

Chapter 14.30 FLOOD DAMAGE PREVENTION*

Sections:

- 14.30.010 Statutory authorization.
- 14.30.020 Findings of fact.
- 14.30.030 Statement of purpose.
- 14.30.040 Methods of reducing flood losses.
- 14.30.050 Definitions.
- 14.30.060 Lands to which this chapter applies.
- 14.30.070 Basis for establishing the areas of special flood hazard.
- 14.30.080 Penalties for noncompliance.
- 14.30.090 Abrogation and greater restrictions.
- 14.30.100 Interpretation.
- 14.30.110 Warning and disclaimer of liability.
- 14.30.120 Flood hazard reduction—General standards.
- 14.30.130 Flood hazard reduction—Specific standards.
- 14.30.140 Development permit.
- 14.30.150 Development permit exceptions.
- 14.30.160 Designation of the city utilities superintendent.
- 14.30.170 Duties and responsibilities of the city utilities superintendent.
- 14.30.180 Appeal board.
- 14.30.190 Conditions for variances.
- 14.30.200 Special flood risk zone.
- 14.30.205 Special flood corridor.
- 14.30.210 Critical facilities.
- 14.30.220 Manufactured homes.
- 14.30.230 Recreational vehicles.
- 14.30.240 AE and A1-30 zones with base flood elevations but no floodways.

* Prior ordinance history: Ords. 885, 941 and 982.

14.30.010 Statutory authorization.

The Legislature of the state of Washington has delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. (Ord. 1035 § 1.1, 1991)

14.30.020 Findings of fact.

(a) Flood hazard areas of Sumas are subject to periodic inundation which results 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.

(b) These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss. (Ord. 1035 § 1.2, 1991)

14.30.030 Statement of purpose.

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

- (1) To protect human life and health;
- (2) To minimize expenditure of public money and costly flood control projects;

- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
- (6) To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (7) To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- (8) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions. (Ord. 1035 § 1.3, 1991)

14.30.040 Methods of reducing flood losses.

In order to accomplish its purposes, this chapter includes methods and provision for:

- (1) Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
- (4) Controlling filling, grading, dredging, and other development which may increase flood damage; and
- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters or may increase flood hazards in other areas. (Ord. 1035 § 1.4, 1991)

14.30.050 Definitions.

Unless specifically defined below, 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.

“Alteration of watercourse” means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

“Appeal” means a request for a review of the Sumas utility superintendent’s interpretation of any provision of this chapter.

“Area of special flood hazard” means the land in the floodplain within a community subject to a one 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 with the phrase “area of special flood hazard”~~Designation on maps will be marked with letter A or V.~~

“ASCE 24” means the most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.

“Base flood” means the flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the “one-hundred year flood.” Designation on maps always includes the letter A or V.

“Base Flood Elevation (BFE)” means the elevation to which floodwater is anticipated to rise during the base flood.

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

"Building Code" means the currently effective versions of the International Building Code and the International Residential Code adopted by the State of Washington Building Code Council.

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

"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 or storage of equipment or materials located within the area of special flood hazard.

"Elevation certificate" means the official form (FEMA form 81-31) used to track development, provide elevation information necessary to ensure compliance with community floodplain management ordinances, and to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F) with Section B completed by community officials.

"Essential facility" has the same meaning as "Essential Facility" defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.

"Flood" or "flooding" means:

(1) A general and temporary condition or partial or complete inundation of normally dry land areas from:

(1A) The overflow of inland or tidal waters;

(2B) The unusual and rapid accumulation of runoff or surface waters from any source; and/or

(3C) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in subsection (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 subsection (1)(A) of this definition.

"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. Also known as a Flood Insurance Study (FIS).

"Flood Insurance Rate Map (FIRM)" means the official map on which the Federal Insurance Administrator has delineated both the areas of special flood hazards 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).

"Flood Insurance Study" means the official report provided by the Federal Insurance Administrator that included flood profiles, and the Flood Boundary Floodway Map, and the water surface elevation of the base flood.

"Floodplain" or "flood prone area" means any land area susceptible to being inundated by water from any source. See "Flood" or "flooding."

"Floodplain administrator" means the community official designated by title to administer and enforce the floodplain management regulations.

"Flood proofing" means any combination of structural and nonstructural additions, 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. Flood proofed structures are those that have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation.

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

"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.

"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 nonelevation design requirements of this chapter found at Section 14.30.130(1)(B).

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

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

"Mean Sea Level" means, for purposes of the National Flood Insurance Program, the vertical datum to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

"New construction" means, for the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

"Reasonably safe from flooding" refers to development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community.

"Recreational vehicle" means a vehicle:

(1) Built on a single chassis;

(2) Four hundred square feet or less when measured at the largest horizontal projection;

(3) Designed to be self-propelled or permanently towable by a light duty truck; and

(4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

“Special flood corridor” means that portion of the special flood risk zone subject to additional development limitations and prohibitions based on a history of severe flooding. The map on file in the office of the city clerk-treasurer illustrates the location of the special flood corridor.

“Special flood risk zone” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the one-hundred-year flood without cumulatively increasing the water surface elevation more than one foot. The map on file in the office of the city clerk-treasurer illustrates the location of the special flood risk zone.

“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, replacement or other improvement was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the state of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

“Structure” means a walled and roofed building including a gas or liquid storage tank that is principally above ground as well as a manufactured home.

“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 fifty percent of the market value of the structure before the damage occurred.

Substantial Improvement.

(1) “Substantial improvement” means any repair, reconstruction, rehabilitation, addition to or other improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the “start of construction” of the improvement or repair.

The term includes structures which have incurred “substantial damage” regardless of the actual repair work performed.

(2) The term does not, however, include either:

(A) Any project for improvement of a structure to correct pre-cited existing violations of state or local health, sanitary, or safety code specifications which have been previously identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

(B) Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places; provided, that the alteration will not preclude the structure’s continued designation as a “historic structure.”

“Variance” means a grant of relief from the requirement of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.

“Water-dependent” means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations. (Ord. 1738 § 1, 2018; Ord. 1652 § 1, 2015; Ord. 1399 § 1, 2004; Ord. 1216 § 1, 1997; Ord. 1176 § 13, 1996; Ord. 1035 § 2, 1991)

14.30.060 Lands to which this chapter applies.

This chapter addresses all lands within the city of Sumas. There shall be an area designated as “special flood hazard zone.” (Ord. 1035 § 3.1, 1991)

14.30.070 Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Insurance Administrator in a scientific and engineering report entitled “The Flood Insurance Study for Whatcom County, Washington and Incorporated Areas” dated January 18, 2019, and any revisions thereto, with an accompanying Flood Insurance Rate Map (FIRM) dated January 18, 2019, and any revisions thereto, are hereby adopted by reference and declared to be a part of this chapter. The Flood Insurance Study and FIRM are on file at City of Sumas, City Hall, 433 Cherry Street, Sumas, Washington, and are incorporated by this reference as if fully set forth herein. (Ord. 1738 § 2, 2018; Ord. 1652 § 2, 2015; Ord. 1376 § 1, 2003; Ord. 1035 § 3.2, 1991)

14.30.080 Penalties for noncompliance.

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this chapter and other applicable regulations. Violation of the provisions of the chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction thereof be fined not more than five hundred dollars or imprisoned for not more than ninety days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the city from taking such other lawful action as is necessary to prevent or remedy any violation. (Ord. 1035 § 3.3, 1991)

14.30.090 Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this chapter and other ordinances, easements, covenants, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. 1035 § 3.4, 1991)

14.30.100 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. (Ord. 1035 § 3.5, 1991)

14.30.110 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 manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of Sumas, any officer or employee thereof, of the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder. (Ord. 1035 § 3.6, 1991)

14.30.120 Flood hazard reduction—General standards.

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

- (I) Anchoring.
 - (A) 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.
 - (B) All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may

include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

(2) Construction Materials and Methods.

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

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

(C) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding and one foot above the base flood elevation.

(3) Utilities.

(A) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;

(B) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discard from the systems into floodwaters;

(C) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding; and

(D) Water wells shall be located on high ground that is not in the floodway.

(4) Subdivision Proposals and Development.

~~(A) All subdivision proposals, as well as new development, shall:~~

~~(A) Be~~ be consistent with the need to minimize flood damage;

~~(B) Have All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage; and~~

~~(C) Have All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and~~

~~(D) Where subdivision proposals and other proposed developments contain greater than 50 lots or 5 acres (whichever is the lesser), base flood elevation data shall be included as part of the application. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty lots or five acres (whichever is less).~~

(5) Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study or from another authoritative source (Section 14.30.170(2)), applications for building permits shall be reviewed 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. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates. (Ord. 1738 § 3, 2018; Ord. 1035 § 3.7, 1991)

14.30.130 Flood hazard reduction—Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 14.30.070, Basis for establishing the areas of special flood hazard, or Section 14.30.170(2), Use of Other Base Flood Data, the following provisions are required:

(1) Residential Construction.

(A) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to one or more feet above the base flood elevation. Mechanical equipment and utilities shall be waterproof or elevated at least one foot above the BFE.

(B) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be usable solely for parking of vehicles, building access or storage and 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 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 exits of floodwaters.
- (iv) A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters.

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

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet the requirements of either subsection (A) or (B), below

(A) New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:

- (i) New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE, or elevated as required by ASCE 24, whichever is greater. Mechanical equipment and utilities shall be waterproofed or elevated at least one foot above the BFE, or as required by ASCE 24, whichever is greater.
- (ii) 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 meet or exceed the following minimum criteria:
 - (a) Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (b) The bottom of all openings shall be no higher than one foot above grade;
 - (c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater; and
 - (d) A garage attached to a non-residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters.

Alternatively, a registered engineer or architect may design and certify engineered openings.

(B) If the requirements of subsection (A) are not met, then new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements

(iA) Be floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water; to an elevation one or more feet above the base flood elevation;

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

(iiiC) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/of review of the structural design, specifications and plans. Such certification shall be provided to the official as set forth in Section 14.30.170(3)(B).

(ivD) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in subsection (1)(B) of this section.

(vE) Applicants 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. 1738 § 4, 2018; Ord. 1105 § 1, 1993; Ord. 1089 § 1, 1993; Ord. 1035 § 3.8, 1991)

(3) Enclosed area below the lowest floor.

If buildings or manufactured homes are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage; provided, that accessory structures shall also conform to the requirements set forth in section 14.30.135 of this chapter.

14.30.135 Accessory structures.

Accessory structures constructed or substantially improved within the SFHA shall conform to the requirements set forth in this section.

(1) Accessory structures located in the SFHA with the lowest floor below the BFE may be wet floodproofed in lieu of the elevation or dry flood proofing without a variance, under the following conditions:

(A) The accessory structure should be small, one story and 400 square feet or less in area, and represent a minimal investment; provided that accessory structures of any size may be considered for a variance;

(B) The accessory structure must meet the definition of structure, for floodplain management purposes where walled and roofed shall be interpreted as having two outside rigid walls and a fully secured roof;

(C) The accessory structure must be anchored to resist flotation, collapse, and lateral movement;

(D) The portions of the accessory structure located below the BFE must be constructed with flood-resistant materials;

(E) Mechanical and utility equipment for the accessory structure must be elevated or dry floodproofed to one foot or more above the BFE;

(F) Where applicable, the accessory structure must comply with the special flood risk zone, special flood corridor and floodway encroachment provisions of this chapter;

(G) The accessory structure must be wet floodproofed to protect the structure from hydrostatic pressure. The design must meet the NFIP design and performance standards for openings as set forth in section 14.30.130 of this chapter and must allow for the automatic entry and exit of floodwaters without manual operation or the presence of a person (or person);

(H) If the accessory structure is converted to another use, it must be brought into full compliance with the standards governing such use set forth in this chapter; and

(I) The structure shall not be used for human habitation.

(2) Accessory structures located in the SFHA with the lowest floor below the BFE that do not meet all of the conditions set forth in subsection (1) shall require approval of a variance; provided, that any such accessory structure shall conform to the requirements set forth in subsections (1)(B) through (H) of this section.

(3) Accessory structures located in the SFHA with the lowest floor elevated to or above the BFE where the lowest floor is used solely for limited storage and parking of vehicles shall be allowed without a variance.

(4) Except as allowed pursuant to subsections (1), (2) and (3) of this section, all accessory structures shall conform to the requirements set forth in section 14.30.130 of this chapter.

14.30.140 Development permit.

(a) A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 14.30.070. The permit shall be for all structures including manufactured homes, as set forth in Section 14.30.050, and for all other development including fill and other activities, also as set forth in Section 14.30.050. The permit shall be processed as a Class I action pursuant to the provisions of Chapter 20.08 of this code.

(b) Application for a development permit shall be made on forms furnished by the Sumas city utilities superintendent and may be accompanied by payment of the fee(s) established under Chapter 3.30, and may include but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions and elevations of the areas in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.

Specifically, the following information is required:

(1) Elevation in relation to mean sea level, of the lowest floor (including the basement) of all structures;

(2) Elevation in relation to mean sea level to which any structure has been floodproofed;

(3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 14.30.130(2); and

(4) Description of the extent to which a watercourse will be altered or relocated as a result of proposed development; and

(5). Any other such information that may be reasonably required by the Floodplain Administrator in order to review the application. (Ord. 1738 § 5, 2018; Ord. 1176 § 14, 1996; Ord. 1035 § 4.1, 1991)

14.30.150 Development permit exceptions.

Development in the area of special flood hazard other than the following shall require a floodplain development permit:

(1) Normal maintenance, repair and resurfacing at comparable grade of bridges, streets, and accessways, excluding any vertical or horizontal expansion.

~~(2) Underground improvements and excavations.~~

~~(3) Maintenance and minor repair of existing improvements, provided the activity does not constitute a substantial improvement.~~

~~(4) Other minor developments, such as open fences, signs, and small unenclosed structures. (Ord. 1738 § 6, 2018; Ord. 1176 § 64, 1996; Ord. 1035 § 4.2, 1991)~~

14.30.160 Designation of the city utilities superintendent.

The Sumas city utilities superintendent is appointed as administrator of this chapter and is authorized to grant or deny development permit applications in accordance with its provisions. (Ord. 1176 § 15, 1996; Ord. 1035 § 4.3, 1991)

14.30.170 Duties and responsibilities of the city utilities superintendent.

Duties of the Sumas city utilities superintendent shall include, but not be limited to:

(1) Permit Review.

(A) Review all development permits to determine that the permit requirements of this chapter have been satisfied.

(B) Review all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

(C) Review all development permits to determine if the proposed development is located in the special flood risk zone. If located in the special flood risk zone assure that encroachment provisions are met.

(D) Ensure the site is reasonably safe from flooding.

(E) Notify FEMA when annexations occur in the Special Flood Hazard Area.

(2) Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 14.30.070, Basis for establishing the areas of special flood hazard, the Sumas city utilities superintendent will obtain, review, and reasonably utilize any base flood elevation information.

(3) Information to Be Obtained and Maintained.

(A) Where base flood elevation data is provided through the Flood Insurance Study or required as in subsection (2) of this section, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.

(B) For all new or substantially improved floodproofed structures:

(i) Verify and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed; and

(ii) Maintain the floodproofing certifications required in Section 14.30.140(b)(3).

(C) Maintain for public inspection all records pertaining to the provisions of this chapter.

(D) Records of all variance actions, including justification for their issuance.

(E) Improvement and damage calculations.

(4) Alteration of Watercourses.

(A) Notify adjacent communities and the state of Washington, Department of Ecology, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administrator.

(B) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

(5) Interpretation of FIRM Boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable

opportunity to appeal the interpretation as provided in Section 14.30.180. (Ord. 1738 § 7, 2018; Ord. 1035 § 4.4, 1991)

14.30.180 Appeal board.

(a) A request for a variance from the requirements of this chapter shall be processed as a Class III action pursuant to the provisions of Chapter 20.08.

(b) An appeal of any requirement, decision, or determination made by the utilities superintendent in the enforcement or administration of this chapter shall be processed pursuant to the provisions of Section 20.08.150.

(c) Those aggrieved by the decision of the Sumas city council, or any taxpayer, may appeal such decision to the Whatcom County superior court, as provided by law for the appeal of Sumas city council decisions.

(d) In passing upon such applications, the Sumas city council shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

- (1) The danger that materials may be swept on other lands to the injury of others;
- (2) The danger to life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity to the facility of a waterfront location, where applicable;
- (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- (7) The compatibility of the proposed use with existing and anticipated development;
- (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (9) The safety of access to the property in time of flood for ordinary and emergency vehicles;
- (10) The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, expected at the site; and
- (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(e) Upon consideration of the factors of subsection (d) of this section and the purpose of this chapter, the Sumas city council may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

(f) The Sumas city utilities superintendent shall maintain the records of all appeal actions and report and variances to the Federal Insurance Administrator upon request. (Ord. 1738 § 8, 2018; Ord. 1176 § 16, 1996; Ord. 1035 § 4.5-1, 1991)

14.30.190 Conditions for variances.

(a) Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acres or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items in Sections 14.30.180(d)(1) through (11) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.

(b) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth this section, provided the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

(c) Variances shall not be issued within the special flood risk zone if any increase in flood levels during the base flood damage would result.

(d) Variances shall only be issued upon a determination that the variance is the minimum necessary.

(e) Variances shall only be issued upon:

(1) A showing of good and sufficient cause;

(2) A determination that failure to grant the variance would result in exceptional hardship to the applicant;

(3) A determination that 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 as identified in Section 14.30.180(d), or conflict with existing local laws or ordinances.

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

(g) Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except subsection (a) of this section and otherwise complies with Sections 14.30.120(1) and (2).

(h) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. (Ord. 1738 § 9, 2018; Ord. 1176 § 17, 1996; Ord. 1035 § 4.5-2, 1991)

14.30.200 Special flood risk zone.

Development within the special flood risk zone shall require issuance of a floodplain development permit pursuant to Section 14.30.140. Development other than the following is prohibited in the special flood risk zone:

(1) Minor structures and additions for which a building permit is not required and which create no new residences;

(2) Minor fills and excavations of less than twelve cubic yards for the purpose of maintenance which will not raise the level of land above that of the surrounding area;

(3) Normal maintenance, repair, resurfacing and rebuilding at comparable grade of bridges, streets and accessways;

(4) Underground improvements;

(5) Maintenance, repair, alterations and like replacement of existing improvement;

(6) Other minor development, such as open fences, signs and small unenclosed structures;

(7) Developments wherein any floodwater blockage effect is at least equally balanced by excavation or removal of structures elsewhere in the special flood risk zone such that, in the opinion of the city utility superintendent or his designee with such evidence as he shall require, the overall capacity to convey floodwaters is not reduced.

Such excavations or structures removed shall not then be eligible for replacement under subsection (5) of this section. Documentation of development in accordance with this subsection shall be retained by the city to demonstrate no net floodwater blockage increase.

The city utility superintendent or his/her designee may require that suitable notification be provided for any development undertaken pursuant to this subsection as a result of the excavation or removal of structures elsewhere in the special flood risk zone indicating that such excavations or structures removed are not eligible for replacement, including the recording thereof with the county auditor's office.

(8) Elevated structures which allow floodwaters to flow underneath and which meet the following criteria:

(A) All structures shall be elevated so that the lowest supporting member is located no lower than one foot above the one-hundred-year flood elevation, with all space below the lowest supporting member open so as not to impede the flow of water, except for breakaway walls as provided below.

(B) Breakaway walls are allowed below the base flood elevation provided they are not a part of the structural support of the building and are designed so as to break away in the event of flood without damage to the structural integrity of the building on which they are to be used. The design of breakaway walls shall be certified by a registered professional engineer or architect based on the intended function of the walls in relation to the applied loads of the one-hundred-year flood flow. If breakaway walls are to be utilized, such enclosed space shall not be used for human habitation.

(C) All structures shall be securely anchored on piling, columns, or foundation walls oriented to the axis of the flow path as determined by the city superintendent. Said support elements shall be certified by a registered professional engineer or architect as capable of withstanding all applied loads of the one-hundred-year flood flow.

(D) There shall be no fill used for structural support, except where such fill is offset by an equal or greater quantity of excavation and removal of material from the floodplain that will result in no overall reduction in flood storage or flood conveyance. (Ord. 1738 § 10, 2018; Ord. 1687 § 23, 2016; Ord. 1373 § 1, 2003; Ord. 1035 § 5.1, 1991)

14.30.205 Special flood corridor.

(a) Prohibited Development. Development other than the following is prohibited within a special flood corridor; provided, that where applicable, issuance of a floodplain development permit shall be required:

(1) Minor structures and additions for which a building permit is not required and which create no new residences;

(2) Normal maintenance, repair, resurfacing, and rebuilding at comparable grade of bridges, streets and accessways;

(3) Underground improvements;

(4) Maintenance, repair, alteration, and like replacement of existing improvements;

(5) Other minor development, such as open fences, signs, and small unenclosed structures. (Ord. 1738 § 11, 2018; Ord. 1216 § 2, 1997)

14.30.210 Critical facilities.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the base floodplain. Construction of new critical facilities shall be permissible within the base floodplain if no feasible alternative site is available. Critical facilities constructed within the base floodplain shall have the lowest floor elevated to three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base floodplain shall be provided to all critical facilities to the extent possible. (Ord. 1035 § 5.2-2, 1991)

14.30.220 Manufactured homes.

All manufactured homes to be placed or substantially improved within Zones A1—30, AH, and AE shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is one foot or more above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of Section 14.30.120(1). (Ord. 1399 § 2, 2004; Ord. 1035 § 5.2-3, 1991)

14.30.230 Recreational vehicles.

Recreational vehicles placed on sites are required to either:

- (1) Be on the site for fewer than one hundred eighty consecutive days;
- (2) Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick-disconnect type utilities and security devices, and have no permanently attached additions; or
- (3) Meet the requirements of Section 14.30.220 and the elevation and anchoring requirements for manufactured homes. (Ord. 1399 § 3, 2004)

14.30.240 AE and A1-30 zones with base flood elevations but no floodways.

In areas with base flood elevations (but where a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. (Ord. 1738 § 12, 2018; Ord. 1035 § 5.4, 1991)