CITY OF SEATTLE

ORDINANCE _____

COUNCIL BILL _____

..title
AN ORDINANCE relating to floodplains; adopting permanent regulations consistent with the Federal Emergency Management Agency (FEMA) regulations; adopting the February 2020 updated National Flood Insurance Rate Maps to allow individuals to continue to obtain flood insurance through FEMA's Flood Insurance Program; repealing Ordinances 126113 and 126271; and amending Chapter 25.06 and Section 25.09.030 of the Seattle Municipal Code.
..body
BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Ordinances 126113 and 126271, 126536, 126651, 126763, 126885, and 126994, which enacted and extended interim floodplain regulations, are repealed. The ordinances are attached to this ordinance as Exhibits 3, 4, 5, 6, and 7.

Section 2. Chapter 25.06 of the Seattle Municipal Code, last amended by Ordinance 126113, is amended as follows:

CHAPTER 25.06 FLOODPLAIN DEVELOPMENT

25.06.010 Title((.))

This ((~~chapter~~)) Chapter 25.06 shall be known and may be cited as the "((~~Seattle~~)) Floodplain Development ((~~Ordinance~~)) Regulations."

25.06.015 Statutory authorization and findings of fact

A. The Legislature of the State of Washington has delegated the responsibility to local communities to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry.

B. The flood hazard areas of the City of Seattle are subject to periodic inundation, which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and

impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards that 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.

25.06.020 Purpose

A. The purpose of this Chapter 25.06 is to regulate development in ((~~areas of~~)) special flood hazard areas and flood-prone areas as defined in subsection 25.09.012.B in accordance with standards established by the National Flood Insurance Program and the Washington State Department of Ecology ((~~and areas identified as flood-prone in subsection 25.09.012.B~~)). This Chapter 25.06 is intended to: promote the public health, safety, and general welfare((~~ and is not intended to protect or benefit any individual or any class or group of persons specifically, or to create or form the basis for any liability on the part of the City or its officers, employees, or agents in connection with administration of this Chapter 25.06.~~)); reduce the annual cost of flood insurance; and minimize public and private losses due to flood conditions in specific areas by provisions designed to:

1. Protect human life and health;

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

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

4. Minimize prolonged business interruptions;

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

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

7. Notify potential buyers that the property is in a Special Flood Hazard Area;

8. Notify those who occupy flood hazard areas that they assume responsibility for their actions; and

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

B. This Chapter 25.06 is not intended to protect or benefit any individual or any class or group of persons specifically, or to create or form the basis for any liability on the part of the City or its officers, employees, or agents in connection with administration of this Chapter 25.06.

C. This Chapter 25.06 shall be administered by affected City departments and interpreted to accomplish its stated purpose.

25.06.022 Methods of reducing flood losses

In order to accomplish its purposes, this Chapter 25.06 includes methods and provisions for:

A. Restricting or prohibiting development that is dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

B. Requiring that development vulnerable to floods be protected against flood damage at the time of initial construction;

C. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;

D. Controlling filling, grading, dredging, and other development, which may increase flood damage; and

E. Preventing or regulating the construction of flood barriers that unnaturally divert floodwaters or may increase flood hazards in other areas.

25.06.025 Warning and disclaimer of liability

The degree of flood protection required by the Floodplain Development Regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on occasions. Flood heights may be increased by man-made or natural causes. This Chapter 25.06 does not imply that land outside the special flood hazard areas or outside flood-prone areas as defined in subsection 25.09.012.B or uses permitted within such areas will be free from flooding or flood damages. The Floodplain Development Regulations shall not create liability on the part of The City of Seattle, any officer, or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this Chapter 25.06, or any administrative decision lawfully made under it.

25.06.030 Definitions

Unless specifically defined ((~~below~~))in this Section 25.06.030, words or phrases used in this Chapter 25.06 shall be interpreted to give them the meaning they have in common usage. For purposes of this Chapter 25.06((~~, the following words or phrases are defined as set out below~~)):

"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.

((~~A.~~)) "Area of shallow flooding" means ((~~a designated AO or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one (1) to three (3) 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.~~)) a designated zone AO on a community's Flood Insurance Rate Map (FIRM) with one percent or

greater annual chance of flooding to an average depth of 1 to 3 feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the sheet flow area.

((~~B.~~)) "Area of special flood hazard" or "special flood hazard area" means the land ((~~subject to a one (1) percent or greater chance of flooding in any given year. Designation on the Flood Insurance Rate Map (FIRM) for areas of special flood hazard always includes the letters A or V.~~)) in the floodplain within Seattle 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, AE, VE.

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

"Attendant utilities and equipment" means mechanical, electrical, fuel gas, plumbing, HVAC, and related equipment, as well as services associated with new construction and substantial improvements and includes equipment containers ~~housing~~ that are not occupiable and not habitable.

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

((~~C.~~)) "Base flood ((~~level~~)) elevation (BFE)" ((~~and~~)) or "base flood ((~~elevation~~)) level" ((~~both~~)) means the level or elevation above mean sea level, as calculated by reference to the vertical datum ((~~for Seattle under Section 1.20.020~~))of NAVD88, ((~~of floodwaters in a particular area during flood having a one percent chance of occurring in any given year~~)) to which floodwater is anticipated to rise during the base flood.

"Basement" means any area of the building having its floor sub-grade (below ground level) on all sides.

"Breakaway wall" means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.

"Cabinet" means a weather protection and floodproofed container that is not occupiable and not habitable used for storage.

"Coastal high hazard area" means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as zone V1-30, VE, or V.

"Community" means any state, or area or political subdivision thereof, or any Indian tribe or authorized tribal organization or Alaska Native village or authorized native organization, that has authority to adopt and enforce floodplain management regulations for the areas within its jurisdiction.

((~~D.~~)) "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, installations that use, or store hazardous materials or hazardous waste and non-Port of Seattle police, fire and emergency response installations. ((~~police, fire, and emergency response installations, nonresidential installations which produce, use or store hazardous materials or hazardous waste.~~))

((~~E.~~)) "Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage equipment or materials.

((~~F.~~)) "Director" means the Director of the Seattle Department of Construction and Inspections (SDCI). As used in this Chapter 25.06, the term includes authorized representatives of the Director of the Seattle Department of Construction and Inspections.

((~~G.~~)) "Flood" or "flooding" means:

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

((~~1.~~)) a. The overflow of inland or tidal waters; and/or

((~~2.~~)) b. The unusual and rapid accumulation of runoff of surface waters from any source.

2. Mudslides (i.e. mudflows) that are proximately caused by flooding as defined in subsection G.1.b of this definition and area kin 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.

3. 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 G.1.a of this definition.

"Flood damage" means harmful inundation, water erosion of soil, stream banks and beds, stream channel shifting and changes, harmful deposition by water of eroded and shifting soils and material and debris upon property or in the beds of streams or other bodies of water; damages by high water, to public roads, highways, bridges, utilities and to works built for protection against floods or inundation; the interruption by floods of travel, communication and commerce; and all other high water influences and results which injuriously affect the public health and the safety of property.

"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).

((~~H.~~)) "Flood Insurance Rate Map (FIRM)" means the ((~~Flood Insurance Study for King County, Washington and incorporated areas, dated May 16, 1995, with accompanying Flood Insurance Rate Maps, that has delineated both the areas of special flood hazards and the risk premium zones applicable to The City of Seattle, or as otherwise required by the Department of Homeland Security~~)) official map of a community on which the Federal Insurance Administrator has delineated both the special hazard areas 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).

((~~I. "Flood Insurance Study" means the official report, entitled "The Flood Insurance Study for King County, Washington and Incorporated Areas," dated May 16, 1995, provided by the Federal Insurance Administration, that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.~~)) "Flood proofing" means any

combination of structural and nonstructural additions, changes, or adjustments to structures that 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 are designed to be impervious to floodwater below the flood protection elevation.

Flood proofing, dry —A combination of measures that results in a structure, including the attendant utilities and equipment, being watertight with all elements substantially impermeable to the passage of water and with structural components having the sufficient strength to resist hydrostatic and hydrodynamic loads including buoyance.

Flood proofing, wet —Floodproofing method that relies on the use of flood damage-resistant materials and construction techniques in areas of a structure that are below the flood protection elevation, by intentionally allowing those areas to flood.

"Flood protection elevation" means an elevation that is three feet above the base flood elevation.

"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 official or officials designated by the Seattle Municipal Code to administer and enforce Seattle's floodplain development regulations.

"Floodplain variance" means a grant of relief by a community from the terms of a floodplain management regulation.

((~~J.~~)) "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing

the water surface elevation more than ((~~one foot (1')~~)) a designated height. Also referred to as "Regulatory floodway."

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

"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 the 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 that 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.

((~~K.~~)) "Long-term storage" see "Storage, long-term"

"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 applicable non-elevation design requirements of subsection ((~~A2 of Section~~)) 25.06.110.A.2.

"Lowest horizontal structural member" means the lowest horizontal member that resists loads or load combinations required by the Seattle Building Code or the Seattle Residential Code excluding piles, pile caps, columns, grade beams at or below grade, and bracing.

((~~L.~~)) "Manufactured home" means a structure, transportable in one ((~~(1)~~)) or more sections, ((~~which~~))that is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" ((~~also includes travel trailers and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days~~))does not include a "recreational vehicle."

((~~M.~~)) "Manufactured home park" or "manufactured home subdivision" means a parcel (or contiguous parcels) of land divided into two ((~~(2)~~)) 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 FIRM are referenced.

((~~N.~~)) "New construction" means structures for which the (("))start of construction(("")) commenced on or after the effective date of ((~~the ordinance codified in this chapter.~~)) floodplain

management regulations adopted by a community and includes any subsequent improvements to such structures.

"Principally above ground" means that at least 51 percent of the actual cash value of the structure, less land value, is above ground.

"Reasonably safe from flooding" for the purposes of evaluating a Letter of Map Revision (LOMR) means base flood waters will not inundate the land or damage structures to be removed from the floodplain/SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

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

((~~O.~~)) "Recreational vehicle" means a vehicle that is (a) built on a single chassis; (b) ((~~four hundred (400)~~)) 400 square feet or less in area when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light-duty truck; and (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Recreational vehicle ready for highway use" means that it is on its wheels or a jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.

((~~P.~~)) "Start of construction" means and includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within ((~~one~~

~~hundred eighty (180)~~)) 180 days of the permit issuance date. The "actual start" means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home or factory-built structure on a foundation. "Permanent construction" does not include ((~~site~~)) land preparation, such as a clearing, grading, or filling; nor does it include the installation of streets and/or walkways; 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 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.

"Storage" means a space or place for putting things for future use or safekeeping and does not include facilities in regular use as a conveyance (e.g., pipeline).

"Storage, long-term" means 3 months for storage that occurs between April 2 and October 30 and 1 week for storage that occurs between October 31 and April 1.

((~~Q.~~)) "Structure" means ((~~anything that is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.~~)) a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home and a factory-built structure.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

((~~R. 1.~~)) "Substantial improvement" means any ((~~repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure either:~~

~~a. Before the improvement or repair is started; or~~

~~b. If the structure has been damaged and is being restored, before the damage occurred.~~

~~2. For the purpose of this definition, a "substantial improvement" commences when the first alteration on any wall, ceiling, floor or other structural part of the building is made, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either:~~

~~a. Any project for improvement of a structure to comply with existing state or local health, sanitary or safety code specifications which are solely necessary to assure safe living conditions; or~~

~~b. Any alteration of a structure which is listed on the National Register of Historic Places or a State Inventory of Historic Places, which is designated as a landmark pursuant to SMC Chapter 25.12 or which is included in a landmark or historic district.~~)) reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "substantial damage," regardless of the actual repair work performed. The term does not include either:

1. Any project for improvement of a structure to correct previously identified existing violations of state or local health, sanitary, or safety code specifications that

have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions; or

2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

25.06.040 Applicability

This Chapter 25.06 shall apply to all ((~~areas of~~))special flood hazard((~~s~~)) areas and flood-prone areas as defined in subsection 25.09.012.B as identified in Section 25.06.050 within the jurisdiction of The City of Seattle. ((~~This Chapter 25.06 shall also apply to flood-prone areas as defined in subsection 25.09.012.B that are not located within areas of special flood hazards, as provided in this Chapter 25.06 by cross reference to subsection 25.09.012.B.~~)) Floodplain regulations include provisions in this Chapter 25.06 and provisions in Title 22 that address the risk of flooding.

25.06.044 Abrogation and greater restrictions

This Chapter 25.06 is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter 25.06 and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

25.06.045 Interpretation

In the interpretation and application of this Chapter 25.06, all provisions shall be:

A. Considered as minimum requirements;

B. Liberally construed to provide the maximum flood protection; and

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

25.06.050 Identification of ((~~areas of~~)) special flood hazard areas

A. The ((~~Areas of~~))special flood hazard ((~~in The City of Seattle are~~))areas as identified by the Federal Insurance Administrator((~~ion~~)) in a scientific and engineering report entitled "The Flood Insurance Study for King County, Washington and Incorporated Areas," dated ((~~May 16, 1995,~~))August 19, 2020, and any revisions thereto, with ((~~an~~))accompanying Flood Insurance Rate Maps (FIRMs), ((~~which~~))dated August 19, 2020, and any revisions thereto ("the Maps"). The study and the Maps are included as Exhibit 1 and 2 to this ordinance, respectively, and are ((~~hereby~~))adopted by reference and declared to be a part of this Chapter 25.06. These mapped areas are special flood hazard areas. The study and ((~~map~~))the Maps shall be maintained on file at the Seattle Department of Construction and Inspections and Seattle ((~~Public Utilities~~)) Department of Transportation.

B. If the FIRM boundaries identified on the Maps are not clear, SDCI shall interpret the exact location of the boundaries of the special flood hazard areas based on actual field conditions. These determination of boundary locations can be formally interpreted through a FEMA Letter of Map Change consistent with the standards of Section 65 of the Rules and Regulations of the National Flood Insurance Program (44 CFR Section 65).

C. Special flood hazard areas also include flood-prone areas as defined in subsection 25.09.012.B.

25.06.060 Floodplain development approval required((~~.~~))

Construction or development including the placement of or substantial improvement to manufactured homes, factory-built structures, and recreational vehicles not ready for highway use, shall not be undertaken within any ((~~area of~~))special flood hazard area and flood-prone areas as defined in subsection 25.09.012.B as established in Section 25.06.050 without approval under this ((~~chapter~~))Chapter 25.06. For development where no other permit or authorization

from The City of Seattle or its departments or agencies is necessary to begin or to accomplish the work, the approval shall be documented by issuance of a floodplain development ((~~license~~))permit or approval. For development where some other permit or authorization from The City of Seattle or its departments or agencies is ((~~necessary~~))required to begin or accomplish the work, ((~~the approval shall be documented by issuance of a floodplain development license. For development where some other permit or authorization from The City of Seattle or its departments or agencies is required to begin or accomplish the work, ~~))including but not limited to development performed by City departments, the floodplain development approval shall be incorporated in such other permit or authorization.

25.06.070 Application for floodplain development approval or license

Application for a floodplain development ((~~license~~))permit or((~~ for floodplain development~~)) approval shall be made on forms furnished by the ((~~Administrators~~))floodplain administrator. The application ((~~shall~~))may include, but ((~~shall~~))is not ((~~be~~))limited to, plans 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 following information is required:

A. Elevation prepared by a licensed surveyor ((~~or a registered professional civil engineer~~))in relation to mean sea level, as calculated based on the vertical datum ((~~for Seattle under Section 1.20.020~~))of NAVD88, of the lowest floor (including basement) of all structures recorded on a current elevation certificate with Section B completed by the floodplain administrator;

B. Elevation prepared by a licensed surveyor ((~~or a registered professional civil engineer~~))in relation to mean sea level, as calculated based on the vertical datum ((~~for Seattle under Section 1.20.020~~))of NAVD88, to which any structure has been or will be floodproofed;

C. ((~~Certification~~))Where a structure is to be flood proofed, certification by a registered professional ((~~civil~~))engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 25.06.110;((~~ and~~))

D. Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development((~~.~~));

E. Where a structure is proposed in a V, V1-30, or VE zone, a V-zone designation design certificate;

F. Where development is proposed in a floodway, an engineering analysis indicating no rise of the Base Flood Elevation; and

G. Any other such information that may be reasonably required by the floodplain administrator in order to review the application.

25.06.080 Designation of ((~~Administrators.~~))administrators

((~~Each City department which has responsibility for review and approval of any development or which performs any development in areas of special flood hazard in The City of Seattle is designated as an Administrator of this chapter and shall approve or deny floodplain development proposals only in accordance with the provisions of this chapter. Each Administrator shall be responsible for enforcing the provisions of this chapter as they apply to that Administrator's jurisdiction. The Director shall approve or deny applications for floodplain development licenses in accordance with the provisions of this chapter.~~))

The Director of the Department of Construction and Inspections or designee is appointed as the floodplain administrator charged to administer, implement, and enforce this Chapter 25.06 by granting or denying development permits, approvals, or licenses in accordance with its provisions for all areas within Seattle except for areas in the City's public right-of-way. For all areas in the City's public right-of-way, the Director of Seattle Department of Transportation or designee is appointed to administer, implement, and enforce this Chapter 25.06 by granting or denying development and use permits in Title 15 in accordance with this Chapter 25.06.

25.06.090 Functions of the ((~~Administrators~~))administrators

((~~Functions of the Administrators under this Chapter 25.06 shall include the following:~~)) Duties of the Director of the Department of Construction and Inspections and the Director of Seattle Department of Transportation shall include but not be limited to:

A. Reviewing development proposals to determine that:

1. ((~~the~~))The requirements of this ((~~chapter~~))Chapter 25.06 have been satisfied;

((~~B. Review development proposals to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required~~)) 2. Review proposed development to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334;

3. The site is reasonably safe from flooding; and

4. The proposed development is not located in the floodway. If located in the floodway, assure the encroachment provisions of Section 25.06.120 are met.

B. Notify the Federal Emergency Management Agency when annexations occur in the special flood hazard area;

C. When base flood elevation data has not been provided in A or V zones in accordance with Section 25.06.050, the floodplain administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer Sections 25.06.110 and 25.06.120;

D. Where base flood elevation data is provided through the ((~~Flood Insurance Study~~)) FIS, FIRM, or required ((~~and obtained~~))through subsection 25.06.090.C((~~ above~~)), obtain and maintain a record of the actual (as-built) elevation (in relation to mean sea level as calculated based on the vertical datum ((~~for Seattle under Section 1.20.020~~))of NAVD88 of the lowest floor, including basement, of all new or substantially improved structures, and indicate whether or not the structure contains a basement;

E. Documentation of the elevation of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of new and substantially improved structures in VE zones;

((~~E.~~))F. For all new or substantially improved floodproofed nonresidential structures where base flood elevation data is provided through the FIS, FIRM, or as required in subsection 25.06.100.E.4:

1. ((~~Verify and~~))Obtain and maintain a record of the ((~~actual~~))elevation (in relation to mean sea level) ((~~as calculated based on the National Geodetic Vertical Datum),~~))to which the structure was flood proofed; and

2. Maintain the floodproofing certifications required in subsection ((~~C of Section~~))25.06.070.C;

((~~F.~~)) G. Maintain for public inspection all records pertaining to the provisions of this ((~~chapter~~))Chapter 25.06, including all floodplain variance actions with justification for their issuance and all certifications;

H. Obtain and maintain a record of improvement and damage calculations;

((~~G.~~)) I. Whenever a watercourse is to be altered or relocated:

1. Notify ((~~affected~~))adjacent communities and the Washington State Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration through appropriate notification and means; and

((~~H.~~))2. Require that ((~~maintenance is provided within the altered or relocated portion of such watercourse so that~~))the flood-carrying capacity ((~~is not diminished;~~))of the altered or relocated portion of the watercourse is maintained.

25.06.100 General standards in A Zones including Zones A, AE, and AO

((~~In all areas of special flood hazards and in all other flood-prone areas defined in subsection 25.09.012.B, the following standards are required~~))The following standards are required in all A zoned areas:

A. Accessory structures (detached garages and small storage structures)

1. Accessory structures limited to 500 square feet and used solely for parking of vehicles or limited storage may be constructed such that the floor is below the flood protection elevation, provided the structure is designed and constructed in accordance with the following requirements:

a. Use of the accessory structure must be limited to parking of vehicles or limited storage;

b. The portions of the accessory structure located below the BFE must be built using flood resistant materials;

c. The accessory structure must be adequately anchored to prevent flotation, collapse, and lateral movement. Accessory structures designed to float (e.g. boat sheds, covered moorage floating piers) shall be securely anchored to an adequately anchored foundation system that resists flotation, collapse, and lateral movement;

d. Any machinery or equipment servicing the accessory structure must be elevated or flood proofed to or above the BFE;

e. The accessory structure must comply with floodway encroachment provisions in subsection 25.06.120.A;

f. The accessory structure must be designed to allow for the automatic entry and exit of floodwaters in accordance with subsection 25.06.110.A.4.

g. The structure shall have low damage potential, and

h. If the structure is converted to another use, it must be brought into full compliance with the standards governing such use.

i. The structure shall not be used for human habitation.

2. Detached garages, storage structures, and other accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in subsections 25.06.110.A, 25.06.110.B, 25.06.130.

B. Anchoring

1. All new construction, ((~~and~~))substantial improvements, manufactured homes, and factory-built structures shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of

buoyancy. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

2. Structures designed to float as part of their function (e.g., boat sheds, covered moorage, floating piers) shall be securely anchored to an adequately anchored foundation system that resists flotation, collapse, and lateral movement.

((~~All manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement of the structure and shall be installed using methods and practices that minimize flood damage.~~))

((~~B~~))C. Construction materials and methods

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

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

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

((~~C~~))D. Storage and processing of materials and equipment

1. As part of new construction and substantial improvements:

a. The processing of materials using one or more operations that transforms a material from one state to a different state that could be injurious to human, animal, or plant life if released due to flooding is prohibited in special flood hazard areas.

b. The storage of hazardous material, if allowed ~~and if released due to damage from flooding in special flood hazard shall~~:

i. On land, be kept at or above the flood protection elevation; or in a dry flood proofed non-residential building, structure or cabinet securely anchored using methods that may include, but are not limited to, use of over-the-top or frame ties to ground anchors; and

ii. Overwater, be kept in a floodproofed container that is securely attached to the pier and at or above the flood protection elevation or in a dry floodproofed non-residential building.

2. As part of new construction and substantial improvements, storage of other material or equipment may be allowed if stored in a manner that is reasonably safe from flooding, including firmly anchored following the provisions of 25.06.100.A.

3. Best management practices for the storage and use of hazardous material.

a. All hazardous and toxic materials shall be stored in a secure manner and leak-proof condition so that they do not enter the water for any reason including wind or wave action.

b. All hazardous and toxic materials shall be handled and used to prevent them from entering the water; double containment systems or other method to prevent spills of hazardous material is required.

c. No open containers of hazardous and toxic materials shall be left unattended.

d. Maintain all machinery and equipment in good working order to prevent the entry of debris, waste materials, and hazardous and toxic materials from machinery or equipment from entering any water body.

E. Utilities and attendant equipment

1. All new and replacement water supply systems shall be designed to eliminate or minimize infiltration of floodwaters into the system.

2. Water wells shall be located on high ground outside the floodway.

3. New and replacement sanitary sewage systems shall be designed to eliminate or minimize infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

((~~3.~~)) 4. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

5. New or replacement utilities and attendant equipment shall be:

a. located at or above the flood protection elevation, or as required by ASCE 24, whichever is greater; or

b. designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation in accordance with ASCE 24; and

c. Electrical wiring systems are permitted to be located below the flood protection elevation provided that they conform to the provisions of the electrical part of this code for wet locations and shall be anchored following the provisions of 25.06.100.A.

((~~D~~))F. Subdivision, short plat, other platting actions, and new development proposals:

1. ((~~All subdivision proposals shall~~))Shall be consistent with the need to minimize flood damage.

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

3. ((~~All subdivision proposals shall~~))Shall have adequate drainage to ((~~minimize to~~))reduce exposure to flood damage.

4. ((~~If base flood elevation data has not been provided or is not available from another authoritative source, the applicant shall provide such data for subdivision proposals and other proposed developments that contain at least 50 lots or five acres, whichever is less.~~))Shall include base flood elevation data as part of the application for proposed development that contains at least 50 lots or 5 acres, whichever is the lesser.

((~~E~~))G. ((~~If~~)) Where elevation data is not available, ((~~either through~~))whether from the ((~~most current map provided by the Federal Emergency Management Agency (FEMA) for administration of the National Flood Insurance Program~~)) FIS, the FIRM, or ((~~from~~))another authoritative source((~~,~~)) as listed in subsection 25.06.090.G, applications for floodplain development shall be reviewed to assure that proposed construction shall be made reasonably safe from flooding. The evaluation of reasonableness shall include consideration of historical data, high water marks, photographs of past flooding, and similar information if available.

25.06.110 Standards involving base flood elevations in A zones, including Zones A, AE, and AO

((~~If~~))In all special flood hazard areas and flood-prone areas as defined in subsection 25.09.012.B, where base flood elevation data has been provided under Section 25.06.050 or subsection 25.06.090.C, the standards of subsections 25.06.110.A through 25.06.110.((~~E~~))H apply((~~ to areas of special flood hazards and to flood-prone areas defined in subsection 25.09.012.B~~)).

A. Residential construction

1. In AE zones or other A zoned areas where the BFE has been determined or can be reasonably obtained, ((~~N~~))new construction and substantial improvement of any residential

structure shall have the elevation of the lowest floor, including basements, ((~~elevated to 2 feet or more above base flood elevation~~)) at or above the flood protection elevation.

2. New construction and substantial improvement of any residential structure in an AO zone shall meet the requirements under Section 25.06.130.

3. New construction and substantial improvement of any residential structure in an unnumbered A zone for which a BFE is not available and cannot be reasonably obtained shall be reasonably safe from flooding, but in all cases the elevation of the lowest floor shall be at least 3 feet above the highest adjacent grade.

4. For new construction and substantial improvement of any residential structure, (~~F~~)fully enclosed areas below the lowest floor ((~~that are subject to flooding~~))are:

a. prohibited; or

b. shall be used solely for parking of vehicles, building access, crawl space, or storage, and 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 ((~~either are required to~~))shall be certified by a registered professional civil engineer or architect; or ((~~are required to~~))shall meet or exceed the following minimum criteria:

((~~a.~~))1) ((~~A~~)) Have a minimum of two openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding((~~ shall be provided~~));

((~~b.~~))2) The bottom of all openings shall be no higher than 1-foot above the adjacent grade and located on the lowest sides of the structure that allows for the flow of water through the enclosed area or 1' above an elevated slab on grade, whichever is higher; and

((~~e.~~))3) Openings may be equipped with screens, louvers, valves, or other coverings or devices ((~~if~~))provided that they permit the automatic entry and exit of floodwaters.

4) A garage attached to a residential structure, constructed with the garage floor slab below the flood protection elevation, must be designed to allow for the automatic entry and exit of floodwaters.

B. ((~~Non-residential and live-work unit construction.~~))New construction and substantial improvement of any commercial, industrial, or other non-residential structure((~~, including a structure with one or more live-work units, shall either have the lowest floor, including basement, elevated to 2 feet or more above the level of the base flood elevation or, together with attendant utility and sanitary facilities,~~)) shall:

((~~1. Be floodproofed so that below 2 feet above the 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 civil engineer that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection 25.06.110.B based on the civil engineer's development or review of the structural design, specifications and plans.~~

~~Non-residential structures or structures with one or more live-work units that are elevated, not floodproofed, shall meet the same standards for space below the lowest floor as set out in subsection 25.06.110.A.2 above.~~)) 1. In AE or other A zoned areas where the BFE has

been determined or can be reasonably obtained, new construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall:

a. have the elevation of the lowest floor , including basements, at or above the flood protection elevation; or

b. be dry flood proofed so that the structure below the flood protection elevation is watertight with walls substantially impermeable to the passage of water or dry flood proofed to the elevation required by ASCE 24, whichever is greater:

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

2) 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 25.06.110.B.2 based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the official as set forth in subsection 25.06.070.C.

2. In an AO zone, the structure shall meet the requirements under Section 25.06.130.

3. In an unnumbered A zone for which a BFE is not available and cannot be reasonably obtained, the structure shall be reasonably safe from flooding, but in all cases the elevation of the lowest floor shall be 3 feet or more above the highest adjacent grade or flood proofed to this elevation.

4. For new construction and substantial improvement of any nonresidential structure that is not dry floodproofed per 25.06.110.B.1.b fully enclosed areas below the lowest

floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to:

a. automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement shall be certified by a registered professional engineer or architect; or shall meet or exceed the following minimum criteria:

b. Have a minimum of two openings with a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding;

c. The bottom of all openings shall be no higher than 1-foot above either interior or exterior adjacent grade;

d. Openings may be equipped with screens, louvers, valves, or other coverings or devices; or a registered engineer or architect may design and certify engineered openings, provided that they permit the automatic entry and exit of floodwater; and

e. A garage attached to an elevated or dry floodproofed 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.

5.Exception to elevation standards for overwater structures. New construction or substantial improvement on piers and wharves that existed on or before August 19, 2020, for commercial, industrial, or other non-residential structures, shall meet FEMA's standard of BFE. FEMA's BFE is measured from the top of the deck of the pier or wharf.

C. Critical facilities. Construction of new critical facilities shall be located outside the limits of the ((~~areas of~~))special flood hazard areas and outside the limits of all other flood-prone areas as defined in Chapter 25.09 where possible. Construction of new critical facilities shall be

permissible within ((~~areas of~~))special flood hazard areas and all other flood-prone areas as defined in Chapter 25.09 if no feasible alternative site is available. Critical facilities constructed within ((~~areas of~~))special flood hazard areas and all other flood-prone areas as defined in Chapter 25.09 shall have the elevation of the lowest floor ((~~elevated to 3 feet above the level of the base flood elevation~~))at or above the flood protection elevation at the site or to the height of the 500-year flood if available, whichever is higher. Floodproofing and sealing measures shall be taken so that ((~~toxic substances~~))hazardous material will not be displaced by or released into floodwaters. Access routes to all critical facilities shall be elevated to or above the level of the base flood elevation to the extent possible.

D. Manufactured homes and factory-built structures. All manufactured homes and factory-built structures ((~~within Zones A1-30, AH, and AE on the FIRM or within all other flood-prone areas as defined in Chapter 25.09~~)) to be placed or substantially improved shall be installed using methods and practices which minimize flood damage including:

1. Being elevated on a permanent foundation ((~~so~~))such that the elevation of the lowest floor of the manufactured home or factory-built structure is ((~~2 feet or more above the base flood elevation~~)) at or above the flood protection elevation; and

2. ((~~shall be~~))Being securely anchored to an ((~~adequately~~))anchored foundation ((~~system in accordance with the provisions~~)) meeting the requirements of subsection 25.06.100.A; and

3. Meet the requirements of 25.06.100.B.

E. Recreational vehicles. Recreational vehicles placed on sites within ((~~areas of~~))special flood hazard areas or flood-prone areas as defined in subsection 25.09.012.B shall ((~~be~~)):

1. ((~~On~~))Be on the site for fewer than 180 consecutive days; or

2. ((~~Fully~~))Be fully licensed and ready for highway use, on their wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and be without permanently attached additions; or

3. Meet the requirements for manufactured homes and factory-built structures specified in subsection 25.06.110.D((~~, above~~)).

F. If a project will alter the BFE or boundaries of the special flood hazard area or the flood-prone area as defined in subsection 25.09.012.B, then the project proponent shall provide engineering documentation and analysis regarding the proposed change and:

1. If the change to the BFE or boundaries of the special flood hazard area would normally require a Letter of Map Change, then the project proponent shall initiate, and receive approval of, a Conditional Letter of Map Revision (CLOMR) prior to approval of the development permit. The project shall be constructed in a manner consistent with the approved CLOMR.

2. If a CLOMR application is made, then the project proponent shall also submit the full CLOMR documentation package to the floodplain administrator to be attached to the floodplain development permit, including all required property owner notifications.

3. Before approval of the final inspection the Letter of Map Revision (LOMR) will be attained and submitted to SDCI.

25.06.120 Standards for floodways

((~~Areas~~))Located within special flood hazard areas established in Section 25.06.050 are areas designated as floodways((~~ are areas of special flood hazard established in Section 25.06.050. The following provisions apply to development in designated floodways~~)). Since the

floodway is an extremely hazardous area due to the velocity of floodwaters that can carry debris, and increase erosion potential, the following provisions apply:

A. Encroachments, including fill, new construction, substantial improvements, and other development, are prohibited unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge.

B. Construction or reconstruction of residential structures is prohibited within designated floodways, except for:

(((~~(1) repairs~~))1. Repairs, reconstruction, or improvements to a structure ((~~which~~)) that do not increase the ground-floor area; and

(((~~(2) repairs~~))2. Repairs, reconstruction, or improvements to a structure, the cost of which does not exceed ((~~fifty (~~))50((~~)~~)) percent of the market value of the structure either:

(((~~(a) before~~))a. Before the repair, reconstruction, or repair is started, or

(((~~(b) if~~))b. If the structure has been damaged, and is being restored, before the damage occurred. ((~~Work done on structures to comply with~~))Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code((~~s,~~)) specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions, or to structures identified as historic or landmark structures may be excluded from the ((~~fifty (~~))50((~~)~~)) percent requirement.

C. Substantially damaged residences in floodway

1. For all substantially damaged residential structures, other than farmhouses, located in a designated floodway, the floodplain administrator may make a written request that

the Department of Ecology assess the risk of harm to life and property posed by the specific conditions of the floodway. Based on analysis of depth, velocity, flood-related erosion, channel migration, debris load potential, and flood warning capability, the Department of Ecology may exercise best professional judgment in recommending to the local permitting authority repair, replacement, or relocation of a substantially damaged structure consistent with WAC 173-158-076. The property owner shall be responsible for submitting to the local government and the Washington State Department of Ecology any information necessary to complete the assessment. Without a favorable recommendation from the department for the repair or replacement of a substantially damaged residential structure located in the regulatory floodway, no repair or replacement is allowed per WAC 173-158-070(1).

2. Before the repair, replacement, or reconstruction is started, all requirements of the National Flood Insurance Program, the state requirements adopted pursuant to chapter 86.16 RCW, and all applicable local regulations must be satisfied. In addition, the following conditions must be met:

a. There is no potential safe building location for the replacement residential structure on the same property outside the regulatory floodway.

b. A replacement residential structure is a residential structure built as a substitute for a legally existing residential structure of equivalent use and size.

c. Repairs, reconstruction, or replacement of a residential structure shall not increase the total square footage of floodway encroachment.

d. The elevation of the lowest floor of the substantially damaged or replacement residential structure is at or above the flood protection elevation.

e. New and replacement water supply systems are designed to eliminate or minimize infiltration of floodwater into the system.

f. New and replacement sanitary sewerage systems are designed and located to eliminate or minimize infiltration of floodwater into the system and discharge from the system into the floodwaters.

g. All other utilities and connections to public utilities are designed, constructed, and located to eliminate or minimize flood damage.

D. If the certification of subsection 25.06.120.A ((~~of this section above~~))is obtained, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this ((~~chapter~~))Chapter 25.06.

25.06.130 Standards for shallow flooding areas

Areas designated as AO zones on the ((~~Flood Insurance Rate Maps~~))FIRMs are areas of shallow flooding. The following provisions apply to such areas of shallow flooding:

A. New construction and substantial improvements of residential structures within AO zones shall have the lowest floor (including basement) elevated above the highest grade adjacent to the building ((~~one (1 foot)~~))2 feet or more above the depth number specified on the FIRM, or if no depth number is specified, at least ((~~two (2)~~))3 feet above the highest grade adjacent to the building.

B. New construction and substantial improvements of nonresidential structures ((~~with one (1) or more live-work units~~))within AO zones shall:((~~ either (1)~~))

1. ((~~h~~))Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site ((~~one (1 foot)~~))2 feet or more above the depth number

specified on the FIRM, or if no depth number is specified, at least ((~~two (2)~~)3 feet above the highest adjacent grade of the building site; or((~~(2)~~))

2. ((~~t~~))Together with utilities and attendant ((~~utility~~))equipment, and sanitary facilities, be completely floodproofed so that any space below the level specified in subsection ((~~(1) above~~))25.06.130.B.1 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 floodproofing is used, compliance with these standards must be certified by a registered professional engineer or architect.

C. Adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures shall be required.

25.06.132 AE riverine zones with base flood elevations but no floodways

A. In AE FIRM designated zones with identified BFEs and there is an effective flood insurance study that has determined that no floodway exists: New construction, substantial improvements, or other development (including fill) is prohibited unless:

1. The applicant can demonstrate 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 1 foot at any point within the community based on FEMA's guidelines and standards for flood risk analysis and mapping; or

2. The standards for VE zones in Section 25.06.134 are met.

B. If the flood risk analysis determines that the proposed project will increase the water surface elevation of the base flood more than 1 foot at any point within the community the applicant shall meet the standards in subsection 25.06.110.F.

C. Exceptions. The following projects are not required to provide a flood risk analysis.

1. Substantial improvement projects in the same footprint that do not increase the volume of material in the SFHA; and

2. New development that replaces existing development in the same footprint and does not increase the volume of material in the SFHA.

25.06.134 Standards for VE zones

The following standards apply to all areas zoned V, V1-30, or VE.

A. Elevation.

1. New construction and substantial improvement for residential structures, and for commercial, industrial, or other non-residential structures shall:

a. Be elevated on pilings and columns and have the elevation of the bottom of the lowest horizontal structural member of the lowest enclosed floor (excluding pilings or columns) at or above the flood protection elevation, or elevated as required by ASCE 24, whichever is greater; and

b. Provide the actual (as-built) elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) and whether or not a basement exists.

2. Exception to Elevation Standards. New construction or substantial improvement:

a. Of commercial, industrial, or other non-residential structures on piers and wharves that existed on or before August 19, 2020, shall meet FEMA's standard of BFE. FEMA's BFE is measured the bottom of the lowest horizontal structural member of the pier or wharf; and/or

b. Of piers and wharves that have structures built on the pier or wharf and existed on or before August 19, 2020, shall meet FEMA's standard of BFE. FEMA's BFE is measured from the bottom of the lowest horizontal structural member of the pier or wharf elevated to a minimum of BFE.

B. Anchoring.

1. Piles and column foundations, and structures attached thereto, shall be anchored to resist floatation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components.

a. Water loading values used shall be those associated with the base flood.

b. Wind loading values used shall be those required by applicable State or local building standards.

2. A registered professional engineer or architect shall develop or review the structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of subsection 25.06.134.A and 25.06.134.B; and

3. Additionally, for structures that are designed to float as part of their function (e.g. boat sheds, covered moorage, floating piers) the structure must be securely anchored to an adequately anchored foundation system that resists flotation, collapse, and lateral movement.

C. Siting. New construction, not including substantial improvements, shall be located landward of the reach of mean high tide.

D. Areas below lowest floor for all new construction and substantial improvements have the space below the lowest floor either:

1. Free of obstruction; or

2. Constructed with non-supporting breakaway walls, open wood latticework, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system.

a. For the purposes of this subsection, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local or State codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:

1) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and,

2) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all building components (structural and non-structural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards.

3) Such enclosed space shall not be used for human habitation and shall be useable solely for parking of vehicles, building access, or storage.

E. Use of fill. Fill material used for structural support of buildings is prohibited.

F. Storage and processing of materials and equipment.

1. As part of new construction and substantial improvements:

a. The processing of hazardous and toxic materials and the process of using one or more operations that transforms a material into hazardous or toxic material is prohibited in special flood hazard areas.

b. Storage of non-hazardous material or equipment may be allowed if stored in a manner that is reasonably safe from flooding, including stored in a structure meeting floodplain standards, including the elevation standards in 25.06.134.A or firmly anchored following the provisions of 25.06.134.B.

2. As part of new construction the storage or processing of any material is not allowed waterward of the mean high tide.

3. As part of substantial improvement:

a. The processing of hazardous and toxic materials and the process of using one or more operations that transforms a material into hazardous or toxic materials is prohibited in special flood hazard areas.

b. The storage of hazardous or toxic materials in special flood hazard, if allowed shall:

1) On land, be kept at or above the flood protection elevation; and

2) Overwater, be kept in floodproofed containers securely anchored using methods that may include, but are not limited to, use of over-the-top or frame ties to ground anchors; or stored in a non-residential building that is at or above the flood protection elevation.

3. Best management practices for the storage and use of hazardous material.

a. All hazardous material shall be stored in a secure manner and leak-proof condition so that they do not enter the water for any reason including wind or wave action.

b. All hazardous material shall be handled and used to prevent them from entering the water; double containment systems or other method to prevent spills of hazardous material is required.

c. No open containers of hazardous material shall be left unattended.

d. Maintain all machinery and equipment in good working order to prevent the entry of debris, waste materials, and hazardous materials from machinery or equipment from entering any water body.

G. Utilities and attendant equipment

1. All new and replacement water supply systems shall be designed to eliminate or minimize infiltration of floodwaters into the system.

2. Water wells shall be located outside the floodway.

3. New and replacement sanitary sewage systems shall be designed to eliminate or minimize infiltration of floodwaters into the systems and discharge from the systems into floodwaters.

4. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

5. New or replacement utilities and attendant equipment shall be:

a. Located at an elevation at or above the flood protection elevation or elevated as required by ASCE 24, whichever is greater: or

b. Designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the design flood elevation in accordance with ASCE 24; and

c. Electrical wiring systems are permitted to be located below the flood protection elevation provided that they conform to the provisions of the electrical part of this code for wet locations and shall be anchored following the provisions of 25.06.134.B.

H. Manufactured homes and factory-built structures. All manufactured homes and factory-built structures to be placed or substantially improved shall be installed using methods and practices which minimize flood damage including:

1. Having the elevation of the lowest floor at or above the flood protection elevation;

2. Having the manufactured home or and factory-built structure chassis supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than the flood protection elevation in height; and

3. Meeting the anchoring requirements in subsection 25.06.134.A.

I. Recreational vehicles shall:

1. Be on the site for fewer than 180 consecutive days; and

2. Be fully licensed and ready for highway use, on its 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 manufactured homes requirements in subsection 25.06.134.H.

J. Critical facilities. Construction of new critical facilities shall be located outside the limits of the special flood hazard areas and outside the limits of all other flood-prone areas as defined in Chapter 25.09 where possible. Construction of new critical facilities shall be permissible within special flood hazard areas and all other flood-prone areas as defined in Chapter 25.09 if no feasible alternative site is available. Critical facilities constructed within

special flood hazard areas and all other flood-prone areas as defined in Chapter 25.09 shall have the elevation of the lowest floor at or above the flood protection elevation at the site or to the height of the 500-year flood if available, whichever is higher. Floodproofing and sealing measures shall be taken so that hazardous material will not be displaced by or released into floodwaters. Access routes to all critical facilities shall be elevated to or above the level of the base flood elevation to the extent possible.

25.06.136 Floodplain variances

The floodplain variance criteria set forth in this Section 25.06.136 are based on the general principle of zoning law that floodplain variances pertain to a piece of property and are not personal in nature. The long-term goal of preventing and reducing flood loss and damage can only be met if floodplain variances are strictly limited. Therefore, the floodplain variance guidelines provided in this Chapter 25.06 are more detailed and contain multiple provisions that must be met before a floodplain variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a floodplain variance are more appropriate.

A. Types of variances issued

1. Historic Structures. Floodplain variances may be issued for the repair, rehabilitation, or restoration of historic structures, upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the floodplain variance is the minimum necessary to preserve the historic character and design of the structure.

2. Functionally dependent Uses. Floodplain variances may be issued for new construction and substantial improvements and for other development necessary for the conduct

of a functionally dependent use defined as a "functionally dependent use" under Section 25.06.030, provided that the requirements in Section 25.06.136.A.3 and 25.06.136.B.1, 25.06.136.B.2, 25.06.136.B.3, are met and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

3. Other Development. Generally, floodplain variances may be issued on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the BFE, provided that the requirements in subsections 25.06.136.B and 25.06.136.C are met and the procedures and standards of this Chapter 25.06 have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the floodplain variance increases.

B. General requirements for floodplain variances

1. Floodplain variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.

2. Variances shall only be issued upon a determination that the floodplain variance is the minimum necessary, considering the flood hazard, to afford relief.

3. Variances shall only be issued upon the following:

a. A showing of good and sufficient cause;

b. A determination that failure to grant the floodplain variance would result in exceptional hardship to the applicant;

c. A determination that the granting of a floodplain 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.

4. When evaluating a variance, the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site will be evaluated.

C. Additional requirements for the issuance of a floodplain variance

1. Any applicant to whom a floodplain variance is granted shall be given written notice over the signature of a community official that:

a. The issuance of a floodplain variance to construct a structure below the BFE will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage; and

b. Such construction below the flood protection elevation or below BFE increases risks to life and property.

2. The floodplain administrator shall maintain a record of all floodplain variance actions, including justification for their issuance.

3. The floodplain administrator shall condition the floodplain variance as needed to ensure that the requirements and criteria of this Section 25.06.136 are met.

25.06.140 Penalties for noncompliance

No development shall occur in a((~~n area of~~)) special flood hazard area or a flood-prone area as defined in subsection 25.09.012.B in The City of Seattle without full compliance with the terms of this ((~~chapter~~))Chapter 25.06 and other applicable regulations. Any person who violates this ((~~chapter~~))Chapter 25.06 or fails to comply with any of its requirements shall be subject to a cumulative civil penalty in the amount of ((~~Fifty Dollars ($50.00)~~))$500 per day for each day from the date the violation began until the date compliance with the requirements of this

((~~chapter~~))Chapter 25.06 is achieved. Nothing ((~~herein~~))contained in this Chapter 25.06 shall prevent The City of Seattle from taking such other lawful action as is necessary to prevent or remedy any violation.

25.06.150 Wetlands management

To the maximum extent possible, development shall avoid the short-term and long-term adverse impacts associated with the destruction or modification of wetlands, especially development ((~~which~~))that limits or disrupts the ability of wetland to alleviate flooding impacts. The ((~~Administrators~~))floodplain administrators shall implement the following process:

A. Review proposals for development within ((~~areas of~~))special flood hazard areas for their possible impacts on wetlands located within such areas;

B. Ensure that development activities in or around wetlands do not negatively affect public safety, health, and welfare by disrupting the wetland's ability to reduce flood and storm drainage; and

C. Request technical assistance from the Washington State Department of Ecology in identifying wetland areas.

Section 3. Section 25.09.030 of the Seattle Municipal Code, last amended by Ordinance 126113, is amended as follows:

25.09.030 Location of environmentally critical areas and buffers

A. Environmentally critical areas are defined in Section 25.09.012, and buffers are described in Sections 25.09.090 and 25.09.160. Environmentally critical areas are mapped whenever possible. These maps are advisory except as follows:

1. The maps adopted as designations for geologically hazardous areas in subsections 25.09.012.A.5, 25.09.012.A.6, and 25.09.012.A.7;

2. The FEMA maps showing ((~~areas of~~))special flood hazard areas defined in ((~~subsection~~))Section 25.06.030((~~.B~~));

3. Areas mapped or designated by the Washington Department of Fish and Wildlife (WDFW) in subsections 25.09.012.D.1 and 25.09.012.D.2; and

4. The delineations in the maps for peat settlement-prone areas in subsection 25.09.012.A.5 for parcels 50,000 square feet or less.

The Director may update or amend the maps by Director's Rule.

* * *

Section 4. The provisions of this ordinance are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section, subsection, or portion of this ordinance, or the invalidity of its application to any person or circumstance, does not affect the validity of the remainder of this ordinance or the validity of its application to other persons or circumstances.

Section 5. This ordinance shall take effect as provided by Seattle Municipal Code Sections 1.04.020 and 1.04.070.

Passed by the City Council the _____ day of _____, 2024, and signed by me in open session in authentication of its passage this _____ day of _____, 2024.

_____

President _____ of the City Council

Approved / returned unsigned / vetoed this _____ day of _____, 2024.

_____

Bruce A. Harrell, Mayor

Filed by me this _____ day of _____, 2024.

_____

Scheereen Dedman, City Clerk

(Seal)

Attachments: