

CHAPTER 601 FLOODPLAIN OVERLAY ZONE

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601.005. Definitions. Unless specifically defined in this section, words or phrases used in this Chapter shall be interpreted so as to give them the meaning they have in common usage and to give this Chapter its most reasonable application.

(a) Area of shallow flooding: An area designated as an "AO" or "AH" zone on the Flood Insurance Rate Map (FIRM). In an area of shallow flooding, the base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate, and velocity flow may be evident. AO is characterized as sheet flow and AH indicates ponding.

(b) A Zone: Areas with a 1 percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas; no depths or base flood elevations are shown within these zones.

(c) AE Zone: The base floodplain where base flood elevations are provided.

(d) AH Zone: Areas with a 1 percent annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.

(e) AO Zone: River or stream flood hazard areas, and areas with a 1 percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.

(f) Base flood: The flood having a one percent chance of being equaled or exceeded in any given year. Base flood also referred to as the "100-year flood."

- (g) Bridge:** A structure, including supports, erected over a depression or an obstruction such as a waterway, highway, or railway, and having a deck or passageway for transporting pedestrians, vehicles, or other moving loads, and having an opening measured along the center of the deck or passageway of more than twenty feet between undercroppings of abutments, or spring lines of arches, or extreme ends of openings for multiple boxes, and which includes multiple pipes where the clear distance between openings is less than half of the smallest contiguous opening.
- (h) Change of use:** Making different use of the land or water than that which existed on June 15, 1979. Change of use includes a change that requires construction or alterations of the land, water or other areas outside of existing buildings or structures which significantly alters or affects the land or water. For the purposes of this definition, an existing open storage area shall be considered a building. Change of use does not include:
- (1)** A change of use of a building or other structure which does not significantly alter or affect the land or water upon which it is situated.
 - (2)** The completion of a structure for which a valid permit has been issued and under which permit substantial construction was undertaken by June 15, 1979.
 - (3)** The sale of property.
 - (4)** Minor landscaping which does not have an appreciable effect on flow characteristics of a waterway.
 - (5)** Construction of driveways which do not involve significant earthwork or supporting structures that affect flow characteristics of a waterway.
 - (6)** Minor modifications of existing structures for which no building permit is required.
 - (7)** The construction or placement of such minor subsidiary structures or facilities that are usual and necessary for the use and enjoyment of existing improvements, except such structures or facilities specifically prohibited or regulated by this Chapter.
- (i) Develop or development:** To bring about growth or availability; to construct, alter, or place a structure; to locate or place a manufacture dwelling or home; to conduct a mining, filling, grading, paving, drilling, dredging, or excavation operation; to make a physical change in the use or appearance of land; to partition or divide land into parcels; or to create or terminate rights of access.
- (j) Enclosed area:** An area with two or more outside rigid walls and an affixed roof. Enclosed areas do not include the uncovered portion of a structure, roof canopy areas with only one wall, or areas below the finish floor that are separated by permeable surfaces such as lattice work, skirting, or insect screening.
- (k) Existing manufactured home park or manufactured home subdivision:** A manufactured home park for which the construction of facilities to service the lot on or which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) was completed prior to July 27, 1987.
- (l) Expansion to an existing manufactured home park or manufactured home subdivision:** The preparation of additional sites by the construction of facilities to service the lots on which the manufactured homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).
- (m) Fish habitat enhancement:** The addition or modification of aquatic habitat components whose absence, scarcity, or condition has been determined by the Director of Public Works to limit fish presence or abundance in the immediate project area, specific stream corridor, or watershed.
- (n) Flood or flooding:** A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters or from the unusual and rapid accumulation of runoff of surface waters from any source.
- (o) Flood Insurance Rate Map or FIRM:** The official map, in paper or digital form, on which the Federal Insurance Administration, Federal Emergency Management Agency (FEMA) has delineated both the areas of special flood hazards and the risk premium zones applicable to the

City of Salem, and includes the accompanying floodway and floodway fringe boundary maps accompanying the FIRM as a part of the flood insurance study.

(p) Flood insurance study: The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary - Floodway Map, and the water surface elevation of the base flood. The flood insurance study, and all subsequent amendments thereto or supplements thereof, is hereby adopted as a part of this Chapter, and a copy thereof shall be kept on file in the office of the Director of Public Works.

(q) Floodplain: Any land or water area which is subject to one percent flood probability along any waterway. Floodplain includes the officially designated floodway, floodway fringe, areas of shallow flooding or special flood hazard area, as delineated on the FIRM, and interim flood hazard areas.

(r) Floodway: The channel of a river or other waterway and the adjacent land areas that must be reserved in order to discharge the waters of a base flood without cumulatively increasing the water surface elevation by more than one foot. Areas designated as floodways are located within floodplains. The floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and have the potential to cause erosion. The floodway limits are as delineated on the FIRM, or located within interim flood hazard areas and designated as floodway by the Director of Public Works pursuant to SRC 601.050.

(s) Floodway fringe: The area of the 100-year floodplain lying outside of the floodway within interim flood hazard areas, and designated as floodway fringe by the Director of Public Works pursuant to SRC 601.050.

(t) Floodproofing: Any combination of structural or nonstructural provisions, changes or adjustments to structures, land or a waterway for the reduction or elimination of flood damage to real property or any improvements thereon, water and sanitary facilities, structures, and their contents during a base flood.

(u) Intensification: Any additions which increase or expand the area, level or activity, or amount of an existing use; or any remodeling of the exterior of a structure that will substantially alter the appearance of the structure. As used in this definition, intensification does not include:

- (1)** Completion of a structure for which a valid permit has been issued and under which permit substantial construction was undertaken prior to June 15, 1979.
- (2)** Maintenance and repair usual and necessary for the continuance of an existing use.
- (3)** Reasonable emergency procedures necessary for the safety and protection of property.
- (4)** Seasonal increases in gravel mining operations.

(v) Interim flood hazard area: An area of special flood hazard designated by the Director of Public Works, but not designated as such on the FIRM. The Interim Flood Hazard Area is established on a waterway which does not have base flood water surface elevations and floodway and floodway fringe boundaries established through a Flood Insurance Study. An interim flood hazard area is an approximation of the floodplain. Minimally the Interim Flood Hazard Area shall include the area which would be designated as the floodway and floodway fringe if a Flood Insurance Study were done.

(w) Lowest floor: The lowest accessible floor of the lowest enclosed area with an interior vertical clearance of greater than four feet.

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

(y) Manufactured home park: A lot or parcel (or contiguous lots or parcels) of land divided into two or more manufactured home lots for sale or rent.

(z) Obstruction: Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, excavation, channel rectification, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, or matter in, along, across, or projecting into any channel, waterway, or floodplain which may impede, retard, or change the direction of the flow of water, either in itself or by catching or collecting debris carried by such water, or that is placed where the flow of water might carry the debris downstream and endanger life or damage property.

(aa) Special Flood Hazard Area: The land in the floodplain subject to a one percent or greater chance of flooding in any given year, as designated by the most recent version of the FIRM. Designation on maps always includes the letters A or V.

(bb) Start of construction: The date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was commenced within 180 days of the permit date. The actual start of construction means either the date of the first permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond excavation; or the date of the placement of a manufactured home on a foundation.

(cc) Stream enhancement: The modification of stream channel width, length, depth, alignment, location, profile, bank shape, or in-stream structures, for the purpose of improving ecological or habitat functions that have been determined by the Director of Public Works to have been degraded or lost in the immediate project area, specific stream corridor, or watershed.

(dd) Structure: Any building with two or more exterior rigid walls and a fully secured roof that is affixed to a permanent site; or any gas or liquid storage tank that is principally above ground.

(ee) Substantial damage: Damage sustained by a structure whereby the cost of restoring the structure to its condition immediately prior to the damage would equal or exceed fifty percent of the market value of the structure before the damage occurred.

(ff) Substantial improvement: For the purposes of floodplain management only, and notwithstanding the provisions for nonconforming situations under SRC Chapter 270, any repair, reconstruction, rehabilitation, addition, replacement, 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 substantial improvement does not include either:

(1) Any project or improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or

(2) Any alteration of the structure listed in the National Register of Historic Places or the State Inventory of Historic Places.

(gg) Waterway: Any perennial river, stream, or creek within the City of Salem.

(hh) Waterway centerline: A line one-half the distance between the edges of the low flow channel of the waterway.

(Ord No. 31-13; Ord No. 17-15; Ord No. 17-15)

601.010. Interpretation. In the interpretation and application of this Chapter, all provisions shall be:

(a) Considered as minimum requirements;

(b) Liberally construed in favor of the governing body; and,

(c) Deemed neither to limit nor repeal any other powers granted under state or federal law. (Ord No. 31-13)

601.015. Reservation of Powers. Nothing in this Chapter shall be deemed to limit, abrogate, impair, or repeal any existing easements, covenants, or deed restrictions, or any powers relating to the prevention or control of flooding and its effects granted under state statutes or city ordinances. However, where this

Chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord No. 31-13)

601.020. Warning and Disclaimer of Liability. The degree of flood protection required by this Chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by natural or man-made causes. This Chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. Nothing in this Chapter shall create any liability on the part of the City of Salem, any officer, employee or agent thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this Chapter or any administrative action or decision lawfully made hereunder. (Ord No. 31-13)

601.025. Authority of Public Works Director. The Director of Public Works shall administer and enforce this Chapter and shall have to authority to grant, deny, suspend, and revoke floodplain development permits. (Ord No. 31-13)

601.030. FIRM Adoption; Amendments and Revisions; Interpretation of Boundaries.

(a) **Adoption.** The FIRM and all amendments thereto are adopted as a part of this Chapter and shown on the Salem Zoning Map.

(b) **Amendments and Revisions.** Amendments and revisions to the FIRM adopted by the Federal Insurance Administration shall be automatically incorporated into this Chapter without further action and shall be shown on the Salem Zoning Map.

(c) **Interpretation of Boundaries.**

(1) The base flood elevation data furnished by the Flood Insurance Study is fixed and shall not be appealed, interpreted or otherwise reexamined except under procedures established by the Federal Insurance Administration. The FIRM, however, is drawn to 1":800' scale, and is based upon contour maps showing ground elevation at ten foot intervals, For these reasons the boundaries shown on the FIRM are subject to interpretation based upon more detailed topographic data. Where an applicant questions the precise location of the boundary, the Director of Public works shall make an interpretation thereof based upon elevations from Public Works aerial photographs and contour maps in conjunction with flood elevations shown on the FIRM, or such data furnished by the applicant as the director finds to be persuasive.

(2) Any person aggrieved by the decision of the Director of Public Works may appeal such decision to the hearings officer by filing written notice of appeal with the Planning Administrator within 10 days of the date of the decision. The notice of appeal shall include a list of all property owners within the notification area prepared by a title insurance company. Notification, hearing, and further proceedings shall proceed as provided in SRC Chapter 300 for appeals from administrative adjustments.

(d) A copy of the FIRM, and any amendments or revisions thereto, shall be kept on file in the Office of the Director of Public Works. (Ord No. 31-13)

601.035. Establishment of Floodplain Overlay Zone. Floodplains for major waterways are shown on the Salem Zoning Map as the Floodplain Overlay Zone, and for regulatory purposes are divided into the following areas:

(a) FW (Floodway);

(b) FF (Floodway Fringe) and Special Flood Hazard Area;

(c) FH (Interim Flood Hazard Area). (Ord No. 31-13)

601.040. Uses in FW (Floodway).

(a) Except as prohibited in subsection (b) of this section, within the FW (Floodway) all uses of

land permitted in the underlying zone shall be permitted upon obtaining a floodplain development permit, and compliance with this Chapter.

(b) The following uses are prohibited within the FW (Floodway) area, and within fifteen feet of the waterway centerline, or within ten feet of the top of a recognizable bank, whichever is greater:

- (1) Storage of toxic, flammable, or explosive materials.
- (2) Sanitary landfill, disposal sites and junkyards.
- (3) Construction or placement of fences.
- (4) Cemeteries.
- (5) Any encroachments, including fill, new construction, substantial improvements, and other development unless analysis by approved methods and certification by a registered professional engineer are provided to the Director of Public Works demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (6) Construction or placement of any permanent or temporary structures including, but not limited to, homes, apartments, manufactured homes, commercial buildings, and industrial buildings, and gas or liquid storage tanks. Notwithstanding this paragraph, the following structures are permitted within the FW (Floodway) area if the structure incorporates floodproofing measures as approved in conjunction with a floodplain development permit, meets all applicable standards for structures as required in the floodway fringe, and does not raise the base flood elevation to any degree:
 - (A) Modification, alteration, or major repair to an existing structure.
 - (B) Docks and piers. The size and shape of a dock or pier shall be limited to that required for the intended use.
 - (C) Public recreational facilities on public land, including, but not limited to restrooms, raised seating, public performance stages, and temporary fences which are removed after October 1, and not erected before April 1 of each year.
 - (D) Structures used for gravel sorting and crushing.
 - (E) Public utility or communication towers.
 - (F) Replacement of existing manufactured homes within existing manufactured home parks or manufactured home subdivisions that comply with SRC 601.045(b). (Ord No. 31-13)

601.045. Uses in FF (Floodway Fringe) or Special Flood Hazard Area. Within any FF (Floodway Fringe Area) or Special Flood hazard Area any of the following uses are permitted upon obtaining a floodplain development permit, and compliance with this Chapter.

- (a) All uses of land permitted in the underlying zone; provided however, that any building, structure, manufactured home, or recreational vehicle associated therewith complies with subsections (b), (c), and (d) of this section.
- (b) Structures, including manufactured homes, as allowed in an underlying residential zone, if:
 - (1) The lowest floor elevation, including a basement, is no less than one foot above the elevation of the base flood, unless base flood elevation data are not available, in which case the structure shall be elevated as provided in SRC 601.095.
 - (2) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
 - (3) The structure is anchored to prevent flotation, collapse, or lateral movement as provided in SRC 601.100.
 - (4) The structure is located no closer than 15 feet to the waterway centerline, or ten feet to

the top of a recognizable bank, whichever is greater, except that this provision shall not apply to the Willamette River floodplain.

(5) The structure is designed according to accepted engineering standards, certified by a registered engineer or architect, and approved by the building official as minimizing the likelihood of flood damage and rendering the structure and its utility equipment reasonably resistant to flood damage.

(6) Except as provided in subparagraphs (A) and (B) of this paragraph, enclosed areas of structures below the lowest floor that are subject to flooding are prohibited.

(A) Below-grade crawlspace construction is permitted in compliance with FEMA Technical Bulletin 11-01, including amendments or revisions thereto;

(B) Crawlspaces and other enclosed areas are allowed only where the vertical interior clearance does not exceed four feet. Such enclosed areas 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 be certified by a professional engineer or must meet or exceed the following minimum criteria:

(i) A minimum of two openings having a total net area of not less than one square inch for every 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.

(Ord No. 31-13; Ord No. 17-15; Ord No. 17-15)

601.050. Uses in FH (Interim Flood Hazard Areas).

(a) Any person proposing an intensification, development, or change of use for which a floodplain development permit within the FH (Interim Flood Hazard) area would be required were the land within a FW (Floodway) or FF (Floodway Fringe) area, shall make application for a floodplain development permit. The Director of Public Works shall determine whether such property should be classified as in a FW (Floodway) or FF (Floodway Fringe). In making such determination the Director shall take into account the elevation and topography of the land, historical base flood elevation data if available, the results of other competent engineering studies of the effects of flooding on the area in question, and other hydraulic and geologic factors relevant to an engineering determination of base flood characteristics of the specific property.

(b) Once the Director has determined FW (Floodway) and FF (Floodway Fringe) locations, uses shall be permitted in the FW (Floodway) area as provided in SRC 601.040, and uses shall be permitted in the FF (Floodway Fringe) and as provided in SRC 601.045. (Ord No. 31-13)

601.055. Floodplain Development Permit Required.

(a) Except as provided in subsection (b) of this section, a floodplain development permit shall be obtained before construction, development, or change of use begins within any FW (Floodway), FF (Floodway Fringe), Special Flood Hazard Area, and FH (Interim Flood Hazard Area). The permit shall be for all development, as defined in SRC 601.005. The issuance of a Floodplain Development Permit is a Type I proceeding under SRC Chapter 300.

(b) A floodplain development permit is not required for the following:

(1) The propagation or cutting of timber.

(2) Uses to protect, conserve, enhance, and maintain public recreational, scenic, and natural uses on public lands such as unenclosed picnic facilities, viewpoints, trails, and campsite facilities.

(3) Maintenance authorized to scenic easements acquired under ORS 390.332-390.368.

- (4) Addition or modification by public utilities of existing utility lines, wires, fixtures, equipment, circuits, appliances, and conductors.
- (5) Flood emergency procedures.
- (6) Signs, markers, aids, etc., placed by a public agency to serve the public.
- (7) Residential accessory uses such as lawns, gardens, parking areas, driveways, and play areas.
- (8) Landscaping.
- (9) Storage of material, equipment, or vehicles associated with uses permitted within residential zones, providing the storage is not subject to damage by floods and is firmly anchored to prevent flotation or can be readily removed from the area within the limited time available after flood warning.
- (10) Driveways, parking lots, and other paved areas.
- (11) Minor repairs or alterations to an existing structure for which no building permit is required.
- (12) Gravel extraction and storage of gravel as allowed under permits required by state or federal law, and as permitted by the Salem Revised Code.
- (13) Customary dredging and channel maintenance, excluding deposition of spoils, as allowed by permits required by state or federal law.
- (14) Agriculture. (Ord No. 31-13)

601.060. Floodplain Permits for Fish Habitat Enhancement Projects.

- (a) Notwithstanding any other provisions of this Chapter, the Director of Public Works may approve and issue floodplain development permits for fish habitat enhancement projects or stream enhancement projects, on a case-by-case basis and subject to any conditions for flood protection, mitigation, monitoring, long-term maintenance, or other certifications or analyses as the Director of Public Works may deem necessary. In making the evaluation, the Director of Public Works shall consult with the Director of Community Development and other appropriate City staff.
- (b) For permit approval, the applicant shall demonstrate, and the Director of Public Works must find:
 - (1) The appropriateness of the project to the watershed or stream corridor under fully developed conditions;
 - (2) That all applicable permits from other agencies have been or can be obtained;
 - (3) That any changes in channel geometry, increases in base flood elevation, stream velocities, or extent of flooding will not pose an unacceptable risk to property or public safety; and
 - (4) The proposed project has no adverse hydraulic impacts upon the stream and the City's storm drainage system, with particular emphasis on potentially increased flooding, implications for streambank stability, changes in channel location, changes in the stream's sediment load, and increased or extraordinary maintenance requirements.
- (c) Written notice of the Director of Public Works' permit decision shall be mailed to the applicant, the applicable neighborhood associations, watershed council, and land owners along the immediately affected stream corridor within 1,500 feet of the project site. The permit shall issue 15 days after the date of mailing of decision, unless appealed as provided in this section.
- (d) Within fifteen days of the mailing of the Director's decision, any person may file a written notice of appeal to the Council, with the fee established by resolution of the Council, specifying the manner in which the Director erred. Upon such appeal, the Council shall conduct a de novo hearing and make a final determination. No permit shall be effective pending Council's determination. (Ord No. 31-13)

601.065. Floodplain Development Permit Application. Every application for a floodplain development permit shall:

(a) Identify and describe the work to be covered by the permit; be made on forms furnished by the Public Works Department and shall include but not be limited to; plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the application shall:

- (1) Describe the land on which the proposed work is to be done, by lot, block, tract, house and street address, or by some similar description that will readily identify and definitely locate the proposed work;
- (2) Indicate the use or occupancy for which the proposed work is intended;
- (3) Include plans and specifications for any work for which performance or specification standards are specified in this Chapter, including a site plan map which shows all existing riparian vegetation, what vegetation is proposed to be removed, and what types of native vegetation will be used to replace that which is being removed;
- (4) Show all areas proposed for excavations or fills and the quantities involved on a two-foot contour topographical map or aerial photo;
- (5) Show the proposed elevation (in relation to mean sea level) of the lowest floor (including a basement) of all new or substantially improved structures, and whether or not the structure contains a basement;
- (6) Include an engineer's certification or other proof of compliance as elsewhere specified in this Chapter. **EXCEPTION:** Where the work to be performed under a floodplain development permit requires a building permit pursuant to the Uniform Building Code as adopted in SRC Chapter 56, plans and specifications need not be separately submitted, but both permit applications may be accompanied by a duplicate set of plans.
- (7) Submit base flood elevation data as reasonably may be required by the Director of Public Works;
- (8) Submit certification by the applicant's engineer that the proposed work will not raise the base flood elevation. For work in a Floodway, the base flood elevation may not be increased to any degree; for work in a FF (Floodway Fringe) or Area of Shallow Flooding, the base flood elevation may be raised to a maximum of one foot; provided, however, that in no case shall such rise cause damage to or increased flood elevations affecting any existing structures on adjacent or upstream parcels.
- (9) Submit certification by the owner that all necessary permits, licenses, and registrations have been obtained from all local, state, or federal authorities requiring permits for the proposed work; and
- (10) Submit such other information as reasonably may be required by the Director of Public Works. (Ord No. 31-13)

601.070. Permit Fees.

- (a) An application for a floodplain development permit shall be accompanied by the permit fees as prescribed by resolution of the City Council.
- (b) Fees set by resolution are fixed and nonrefundable, and are required to support plans review, permit issuance, and inspection services.
- (c) Work being done under contract with the City of Salem shall be exempt from the provisions of SRC 601.065 to 601.075, except that records must be kept in compliance with SRC 601.075(d).
- (d) Where work for which a permit is required by this Chapter is commenced or proceeds prior to obtaining the permit, the fees specified in subsection (a) shall be doubled, but the payment of such double fees shall not relieve any person from fully complying with the requirements of this

Chapter in the execution of the work nor from any other penalties prescribed herein.

(e) Floodplain development permits shall be nontransferable. Any change in applicant such as a change in ownership of the land will require reapplication for permits. If six months has lapsed since plan approval required by SRC 601.075, reapplication for plan check shall be made. (Ord No. 31-13)

601.075. Permit Review; Records to Be Kept.

(a) The Director of Public Works shall determine whether all site, waterway and floodway development standards specified in this Chapter have been met, and shall refer the application to the Building Official for a determination of whether the standards for protection of buildings and structures specified in this Chapter and the Uniform Building Code have been met.

(b) In conducting such review, where base flood elevation data have not been provided by the Federal Insurance Administration, then the Director of Public Works shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a state, federal, city, or other authoritative source. The Director of Public Works may require the applicant to provide a hydraulic analysis defining the 100-year floodplain and floodway. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

(c) The Director of Public Works shall review each application to determine whether all necessary permits, licenses and registrations have been obtained from all local, state, or federal authorities requiring permits for the proposed work. City permits may be issued with the proviso that the applicant cannot begin work without having obtained all other local, state, or federal permits required.

(d) The Director of Public Works shall obtain and record with the file for the property subject of the permit the following information where available:

- (1) Base flood elevation data;
- (2) The actual elevation (in relation to mean sea level) of:
 - (A) The lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement; or
 - (B) Floodproofing for any non-residential structures.
- (3) Any other engineering certifications required by this Chapter; and
- (4) Evidence of the notifications required by SRC 601.115(d).

(e) The Director of Public Works shall maintain for public inspection all records pertaining to the provisions of this Chapter. (Ord No. 31-13)

601.080. Scope of Work Authorized by Permit.

(a) The issuance of a permit under the provisions of this Chapter shall be held to authorize work only in accordance with the provisions of this Chapter, the approved plans, and work necessarily implied therefrom.

(b) The issuance of such a permit shall not be construed to be a permit for or approval of any violation of the provisions of this Chapter or any other applicable law or ordinance. The issuance of a permit based on submitted plans shall not thereafter prevent the Director of Public Works from requiring the correction of errors or apparent violations contained therein, or from preventing operations being carried on thereunder when in violation of any applicable law or ordinance. (Ord No. 31-13)

601.085. Suspension or Revocation of Floodplain Development Permit; Appeal.

(a) The Director of Public Works may, in writing, suspend or revoke a floodplain development permit whenever it appears that:

- (1) The floodplain development permit was issued in error, and the applicant was not, in fact, on the basis of the application, entitled to the permit;
- (2) The floodplain development permit was issued on the basis of incorrect, incomplete, or

misleading information supplied by the applicant;

(3) The work authorized by the floodplain development permit is in violation of any applicable law or ordinance, including any provision requiring the applicant to obtain a license, registration, or additional permit; or

(4) The work being done under the floodplain development permit is not in accordance with the approved plans, or is beyond the scope of work authorized by the permit.

(b) Any person whose permit has been suspended or revoked pursuant to this section may appeal such action to the Hearings Officer, in the manner provided by SRC Chapter 20J. (Ord No. 31-13)

601.090. Failure to Maintain Site or Conditions.

(a) The holder of a floodplain development permit shall continuously maintain the completed work within the terms and conditions set forth in this Chapter and the permit. All owners and occupants, during the period of their ownership or occupancy, shall be jointly and severally liable for proper maintenance as herein prescribed.

(b) In the event of failure to maintain premises as provided in subsection (a) of this section, the Director of Public Works shall cause to be served upon the person or persons responsible a notice to correct the inadequate maintenance. Upon the failure of the persons responsible to comply with such notice within the time specified therein, to be no less than 15 days, the Director of Public Works may file with the City Council a petition to have the maintenance performed as provided in subsection (c) of this section, and the cost thereof assessed as a lien against the property. Upon filing of the petition, the City Recorder shall set the petition for prompt public hearing, and cause notice thereof to be served by certified mail upon the owner of the premises. At the hearing any person entitled to notice shall be accorded an opportunity to show cause why the work should not be performed as provided in subsection (c) of this section and the cost thereof assessed as a lien against the property.

(c) If the City Council is satisfied that the required maintenance must be performed for the protection of the public health, safety, and welfare it shall, by resolution, direct the Director of Public Works to arrange for the maintenance to be performed by city forces or by private contract let through competitive bid, whichever is estimated by the Director of Public Works to be the least costly and most expedient. Upon completion of the work the Director of Public Works shall certify to the City Council the costs thereof and the City Council shall ascertain and determine the cost of the work, and assess the same against the property upon which the maintenance was performed. Such assessment shall be declared by an ordinance and it shall be entered in the docket of city liens and shall thereupon be and become a lien against the property and the creation of the lien and the collection and enforcement of the cost shall all be done and performed in substantially the same manner as in the case of the cost of street improvements, but irregularities or informalities in the procedure shall be disregarded. Any assessment levied pursuant to this Chapter shall be due and payable in ten days after the same has been entered in the lien docket. Notice of the assessment shall be given to the owner or owners of the property in the same manner as notice of street assessments is given. (Ord No. 31-13)

601.095. Standards for Shallow Flooding Areas (AO Zones). Shallow flooding areas appear on FIRM's as AO Zones with depth designations. The base flood depths in these AO Zones range from 1 to 3 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 AO Zones, the following provisions apply:

(a) New construction and substantial improvements of residential structures, including manufactured homes, shall have the lowest floor (including basement) elevated no less than: one foot plus the depth number specified on the FIRM above the highest adjacent grade of the building site (at least two feet if no depth number is specified), or one foot above the crown of

the nearest roadway; whichever is greater, as determined by the Director or Public Works.

(b) New construction and substantial improvements of nonresidential structures within AO Zones shall either:

(1) Have the lowest floor (including basement) elevated no less than one foot plus the depth number specified on the FIRM above the highest adjacent grade of the building site (at least two feet if no depth number is specified), or one foot above the crown of the nearest

roadway; whichever is greater as determined by the Director of Public Works; or,

(2) Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level 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 as provided in SRC 601.100(c)(3).

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

(d) Recreational vehicle use in AO Zones shall comply with SRC 601.045(d), or shall be subject to subsection (a) of this section. (Ord No. 31-13)

601.100. Performance Standards and Specifications for Flood Hazard Protection. Where anchoring or floodproofing are required by this Chapter, the following standards shall apply:

(a) New structures, and substantial improvements to existing structures, shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

(b) All manufactured homes must be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods include, but are not limited to, use of over-the-top or frame ties to ground anchors, and any other technique authorized by FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook.

(c) New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to one foot above the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

(1) Be floodproofed so that below one foot above base flood level the structure is watertight with walls substantially impermeable to the passage of water;

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

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

(4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in SRC 601.045(b).

(5) Applicant floodproofing nonresidential buildings shall be notified 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). (Ord No. 31-13)

601.105. Bridges within the Regulatory Floodplain. Bridges within the regulatory floodplain shall comply with the following requirements:

- (a) Construction of new vehicular bridges shall have the lowest structural member of the bridge at least one foot above the base flood elevation.
- (b) Repair or replacement of existing vehicular bridges shall not increase the water surface elevation of the base flood discharge.
- (c) Construction or repair of pedestrian bridges shall not increase the water surface elevation of the base flood discharge. (Ord No. 31-13)

601.110. General Flood Protection. In addition to any other requirement or standards specified elsewhere in the Salem Revised Code, all intensification, development, and change of use within a floodplain or along a waterway shall comply with the following general standards:

- (a) **Standards.** The following standards shall apply to all development proposals:
 - (1) No waterway or floodway shall be altered or obstructed so as to reduce the carrying capacity thereof.
 - (2) All development proposals shall be consistent with the need to minimize flood damage.
 - (3) All development proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
 - (4) All development proposals shall have adequate drainage provided to reduce exposure to flood damage. Easements for drainage may be required where warranted by other sections of the Salem Revised Code or the standards and specifications on file in the office of the Director of Public Works; and,
 - (5) Where base flood elevation data has not been provided or is not available from City records or another authoritative source, the Director of Public Works may require it from the applicant's engineer. For subdivision proposals and other proposed developments which contain at least 50 lots or five acres (whichever is less) base flood elevation data must be generated, an HEC-2 water surface profile or equivalent analysis stamped by a registered professional engineer may be required.
- (b) **Utilities.**
 - (1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
 - (2) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
 - (3) On-site waste disposal system shall be located to avoid impairment to them or contamination from them during flooding.
- (c) **Manufactured Home Sites.** For new manufactured home parks and manufactured home subdivisions; for expansions to existing manufactured home parks and manufactured home subdivisions; for existing manufactured home parks and manufactured home subdivisions where a manufactured home has incurred substantial damage as a result of a flood; and for manufactured homes not placed in a manufactured home park or manufactured home subdivision as permitted by law or ordinance, all manufactured homes subject to placement, replacement, or substantial improvement within AO Zones, AH Zones, and AE Zones, or any numbered A zones shall:
 - (1) Be elevated on a permanent foundation such that the lowest floor of the manufactured home will be at least one foot above base flood elevation; or where base flood elevation are not available, elevated as provided in SRC 601.095.
 - (2) Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
 - (3) Be securely anchored to an adequately anchored foundation system in accordance with

SRC 601.100(a).

(d) Landscaping. Where intensification, development or change of use requires a floodplain development permit, the property upon which the activity will take place shall have the floodway, other than the Willamette River, on that property landscaped and maintained according to the following standards:

(1) All non-native vegetation that would significantly affect the flood carrying and containment capacity of the floodway shall be removed.

(2) Any vegetation planted or permitted to grow within the floodway shall be compatible with the flood protection standards set forth in this Chapter.

(3) Vegetation shall be planted or permitted to grow as necessary to stabilize the floodway slope and minimize erosion.

(e) Obstructions: Every property owner having land within a floodway other than the Willamette River shall maintain the floodway free of all natural and non-natural obstructions not permitted by this Chapter.

(f) Construction Materials and Methods:

(1) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

(2) All new construction and substantial improvements shall be constructed using methods and practices to minimize flood damage.

(3) Electrical, heating, ventilation, plumbing, and air conditioning equipment, including ducts, and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding. (Ord No. 31-13)

601.115. Alteration of Floodway or Waterway. Where it is necessary to the development of property adjacent to a floodway or waterway other than the Willamette River, and such development is authorized by a floodplain development permit, a property owner may alter or modify the floodway or waterway according to this section and Public Works Design Standards.

(a) Carrying capacity. No waterway or floodway shall be altered or obstructed so as to reduce the carrying capacity thereof.

(b) Maintenance. Maintenance shall be provided by the owner within the altered or relocated portion of a watercourse so that the flood carrying capacity is not diminished, pursuant to SRC 601.090.

(c) Lined channel. Within commercial and industrial zones a lined channel design may be permitted if the following conditions apply:

(1) The Director of Public Works determines that lining is the only practical method to achieve adequate maintenance.

(2) The design is approved by the Director of Public Works as incorporating adequate provisions to protect the public from the consequences of a base flood.

(d) Notification. Not less than 15 days prior to approval of the design for, alterations to, or relocation of, a waterway or floodway, the Director of Public Works shall:

(1) Notify all incorporated cities and all counties either upstream or downstream which may be affected by the approval;

(2) Notify the Oregon Division of State Lands, Oregon Department of Transportation, and Oregon Department of Land Conservation and Development;

(3) Submit evidence of such notification to the Federal Insurance Administration; and

(4) Verify that applicable approvals are on file from the state and federal agencies which have jurisdiction over the waterway or floodway. (Ord No. 31-13)

601.120. Native Vegetation. Vegetative ground cover and trees from the low water mark to the top of the

bank shall be preserved, conserved, and maintained according to the provisions in SRC 601.110(d) and the following provisions:

- (a) Riparian vegetation removed during development shall be replaced with native vegetation which shall be compatible with and enhance the riparian environment.
- (b) Plans for removal and replacement of riparian vegetation shall be submitted and approved by the Director of Public Works prior to any clearing, excavation, grading, or construction. (Ord No. 31-13)

601.125. Floodplain Overlay Zone Variance.

(a) Applicability.

(1) In lieu of the variance procedure under SRC 245, this section provides the process for variances within the in the Floodplain Overlay Zone. Use standards in the Floodplain Overlay Zone are non-variable.

(2) Variances as interpreted in the National Flood Insurance Program are based on the general zoning principle that the variance pertains to a physical piece of property; are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. Variances primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations granted under this section should be quite rare.

(b) Classes.

(1) **Class 1 Floodplain Overlay Zone Variance.** A Class 1 Floodplain Overlay Zone Variance is a variance from the development standards of this Chapter for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places, or designated as local historic resources pursuant to SRC 230.010 that are located in the FF (Floodway Fringe) and Special Floodway Hazard Area.

(2) **Class 2 Floodplain Overlay Zone Variance.** A Class 2 Floodplain Overlay Zone Variance is a variance from the development standards of this Chapter for development in the FF (Floodway Fringe) and Special Flood Hazard Area, other than a Class 1 Floodplain Overlay Zone Variance.

(c) **Procedure Type.** Class 1 and Class 2 Floodplain Overlay Zone Variances are processed as a Type III procedure under SRC Chapter 300.

(d) **Submittal Requirements.** In addition to the submittal requirements for a Type III application under SRC Chapter 300, an application for a Class 1 or Class 2 Floodplain Overlay Zone Variance shall include the application submittal requirements for a floodplain development permit under SRC 601.065, and a written statement addressing the criteria.

(e) Criteria.

(1) **Class 1 Floodplain Overlay Zone Variance.** An application for a Class 1 Floodplain Overlay Zone Variance shall be approved if all of the following criteria are met:

- (A) The variance is the absolute minimum necessary, considering the flood hazard, to afford relief from a hardship affecting use and development of structures listed on the National Register of Historic Places, or designated as local historic resources pursuant to SRC 230.010 which would be worked by strict application of the requirements of this Chapter;
- (B) If the request includes any area within the FW (Floodway) area, that granting the variance will not have the effect of producing any increase in base flood elevation;
- (C) The applicant shows good and sufficient cause for the variance;
- (D) Minimal danger exists that materials may be swept onto other lands to the injury of others;
- (E) Minimal danger exists to life and property due to flooding or erosion damage;

(F) Safe access is available to the property in times of flood for ordinary and emergency vehicles;

(G) Minimal costs would result from the provision of governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

(2) Class 2 Floodplain Overlay Zone Variance. An application for a Class 2 Floodplain Overlay Zone Variance shall be approved if the following criteria are met:

(A) The variance is the absolute minimum necessary, considering the flood hazard, to afford relief from a hardship affecting use and development of land which would be worked by strict application of the requirements of this Chapter;

(B) If the request includes any area within the FW (Floodway) area, granting the variance will not have the effect of producing any increase in base flood elevation;

(C) Variances to an elevation standard shall only be granted if the variance is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level;

(D) The applicant shows good and sufficient cause for the variance;

(E) Failure to grant the variance would result in exceptional hardship to the applicant;

(F) 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 or ordinances;

(G) Minimal danger exists that materials may be swept onto other lands to the injury of others;

(H) Minimal danger exists to life and property due to flooding or erosion damage;

(I) The proposed facility and its contents have minimal susceptibility to flood damage, and the individual owner would be minimally affected by such damage;

(J) The services provided by the proposed facility are critical to the community;

(K) The use or facility requires a waterfront location;

(L) Alternative locations free from the possibility of flooding or erosion damage are not available for the proposed use;

(M) Safe access is available to the property in times of flood for ordinary and emergency vehicles;

(M) Negligible increase would result in the expected heights, velocity, duration, rate of rise, or sediment transport of the flood waters at the site; and

(N) Minimal costs would result from the provision of governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

(f) Burden of Proof. The larger the size of the lot on which the variance is requested, the greater is the burden on the applicant to justify the need for a variance.

(g) Conditions. Conditions may be attached to a variance that the Review Authority deems necessary to further the purposes embodied in this Chapter.

(h) Notice to Applicant of Cost of Flood Insurance. Any applicant to whom a variance to an elevation standard is granted pursuant to this section shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(i) Notice. Notwithstanding the notice requirements of SRC Chapter 300, written notice of an application and notice of the decision on a variance request shall be mailed to the applicant, the applicable neighborhood association, watershed council, and land owners along the immediately affected stream corridor within 1500 feet of the project site.

(j) Records. The Director of Public Works shall maintain the records of all variances and shall report, upon request, any variances granted to the Federal Insurance Administration. (Ord No. 31-13)