the Federal Insurance Administrator.**

P. "Flood elevation study" means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

Q. ~~N.~~ "Flood Insurance Rate Map (FIRM)" means the official map **of a community,** on which the Federal Insurance ~~Administration~~ **Administrator** has delineated both the areas of special flood hazards (floodplain) and the risk premium zones applicable to the community**. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).** ~~and is on file with the Marion County planning division.~~

R. ~~O.~~ "Flood Insurance Study (FIS)" **see "Flood elevation 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 and is on file with the Marion County planning division.~~

S. ~~P.~~ "Floodproofing" means ~~a~~ **any** combination of structural **and** ~~or~~ nonstructural **additions** ~~provisions~~, changes or adjustments to structures **which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.** ~~, land or waterways for the reduction or elimination of flood damage to properties, water and sanitary facilities, structures and contents of buildings in a flood hazard area.~~

T. ~~Q.~~ "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must ~~remain unobstructed~~ **be reserved in order** to discharge the base flood without cumulatively increasing the water surface elevation more than **a designated height.** ~~one foot~~. **Also referred to as "Regulatory floodway".** ~~The floodways are identified on the Flood Insurance Rate Maps (FIRMs) for Marion County. Once established, nothing can be placed in the floodway that would cause any rise in the base flood elevation.~~

U. ~~R.~~ **"Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.**

V. "Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

W. "Highway ready recreation vehicle" means a fully licensed recreational vehicle that is on 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.

X. "Historic structure" means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

a. By an approved state program as determined by the Secretary of the Interior or

b. Directly by the Secretary of the Interior in states without approved programs.

Y. ~~S.~~ "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 title.

Z. ~~T.~~ "Manufactured **dwelling** ~~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~~ **attached** to the required utilities. ~~For floodplain management purposes the~~ **The** term "manufactured **dwelling** ~~home~~" **does not include a "recreational vehicle" and is synonymous with "manufactured home".** ~~also includes mobile homes as defined in subsection (W) of this section. For insurance and floodplain management purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles as defined in subsection (AA) of this section.~~

AA. ~~U.~~ "Manufactured ~~home~~ **dwelling** park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured ~~home~~ **dwelling** lots or spaces for rent or sale.

BB. ~~V.~~ "Mean sea level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

CC. ~~W.~~ "Mobile home" means a vehicle or structure, transportable in one or more sections, which is eight feet or more in width, is 32 feet or more in length, is built on a permanent chassis to which running gear is or has been attached, and is designed to be used as a **residential structure** ~~dwelling~~ with or without permanent foundation when connected to the required utilities. Such definition does not include any recreational vehicle as defined by subsection (~~AA~~**FF**) of this section.

DD. ~~X.~~ "New construction" means **for floodplain management purposes, "new construction" means structures** ~~any structure(s)~~ for which the **"**start of construction**"** commenced on or after the effective date of **a floodplain management regulation adopted by Marion County and includes any subsequent improvements to such structures.** ~~the floodplain overlay zone (August 15, 1979).~~

EE. ~~Y.~~ "Obstruction" means any physical object which hinders the passage of water.

FF. ~~Z.~~ "Permanent foundation" means a natural or manufactured support system to which a structure is anchored or attached. A permanent foundation is capable of resisting flood forces and may include posts, piles, poured concrete or reinforced block walls, properly compacted fill, or other systems of comparable flood resistivity and strength.

GG. ~~AA.~~ "Recreational vehicle" means a ~~"camper," "motor home," or "travel trailer," as defined in ORS 801.180, 801.350, and 801.565, that is intended for temporary human occupancy and is equipped with plumbing, sinks, or toilet, and does not meet the definition of a mobile home in subsection (W) of this section.~~ **a vehicle which 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 residential but as temporary living quarters for recreational, camping, travel or seasonal use.

HH. ~~BB.~~ **"**Reinforced Pier**"**~~.~~ At a minimum, a "reinforced pier" must have a footing adequate to support the weight of the manufactured ~~home~~ **dwelling** under saturated soil conditions. Concrete blocks may be used if vertical steel reinforcing rods are placed in the hollows of the blocks and the hollows are filled with concrete or high strength mortar. Dry stacked concrete blocks do not constitute reinforced piers. When piers exceed 36 inches under "I" beams or 48 inches under floor systems, they are required to be designed by an engineer licensed in Oregon.

II. ~~CC.~~ "Special flood hazard area (SFHA)" **see "Areas of special flood hazard" for this definition.** ~~means areas subject to inundation from a 100-year flood (identified on the FIRM by the letter "A," e.g., A, AE, A1—A30, AO, AH, etc.).~~

JJ. ~~DD.~~ "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, **rehabilitation, addition,** 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 slabs 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~~ **dwelling** 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 **residential** ~~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.

KK. "Structure" means for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured dwelling.

LL. ~~EE.~~ "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.

MM. ~~FF.~~ "Substantial improvement" means any 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 before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. 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 "historic structure"; provided, that the alteration will not preclude the structure's continued designation as a "historic structure."

NN. ~~GG.~~ "Watercourse" means a natural or artificial channel in which a flow of water occurs either continually or intermittently in identified floodplains.

~~HH. "Water dependent" means a use or activity that can be carried out only on, in or adjacent to water areas because the use requires access to the water body for water-related transportation, recreation, energy production or source of water. These uses include structures that to serve their purpose must be in or adjacent to water areas, such as bridges, culverts, and erosion and flood control structures.~~

FEMA is requiring the use of the term "Functionally dependent use" to match 44 CFR 59.1 instead of "Water dependent".

OO. ~~II.~~ "Wet floodproofing" means a method of construction using building materials capable of withstanding direct and prolonged (72 hours) contact with floodwaters without sustaining significant damage (any damage requiring more than low-cost cosmetic repair, such as painting), consistent with FEMA Technical Bulletin 7-93.

PP. "Variance" means a grant of relief by Marion County from the terms of a floodplain management regulation.

QQ. "Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

RR. ~~JJ.~~ "Zoning administrator" shall be the planning director or designee. [Ord. 1346 § 4 (Exh. B), 2014; Ord. 1301 § 4 (Exh. A), 2010; Ord. 1094 § 6, 1998; Ord. 951 § 5, 1993; Ord. 863 § 5, 1990. UZ Ord. § 19.01.]

Changes required by FEMA to comply with the NFIP.

16.19.100 General provisions.

The following regulations apply to all unincorporated lands in identified floodplains as shown graphically on the zoning maps. The floodplain comprises those areas of special flood hazard identified by the Federal Insurance ~~Administration~~ **Administrator** in a scientific and engineering report entitled the "Flood Insurance Study for Marion County, Oregon and Unincorporated Areas" dated ~~January 2, 2003~~ **October 18, 2019**, **with accompanying Flood Insurance Rate Maps (FIRMs)** and subsequent FEMA issued letter of map amendments and letter of map revisions related to these adopted studies and maps**, which are hereby adopted by reference and declared to be a part of this chapter**. The floodplain also comprises areas identified and mapped by Marion County that were not studied by the Flood Insurance Study. The report and maps are incorporated in the overlay zone by this reference and are on file with the Marion County planning division. When base flood elevation data have not been provided, the zoning administrator shall have the authority to determine the location of the boundaries of the floodplain where there appears to be a conflict between a mapped boundary and the actual field conditions, provided a record is maintained of any such determination.

A. Coordination with the State of Oregon Specialty Codes: Pursuant to the requirement established in ORS 455 that Marion County administers and enforces the State of Oregon Specialty Codes, Marion County does hereby acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood hazard areas. Therefore, this ordinance is intended to be administered in conjunction with the Oregon Specialty Codes.

B. Compliance and penalties for noncompliance:

All development within the floodplain (including areas of special flood hazard), is subject to the terms of this ordinance and required to comply with its provisions and all other applicable regulations.

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. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall be enforced pursuant to MCC 16.35.270 and MCC Chapter 1.25. Nothing contained herein shall prevent Marion County from taking such other lawful action as is necessary to prevent or remedy any violation.

C. Abrogation:

This chapter 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.

D. Severability:

This chapter and the various parts thereof are hereby declared to be severable. If any section clause, sentence, or phrase of the chapter is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this chapter.

E. Interpretation:

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

1. Considered as minimum requirements;

2. Liberally construed in favor of the governing body; and

3. Deemed neither to limit nor repeal any other powers granted under state statutes.

F. Designation of the floodplain administrator:

The county zoning administrator is hereby appointed as the floodplain administrator to administer, implement, and enforce this chapter by granting or denying development permits in accordance with its provisions. The floodplain administrator may delegate authority to implement these provisions.

Changes required by FEMA to comply with the NFIP.

G. ~~A.~~ Duties of the ~~zoning~~ **floodplain** administrator, **or their designee,** shall include, but not be limited to:

1. Review all development permits to determine that the permit requirements of this title 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 building permits where elevation data is not available either through the FIS or from another authoritative source, to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available.

4. 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 MCC 16.19.140(J) are met.

5. Provide to building officials the Base Flood Elevation (BFE) and any required freeboard applicable to any building requiring a development permit.

6. Review all development permit applications to determine if the proposed development qualifies as a substantial improvement.

7. Review all development permits to determine if the proposed development activity is a watercourse alteration. If a watercourse alteration is proposed, ensure compliance with the relevant provisions of this chapter.

8. Review all development permits to determine if the proposed development activity includes the placement of fill or excavation.

H. Information to be obtained and maintained:

1. Obtain, record, and maintain the actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where Base Flood Elevation (BFE) data is provided through the Flood Insurance Study (FIS), Flood Insurance Rate Map (FIRM), or obtained in accordance with MCC 16.19.100.

2. Obtain and record the elevation (in relation to mean sea level) of the natural grade of the building site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of MCC 16.19.140 are adhered to.

3. Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, obtain documentation, prepared and sealed by a professional licensed surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement).

4. Where base flood elevation data are utilized, obtain As-built certification of the elevation (in relation to mean sea level) of the lowest floor (including basement) prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection.

5. Maintain all Elevation Certificates (EC) submitted to Marion County

6. Obtain, record, and maintain the elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this ordinance and where Base Flood Elevation (BFE) data is provided through the FIS, FIRM, or obtained in accordance with MCC 16.19.140.

7. Maintain all floodproofing certificates required under this ordinance;

8. Record and maintain all variance actions, including justification for their issuance;

9. Obtain and maintain all hydrologic and hydraulic analyses performed as required under MCC 16.19.140(J).

10. Record and maintain all Substantial Improvement and Substantial Damage calculations and determinations as required under MCC 16.19.100(J).

11. Maintain for public inspection all records pertaining to the provisions of this ordinance.

~~5. 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 structures contain a basement.~~

~~6. For all new or substantially improved floodproofed structures:~~

~~a. Verify and record the actual elevation (in relation to mean sea level); and~~

~~b. Maintain the floodproofing certifications required in MCC 16.19.140(C).~~

~~7. Maintain for public inspection all records pertaining to the provisions of this title, including elevation certificates.~~ [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1369 § 4 (Exh. B), 2016; Ord. 1301 § 4 (Exh. A), 2010; Ord. 1167 § 5, 2002; Ord. 1121 § 5, 1999; Ord. 1094 § 6, 1998; Ord. 1061 § 5, 1997; Ord. 1030 § 5, 1995; Ord. 951 § 5, 1993; Ord. 863 § 5, 1990. UZ Ord. § 19.10.]

I. Requirement to notify other entities and submit new technical data:

1. The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the

community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

2. Notify adjacent communities, the Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:

a. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or

b. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under MCC 16.19.100(I).

3. A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Section 44 of the Code of Federal Regulations (CFR), Sub-Section 65.3. The community may require the applicant to submit such data and review fees required for compliance with this section through the applicable FEMA Letter of Map Change (LOMC) process.

The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:

a. Proposed floodway encroachments that increase the base flood elevation; and

b. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.

An applicant shall Notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

J. Substantial improvement and substantial damage assessments and determinations:

Conduct Substantial Improvement (SI) (as defined in MCC 16.19.010) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files in accordance with MCC 16.19.100(G). Conduct Substantial Damage (SD) (as defined in MCC 16.19.010) assessments when structures are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the special flood hazard area are damaged to the extent that 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.

Change recommended by FEMA and DLCD. Puts into code current practice.

16.19.110 Uses.
Within an FP (floodplain) overlay zone no uses, structures, recreational vehicles and premises shall be used or established except as provided in the applicable underlying zone and the provisions of this overlay zone. Except as provided herein all uses and floodplain development shall be subject to issuance of a conditional use permit (floodplain development permit) as provided in MCC 16.19.130.

A. The following uses are exempt from the regulations of this overlay zone:

1. Signs, markers, aids, etc., placed by a public agency to serve the public.

2. Streets, driveways, parking lots and other open space use areas where no alteration of topography will occur.

3. Minor repairs or alterations to existing structures provided the alterations do not increase the size or intensify the use of the structure, and do not constitute "substantial improvement" as defined in MCC 16.19.010(FF).

4. Customary dredging associated with channel maintenance consistent with applicable state or federal law. This exemption does not apply to the dredged materials placed within a floodplain.

5. Placement of utility facilities necessary to serve established and permitted uses within floodplain areas, such as telephone poles. This exemption does not apply to buildings, substations, or other types of utility facilities development in the floodplain.

6. Flagpoles.

7. Except in a floodway, open wire fencing (no more than one horizontal strand per foot of height) and open rail fencing (rails occupy less than 10 percent of the fence area and posts are spaced no closer than eight feet apart).

~~8. Accessory structures smaller than 50 square feet in size that do not require a building permit.~~

FEMA requires that accessory structures of any size comply with the requirements for accessory structures in this chapter.

9. A highway-ready recreation**al** vehicle may be located on a lot or parcel without a ~~dwelling~~ **residential structure** in a floodplain or floodway ~~only during the non-flood season (June 1st through September 30th)~~, subject to the requirements in MCC 16.26.410 **and shall:**

a. Be placed on site for fewer than 120 consecutive days only during the non-flood season, June 1st through September 30th.

b. 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.

B. Prior to obtaining a building permit for any residential, commercial or industrial structure within an area identified by FEMA or Marion County as being within a 500-year floodplain, the applicant shall comply with the requirement in MCC 16.19.130(C).

C. New ~~dwellings~~ **residential structures** and manufactured **dwelling s**~~homes~~, and replacement ~~dwellings~~ **residential structures** that are not being replaced in the same location as the original ~~dwelling~~ **residential structure**, are prohibited in the floodplain if there is an area on the subject property that is located outside of the floodplain where the **residential structure** ~~dwelling~~ can be placed. An exception to this prohibition

may be granted if a floodplain development permit, and variance meeting the criteria in MCC 16.19.170, are obtained.

D. *Repealed by Ord. 1369.*

E. Siting of new critical facilities is prohibited within the floodway and 100- and 500-year floodplains. For a critical facility needed within a hazard area in order to provide essential emergency response services in a timely manner, an exception to this prohibition may be granted for development in the 500-year floodplain if a floodplain development permit, and variance meeting the criteria in MCC 16.19.170, are obtained. This prohibition does not apply to ~~water~~ **functionally** dependent uses. [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1369 § 4 (Exh. B), 2016; Ord. 1346 § 4 (Exh. B), 2014; Ord. 1301 § 4 (Exh. A), 2010; Ord. 1094 § 6, 1998; Ord. 863 § 5, 1990. UZ Ord. § 19.11.]

F. In coordination with the State of Oregon Specialty Codes, when a structure is located in multiple flood zones on the Marion County Flood Insurance Rate Maps (FIRMs) the provisions for the more restrictive flood zone shall apply. When a structure is partially located in an area of special flood hazard, the entire structure shall meet the requirements for new construction and substantial improvements.

Changes required by FEMA to comply with the NFIP.

16.19.130 Conditional use procedures and requirements.

A. Except as provided in MCC 16.19.110, a conditional use permit (floodplain development permit) shall be obtained before construction or development begins within **any area horizontally within** the floodplain overlay zone **(which includes the area of special flood hazard)**. **The floodplain development permit shall be required for all structures, including manufactured dwellings and for all other development, as defined in MCC 16.19.010.** The conditional use permit shall include conditions ensuring that the flood protection standards in MCC 16.19.140 are met.

B. When base flood elevation data and floodway data have not been provided in accordance with MCC 16.19.100, the applicant, with the assistance of the ~~zoning~~ **floodplain** administrator, shall obtain and reasonably utilize any base flood elevation data or evidence available from a federal, state or other source in order to determine compliance with the flood protection standards. If data are insufficient, the ~~zoning~~ **floodplain** administrator may require that the applicant provide data derived by standard engineering methods.

C. Prior to obtaining a building permit the owner shall be required to sign and record in the deed records for the county a declaratory statement binding the landowner, and the landowner's successors in interest, acknowledging that the property and the approved development are located in a floodplain.

D. Prior to obtaining a building permit, commencing development or placing fill in the floodplain, the applicant shall submit a certification from a registered civil engineer demonstrating that a development or fill will not result in an increase in floodplain area on other properties and will not result in an increase in erosive velocity of the stream that may cause channel scouring or reduce slope stability downstream of the development or fill.

E. The applicant shall provide an elevation certificate signed by a licensed surveyor or civil engineer certifying that the actual elevations **(in relation to mean sea level) of the lowest floor (including basement) and all attendant utilities** of all new or substantially improved ~~manufactured homes, dwellings~~ **residential structures including manufactured dwellings** ~~and structures~~ meet the requirements of MCC 16.19.140(A), (B) and (C) where applicable, as follows:

1. Prior to construction (based on construction drawings); and

2. Once the floor elevation can be determined (based on the building under construction); and

3. Prior to occupancy (based on finished construction).

~~Unless requested by FEMA,~~ e**E**levation certificates shall not be required for the following uses:

1. ~~Water~~ **Functionally** dependent uses, such as boat ramps, docks, wells and well covers.

2. Improvements resulting from cut or fill operations, such as berms, bank improvements, ponds and dams.

~~3. Small scale facilities necessary to serve other uses, such as kiosks and open picnic shelters.~~

4. Grading, such as for roadways, even where alteration of topography occurs.

F. *Repealed by Ord. 1397.*

G. In addition to other information required in a conditional use application, the application shall include:

1. Land elevation in mean sea level data at development site and topographic characteristics of the site.

2. Base flood level expressed in mean sea level data on the site, if available.

3. Plot plan showing property location, floodplain and floodway boundaries where applicable, boundaries and the location and floor elevations of existing and proposed development, or the location of grading or filling where ground surface modifications are to be undertaken.

4. Any additional statements and maps providing information demonstrating existing or historical flooding conditions or characteristics which may aid in determining compliance with the flood protection standards of this overlay zone. [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1346 § 4 (Exh. B), 2014; Ord. 1301 § 4 (Exh. A), 2010; Ord. 1167 § 5, 2002; Ord. 1094 § 6, 1998; Ord. 863 § 5, 1990. UZ Ord. § 19.13.]

5. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed.

6. Certification by a registered professional engineer or architect licensed in the State of Oregon that the floodproofing methods proposed for any non-residential structure meet the floodproofing criteria for non-residential structures in this chapter.

7. A description of the extent to which any watercourse will be altered or relocated.

8. Base Flood Elevation data for any subdivision proposals or other development when required per MCC 16.19.140(G).

9. Substantial improvement calculation(s) for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure.

10. The amount and location of any fill or excavation activities proposed.

Changes required by FEMA to comply with the NFIP.

16.19.140 Flood protection standards.

In all areas of identified floodplain **(which include all areas of special flood hazard)**, the following requirements apply:

A. ~~Dwellings~~ **Residential structures**, **including** Manufactured ~~Homes~~ **Dwellings** and Related ~~Accessory~~ Structures. New residential construction, substantial improvement of any residential structures, location of a manufactured **dwelling** ~~home~~ on a lot or in a manufactured **dwelling** ~~home~~ park or park expansion ~~approved after adoption of this title~~ shall:

1. **Residential structures** ~~Dwellings~~ shall have the top of the lowest floor, including basement, elevated on a permanent foundation to two feet above base flood elevation and the bottom of the lowest floor constructed a minimum of one foot above the base flood elevation. Where the base flood elevation is not available, the top of the lowest floor, including basement, shall be elevated on a permanent foundation to two feet above the highest adjacent natural grade (within five feet) of the building site and the bottom of the lowest floor elevated to one foot above the highest adjacent natural grade (within five feet) of the building site.

2. Manufactured **dwellings** ~~homes~~ shall have the ~~finished floor~~ **bottom of the longitudinal chassis frame beam**, including basement, elevated on a permanent foundation to two feet above base flood elevation. Where the base flood elevation is not available, the finished floor, including basement, shall be elevated on a permanent foundation to two feet above the highest adjacent natural grade (within five feet) of the building site.

3. Manufactured ~~homes~~ **dwellings** shall be anchored in accordance with subsection (D) of this section **and all electrical crossover connections shall be a minimum of one foot above the base flood elevation.**

Requirement in Oregon Manufactured Dwelling Installation Specialty Code.

4. No new ~~dwellings~~ **residential structures, including** ~~or~~ manufactured **dwellings** ~~homes~~ shall be placed in a floodway. An exception to this prohibition may be granted if a floodplain development permit, and variance consistent with MCC 16.19.160, are obtained.

5. **All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the base flood elevation, including crawlspaces shall:** ~~Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must comply with the following standards:~~

a. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the netry and exit of floodwaters;

b. Be used solely for parking, storage, or building access;

c. Be certified by a registered professional engineer or architect to meet or exceed all of the following minimum criteria:

1) A minimum of two openings,

2) The total net area of non-engineered openings shall be not less than one square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosed walls,

~~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.~~

3)~~b.~~ The bottom of all openings shall be no higher than one foot above grade.

4) ~~c.~~ Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they **shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area.** ~~permit the automatic entry and exit of floodwaters.~~

6. Construction where the crawlspace is below grade on all sides may be used. Designs for meeting these requirements must either be certified by a registered professional engineer or architect, or must meet the following standards, consistent with FEMA Technical Bulletin 11-01 for crawlspace construction:

a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

b. The bottom of all openings shall be no higher than one foot above grade;

c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters;

d. Interior grade of the crawlspace shall not exceed two feet below the lowest adjacent exterior grade;

e. The height of the crawlspace when measured from the interior grade of the crawlspace (at any point on grade) to the bottom of the lowest horizontal structural member of the lowest floor shall not exceed four feet;

f. An adequate drainage system that removes floodwaters from the interior area of the crawlspace shall be provided;

g. The velocity of floodwaters at the site shall not exceed five feet per second for any crawlspace. For velocities in excess of five feet per second, other foundation types shall be used; and

h. Below-grade crawlspace construction in accordance with the requirements listed above will not be considered basements for flood insurance purposes. However, below-grade crawlspace construction in the special flood hazard area is not the recommended construction method because of the increased likelihood of problems with foundation damage, water accumulation, moisture damage, and drainage. Applicants shall be advised that buildings constructed with below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction (the interior grade of the crawlspace is at or above the adjacent exterior grade).

7. A garage attached to a residential structure, constructed with the garage floor slab below the base flood elevation, or a fully enclosed space beneath a ~~dwelling~~ **residential structure** that does not constitute a basement may be constructed to wet floodproofing standards; provided, that:

a. The garage or enclosed space shall be constructed with unfinished materials, acceptable for wet floodproofing to two feet above the base flood elevation or, where no BFE has been established, to two feet above the highest adjacent grade;

b. The garage or enclosed space shall be designed **and constructed with flood openings** to automatically equalize hydrostatic flood forces on exterior walls by **allowing for the automatic entry and exit of floodwaters, in full compliance with the standards in MCC 16.19.140(A)(5).**

~~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 comply with the following standards:~~

~~i. 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;~~

~~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 floodwaters;~~

c. Electrical, heating, ventilation, plumbing, and air conditioning equipment shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site;

d. The garage or enclosed space shall **only be used for parking, storage, and building access, and for** ~~be limited to vehicle parking and~~ storage of items having low damage potential when submerged by water (no workshops, offices, recreation rooms, etc.);

e. The garage or enclosed space shall not be used for human habitation;

f. A declaratory statement is recorded requiring compliance with the standards in subsections (A)(7)(a) through (e) of this section.

g. The floors are at or above grade on not less than one side.

h. The garage or enclosed space must be constructed in compliance with section 16.19.140(D),(E), and (H).

8. A detached residential accessory structure may be constructed to wet floodproofing standards **with**; ~~provided, that:~~ **relief from elevation or floodproofing requirements for residential and non-residential structures in Riverine (Non-Coastal) flood zones provided that the following requirements are met:**

a. Appurtenant structures located partially or entirely within the floodway must comply with requirements for development within a floodway found in MCC 16.19.140(J).

b. Appurtenant structures must only be used for parking, access, and/or storage and shall not be used for human habitation;

c. In compliance with State of Oregon Specialty Codes, appurtenant structures on properties that are zoned residential are limited to one-story structures less than 200 square feet, or 400 square feet if the property is greater than two (2) acres in area and the proposed appurtenant structure will be located a minimum of 20 feet from all property lines. Appurtenant structures on properties that are zoned as non-residential are limited in size to 120 square feet.

FEMA requires that accessory structures be limited in size in order that they are able to be insured as an "appurtenances" to the primary dwelling.

d. The portions of the appurtenant structure located below two feet above the Base Flood Elevation, where no BFE has been established, below two feet above the highest adjacent grade shall be built using flood resistant materials;

e. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.

f. The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in MCC 16.19.140(A);

g. Appurtenant structures shall be located and constructed to have low damage potential;

h. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with MCC 16.19.140(L);

~~a. The accessory structure shall be located on a property with a dwelling~~ **~~residential structure~~**~~;~~

~~b. The accessory structure shall meet the criteria for a variance in MCC 16.19.170;~~

~~c. The accessory structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;~~

~~d. The accessory structure shall be constructed with unfinished materials, acceptable for wet floodproofing to two feet above the base flood elevation or, where no BFE has been established, to two feet above the highest adjacent grade;~~

~~e. The accessory structure shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must comply with the following standards:~~

~~i. 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;~~

~~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 floodwaters;~~

~~f~~**j**. Electrical, heating, ventilation, plumbing, and air conditioning equipment shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site or **shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood**;

~~g. The accessory structure shall be limited to vehicle parking and storage of items having low damage potential when submerged by water (no workshops, offices, recreation rooms, etc.);~~

~~h. The accessory structure shall not be used for human habitation;~~

j. ~~i.~~ A declaratory statement is recorded requiring compliance with the standards in subsections (A)(8)(~~d~~**b**) through (~~h~~**i**) of this section.

~~B. Manufactured Homes in Existing Manufactured Home Parks. The standards in subsection (A) of this section shall apply to location of a manufactured home in a vacant space in a manufactured home park existing prior to adoption of this title.~~

B. Reserved

C. Nonresidential Development.

1. New construction and substantial improvement of any commercial, industrial or other nonresidential structures shall either have the lowest floor, including basement, elevated to two feet above the level of the base flood elevation, and where the base flood elevation is not available, the lowest floor, including basement, shall be elevated to two feet above the highest adjacent natural grade (within five feet) of the building site; or together with attendant utility and sanitary facilities, shall:

a. Be floodproofed to an elevation of two feet above base flood elevation or, where base flood elevation has not been established, two feet above the highest adjacent grade, so that the structure is watertight with walls substantially impermeable to the passage of water.

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

c. Be certified by a registered professional engineer or architect that the **design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this** ~~standards in this~~ subsection based on their development and/or review of the structural design, specifications, and plans. ~~**are satisfied**~~. This certificate shall include the specific elevation (in relation to mean sea level) to which such structures are floodproofed **and shall be provided to the Floodplain Administrator**.

~~d.~~ Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (A)(5) of this section.

~~e.~~ Applicants floodproofing nonresidential buildings shall be notified by the zoning administrator that 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).

2. New construction of any commercial, industrial or other nonresidential structures is prohibited in the floodway. An exception to this prohibition may be granted if a floodplain development permit, and variance consistent with MCC 16.19.160, are obtained. This prohibition does not apply to ~~water~~ **functionally** dependent uses.

3. An agricultural structure may be constructed to wet floodproofing standards; provided, that:

a. The structure shall meet the criteria for a variance in MCC 16.19.170;

b. The structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

c. The structure shall be constructed with unfinished materials, acceptable for wet floodproofing to two feet above the base flood elevation or, where no BFE has been established, to two feet above the highest adjacent grade;

d. The structure shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must comply with the following standards:

i. 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;

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 floodwaters;

e. Electrical, heating, ventilation, plumbing, and air conditioning equipment shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site;

f. The structure shall be used solely for agricultural purposes, for which the use is exclusively in conjunction with the production, harvesting, storage, drying, or raising of agricultural commodities, the raising of livestock, and the storage of farm machinery and equipment;

g. The structure shall not be used for human habitation;

h. A declaratory statement shall be recorded requiring compliance with the standards in (C)(3)(c) through (g) of this section.

D. Anchoring.

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure **resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy**.

2. All manufactured ~~homes~~ **dwellings** must likewise be anchored to prevent flotation, collapse or lateral movements, 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. Anchoring methods shall be consistent with the standards contained ~~in Section 308 (Flood Resistance) contained in the Oregon Manufactured Dwelling Standards Manual per ORS 446.062.~~ **the Oregon Manufactured Dwelling Installation Specialty Code.**

E. Construction Materials and Methods.

1. All new construction and substantial improvements **shall be constructed with materials and utility equipment resistant to flood damage,** ~~below base flood level shall be constructed with materials and utility equipment resistant to flood damage,~~ and the design and methods of construction are in accord with accepted standards of practice based on an engineer's or architect's review of the plans and specifications.

2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damages.

F. Utilities.

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system as approved by the State Health Division.

2. New and replacement sanitary sewage systems ~~including on-site waste disposal systems shall be designed and located to minimize floodwater contamination consistent with the requirements of the Oregon State Department of Environmental Quality~~ **shall be designed to minimize or eliminate infiltration of flood waters in to the systems and discharge from the systems into flood waters.**

3. On-site waste disposal systems shall be designed and located to avoid impairment to them or contamination from them during flooding consistent with the requirements of the Oregon State Department of Environmental Quality.

4. ~~3.~~ Electrical, heating, ventilation, plumbing, **duct systems,** ~~and~~ air conditioning**, and other** equipment **and service facilities** shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site. **If replaced as part of a substantial improvement the utility equipment and service facilities shall meet all the requirements of this subsection.**

G. Developments, Generally. Residential developments involving more than one single-family **residential structure** ~~dwelling~~, including subdivisions, manufactured **dwelling** ~~home~~ parks, multiple-family **residential structures** ~~dwellings~~ ~~and~~ planned developments**, and other proposed developments** including development regulated under subsections (A) and (C) of this section shall meet the following requirements:

1. Be designed to minimize flood damage.

2. Have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize **or eliminate** flood damage.

3. Have adequate drainage provided to reduce exposure to flood **hazards** ~~damage~~.

4. Base flood elevation data shall be provided by the developer. In cases where no base flood elevation is available, analysis by standard engineering methods will be required **to develop base flood elevation data**.

H. Storage of Materials and Equipment. Materials that are buoyant, flammable, obnoxious, toxic or otherwise injurious to persons or property, if transported by floodwaters, are prohibited. Storage of materials and equipment not having these characteristics is permissible only if the materials and equipment have low damage potential and are anchored or are readily removable from the area within the time available after forecasting and warning.

I. Alteration of Watercourses. When considering a conditional use permit to allow alteration or modification of a watercourse, the following shall apply:

1. Adjacent communities, the Oregon Division of State Lands and the Department of Land Conservation and Development, and other affected **state and federal** agencies shall be notified prior to any alteration or relocation of a watercourse and evidence of such notification shall be submitted to the Federal Insurance Administration. **This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:**

a. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or

b. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

2. Maintenance shall be provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

3. The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under MCC 16.19.100(I).

J. Floodways. Located within areas of floodplain established in MCC 16.19.100 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply in addition to the requirements in subsection (I) of this section:

1. Prohibit encroachments, including fill, new construction, substantial improvements and other development **within the adopted regulatory floodway** unless **certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge.** ~~a certified technical evaluation is provided by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. This evaluation may be submitted to the Federal Emergency Management Agency for technical review.~~

2. If subsection (J)(1) of this section is satisfied, all new construction**,** ~~and~~ substantial improvements**, and other development** shall comply with all applicable flood hazard reduction provisions of this section.

3. The area below the lowest floor shall remain open and unenclosed to allow the unrestricted flow of floodwaters beneath the structure.

K. Standards for Shallow Flooding Areas (AO Zones). Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from one to three feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

1. New construction and substantial improvements of residential structures **and manufactured dwellings** within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade (within five feet) of the building site, to two feet above the depth number specified on the FIRM or three feet if no depth number is specified.

2. New construction and substantial improvements of nonresidential structures within AO zones shall either:

a. Have the lowest floor (including basement) elevated above the highest adjacent grade (within five feet) of the building site, to two feet above the depth number specified on the FIRM or three feet if no depth number is specified; or

b. Together with attendant utility and sanitary facilities, be completely floodproofed to or above ~~that level~~ **two feet above the depth number specified on the FIRM or three feet if no depth number is specified** so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of

resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in subsection (E) of this section.

3. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

4. In AO zones, new and substantially improved accessory structures must comply with the standards in section 16.19.140(A)(7) or (8).

5. In AO zones, enclosed areas beneath elevated structures shall comply with the requirements in section 16.19.140(A)(5). [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1369 § 4 (Exh. B), 2016; Ord. 1301 § 4 (Exh. A), 2010; Ord. 1167 § 5, 2002; Ord. 1094 § 6, 1998; Ord. 951 § 5, 1993; Ord. 863 § 5, 1990. UZ Ord. § 19.14.]

L. Tanks

A. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.

B. Above-ground tanks shall be installed to one foot above the base flood level or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.

C. Tanks shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

Changes required by FEMA to comply with the NFIP. Puts into code current practice on tanks.

16.19.150 Generalized floodplain areas.

Where elevation data is generalized, such as the unnumbered A zones on the FIRM, conditional use permits shall include a review and determination that proposed construction will be reasonably safe from flooding and meet the flood protection standards. In determining whether the proposed floodplain development is reasonably safe, applicable criteria shall include, among other things, the use of historical data, high water marks, photographs of past flooding; or data (e.g., an engineering study or soil and landscape analysis) may be submitted by qualified professionals that demonstrate the site is not in a floodplain. In such cases, a letter of map amendment may be required by the zoning administrator. [Ord. 1301 § 4 (Exh. A), 2010; Ord. 1094 § 6, 1998; Ord. 863 § 5, 1990. UZ Ord. § 19.15.]

16.19.160 Variances.

A. A variance may be issued as part of the conditional use process 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, in conformance with the criteria in MCC 16.19.170.

B. Marion County shall notify the applicant in writing over the signature of the zoning administrator that:

1. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood ~~insurance up to amounts as high as $25.00 for $100.00 of~~ insurance coverage; and

2. Such construction below the base flood level increases risk to life and property.

Such notification shall be maintained with a record of all variance actions as required in subsection (C) of this section.

C. Marion County shall:

~~1.~~ Maintain a record of all variance actions, including justification for their issuance; and

~~2. Report such variances issued in its biennial report submitted to the NFIP administrator.~~ [Ord. 1301 § 4 (Exh. A), 2010; Ord. 1094 § 6, 1998; Ord. 863 § 5, 1990. UZ Ord. § 19.16.]

16.19.170 Variance criteria.
The following criteria shall be used to review variance applications:

A. Variances shall only be issued upon a showing that:

1. There is a good and sufficient cause;

2. Failure to grant the variance would result in exceptional hardship to the applicant;

3. The granting of a 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, or conflict with existing local laws;

4. The variance is the minimum necessary, considering the flood hazard, to afford relief;

5. The variance will be consistent with the intent and purpose of the provision being varied;

6. There has not been a previous land use action approved on the basis that variances would not be allowed; and

7. The new construction or substantial improvement is not within any designated regulatory floodway, or if located in a floodway, no increase in base flood discharge will result.

8. Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of this subsection are met, and the structure or other development is protected by methods that will minimize flood damages during the base flood and create no additional threats to public safety. [Ord. 1301 § 4 (Exh. A), 2010; Ord. 1094 § 6, 1998; Ord. 863 § 5, 1990. UZ Ord. § 19.17.]

Changes required by FEMA to comply with the NFIP. Puts into code current practice.

16.19.180 Warning and disclaimer of liability.
The degree of flood protection required by this overlay zone is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on occasion. Flood heights may be increased by manmade or natural causes. This zone does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This zone will not create liability on the part of Marion County, any officer or employee thereof, or the Federal Insurance **Administrator** ~~Administration~~ for any flood damages that result from reliance on this chapter or any **administrative** decision lawfully made hereunder. [Ord. 1301 § 4 (Exh. A), 2010; Ord. 1094 § 6, 1998; Ord. 863 § 5, 1990. UZ Ord. § 19.18.]

Changes required by FEMA to comply with the NFIP.

Proposed Amendments

ADDITIONS IN BOLD AND UNDERLINED
~~DELETIONS IN STRIKEOUT~~
Staff comments in **inverse**/shaded fonts.

Chapter 17.178
FLOODPLAIN OVERLAY ZONE

Sections:

17.178.010 Purpose.

The flood hazard areas of Marion County are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses may be caused by the cumulative effect of obstructions in special flood hazard areas which increase flood heights and velocities, and when inadequately anchored, cause damage in other areas. Uses that are inadequately floodproofed, elevated, or otherwise protected from flood damage also contribute to flood loss.

The State of Oregon has in ORS 197.175 delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry. The purpose of the floodplain overlay zone **therefore** is to **promote public health, safety, and general welfare, and to minimize public and private losses due to flooding in flood hazard areas by provisions designed to**:

A. Protect human life and health;

B. Minimize expenditure of public money for costly flood control projects;

C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

D. Minimize prolonged business interruptions;

E. Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in special flood hazard areas;

F. Help maintain a stable base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding;

G. Notify potential buyers that the property is in a special flood hazard area.

H. Notify those who occupy special flood hazard areas that they assume responsibility for their actions.

I. Participate in and maintain eligibility for flood insurance and disaster relief.

In order to accomplish its purpose, this Chapter includes methods and provisions for:

A. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.

B. Minimize expenditure of public money for flood control projects, rescue and relief efforts in areas subject to flooding.

C. Minimize flood damage to new construction by elevating or floodproofing all structures.

D. Control the alteration of natural floodplains, stream channels and natural protective barriers**,** which ~~hold,~~ **help** accommodate or channel flood waters.

E. Control filling, grading, dredging and other development which may be subject to or increase flood damage.

F. Prevent or regulate the construction of flood barriers which **will unnaturally divert flood waters or** may increase flood hazards in other areas.

G. Comply with the requirements of the Federal Insurance Administration to qualify Marion County for participation in the National Flood Insurance Program.

H. Minimize flood insurance premiums paid by the citizens of Marion County by reducing potential hazards due to flood damage.

I. Implement the floodplain policies in the Marion County Comprehensive Plan. [Ord. 1271 § 5, 2008; Ord. 1094 § 5, 1998; Ord. 761 § 2, 1987. RZ Ord. § 178.010.]

Changes required by FEMA to comply with the NFIP.

17.178.020 Definitions.
For purposes of this overlay zone the following terms shall mean:

A. "Accessory" means a building, structure, vehicle, or use which is incidental and subordinate to and dependent upon the primary use on the lot.

B. "Area of shallow flooding" means a designated AO or AH zone on **a community's** ~~the~~ flood insurance rate map (FIRM)~~. The base flood depths range from~~ **with a one percent or greater annual chance of flooding to an average depth of** one to three feet~~;~~ **where** a clearly defined channel does not exist~~;~~ **where** the path of flooding is unpredictable**,** and ~~indeterminate; and~~ velocity flow may be evident. ~~AO~~ **Such flooding** is characterized ~~as sheet flow and AH indicates~~ **by** ponding **or sheet flow**.

C. "Area of special flood hazard" means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous in meaning and definition with the phrase "area of special flood hazard".

D. ~~C.~~ "Base flood ~~level~~" means the flood level having a one percent chance of being equaled or exceeded in any given year ~~(100-year floodplain)~~.

E. "Base flood elevation (BFE)" means the elevation to which floodwater is anticipated to rise during the base flood.

F. ~~D.~~ "Basement" means any area of a building having its floor subgrade (below ground level**)** on all sides**.**~~)~~ ~~and not meeting the requirements for crawlspace construction in FEMA Technical Bulletin 11-01.~~

G. "Below-grade crawl space" means 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 crawlspace to the top of the crawlspace foundation, does not exceed 4 feet at any point.

H. ~~E.~~ "Critical facility" means any buildings or locations vital to the emergency response effort (e.g., emergency operations centers, 911 centers, police and fire stations, municipal water distribution and storage systems, hospitals, road departments and select roads and bridges, radio and TV stations and towers), and buildings or locations that, if damaged, would create secondary disasters (e.g., hazardous materials facilities, water and wastewater distribution and treatment facilities, schools, nursing homes, natural gas and petroleum pipelines, and prison or jail facilities).

I. ~~F.~~ "Conveyance" means the carrying capacity of all or a part of the floodplain. It reflects the quantity and velocity of floodwaters. Conveyance is measured in cubic feet per second (CFS). If the flow is 30,000 CFS at a cross-section, this means that 30,000 cubic feet of water pass through the cross-section each second.

~~G. "Existing manufactured home park or subdivision" is one in which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed was completed before the effective date (August 15, 1979) of the community's floodplain management regulations. The construction of facilities includes, at a minimum, the installation of utilities, construction of streets, and either final site grading or the pouring of concrete pads.~~

The Oregon Specialty Codes do not distinguish between new and existing manufactured home parks or subdivisions and apply the same standards to both, so this definition is unnecessary.

J. "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.

K. ~~H.~~ "Encroachment" means any obstruction in the floodplain which affects flood flows.

L. ~~I.~~ "Flood" or "flooding" means**:**

1. A ~~a~~ general and temporary condition of partial or complete inundation of ~~usually~~ **normally** dry land areas from**:**

a. The overflow of inland or tidal waters.

b. The ~~the~~ unusual and rapid accumulation of runoff of surface waters from any source.

c. Mudslides (i.e. mudflows) which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1)(a) of this definition.

M. ~~J.~~ "Flood boundary floodway map (FBFM)" means the map portion of the Flood Insurance Study (FIS) issued by the Federal Insurance Agency on which is delineated the floodplain, floodway (and floodway fringe) and cross-sections (referenced in the text portion of the FIS).

~~K. "Floodplain development" means any manmade 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 floodplain.~~

N. ~~L.~~ "Floodway fringe" means the area of the floodplain lying outside of the floodway as delineated on the FBFM **or FIRM** where encroachment by development will not increase the flood elevation more than one foot during the occurrence of the base flood discharge.

O. ~~M.~~ "Floodplain" means lands within the county that are subject to a one percent or greater chance of flooding in any given year and other areas as identified on the official zoning maps of Marion County. **"Floodplain" includes the "Areas of special flood hazard" identified within Marion County by the Federal Insurance Administrator.**

P. "Flood elevation study" means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

Q. ~~N.~~ "Flood Insurance Rate Map (FIRM)" means the official map **of a community,** on which the Federal Insurance ~~Administration~~ **Administrator** has delineated both the areas of special flood hazards (floodplain) and the risk premium zones applicable to the community**. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).** ~~and is on file with the Marion County planning division.~~

R. ~~O.~~ "Flood Insurance Study (FIS)" **see "Flood elevation 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 and is on file with the Marion County planning division.~~

S. ~~P.~~ "Floodproofing" means ~~a~~ **any** combination of structural **and** ~~or~~ nonstructural **additions** ~~provisions~~, changes or adjustments to structures **which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents.** ~~, land or waterways for the reduction or elimination of flood damage to properties, water and sanitary facilities, structures and contents of buildings in a flood hazard area.~~

T. ~~Q.~~ "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must ~~remain unobstructed~~ **be reserved in order** to discharge the base flood without cumulatively increasing the water surface elevation more than **a designated height.**~~one foot~~. **Also referred to as "Regulatory floodway".** ~~The floodways are identified on the Flood Insurance Rate Maps (FIRMs) for Marion County.~~

~~Once established, nothing can be placed in the floodway that would cause any rise in the base flood elevation.~~

U. ~~R. "~~**Functionally dependent use" means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.**

V. "Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

W. "Highway ready recreation vehicle" means a fully licensed recreational vehicle that is on 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.

X. "Historic structure" means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

a. By an approved state program as determined by the Secretary of the Interior or

b. Directly by the Secretary of the Interior in states without approved programs.

Y. ~~S.~~ "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 title.

Z. ~~T.~~ "Manufactured **dwelling** ~~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~~ **attached** to the required utilities. ~~For floodplain management purposes the~~ **The** term "manufactured **dwelling** ~~home~~" **does not include a "recreational vehicle" and is synonymous with "manufactured home".** ~~also includes mobile homes as defined in subsection (W) of this section. For insurance and floodplain management purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles as defined in subsection (AA) of this section.~~

AA. ~~U.~~ "Manufactured ~~home~~ **dwelling** park or subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured ~~home~~ **dwelling** lots or spaces for rent or sale.

BB. ~~V.~~ "Mean sea level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

CC. ~~W.~~ "Mobile home" means a vehicle or structure, transportable in one or more sections, which is eight feet or more in width, is 32 feet or more in length, is built on a permanent chassis to which running gear is or has been attached, and is designed to be used as a **residential structure** ~~dwelling~~ with or without permanent foundation when connected to the required utilities. Such definition does not include any recreational vehicle as defined by subsection (~~AA~~**FF**) of this section.

DD. ~~X.~~ "New construction" means **for floodplain management purposes, "new construction" means structures** ~~any structure(s)~~ for which the **"**start of construction**"** commenced on or after the effective date of **a floodplain management regulation adopted by Marion County and includes any subsequent improvements to such structures.** ~~the floodplain overlay zone (August 15, 1979).~~

EE. ~~Y.~~ "Obstruction" means any physical object which hinders the passage of water.

FF. ~~Z.~~ "Permanent foundation" means a natural or manufactured support system to which a structure is anchored or attached. A permanent foundation is capable of resisting flood forces and may include posts, piles, poured concrete or reinforced block walls, properly compacted fill, or other systems of comparable flood resistivity and strength.

GG. ~~AA.~~ "Recreational vehicle" means a ~~"camper," "motor home," or "travel trailer," as defined in ORS 801.180, 801.350, and 801.565, that is intended for temporary human occupancy and is equipped with plumbing, sinks, or toilet, and does not meet the definition of a mobile home in subsection (W) of this section.~~ **vehicle which 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 residential but as temporary living quarters for recreational, camping, travel or seasonal use.

HH. ~~BB.~~ **"**Reinforced Pier**"**~~.~~ At a minimum, a "reinforced pier" must have a footing adequate to support the weight of the manufactured ~~home~~ **dwelling** under saturated soil conditions. Concrete blocks may be used if vertical steel reinforcing rods are placed in the hollows of the blocks and the hollows are filled with concrete or high strength mortar. Dry stacked concrete blocks do not constitute reinforced piers. When piers exceed 36 inches under "I" beams or 48 inches under floor systems, they are required to be designed by an engineer licensed in Oregon.

II. ~~CC.~~ "Special flood hazard area (SFHA)" **see "Areas of special flood hazard" for this definition.** ~~means areas subject to inundation from a 100-year flood (identified on the FIRM by the letter "A," e.g., A, AE, A1—A30, AO, AH, etc.).~~

JJ. ~~DD.~~ "Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, **rehabilitation, addition,** 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 slabs 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~~ **dwelling** 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 **residential** ~~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.**

KK. "Structure" means for floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured dwelling.

LL. ~~EE.~~ "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.

MM. ~~FF.~~ "Substantial improvement" means any 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 before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. 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 "historic structure"; provided, that the alteration will not preclude the structure's continued designation as a "historic structure."

NN. ~~GG.~~ "Watercourse" means a natural or artificial channel in which a flow of water occurs either continually or intermittently in identified floodplains.

~~HH. "Water dependent" means a use or activity that can be carried out only on, in or adjacent to water areas because the use requires access to the water body for water-related transportation, recreation, energy production or source of water. These uses include structures that to serve their purpose must be in or adjacent to water areas, such as bridges, culverts, and erosion and flood control structures.~~

FEMA is requiring the use of the term "Functionally dependent use" to match 44 CFR 59.1 instead of "Water dependent".

OO. ~~II.~~ "Wet floodproofing" means a method of construction using building materials capable of withstanding direct and prolonged (72 hours) contact with floodwaters without sustaining significant damage (any damage requiring more than low-cost cosmetic repair, such as painting), consistent with FEMA Technical Bulletin 7-93.

PP. "Variance" means a grant of relief by Marion County from the terms of a floodplain management regulation.

QQ. "Violation" means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

RR. ~~JJ.~~ "Zoning administrator" shall be the planning director or designee. [Ord. 1346 § 4 (Exh. B), 2014; Ord. 1330 § 4 (Exh. A), 2013; Ord. 1313 § 4 (Exh. A), 2011; Ord. 1271 § 5, 2008; Ord. 1094 § 5, 1998; Ord. 951 § 4, 1993; Ord. 761 § 2, 1987. RZ Ord. § 178.020.]

Changes required by FEMA to comply with the NFIP.

17.178.030 General provisions.

The following regulations apply to all unincorporated lands in identified floodplains as shown graphically on the zoning maps. The floodplain comprises those areas of special flood hazard identified by the Federal Insurance **Administrator** ~~Administration~~ in a scientific and engineering report entitled the "Flood Insurance Study for Marion County, Oregon, Unincorporated Areas" dated ~~January 2, 2003~~ **October 18, 2019, with accompanying Flood Insurance Rate Maps (FIRMS)**, and subsequent letter of map amendments and letter of map revisions related to these adopted studies and maps, **which are hereby adopted by reference and declared to be part of this chapter.** The floodplain also comprises areas identified and mapped by Marion County that were not studied by the Flood Insurance Study. The report and maps are incorporated in the overlay zone by this reference and are on file with the Marion County planning division. When base flood elevation data have not been provided, the zoning administrator shall have the authority to determine the location of the boundaries of the floodplain where there appears to be conflict between mapped boundary and the actual field conditions, provided a record is maintained of any such determination.

A. Coordination with the State of Oregon Specialty Codes: Pursuant to the requirement established in ORS 455 that Marion County administers and enforces the State of Oregon Specialty Codes, Marion County does hereby acknowledge that the Oregon Specialty Codes contain certain provisions that apply to the design and construction of buildings and structures located in special flood hazard areas. Therefore, this ordinance is intended to be administered in conjunction with the Oregon Specialty Codes.

B. Compliance and penalties for noncompliance:

All development within the floodplain (including areas of special flood hazard) is subject to the terms of this ordinance and required to comply with its provisions and all other applicable regulations.

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. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall be enforced pursuant to MCC 17.110.870 and MCC Chapter 1.25. Nothing contained herein shall prevent Marion County from taking such other lawful action as is necessary to prevent or remedy any violation.

C. Abrogation:

This chapter 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.

D. Severability:

This chapter and the various parts thereof are hereby declared to be severable. If any section clause, sentence, or phrase of the chapter is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this chapter.

E. Interpretation:

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

1. Considered as minimum requirements;

2. Liberally construed in favor of the governing body; and

3. Deemed neither to limit nor repeal any other powers granted under state statutes.

F. Designation of the floodplain administrator:

The county planning director is hereby appointed as the floodplain administrator to administer, implement, and enforce this chapter by granting or denying development permits in accordance with its provisions. The floodplain administrator may delegate authority to implement these provisions.

Changes required by FEMA to comply with the NFIP.

G. ~~A.~~ Duties of the ~~zoning~~ **floodplain** administrator, **or their designee,** shall include, but not be limited to:

1. Review all development permits to determine that the permit requirements of this title 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 building permits where elevation data is not available either through the FIS or from another authoritative source, to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available.

4. 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 MCC 17.178.060(J) are met.

5. Provide to building officials the Base Flood Elevation (BFE) and any required freeboard applicable to any building requiring a development permit.

6. Review all development permit applications to determine if the proposed development qualifies as a substantial improvement.

7. Review all development permits to determine if the proposed development activity is a watercourse alteration. If a watercourse alteration is proposed, ensure compliance with the relevant provisions of this chapter.

8. Review all development permits to determine if the proposed development activity includes the placement of fill or excavation.

H. Information to be obtained and maintained:

1. Obtain, record, and maintain the actual elevation (in relation to mean sea level) of the lowest floor (including basements) and all attendant utilities of all new or substantially improved structures where Base Flood Elevation (BFE) data is provided through the Flood Insurance

Study (FIS), Flood Insurance Rate Map (FIRM), or obtained in accordance with MCC 17.178.030.

2. Obtain and record the elevation (in relation to mean sea level) of the natural grade of the building site for a structure prior to the start of construction and the placement of any fill and ensure that the requirements of MCC 17.178.060 are adhered to.

3. Upon placement of the lowest floor of a structure (including basement) but prior to further vertical construction, obtain documentation, prepared and sealed by a professional licensed surveyor or engineer, certifying the elevation (in relation to mean sea level) of the lowest floor (including basement).

4. Where base flood elevation data are utilized, obtain As-built certification of the elevation (in relation to mean sea level) of the lowest floor (including basement) prepared and sealed by a professional licensed surveyor or engineer, prior to the final inspection.

5. Maintain all Elevation Certificates (EC) submitted to Marion County.

6. Obtain, record, and maintain the elevation (in relation to mean sea level) to which the structure and all attendant utilities were floodproofed for all new or substantially improved floodproofed structures where allowed under this ordinance and where Base Flood Elevation (BFE) data is provided through the FIS, FIRM, or obtained in accordance with MCC 17.178.060.

7. Maintain all floodproofing certificates required under this ordinance.

8. Record and maintain all variance actions, including justification for their issuance.

9. Obtain and maintain all hydrologic and hydraulic analyses performed as required under MCC 17.178.060(J).

10. Record and maintain all Substantial Improvement and Substantial Damage calculations and determinations as required under MCC 17.178.030(J).

11. Maintain for public inspection all records pertaining to the provisions of this ordinance.

~~5. 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 structures contain a basement.~~

~~6. For all new or substantially improved floodproofed structures:~~

~~a. Verify and record the actual elevation (in relation to mean sea level); and~~

~~b. Maintain the floodproofing certifications required in MCC 16.19.140(C).~~

~~7. Maintain for public inspection all records pertaining to the provisions of this title, including elevation certificates. [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1369 § 4 (Exh. B), 2016; Ord. 1271 § 5, 2008; Ord. 1167 § 4, 2002; Ord. 1121 § 4, 1999; Ord. 1094 § 5, 1998; Ord. 1061 § 4, 1997; Ord. 1030 § 4, 1995; Ord. 951 § 4, 1993; Ord. 761 § 2, 1987. RZ Ord. § 178.030.]~~

I. Requirement to notify other entities and submit new technical data:

1. The Floodplain Administrator shall notify the Federal Insurance Administrator in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed authority or no longer has authority to adopt and enforce floodplain management regulations for a particular area, to ensure that all Flood Hazard Boundary Maps (FHBM) and Flood Insurance Rate Maps (FIRM) accurately represent the community's boundaries. Include within such notification a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority.

2. Notify adjacent communities, the Department of Land Conservation and Development, and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:

a. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or

b. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under MCC 17.178.030(I).

3. A community's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Insurance Administrator of the changes by submitting technical or scientific data in accordance with Section 44 of the Code of Federal Regulations (CFR), Sub-Section 65.3. The community may require the applicant to submit such data and review fees required for compliance with this section through the applicable FEMA Letter of Map Change (LOMC) process.

The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:

a. Proposed floodway encroachments that increase the base flood elevation; and

b. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.

An applicant shall Notify FEMA within six (6) months of project completion when an applicant has obtained a Conditional Letter of Map Revision (CLOMR) from FEMA. This notification to FEMA shall be provided as a Letter of Map Revision (LOMR).

J. Substantial improvement and substantial damage assessments and determinations:

Conduct Substantial Improvement (SI) (as defined in MCC 17.178.020) reviews for all structural development proposal applications and maintain a record of SI calculations within permit files in accordance with MCC 17.178.030(G). Conduct Substantial Damage (SD) (as defined in MCC 17.178.020) assessments when structures are damaged due to a natural hazard event or other causes. Make SD determinations whenever structures within the special flood hazard area are damaged to the extent that 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.

Change recommended by FEMA and DLCD. Puts into code current practice.

17.178.040 Uses.
Within a FP (floodplain) overlay zone no uses, structures, recreational vehicles and premises shall be used or established except as provided in the applicable underlying zone and the provisions of this overlay zone. Except as provided herein all uses and floodplain development shall be subject to issuance of a conditional use permit (floodplain development permit) as provided in MCC 17.178.050.

A. The following uses are exempt from the regulations of this overlay zone:

1. Signs, markers, aids, etc., placed by a public agency to serve the public.

2. Streets, driveways, parking lots and other open space use areas where no alteration of topography will occur.

3. Minor repairs or alterations to existing structures provided the alterations do not increase the size or intensify the use of the structure, and do not constitute "substantial improvement" as defined in MCC 17.178.020(GG).

4. Customary dredging associated with channel maintenance consistent with applicable state or federal law. This exemption does not apply to the dredged materials placed within a floodplain.

5. Placement of utility facilities necessary to serve established and permitted uses within floodplain areas, such as telephone poles. This exemption does not apply to buildings, substations, or other types of utility facilities development in the floodplain.

6. Flagpoles.

7. Except in a floodway, open wire fencing (no more than one horizontal strand per foot of height) and open rail fencing (rails occupy less than 10 percent of the fence area and posts are spaced no closer than eight feet apart).

~~8. Accessory structures smaller than 50 square feet in size that do not require a building permit.~~

FEMA requires that accessory structures of any size comply with the requirements for accessory structures in this chapter.

9. A highway-ready recreation**al** vehicle **not used as a hardship dwelling consistent with MCC 17.120.040** may be located on a lot or parcel without a ~~dwelling~~ **residential structure** in a floodplain or floodway ~~only during the non-flood season (June 1st through September 30th)~~, subject to the requirements in MCC 17.126.040 **and shall:**

a. Be placed on site for fewer than 120 consecutive days only during the non-flood season, June 1st through September 30th.

b. 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.

B. Prior to obtaining a building permit for any residential, commercial or industrial structure within an area identified by FEMA or Marion County as being within a 500-year floodplain, the applicant shall comply with the requirement in MCC 17.178.050(C).

C. New ~~dwellings~~ **residential structures** and manufactured **dwellings** ~~homes,~~ and replacement ~~dwellings~~ **residential structures** that are not being replaced in the same location as the original ~~dwelling~~, **residential structure,** are prohibited in the floodplain if there is an area on the subject property that is located outside of the floodplain where the **residential structure** ~~dwelling~~ can be placed. An exception to this prohibition may be granted if a floodplain development permit and variance meeting the criteria in MCC 17.178.090 are obtained.

D. *Repealed by Ord. 1369.*

E. Siting of new critical facilities is prohibited within the floodway and 100- and 500-year floodplains. For a critical facility needed within a hazard area in order to provide essential emergency response services in a timely manner, an exception to this prohibition may be granted for development in the 500-year floodplain if a floodplain development permit, and variance meeting the criteria in MCC 17.178.090, are obtained. This prohibition does not apply to ~~water~~ **functionally** dependent uses. [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1369 § 4 (Exh. B), 2016; Ord. 1346 § 4 (Exh. B), 2014; Ord. 1271 § 5, 2008; Ord. 1094 § 5, 1998; Ord. 761 § 2, 1987. RZ Ord. § 178.040.]

F. In coordination with the State of Oregon Specialty Codes, when a structure is located in multiple flood zones on the Marion County Flood Insurance Rate Maps (FIRMs) the provisions for the more restrictive flood zone shall apply. When a structure is partially located in an area of special flood hazard, the entire structure shall meet the requirements for new construction and substantial improvements.

Changes required by FEMA to comply with the NFIP.

17.178.050 Conditional use procedures and requirements.

A. Except as provided in MCC 17.178.040 a conditional use permit (floodplain development permit) shall be obtained before construction or development begins within **any area horizontally within** the floodplain overlay zone **(which includes the area of special flood hazard). The floodplain development permit shall be required for all structures, including manufactured dwellings and for all other development, as defined in MCC 17.178.020.** The conditional use permit shall include conditions ensuring that the flood protection standards in MCC 17.178.060 are met.

B. When base flood elevation data and floodway data have not been provided in accordance with MCC 17.178.030, the applicant, with the assistance of the ~~zoning~~ **floodplain** administrator, shall obtain and reasonably utilize any base flood elevation data or evidence available from a federal, state or other source in order to determine compliance with the flood protection standards. If data are insufficient, the ~~zoning~~ **floodplain** administrator may require that the applicant provide data derived by standard engineering methods.

C. Prior to obtaining a building permit the owner shall be required to sign and record in the deed records for the county a declaratory statement binding the landowner, and the landowner's successors in interest, acknowledging that the property and the approved development are located in a floodplain.

D. Prior to obtaining a building permit, commencing development or placing fill in the floodplain the applicant shall submit a certification from a registered civil engineer demonstrating that a development or fill will not result in an increase in floodplain area on other properties and will not result in an increase in erosive velocity of the stream that may cause channel scouring or reduce slope stability downstream of the development or fill.

E. ~~1.~~ The applicant shall provide an elevation certificate signed by a licensed surveyor or civil engineer certifying that the actual elevations **(in relation to mean sea level) of the lowest floor (including basement) and all attendant utilities** of all new or substantially improved ~~manufactured homes, dwellings~~

residential structures including manufactured dwellings ~~and structures~~ meet the requirements of MCC 17.178.060(A), (B) and (C), where applicable, as follows:

~~a.~~ **1.** Prior to construction (based on construction drawings); and

~~b.~~ **2.** Once the floor elevation can be determined (based on the building under construction); and

~~c.~~ **3.** Prior to occupancy (based on finished construction).

~~2. Unless requested by FEMA, e~~ **E**levation certificates shall not be required for the following uses:

~~a. Water~~ **1. Functionally** dependent uses, such as boat ramps, docks, wells and well covers.

~~b.~~ **2.** Improvements resulting from cut or fill operations, such as berms, bank improvements, ponds and dams.

~~c. Small scale facilities necessary to serve other uses, such as kiosks and open picnic shelters.~~

~~d.~~ **3.** Grading, such as for roadways, even where alteration of topography occurs.

F. *Repealed by Ord. 1397.*

G. In addition to other information required in a conditional use application, the application shall include:

1. Land elevation in mean sea level data at development site and topographic characteristics of the site.

2. Base flood level expressed in mean sea level data on the site, if available.

3. Plot plan showing property location, floodplain and floodway boundaries where applicable, boundaries and the location and floor elevations of existing and proposed development, or the location of grading or filling where ground surface modifications are to be undertaken.

4. Any additional statements and maps providing information demonstrating existing or historical flooding conditions or characteristics which may aid in determining compliance with the flood protection standards of this overlay zone. [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1326 § 4 (Exh. A), 2012; Ord. 1271 § 5, 2008; Ord. 1167 § 4, 2002; Ord. 1094 § 5, 1998; Ord. 761 § 2, 1987. RZ Ord. § 178.050.]

5. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed.

6. Certification by a registered professional engineer or architect licensed in the State of Oregon that the floodproofing methods proposed for any non-residential structure meet the floodproofing criteria for non-residential structures in this chapter.

7. A description of the extent to which any watercourse will be altered or relocated.

8. Base Flood Elevation data for any subdivision proposals or other development when required per MCC 17.178.060(G).

9. Substantial improvement calculation(s) for any improvement, addition, reconstruction, renovation, or rehabilitation of an existing structure.

10. The amount and location of any fill or excavation activities proposed.

Changes required by FEMA to comply with the NFIP.

17.178.060 Flood protection standards.
In all areas of identified floodplain **(which includes all areas of special flood hazard)**, the following requirements apply:

A. ~~Dwellings~~ **Residential structures**, **including** Manufactured ~~Homes~~ **Dwellings** and Related ~~Accessory~~ Structures. New residential construction, substantial improvement of any residential structures, location of a manufactured **dwelling** ~~home~~ on a lot or in a manufactured **dwelling** ~~home~~ park or park expansion ~~approved after adoption of this title~~ shall:

1. **Residential structures** ~~Dwellings and accessory structures, except as provided for in subsections (A)(7) and (8) of this section~~, shall have the top of the lowest floor, including basement, elevated on a permanent foundation to two feet above base flood elevation and the bottom of the lowest floor constructed a minimum of one foot above the base flood elevation. Where the base flood elevation is not available, the top of the lowest floor including basement shall be elevated on a permanent foundation to two feet above the highest adjacent natural grade (within five feet) of the building site and the bottom of the lowest floor elevated to one foot above the highest adjacent natural grade (within five feet) of the building site;

2. Manufactured ~~homes~~ **dwellings** shall have the bottom of the longitudinal chassis frame beam, including basement, elevated on a permanent foundation to two feet above base flood elevation. Where the base flood elevation is not available, the finished floor, including basement, shall be elevated on a permanent foundation to two feet above highest adjacent natural grade (within five feet) of the building site;

3. Manufactured ~~homes~~ **dwellings** shall be anchored in accordance with subsection (D) of this section; **and all electrical crossover connections shall be a minimum of one foot above the base flood elevation.**

Requirement in Oregon Manufactured Dwelling Installation Specialty Code.

4. No new ~~dwelling~~ **residential structures, including** ~~or~~ manufactured **dwellings** ~~home~~ shall be placed in a floodway. An exception to this prohibition may be granted if a floodplain development permit and variance consistent with MCC 17.178.080 are obtained;

5. **All new construction and substantial improvements with fully enclosed areas below the lowest floor (excluding basements) are subject to the following requirements. Enclosed areas below the base flood elevation, including crawlspaces shall:** ~~Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must comply with the following standards:~~

a. Be designed to automatically equalize hydrostatic flood forces on walls by allowing for the netry and exit of floodwaters;

b. Be used solely for parking, storage, or building access;

c. Be certified by a registered professional engineer or architect to meet or exceed all of the following minimum criteria:

1) A minimum of two openings,

2) The total net area of non-engineered openings shall be not less than one square inch for each square foot of enclosed area, where the enclosed area is measured on the exterior of the enclosed walls,

~~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.~~ **3)** The bottom of all openings shall be no higher than one foot above grade.

~~c.~~**4)** Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they **shall allow the automatic flow of floodwater into and out of the enclosed areas and shall be accounted for in the determination of the net open area.** ~~permit the automatic entry and exit of floodwaters;~~

6. Construction where the crawlspace is below grade on all sides may be used. Designs for meeting these requirements must either be certified by a registered professional engineer or architect, or must meet the following standards, consistent with FEMA Technical Bulletin 11-01 for crawlspace construction:

a. A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

b. The bottom of all openings shall be no higher than one foot above grade;

c. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwaters;

d. Interior grade of the crawlspace shall not exceed two feet below the lowest adjacent exterior grade;

e. The height of the crawlspace when measured from the interior grade of the crawlspace (at any point on grade) to the bottom of the lowest horizontal structural member of the lowest floor shall not exceed four feet;

f. An adequate drainage system that removes floodwaters from the interior area of the crawlspace shall be provided;

g. The velocity of floodwaters at the site shall not exceed five feet per second for any crawlspace. For velocities in excess of five feet per second, other foundation types shall be used; and

h. Below-grade crawlspace construction in accordance with the requirements listed above will not be considered basements for flood insurance purposes. However, below-grade crawlspace construction in the special flood hazard area is not the recommended construction method because of the increased likelihood of problems with foundation damage, water accumulation, moisture damage, and drainage. Applicants shall be advised that buildings constructed with below-grade crawlspaces will have higher flood insurance premiums than buildings that have the preferred crawlspace construction (the interior grade of the crawlspace is at or above the adjacent exterior grade);

7. A garage attached to a residential structure, constructed with the garage floor slab below the base flood elevation, or a fully enclosed space beneath a ~~dwelling~~ **residential structure** that does not constitute a basement may be constructed to wet floodproofing standards; provided, that:

a. The garage or enclosed space shall be constructed with unfinished materials, acceptable for wet floodproofing to two feet above the base flood elevation or, where no BFE has been established, to two feet above the highest adjacent grade;

b. The garage or enclosed space shall be designed **and constructed with flood openings** to automatically equalize hydrostatic flood forces on exterior walls by allowing for the **automatic** entry and exit of floodwaters, **in full compliance with the standards in MCC 17.178.060(A)(5)**. ~~Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must comply with the following standards:~~

~~i. 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;~~

~~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 floodwaters;~~

c. Electrical, heating, ventilation, plumbing, and air-conditioning equipment shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air-conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site;

d. The garage or enclosed space shall **only be used for parking, storage, and building access, and for** ~~be limited to vehicle parking, building access, and~~ storage of items having low damage potential when submerged by water (no workshops, offices, recreation rooms, etc.);

e. The garage or enclosed space shall not be used for human habitation;

f. A declaratory statement is recorded requiring compliance with the standards in subsections (A)(7)(a) through (e) of this section;

g. The floors are at or above grade on not less than one side.

h. The garage or enclosed space must be constructed in compliance with section 17.178.060(D),(E), and (H).

8. A detached residential accessory structure may be constructed to wet floodproofing standards; **with** ~~provided, that:~~ **relief from elevation or floodproofing requirements for residential and non-residential structures in Riverine (Non-Coastal) flood zones provided that the following requirements are met:**

a. Appurtenant structures located partially or entirely within the floodway must comply with requirements for development within a floodway found in MCC 17.178.060(J).

b. Appurtenant structures must only be used for parking, access, and/or storage and shall not be used for human habitation;

c. In compliance with State of Oregon Specialty Codes, appurtenant structures on properties that are zoned residential are limited to one-story structures less than 200 square feet, or 400 square feet if the property is greater than two (2) acres in area and the proposed appurtenant structure will be located a minimum of 20 feet from all property lines. Appurtenant structures on properties that are zoned as non-residential are limited in size to 120 square feet.

FEMA requires that accessory structures be limited in size in order that they are able to be insured as an "appurtenances" to the primary dwelling.

d. The portions of the appurtenant structure located below two feet above the Base Flood Elevation, where no BFE has been established, below two feet above the highest adjacent grade shall be built using flood resistant materials;

e. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood.

f. The appurtenant structure must be designed and constructed to equalize hydrostatic flood forces on exterior walls and comply with the requirements for flood openings in MCC 17.178.060(A);

g. Appurtenant structures shall be located and constructed to have low damage potential;

h. Appurtenant structures shall not be used to store toxic material, oil, or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with MCC 17.178.060(L);

~~a. The accessory structure shall be located on a property with a dwelling;~~

~~b. The accessory structure shall meet the criteria for a variance in MCC 17.178.090;~~

~~c. The accessory structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;~~

~~d. The accessory structure shall be constructed with unfinished materials, acceptable for wet floodproofing to two feet above the base flood elevation or, where no BFE has been established, to two feet above the highest adjacent grade;~~

~~e. The accessory structure shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must comply with the following standards:~~

~~i. 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;~~

~~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 floodwaters;~~

~~f.~~ **i.** Electrical, heating, ventilation, plumbing, and air-conditioning equipment shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air-conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site **or shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood**;

~~g. The accessory structure shall be limited to vehicle parking and storage of items having low damage potential when submerged by water (no workshops, offices, recreation rooms, etc.);~~

~~h. The accessory structure shall not be used for human habitation;~~

~~i.~~ **j.** A declaratory statement is recorded requiring compliance with the standards in subsections (A)(8)(~~d~~ **b**) through (~~h~~ **j)** of this section.

~~B. Manufactured Homes in Existing Manufactured Home Parks. The standards in subsection (A) of this section shall apply to location of a manufactured home in a vacant space in a manufactured home park existing prior to adoption of the ordinance codified in this title.~~

B. Recreational vehicles used as a hardship dwelling consistent with MCC 17.120.040 may be placed in the floodplain consistent with the following standards:

1. When placed on solid foundation walls shall be constructed with openings that comply with section MCC 16.19.140(A).

2. Shall be elevated in compliance with section MCC 16.19.140(A).

3. Shall be anchored in compliance with section MCC 16.19.140 (D)(2).

4. Electrical crossover connections shall be a minimum or 12 inches above the base flood elevation.

Adds ability to use a recreational vehicle as a hardship dwelling in the floodplain if it meets standards for manufactured home placement. This may permit the use of a "park model" RV as a hardship dwelling in the floodplain.

C. Nonresidential Development.

1. New construction and substantial improvement of any commercial, industrial or other nonresidential structures shall either have the lowest floor, including basement, elevated to two feet above the level of the base flood elevation, and where the base flood elevation is not available, the lowest floor, including basement, shall be elevated to two feet above the highest adjacent natural grade (within five feet) of the building site, or together with attendant utility and sanitary facilities, shall:

a. Be floodproofed to an elevation of two feet above base flood elevation or, where base flood elevation has not been established, two feet above the highest adjacent grade, so that the structure is watertight with walls substantially impermeable to the passage of water.

b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

c. Be certified by a registered professional engineer or architect that the **design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this** ~~standards in this~~ subsection **based on their development and/or review of the structural design, specifications, and plans.** ~~are satisfied~~. This certificate shall include the specific elevation (in relation to mean sea level) to which such structures are floodproofed **and shall be provided to the Floodplain Administrator**.

d. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsections (A)(5) and (6) of this section.

e. Applicants floodproofing nonresidential buildings shall be notified by the zoning administrator that 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).

2. New construction of any commercial, industrial or other nonresidential structures is prohibited in the floodway. An exception to this prohibition may be granted if a floodplain development permit and variance consistent with MCC 17.178.080 are obtained. This prohibition does not apply to ~~water~~ **functionally** dependent uses.

3. An agricultural structure may be constructed to wet floodproofing standards; provided, that:

a. The structure shall meet the criteria for a variance in MCC 17.178.090;

b. The structure shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;

c. The structure shall be constructed with unfinished materials, acceptable for wet floodproofing to two feet above the base flood elevation or, where no BFE has been established, to two feet above the highest adjacent grade;

d. The ~~accessory~~ structure shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must comply with the following standards:

i. 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;

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 floodwaters;

e. Electrical, heating, ventilation, plumbing, and air-conditioning equipment shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air-conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site;

f. The structure shall be used solely for agricultural purposes, for which the use is exclusively in conjunction with the production, harvesting, storage, drying, or raising of agricultural commodities, the raising of livestock, and the storage of farm machinery and equipment;

g. The structure shall not be used for human habitation;

h. A declaratory statement shall be recorded requiring compliance with the standards in subsections (C)(3)(c) through (g) of this section.

D. Anchoring.

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure **resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy**.

2. All manufactured ~~homes~~ **dwellings** must likewise be anchored to prevent flotation, collapse or lateral movements, 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. Anchoring methods shall be consistent with the standards contained in **the Oregon Manufactured Dwelling Installation Specialty Code.** ~~Section 308 (Flood Resistance) contained in the Oregon Manufactured Dwelling Standards Manual per ORS 446.062.~~

E. Construction Materials and Methods.

1. All new construction and substantial improvements **shall be constructed with materials and utility equipment resistant to flood damage,** ~~below base flood level shall be constructed with materials and utility equipment resistant to flood damage~~, and the design and methods of construction are in accord with accepted standards of practice based on an engineer's or architect's review of the plans and specifications.

2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damages.

F. Utilities.

1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system as approved by the State Health Division.

2. New and replacement sanitary sewage systems ~~including on-site waste disposal systems shall be designed and located to minimize floodwater contamination consistent with the requirements of the Oregon State Department of Environmental Quality.~~ **shall be designed to minimize or eliminate infiltration of flood waters in the systems and discharge from the systems into flood waters.**

3. On-site waste disposal systems shall be designed and located to avoid impairment to them or contamination from them during flooding consistent with the requirements of the Oregon State Department of Environmental Quality.

~~3~~. **4.** Electrical, heating, ventilation, plumbing, **duct systems,** ~~and~~ air-conditioning **and other equipment and service facilities** shall be elevated to one foot above the level of the base flood elevation. Where the base flood elevation is not available, the electrical, heating, ventilation, plumbing and air-conditioning equipment shall be elevated to one foot above the highest adjacent natural grade (within five feet) of the building site. **If replaced as part of a substantial improvement the utility equipment and service facilities shall meet all the requirements of this subsection.**

G. Developments Generally. Residential developments involving more than one single-family **residential structure** ~~dwelling,~~ including subdivisions, manufactured **dwelling** ~~home~~ parks, multiple-family **residential structures** ~~dwellings~~ and planned developments, **and other proposed developments** including development regulated under subsections (A) and (C) of this section shall meet the following requirements:

1. Be designed to minimize flood damage.

2. Have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize **or eliminate** flood damage.

3. Have adequate drainage provided to reduce exposure to flood **hazards** ~~damage.~~

4. Base flood elevation data shall be provided by the developer. In cases where no base flood elevation data is available analysis by standard engineering methods will be required **to develop base flood elevation data**.

H. Storage of Materials and Equipment. Materials that are buoyant, flammable, obnoxious, toxic or otherwise injurious to persons or property, if transported by floodwaters, are prohibited. Storage of materials and equipment not having these characteristics is permissible only if the materials and equipment have low damage potential and are anchored or are readily removable from the area within the time available after forecasting and warning.

I. Alteration of Watercourses. When considering a conditional use permit to allow alteration or modification of a watercourse the following shall apply:

1. Adjacent communities, the Oregon Division of State Lands and the Department of Land Conservation and Development, and other affected **state and federal** agencies shall be notified prior to any alteration or relocation of a watercourse and evidence of such notification shall be submitted to the Federal Insurance Administration. **This notification shall be provided by the applicant to the Federal Insurance Administration as a Letter of Map Revision (LOMR) along with either:**

a. A proposed maintenance plan to assure the flood carrying capacity within the altered or relocated portion of the watercourse is maintained; or

b. Certification by a registered professional engineer that the project has been designed to retain its flood carrying capacity without periodic maintenance.

2. Maintenance shall be provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

3. The applicant shall be required to submit a Conditional Letter of Map Revision (CLOMR) when required under MCC 17.178.030(I).

J. Floodways. Located within areas of floodplain established in MCC 17.178.030 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential the following provisions shall apply in addition to the requirement in subsection (I) of this section:

1. Prohibit encroachments, including fill, new construction, substantial improvements and other development **within the adopted regulatory floodway** unless **certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge.** ~~a certified technical evaluation is provided by a registered professional engineer or architect demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. This evaluation may be submitted to the Federal Emergency Management Agency for technical review.~~

2. If subsection (J)(1) of this section is satisfied, all new construction**,** ~~and~~ substantial improvements**, and other development** shall comply with all applicable flood hazard reduction provisions of this section.

3. The area below the lowest floor shall remain open and unenclosed to allow the unrestricted flow of floodwaters beneath the structure.

K. Standards for Shallow Flooding Areas (AO Zones). Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from one to three feet where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

1. New construction and substantial improvements of residential structures **and manufactured dwellings** within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent natural grade (within five feet) of the building site, to two feet above the depth number specified on the FIRM or three feet if no depth number is specified.

2. New construction and substantial improvements of nonresidential structures within AO zones shall either:

a. Have the lowest floor (including basement) elevated above the highest adjacent natural grade (within five feet) of the building site, to two feet above the depth number specified on the FIRM or three feet if no depth number is specified; or

b. Together with attendant utility and sanitary facilities, be completely floodproofed to or above ~~that level~~ **two feet above the depth number specified on the FIRM or three feet if no depth number is specified** so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as in subsection (C) of this section.

3. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

4. In AO zones, new and substantially improved accessory structures must comply with the standards in section MCC 17.178.060(A)(7) or (8).

5. In AO zones, enclosed areas beneath elevated structures shall comply with the requirements in section MMC 17.178.060(A)(5). [Ord. 1397 § 4 (Exh. B), 2019; Ord. 1369 § 4 (Exh. B), 2016; Ord. 1330 § 4 (Exh. A), 2013; Ord. 1326 § 4 (Exh. A), 2012; Ord. 1313 § 4 (Exh. A), 2011; Ord. 1271 § 5, 2008; Ord. 1167 § 4, 2002; Ord. 1094 § 5, 1998; Ord. 951 § 4, 1993; Ord. 761 § 2, 1987. RZ Ord. § 178.060.]

L. Tanks

A. Underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood.

B. Above-ground tanks shall be installed to one foot above the base flood level or shall be anchored to prevent flotation, collapse, and lateral movement under conditions of the base flood.

C. Tanks shall be constructed with electrical, mechanical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

Changes required by FEMA to comply with the NFIP. Puts into code current practice on tanks.

17.178.070 Generalized floodplain areas.
Where elevation data is generalized, such as the unnumbered A zones on the FIRM, conditional use permits shall include a review and determination that proposed construction will be reasonably safe from flooding and meet the flood protection standards. In determining whether the proposed floodplain development is reasonably safe, applicable criteria shall include, among other things, the use of historical data, high water marks, photographs of past flooding, or data (e.g., an engineering study or soil and landscape analysis) may be submitted by qualified professionals that demonstrate the site is not in a floodplain. In such cases, a letter of map amendment may be required by the zoning administrator. [Ord. 1271 § 5, 2008; Ord. 1094 § 5, 1998; Ord. 761 § 2, 1987. RZ Ord. § 178.070.]

17.178.080 Variances.
A. A variance may be issued as part of the conditional use process 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, in conformance with the criteria in MCC 17.178.090. The variance criteria of MCC 17.122.020 do not apply.

B. Marion County shall notify the applicant in writing over the signature of the zoning administrator that:

1. The issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood ~~insurance up to amounts as high as $25.00 for $100.00 of~~ insurance coverage; and

2. Such construction below the base flood level increases risk to life and property. Such notification shall be maintained with a record of all variance actions as required in subsection (C) of this section.

C. Marion County shall:

~~1.~~ Maintain a record of all variance actions, including justification for their issuance; and

~~2. Report such variances issued in its biennial report submitted to the NFIP administrator~~. [Ord. 1271 § 5, 2008; Ord. 1094 § 5, 1998; Ord. 761 § 2, 1987. RZ Ord. § 178.080.]

17.178.090 Variance criteria.
The following criteria shall be used to review variance applications:

A. Variances shall only be issued upon a showing that:

1. There is a good and sufficient cause;

2. Failure to grant the variance would result in exceptional hardship to the applicant;

3. The granting of a 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, or conflict with existing local laws;

4. The variance is the minimum necessary, considering the flood hazard, to afford relief;

5. The variance will be consistent with the intent and purpose of the provision being varied;

6. There has not been a previous land use action approved on the basis that variances would not be allowed; and

7. The new construction or substantial improvement is not within any designated regulatory floodway, or if located in a floodway, no increase in base flood discharge will result.

8. Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria of this subsection are met, and the structure or other development is protected by methods that will minimize flood damages during the base flood and create no additional threats to public safety. [Ord. 1271 § 5, 2008; Ord. 1094 § 5, 1998; Ord. 761 § 2, 1987. RZ Ord. § 178.090.]

Changes required by FEMA to comply with the NFIP. Puts into code current practice.

17.178.100 Warning and disclaimer of liability.

The degree of flood protection required by this overlay zone is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on occasion. Flood heights may be increased by manmade or natural causes. This zone does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This zone will not create liability on the part of Marion County, any officer or employee thereof or the

Federal Insurance **Administrator** ~~Administration~~ for any flood damages that result from reliance on this chapter or any **administrative** decision lawfully made thereunder. [Ord. 1271 § 5, 2008; Ord. 1094 § 5, 1998; Ord. 761 § 2, 1987. RZ Ord. § 178.100.]

Changes required by FEMA to comply with the NFIP.