

Legislation Text

File #: 2020-0045, **Version:** 2

AN ORDINANCE related to floodplain development regulations; amending Ordinance 12196, Section 9, as amended, and K.C.C. 20.20.020, Ordinance 10870, Section 57, and K.C.C. 21A.06.085, Ordinance 17173, Section 1, and K.C.C. 21A.06.202, Ordinance 15051, Section 28, and K.C.C. 21A.06.331, Ordinance 15051, Section 42, and K.C.C. 21A.06.453, Ordinance 10870, Section 131, as amended, and K.C.C. 21A.06.455, Ordinance 10870, Section 135, as amended, and K.C.C. 21A.06.475, Ordinance 15051, Section 49, and K.C.C. 21A.06.478, Ordinance 10870, Section 136, as amended, and K.C.C. 21A.06.480, Ordinance 10870, Section 137, as amended, and K.C.C. 21A.06.485, Ordinance 10870, Section 138, as amended, and K.C.C. 21A.06.490, Ordinance 17539, Section 18, and K.C.C. 21A.06.497, Ordinance 15051, Section 65, and K.C.C. 21A.06.599, Ordinance 10870, Section 294, as amended, and K.C.C. 21A.06.1270, Ordinance 10870, Section 454, as amended, and K.C.C. 21A.24.070, Ordinance 10870, Section 470, as amended, and K.C.C. 21A.24.230, Ordinance 10870, Section 471, as amended, and K.C.C. 21A.24.240, Ordinance 10870, Section 472, as amended, and K.C.C. 21A.24.250, Ordinance 10870, Section 473, as amended, and K.C.C. 21A.24.260, Ordinance 10870, Section 474, as amended, and K.C.C. 21A.24.270, Ordinance 17539, Section 54 and K.C.C. 21A.24.271, and Ordinance 17173, Section 2 and K.C.C. 21A.24.272, adding new sections to K.C.C. chapter 21A.24 and repealing Ordinance 15051, Section 9

and K.C.C. 21A.06.087, Ordinance 15051, Section 48 and K.C.C. 21A.06.476, Ordinance 15051, Section 71 and K.C.C. 21A.06.683 and Ordinance 15051, Section 72 and K.C.C. 21A.06.684.

STATEMENT OF FACTS:

1. In RCW 86.16.041, the Washington state Legislature has delegated the responsibility to each community to adopt floodplain management regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, King County's floodplains are regulated as adopted in K.C.C. Title 21A and as amended in this ordinance.
2. The degree of flood protection required by K.C.C. Title 21A 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 human-made or natural causes. This ordinance does not imply that land outside the special flood hazard areas or uses permitted within such areas will be free from flooding or flood damages.
3. King County has a strong commitment to supporting agricultural uses within the county. Federal floodplain management regulations require communities to regulate residential and nonresidential buildings, which encompass agricultural buildings, to at least the Federal Emergency Management Agency's minimum requirements. In February 2020, the Federal Emergency Management Agency ("FEMA") issued new policy guidance for agricultural buildings. Through this ordinance, King County is taking advantage of the opportunities that FEMA allows in the policy guidance to provide new flexibility for agricultural property owners in King County's floodplains. Additionally, the county intends to request a communitywide exception from FEMA in order to allow the safe placement of certain agricultural buildings within the floodplain without the need for a variance process. If such a communitywide exception is approved by FEMA, the county intends to update these floodplain development

regulations in order to match that approval.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. The elements of the King County Shoreline Master Program in section 17 of this ordinance are hereby amended to read as set forth in this ordinance and are incorporated herein by this reference.

SECTION 2. The FEMA floodway and floodplain identified in a scientific and engineering report entitled Flood Insurance Study for King County, Washington and Incorporated Areas, dated August 19, 2020, which is Attachment A to this ordinance, with accompanying Flood Insurance Rate Maps in Attachment B to this ordinance, and any revisions thereto, are hereby adopted and regulated as part of the flood hazard area for unincorporated King County. The Flood Insurance Study and Flood Insurance Rate Maps are available at the department of natural resources and parks at 201 South Jackson Street, Seattle, WA.

SECTION 3. Ordinance 12196, Section 9, as amended, and K.C.C. 20.20.020 are hereby amended to read as follows:

A. Land use permit decisions are classified into four types, based on who makes the decision, whether public notice is required, whether a public hearing is required before a decision is made and whether administrative appeals are provided. The types of land use decisions are listed in subsection E. of this section.

1. Type 1 decisions are made by the permitting division manager or designee ("director") of the department of local services ("department"). Type 1 decisions are nonappealable administrative decisions.

2. Type 2 decisions are made by the director. Type 2 decisions are discretionary decisions that are subject to administrative appeal.

3. Type 3 decisions are quasi-judicial decisions made by the hearing examiner following an open record hearing. Type 3 decisions may be appealed to the county council, based on the record established by the hearing examiner.

4. Type 4 decisions are quasi-judicial decisions made by the council based on the record established

by the hearing examiner.

B. Except as provided in K.C.C. 20.44.120A.7. and 25.32.080 or unless otherwise agreed to by the applicant, all Type 2, 3 and 4 decisions included in consolidated permit applications that would require more than one type of land use decision process may be processed and decided together, including any administrative appeals, using the highest-numbered land use decision type applicable to the project application.

C. Certain development proposals are subject to additional procedural requirements beyond the standard procedures established in this chapter.

D. Land use permits that are categorically exempt from review under SEPA do not require a threshold determination (determination of nonsignificance ["DNS"] or determination of significance ["DS"]). For all other projects, the SEPA review procedures in K.C.C. chapter 20.44 are supplemental to the procedures in this chapter.

E. Land use decision types are classified as follow:

TYPE 1	(Decision by director, no administrative appeal)	Temporary use permit for a homeless encampment under K.C.C. 21A.45.010, 21A.45.020, 21A.45.030, 21A.45.040, 24A.45.050, 21A.45.060, 21A.45.070, 21A.45.080 and 21A.45.090; building permit, site development permit, or clearing and grading permit that is not subject to SEPA, that is categorically exempt from SEPA as provided in K.C.C. 20.20.040, or for which the department has issued a determination of nonsignificance or mitigated determination of nonsignificance; boundary line adjustment; right of way; variance from K.C.C. chapter 9.04; shoreline exemption; decisions to require studies or to approve, condition or deny a development proposal based on K.C.C. chapter 21A.24, except for decisions to approve, condition or deny alteration exceptions; <u>decisions to approve, condition or deny nonresidential elevation and dry floodproofing variances for agricultural buildings that do not equal or exceed a maximum assessed value of sixty-five thousand dollars under K.C.C. chapter 21A.24;</u> approval of a conversion-option harvest plan; a binding site plan for a condominium that is based on a recorded final planned unit development, a building permit, an as-built site plan for developed sites, a site development permit for the entire site; approvals for agricultural activities and agricultural support services authorized under K.C.C. 21A.42.300; final short plat; final plat.
TYPE 2 ^{1,2}	(Decision by director appealable to hearing examiner, no further administrative appeal)	Short plat; short plat revision; short plat alteration; zoning variance; conditional use permit; temporary use permit under K.C.C. chapter 21A.32; temporary use permit for a homeless encampment under K.C.C. 21A.45.100; shoreline substantial development permit ³ ; building permit, site development permit or clearing and grading permit for which the department has issued a determination of significance; reuse of public schools; reasonable use exceptions under K.C.C. 21A.24.070.B; preliminary determinations under K.C.C. 20.20.030.B; decisions to approve, condition or deny alteration exceptions <u>or variances to floodplain development regulations</u> under K.C.C. chapter 21A.24; extractive operations under K.C.C. 21A.22.050; binding site plan; waivers from the moratorium provisions of K.C.C. 16.82.140 based upon a finding of special circumstances.
TYPE 3 ¹	(Recommendation by director, hearing and decision by hearing examiner, appealable to county council on the record)	Preliminary plat; plat alterations; preliminary plat revisions.

TYPE 4 ^{1,4}	(Recommendation by director, hearing and recommendation by hearing examiner decision by county council on the record)	Zone reclassifications; shoreline environment redesignation; urban planned development; special use; amendment or deletion of P suffix conditions; plat vacations; short plat vacations; deletion of special district overlay.
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¹ See K.C.C. 20.44.120.C. for provisions governing procedural and substantive SEPA appeals and appeals of Type 3 and 4 decisions to the council.

² When an application for a Type 2 decision is combined with other permits requiring Type 3 or 4 land use decisions under this chapter, the examiner, not the director, makes the decision.

³ A shoreline permit, including a shoreline variance or conditional use, is appealable to the state Shorelines Hearings Board and not to the hearing examiner.

⁴ Approvals that are consistent with the Comprehensive Plan may be considered by the council at any time. Zone reclassifications that are not consistent with the Comprehensive Plan require a site-specific land use map amendment and the council's hearing and consideration shall be scheduled with the amendment to the Comprehensive Plan under K.C.C. 20.18.040 and 20.18.060.

F. The definitions in K.C.C. 21A.45.020 apply to this section.

SECTION 4. Ordinance 10870, Section 57, and K.C.C. 21A.06.085 are hereby amended to read as follows:

Base flood elevation: the ~~((water surface elevation of the base flood in relation to the National Geodetic Vertical Datum of 1929))~~ elevation to which floodwater is anticipated to rise during the base flood.

SECTION 5. Ordinance 17173, Section 1, and K.C.C. 21A.06.202 are hereby amended to read as follows:

Coastal high hazard area: 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 ~~((f))~~Flood ~~((i))~~I

insurance ~~((f))~~Rate ~~((m))~~Maps as ~~((zone V1-30,))~~ VE ~~((or V, and))~~ or AE~~((, AO or AH))~~ zones that are immediately adjacent to the ~~((V1-30,))~~ VE ~~((or V-zones))~~ zone.

SECTION 6. Ordinance 15051, Section 28, and K.C.C. 21A.06.331 are hereby amended to read as follows:

Draft flood boundary work map: a floodplain map prepared by a mapping partner, reflecting the results of a flood study or other floodplain mapping analysis. The draft flood boundary work map depicts floodplain boundaries, ~~((regulatory))~~ FEMA floodway and zero-rise floodway boundaries, base flood elevations and flood cross-sections, and provides the basis for the presentation of this information on a Preliminary Flood Insurance Rate Map or Flood Insurance Rate Map.

SECTION 7. Ordinance 15051, Section 42, and K.C.C. 21A.06.453 are hereby amended to read as follows:

Federal Emergency Management Agency: the ~~((independent))~~ federal agency that, among other responsibilities, oversees the administration of the National Flood Insurance Program.

SECTION 8. Ordinance 10870, Section 131, as amended, and K.C.C. 21A.06.455 are hereby amended to read as follows:

FEMA floodway: the channel of the stream or other watercourse and ~~((that portion of the adjoining floodplain that is necessary to contain and))~~ the adjacent land areas that must be reserved in order to discharge the base flood ((flow)) without cumulatively increasing the ((base flood)) water surface elevation more than ((one foot)) a designated height at any point. The FEMA floodway is delineated on the Flood Insurance Rate Map and on King County Surface Water Design Manual major floodplain or floodway studies.

SECTION 9. Ordinance 10870, Section 135, as amended, and K.C.C. 21A.06.475 are hereby amended to read as follows:

Flood hazard area: any area subject to inundation by the base flood or risk from channel migration including, but not limited to, an aquatic area, wetland or closed depression. A flood hazard area may contain

one or more of the following components:

- A. Floodplain;
- B. Special flood hazard area, as shown on the Flood Insurance Rate Maps;
- C. Zero-rise (~~((flooding))~~) flood fringe;
- ~~((C))~~ D. Zero-rise floodway;
- ~~((D))~~ E. FEMA floodway; and
- ~~((E))~~ F. Channel migration zones.

SECTION 10. Ordinance 15051, Section 49, and K.C.C. 21A.06.478 are hereby amended to read as follows:

Flood hazard data: data or any combination of data available from federal, state or other sources including, but not limited to, maps, critical area studies, reports, historical flood hazard information, channel migration zone maps or studies or other related engineering and technical data that identify floodplain boundaries, ~~((regulatory))~~ FEMA floodway or zero-rise floodway boundaries, base flood elevations or flood cross-sections.

SECTION 11. Ordinance 10870, Section 136, as amended, and K.C.C. 21A.06.480 are hereby amended to read as follows:

Flood Insurance Rate Map: the ~~((insurance and floodplain management map produced by FEMA that identifies, based on detailed or approximate analysis, the areas subject to flooding during the base flood))~~ official map of a community on which the Federal Emergency Management Agency has delineated the FEMA Floodway, special flood hazard areas and the risk premium zones applicable to the community.

SECTION 12. Ordinance 10870, Section 137, as amended, and K.C.C. 21A.06.485 are hereby amended to read as follows:

Flood Insurance Study ~~((for King County and Incorporated Areas))~~: the ~~((April 19, 2005,))~~ official report entitled Flood Insurance Study for King County, Washington and Incorporated Areas, dated August 19,

2020, provided by FEMA that includes flood profiles and the Flood Insurance Rate Map, ~~((along with any subsequently adopted))~~ and revisions thereto.

SECTION 13. Ordinance 10870, Section 138, as amended, and K.C.C. 21A.06.490 are hereby amended to read as follows:

Flood protection elevation: an elevation that is three feet above the base flood elevation. ~~((For flood zones that establish flood depths instead of base flood elevations, the flood protection elevation is the depth number specified in feet on the flood insurance rate map plus one foot. The flood protection elevation is measured from the highest adjacent grade of the footprint of the existing or proposed structure. If the flood insurance rate map does not specify a depth, the flood protection elevation is at least two feet as measured from the highest adjacent grade of the footprint of the existing or proposed structure.))~~

SECTION 14. Ordinance 17539, Section 18, and K.C.C. 21A.06.497 are hereby amended to read as follows:

A. Floodplain development: any human-made change to improved or unimproved real estate in the floodplain, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, storage of equipment or materials, subdivision or short subdivision of land and removal of more than five percent of the native vegetation on the site.

B. Examples of human-made changes that are not considered "~~((F))~~floodplain development" ~~((does not~~)) include:

1. Routine maintenance of landscaping that does not involve grading, excavation or filling;
2. Removal of noxious weeds or invasive vegetation and replacement of nonnative vegetation with native vegetation;
3. Removal of a hazard tree;
4. ~~((Maintenance and repair of an existing structure;~~
5. ~~Maintenance and repair of an above-ground utility;~~

6-)) Maintenance of the public road right-of-way ((~~structure~~)) outside of the floodplain as shown on the Flood Insurance Rate Map, unless otherwise specified in K.C.C. Title 9 or the Surface Water Design Manual; and

~~((7. Maintenance, repair or replacement of a flood protection facility; and~~

~~8. Agricultural activity))~~ 5. Agricultural activities with a low-impact on flood hazards, including tilling, discing, planting, seeding, harvesting, preparing soil, rotating crops, fertilizing, grazing and related activity that does not include grading or fill.

SECTION 15. Ordinance 15051, Section 65, and K.C.C. 21A.06.599 are hereby amended to read as follows:

Historical flood hazard information: information that identifies floodplain boundaries, ((~~regulatory~~)) FEMA floodway or zero-rise floodway boundaries, base flood elevations((~~;~~)) or flood cross-sections, including, but not limited to, photos, video recordings, high water marks, survey information or news agency reports.

SECTION 16. Ordinance 10870, Section 294, as amended, and K.C.C. 21A.06.1270 are hereby amended to read as follows:

Substantial improvement:

A.1. Any maintenance, repair, structural modification, addition or other improvement of a structure, the cost of which equals or exceeds fifty 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 purposes of this definition, the cost of any improvement is considered to begin when the first alteration of any wall, ceiling, floor or other structural part of the building begins, whether or not that alteration affects the external dimensions of the structure; and

B. Does not include ((~~either~~)):

1. ((~~Any projects for i~~))Improvement of a structure ((~~for purposes of flood mitigation, including but~~

~~not limited to elevating a structure to the base flood elevation, or~~) to correct 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 ensure safe living conditions; or

2. ~~((any a))~~Alteration of a structure listed on the national Register of Historic Places or a state or local inventory of historic resources.

SECTION 17. Ordinance 10870, Section 454, as amended, and K.C.C. 21A.24.070 are hereby amended to read as follows:

A. The director may approve alterations to critical areas, critical area buffers and critical area setbacks, except for flood hazard areas, not otherwise allowed by this chapter as follows:

1. Except as otherwise provided in subsection A.2. of this section, for linear alterations, the director may approve alterations to critical areas, critical area buffers and critical area setbacks only when all of the following criteria are met:

a. there is no feasible alternative to the development proposal with less adverse impact on the critical area;

b. the proposal minimizes the adverse impact on critical areas to the maximum extent practical;

c. the approval does not require the modification of a critical area development standard established by this chapter;

d. the development proposal does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal site and is consistent with the general purposes of this chapter and the public interest;

e. the linear alteration:

(1) connects to or is an alteration to a public roadway, regional light rail transit line, public trail, a utility corridor or utility facility or other public infrastructure owned or operated by a public utility; or

(2) is required to overcome limitations due to gravity;

2. In order to accommodate the siting of a regional light rail transit facility under RCW 36.70A.200, the director may approve alterations to critical areas, critical area buffers and critical area setbacks not otherwise allowed by this chapter and may impose reasonable conditions to minimize the impact of the light rail transit facility on the critical area and its buffer; and

3. For nonlinear alterations the director may approve alterations to critical areas except wetlands, unless otherwise allowed under subsection A.3.h. of this section, aquatic areas and wildlife habitat conservation areas, and alterations to critical area buffers and critical area setbacks, when all of the following criteria are met:

a. there is no feasible alternative to the development proposal with less adverse impact on the critical area;

b. the alteration is the minimum necessary to accommodate the development proposal;

c. the approval does not require the modification of a critical area development standard established by this chapter(~~(, except as set forth in subsection A.3.i. of this section)~~);

d. the development proposal does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal site and is consistent with the general purposes of this chapter and the public interest;

e. for dwelling units, no more than five thousand square feet or ten percent of the site, whichever is greater, may be disturbed by structures, building setbacks or other land alteration, including grading, utility installations and landscaping, but not including the area used for a driveway or for an on-site sewage disposal system. When the site disturbance is within a critical area buffer, the building setback line shall be measured from the building footprint to the edge of the approved site disturbance;

f. to the maximum extent practical, access is located to have the least adverse impact on the critical area and critical area buffer;

g. the critical area is not used as a salmonid spawning area; and

h. the director may approve an alteration in a category II, III and IV wetland for development of a

public school facility(~~;~~ and

~~i. the director may approve an alteration to the elevation or dry flood proofing standards in K.C.C. 21A.24.240.F.1. or 21A.24.240.F.2. for nonresidential agricultural accessory buildings that equal or exceed a maximum assessed value of sixty-five thousand dollars if the development proposal meets the criteria in subsection A.3. of this section and the standards in K.C.C. 21A.24.240.F.4. through 21A.24.240.G)).~~

B. The director may approve alterations to critical areas, critical area buffers and critical area setbacks, except for flood hazard areas, if the application of this chapter would deny all reasonable use of the property as follow:

1. If the critical area, critical area buffer or critical area setback is outside of the shoreline jurisdiction, the applicant may apply for a reasonable use exception under this subsection without first having applied for an alteration exception under this section if the requested reasonable use exception includes relief from development standards for which an alteration exception cannot be granted under this section. The director shall determine that all of the following criteria are met:

- a. there is no other reasonable use with less adverse impact on the critical area;
- b. development proposal does not pose an unreasonable threat to the public health, safety or welfare on or off the development proposal site and is consistent with the general purposes of this chapter and the public interest;
- c. any authorized alteration to the critical area or critical area buffer is the minimum necessary to allow for reasonable use of the property; and
- d. for dwelling units, no more than five thousand square feet or ten percent of the site, whichever is greater, may be disturbed by structures, building setbacks or other land alteration, including grading, utility installations and landscaping but not including the area used for a driveway or for an on-site sewage disposal system; and

2. If the critical area, critical area buffer or critical area setback is located within the shoreline

jurisdiction, the request for a reasonable use exception shall be considered a request for a shoreline variance under K.C.C. 21A.44.090.

C. For the purpose of this section:

1. "Linear" alteration means infrastructure that supports development that is linear in nature and includes public and private roadways, public trails, private driveways, railroads, regional light rail transit, hydroelectric generating facilities, utility corridors and utility facilities; and
2. For purposes of subsections A. and B. of this section, areas located within the shoreline jurisdiction that are below the ordinary high water mark shall not be included in calculating the site area.

D. Alteration exceptions approved under this section shall meet the mitigation requirements of this chapter.

E. An applicant for an alteration exception shall submit a critical area report, as required by K.C.C. 21A.24.110.

NEW SECTION. SECTION 18. There is hereby added to K.C.C. chapter 21A.24 a new section to read as follows, to precede K.C.C. 21A.24.230:

The purpose of section 19 of this ordinance through K.C.C. 21A.24.272 is to promote public health, safety and general welfare, and to minimize public and private losses due to flooding in flood hazard areas through provisions designed to:

- A. Protect human life and health;
- B. Minimize the expenditure of public money for costly flood-control projects;
- C. Minimize the need for rescue and relief efforts that are associated with flooding and generally undertaken at the expense of the general public;
- D. Minimize prolonged business interruptions;
- E. Minimize damage to public infrastructure, buildings and utilities such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in flood hazard areas;

F. 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;

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

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

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

NEW SECTION. SECTION 19. There is hereby added to K.C.C. chapter 21A.24 a new section to read as follows, to precede K.C.C. 21A.24.230:

The definitions in K.C.C. chapter 21A.06 and the following definitions apply to section 18 of this ordinance through K.C.C. 21A.24.272. Where definitions in this section differ from the definitions in K.C.C. chapter 21A.06, the following definitions shall control:

A. Accessory building: a nonresidential building on the same site as a principal building, the use of which is subordinate and incidental to the use of the principal building;

B. Agricultural building: a nonresidential building used exclusively in connection with the production, harvesting, storage, raising or drying of agricultural products or aquatic animals or plants;

C. Area of shallow flooding: an area designated as AO or AH Zone on the Flood Insurance Rate Map with a one percent or greater annual chance of flooding to an average depth of one to three feet, where a clearly defined channel does not exist, the path of flooding is unpredictable and velocity flow may be evident. Such flooding is characterized by ponding or sheet flow;

D. Basement: any area of a building having its floor subgrade, which means below ground level, on all sides;

E. Building: a walled and roofed structure that is principally above ground, including gas or liquid storage tanks and manufactured homes;

F. Highest adjacent grade: the highest natural elevation of the ground surface before construction next to the proposed walls of a building;

G. Lowest floor: the lowest floor of the lowest enclosed area, including the basement. An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement, is not considered a building's lowest floor, but only if the enclosure meets the design requirements of K.C.C. 21A.24.240;

H. Nonresidential building: any building that is not a residential building;

I. Recreational vehicle: a vehicle that is:

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 unit but as a temporary living quarters for recreational camping, travel or seasonal use;

J. Residential building: a building used for overnight human occupancy, except for a hospital;

K. Start of construction: includes substantial improvement, and means the date the building permit was issued, but only if the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within one hundred eighty days of the permit issuance date. "The actual start of construction" means either the first placement of permanent construction of a building on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include: land preparation, such as clearing, grading and filling; the installation of streets or walkways; excavation for a basement, footings, piers or foundations or the erection of temporary forms; or the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. 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;

L. Substantial damage: damage of any origin sustained by a building whereby the cost of restoring the building to before its damaged condition would equal or exceed fifty percent of the market value of the building before the damage occurred;

M. Substantial improvement:

1. Any maintenance, repair, structural modification, reconstruction, addition or other improvement of a building, the cost of which equals or exceeds fifty percent of the market value of the building either:

a. before the start of construction; or

b. if the building has been damaged and is being restored, before the damage occurred;

2. Includes buildings that have incurred substantial damage regardless of the actual repair work performed; and

3. Does not include:

a. improvement of a building to correct 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 ensure safe living conditions; or

b. alteration of a building listed on the national Register of Historic Places or a state or local inventory of historic resources, but only if the alteration will not preclude the building's continued designation as a historic building;

N. Utility: an on-site system providing service to a building or structure. Utilities may be public or private and include, but are not limited to, sewer, gas, electrical, water systems, heating, ventilation, plumbing, air conditioning equipment and ductwork; and

O. Water surface elevation: the height, in relation to the North American Vertical Datum, which is also known as NAVD, of 1988, or other datum, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

NEW SECTION. SECTION 20. There is hereby added to K.C.C. chapter 21A.24 a new section to read

as follows, to precede K.C.C. 21A.24.230:

A. The director may approve variances to floodplain development regulations not otherwise allowed by this chapter. In reviewing and evaluating these variance applications, the director shall consider all technical evaluations, all relevant factors, applicable standards specified in other sections of the King County Code and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding, erosion damage or channel migration;
3. The susceptibility of the proposed floodplain development and the contents of any building or structure to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed floodplain development to the community;
5. The necessity to the floodplain development of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use that are not subject to flooding, erosion damage or channel migration;
7. The potential of the proposed floodplain development to create an adverse effect on a federally or state-protected species or habitat;
8. The compatibility of the proposed floodplain development with existing and anticipated development;
9. The relationship of the proposed use to the Comprehensive Plan, shoreline master program and Flood Hazard Management Plan;
10. The safety of access to the property in times of flooding for ordinary and emergency vehicles;
11. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters, and effects of wave action, if applicable, expected at the site; and
12. The costs of providing governmental services during and after flood conditions, including emergency management services and maintenance and repair of public utilities and infrastructure such as

sewer, gas, electrical, water systems, streets and bridges.

B. The director may approve variances to floodplain development regulations as follows:

1. A variance shall only be approved upon a showing by the applicant of good and sufficient cause and also upon a determination that failure to grant the variance would result in an exceptional hardship. An exceptional hardship shall not include economic or financial hardship or personal circumstances of the applicant, including inconvenience, aesthetic considerations, physical handicaps, personal preferences or disapproval of neighbors;

2. A variance shall only be approved based upon a determination that the granting of the variance will not result in increased flood heights;

3. A variance shall only be approved based upon a determination that the granting of the variance will not result in additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing laws or ordinances;

4. A variance may be approved for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing buildings constructed below the flood protection elevation, but only if subsection A. of this section has been fully considered and all other criteria in this subsection B. have been met. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases;

5. A variance shall not be approved within the FEMA floodway or the zero-rise floodway if any increase in water surface elevations would result;

6. A variance shall only be approved upon a determination that the variance is the minimum necessary, considering the flood, erosion or channel migration hazard, to afford relief;

7. A variance shall not be approved that would conflict with K.C.C. 21A.24.260.C.;

8. A variance shall not be approved that allows establishment of a use that is not otherwise permitted in the zone in which the proposal is located; and

9. A variance to the nonresidential elevation and dry floodproofing standards in K.C.C. 21A.24.240.F. for agricultural buildings that equal or exceed a maximum assessed value of sixty-five thousand dollars must meet all criteria in this section as well as all criteria in section 21 of this ordinance. The more restrictive requirements shall apply where there is a conflict.

C. For a proposal where an applicant submits both a request for a variance as allowed under this section and a critical areas alteration exception request as allowed under K.C.C. 21A.24.070, the two requests shall be evaluated concurrently and the director's determination on both requests shall be issued at the same time.

D. An applicant for a variance shall be given a written notice that the approval of the variance to construct a building below the flood protection elevation will result in increased flood insurance premium rates up to amounts as high as twenty-five dollars per one hundred dollars of coverage and will increase risks to life and property.

E.1. An application for a variance to floodplain development regulations shall be submitted in writing to the department of local services, permitting division, together with any supporting documentation that demonstrates how the proposal meets the criteria in this section.

2. An application for a variance to floodplain development regulations under this section shall be reviewed as a Type II land use decision in accordance with K.C.C. 20.20.020.

F. The department shall maintain in perpetuity a record of all requests for variances, including justification for their issuance.

G. The variance standards in K.C.C. 21A.44.030 and the alteration exception standards in K.C.C. 21A.24.070 shall not be used for variances or exceptions to the floodplain regulations of this chapter.

NEW SECTION. SECTION 21. There is hereby added to K.C.C. chapter 21A.24 a new section as follows, to precede K.C.C. 21A.24.230:

A. The director may approve variances to the nonresidential elevation and dry floodproofing standards in K.C.C. 21A.24.240.F. for agricultural buildings that do not equal or exceed a maximum assessed value of

sixty-five thousand dollars and meet the following requirements:

1. Use of the building shall be limited exclusively to production, harvesting, storage, raising or drying of, or storage of tools and equipment used for, agricultural products or aquatic animals or plants;
2. The building shall not be used in a manner that would create a threat to public safety, health and welfare, such as, but not limited to, confinement operations, structures with liquefied natural gas terminals and facilities producing and storing highly volatile, toxic or water-reactive materials;
3. The building shall have low damage potential given the characteristics of the building's construction and the base flood;
4. The building shall be constructed and placed on the site so as to offer the minimum resistance to the flow of floodwaters;
5. The portions of the building below the flood protection elevation shall be constructed with flood-resistant materials;
6. Building utilities shall not be installed except electrical fixtures, which must be elevated or dry floodproofed to or above the flood protection elevation;
7. The building 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 meet or exceed the following:
 - a. a minimum of two openings having a net total area of no less than one square inch for every one square foot of enclosed space shall be provided. The openings shall be located on at least two opposite-side walls in the direction of flow;
 - b. the bottom of all openings shall not be higher than one foot above the adjacent grade;
 - c. openings may be equipped with screens, louvers, valves or other coverings or devices, but only if they allow the automatic entry and exit of floodwaters; and
 - d. if a building has more than one room or enclosed area, each area shall have openings to allow

floodwaters to automatically enter and exit;

8. The building shall not have all sides of the building below grade;
9. The building shall comply with the standards in K.C.C. 21A.24.250.B. and K.C.C. 21A.24.260.B;
10. The building shall not be located in the coastal high hazard area;
11. The applicant shall demonstrate that the strict enforcement of the standards of K.C.C.

21A.24.240.F would result in exceptional hardship to the property owner; and

12. A variance shall only be approved upon a determination that the variance is the minimum necessary, considering the flood, erosion or channel migration hazard, to afford relief.

B.1. An application for a variance under this section shall be submitted in writing to the department of local services, permitting division, together with any supporting documentation that demonstrates how the proposal meets the criteria in this section.

2. An application for a variance under this section shall be reviewed as a Type I land use decision in accordance with K.C.C. 20.20.020.

C. The department shall maintain in perpetuity a record of all requests for variances, including justification for their issuance.

D. The variance standards in Section 20 of this ordinance, K.C.C. 21A.44.030 and the alteration exception standards in K.C.C. 21A.24.070 shall not be used for variances to the nonresidential elevation and dry floodproofing standards in K.C.C. 21A.24.240.F. for agricultural buildings that do not equal or exceed a maximum assessed value of sixty-five thousand dollars.

SECTION 22. Ordinance 10870, Section 470, as amended, and K.C.C. 21A.24.230 are hereby amended to read as follows:

A. ((A)) The regulated flood hazard area consists of one or more of the following components:

1. Floodplain;
2. Zero-rise flood fringe;

3. Zero-rise floodway;
4. FEMA floodway; and
5. Channel migration zones.

B. The FEMA floodway and floodplain are identified in a scientific and engineering report entitled Flood Insurance Study for King County, Washington and Incorporated Areas, dated August 19, 2020, with accompanying Flood Insurance Rate Maps, and any revisions thereto.

C.1. The department may delineate or require a delineation of a flood hazard area ~~((after reviewing base flood elevations and flood hazard data for a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "one-hundred-year flood." The department shall determine the base flood for existing conditions. If a basin plan or hydrologic study including projected flows under future developed conditions has been completed and is currently approved by King County, the department may use these future flow projections. Many flood hazard areas are mapped by FEMA in a scientific and engineering report entitled "The Flood Insurance Study for King County and Incorporated Areas." Proof that a land use or development activity is occurring within the area mapped on the Flood Hazard Area Study for King County and Incorporated Areas shall be sufficient, but not required, to prove that the area of concern is subject to inundation by the base flood in any action to enforce code compliance under K.C.C. Title 23. When there are multiple sources of flood hazard data for flood plain boundaries, regulatory floodway boundaries, base flood elevations, or flood cross sections, the department may determine which data most accurately classifies and delineates the flood hazard area. The department may utilize the following sources of flood hazard data for floodplain boundaries, regulatory floodway boundaries, base flood elevations or cross sections when determining a flood hazard area))~~ using data or information from any of the following sources, but only if the data is at least as restrictive as the data in the Flood Insurance Study and Flood Insurance Rate Maps referenced in subsection B. of this section. The department may also use data from the following sources to determine base flood elevations, floodway boundaries or other regulatory flood information:

~~((1-))~~ a. Flood Insurance ~~((Rate-Maps))~~ Study;

~~((2-))~~ b. Flood Insurance ~~((Studies))~~ Rate Maps;

~~((3-))~~ c. Preliminary Flood Insurance ~~((Rate-Maps))~~ Study or pending Flood Insurance Study;

~~((4-))~~ d. Preliminary Flood Insurance ~~((Studies))~~ Rate Maps or pending Flood Insurance Rate Maps;

~~((5-))~~ e. ~~((D))~~ draft flood boundary work maps and associated technical reports;

~~((6-))~~ f. ~~((C))~~ critical area reports prepared in accordance with FEMA standards contained in 44

C.F.R. Part 65 and consistent with the King County Surface Water Design Manual provisions for floodplain analysis;

~~((7-))~~ g. ~~((L))~~ letters of map ~~((amendments))~~ change;

~~((8- Letter of map revisions;~~

~~9-))~~ h. ~~((C))~~ channel migration zone maps and studies;

~~((10-))~~ i. ~~((H))~~ historical flood hazard information;

~~((11- Wind and wave data provided by the United States Army Corps of Engineers))~~ j. basin plan or hydrologic study that includes projected flows under future developed conditions that have been completed and approved by King County; and

~~((12-))~~ k. ~~((A))~~ any other available data that accurately classifies and delineates the flood hazard area or base flood elevation.

~~((C-))~~ 2. When there are multiple sources of flood hazard data for flood hazard area boundaries, FEMA floodway or zero-rise floodway boundaries, base flood elevations or cross-sections, the department may determine which data most accurately classifies and delineates the flood hazard area, as long as the data is at least as restrictive as the Flood Insurance Study and Flood Insurance Rate Maps referenced in subsection B. of this section.

D. Proof that a land use or development activity is occurring within the area mapped on the Flood Insurance Rate Maps shall be sufficient, but not required, to prove that the area of concern is subject to

inundation by the base flood in an action to enforce code compliance under K.C.C. Title 23.

E. A number of channel migration zones are mapped by the county for portions of river systems. These channel migration zones and the criteria and process used to designate and classify channel migration zones are specified by public rule adopted by the department. An applicant for a development proposal may submit a critical area report to the department to determine channel migration zone boundaries or classify channel migration hazard areas on a specific property if there is an apparent discrepancy between the site-specific conditions or data and the adopted channel migration zone maps.

SECTION 23. Ordinance 10870, Section 471, as amended, and K.C.C. 21A.24.240 are hereby amended to read as follows:

The following development standards apply to floodplain development (~~((proposals))~~) and alterations on sites within the zero-rise flood fringe:

A. Floodplain (~~((D))~~) development (~~((proposals))~~) and alterations shall not reduce the effective base flood storage volume of the floodplain. (~~((A))~~) Floodplain development (~~((proposal))~~) shall provide compensatory storage if grading or other activity displaces any effective flood storage volume. Compensatory storage is not required for grading or fill placed within the foundation of an existing residential (~~((structure))~~) building to bring the interior foundation grade to the same level as the lowest adjacent exterior grade. Compensatory storage shall:

1. Provide equivalent volume at equivalent elevations to that which is being displaced. For this purpose, equivalent elevations means having similar relationship to ordinary high water and to the best available ten-year, fifty-year and one-hundred-year water surface profiles. If the difference between the fifty-year and the one-hundred-year surface profiles is less than one foot, equivalent elevations means having similar relationships to ordinary high water and to the best available ten-year and one-hundred-year water surface profiles;
2. Hydraulically connect to the source of flooding;

3. Provide compensatory storage in the same construction season as when the displacement of flood storage volume occurs and before the flood season begins on September 30 for that year;

4. Occur on the site. The director may approve equivalent compensatory storage off the site if legal arrangements, acceptable to the department, are made to ensure that the effective compensatory storage volume will be preserved over time; and

5. The director may approve of off(())-site compensatory storage through a compensatory storage bank managed by the department of natural resources and parks ~~((or the director, in consultation with and agreement from the department of natural resources and parks, may allow a reduction in flood storage if a cumulative effects analysis demonstrates that the loss of storage will not create a measurable increase in the base flood elevation anywhere off the site)))~~;

B. A structural engineer shall design and certify all elevated buildings and submit the design to the department;

C. A civil engineer shall prepare a base flood depth and base flood velocity analysis and submit the analysis to the department. A base flood depth and base flood velocity analysis is not required for agricultural ~~((structures that will not be used for human habitation. The director may waive the requirement for a base flood depth and base flood velocity analysis for agricultural structures that are not used for human habitation)))~~ buildings. Floodplain ((D))development ((proposals)) and alterations are not allowed if the base flood depth exceeds three feet and the base flood velocity exceeds three feet per second, except ~~((that the director may approve development proposals and alterations in areas where the base flood depth exceeds three feet and the base flood velocity exceeds three feet per second)))~~ for the following projects((;)):

1. Agricultural ~~((accessory))~~ structures and farm pads;
2. Roads and bridges;
3. Utilities;
4. Surface water flow control or surface water conveyance systems;

5. Public park structures; and

6. Flood hazard mitigation projects, such as, but not limited to construction, repair or replacement of flood protection facilities or for building elevations or relocations;

D. Subdivisions, short subdivisions, urban planned developments and binding site plans should be consistent with the need to minimize flood damage within the flood hazard area and shall meet the following requirements:

1. New building lots shall include five thousand square feet or more of buildable land outside the zero-rise floodway;

2. All public infrastructure and utilities (~~and facilities~~) such as sewer, gas, electrical and water systems are consistent with subsection ~~((s E., F. and I.))~~ J. of this section;

3. A civil engineer shall prepare detailed base flood elevations in accordance with FEMA guidelines for all new lots;

4. A development proposal shall provide adequate drainage in accordance with the King County Surface Water Design Manual to reduce exposure to flood damage; and

5. The face of the recorded subdivision, short subdivision, urban planned development or binding site plan shall include the following for all lots:

a. ~~((building))~~ setback areas restricting structures to designated buildable areas~~((÷))~~;

b. base flood data and sources and flood hazard notes including, but not limited to, base flood elevation, required flood protection elevations, the boundaries of the floodplain and the zero-rise floodway, if determined, and channel migration zone boundaries, if determined; and

c. include the following notice:

"Lots and ~~((structures))~~ buildings located within flood hazard areas may be inaccessible by emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions.";

E. New, substantially improved or converted residential ~~((structures, substantial improvements of~~

~~existing residential structures))~~ buildings and flood mitigation home elevations shall meet the following standards:

1. Elevate the lowest floor, including basement, to or above the flood protection elevation;
2. ~~((Do not fully enclose portions of the structure that are below the lowest floor area;~~
3. ~~Design and construct the areas and rooms below the lowest floor to automatically equalize~~

~~hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters as follows:~~

~~a. provide a minimum of two openings on each of two opposite side walls in the direction of flow, with each of those walls having a total open area of not less than one square inch for every square foot of enclosed area subject to flooding;~~

~~b. design and construct the bottom of all openings so they are no higher than one foot above grade; and~~

~~c. screens, louvers or other coverings or devices are allowed over the opening if they allow the unrestricted entry and exit of floodwaters;))~~ Fully enclosed areas below the lowest floor and below the flood protection elevation, including crawlspaces or attached garages, 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 meet or exceed the following:

a. a minimum of two openings having a net total area of no less than one square inch for every one square foot of enclosed space shall be provided. The openings shall be located on at least two opposite-side walls in the direction of flow;

b. the bottom of all openings shall not be higher than one foot above the adjacent grade;

c. openings may be equipped with screens, louvers, valves or other coverings or devices, but only if they allow the automatic entry and exit of floodwaters; and

d. if a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit;

3. Fully enclosed areas below the lowest floor meeting the criteria in subsection E.2. of this section shall not have all sides of the building below grade;

4. Fully enclosed areas below the lowest floor shall be used solely for the parking of vehicles, building access or limited storage of readily removable items;

5. Use materials and methods that are resistant to and minimize flood damage; and

~~((5-))~~ 6. Elevate ~~((above))~~ or dry~~((-proof))~~ floodproof all ~~((electrical, heating, ventilation, plumbing, air conditioning equipment and other utilities that service the structure, such as duct work))~~ building utilities to or above the flood protection elevation;

F. New, substantially improved, or converted nonresidential ~~((structures, substantial improvements))~~ buildings and flood mitigation ~~((nonresidential))~~ elevations of existing nonresidential ~~((structures))~~ buildings shall meet the following standards:

1. ~~((a. Except as provided in subsection F.1.b. of this section, e))~~ Elevate the lowest floor to or above the flood protection elevation~~((;~~

~~b. Nonresidential agricultural accessory buildings elevate the lowest floor to one foot above the base flood elevation;~~

~~2-)), except as otherwise provided in subsection G. of this section, or ~~((D))~~ dry ~~((flood-proof))~~ floodproof the ~~((structure))~~ building and building utilities to or above the flood protection elevation. ~~((to meet the following standards:~~~~

~~a. t))~~ The applicant shall provide certification by a civil or structural engineer that the dry ~~((flood-proofing))~~ floodproofing methods are adequate to withstand the flood depths, pressures, velocities, impacts, uplift forces and other factors associated with the base flood. After construction, the engineer shall certify that the permitted work conforms to the approved plans and specifications; ~~((and~~

~~b. approved building permits for dry flood-proofed nonresidential structures shall contain a statement notifying applicants that flood insurance premiums are based upon rates for structures that are one foot below the elevation to which the building is dry floodproofed;~~

~~3. Nonresidential agricultural accessory buildings that do not equal or exceed a maximum assessed value of sixty-five thousand dollars may be designed and oriented to allow the free passage of floodwaters through the building in a manner affording minimum flood damage provided they meet the standards in subsection F.4. through F.6. of this section. Nonresidential agricultural accessory buildings that equal or exceed sixty-five thousand dollars may apply for an alteration exception pursuant to K.C.C. 21A.24.070.~~

~~Nonresidential agricultural accessory buildings that do not meet the elevation standard in subsection F.1. of this section or the dry flood-proofing standard in subsection F.2. of this section will be assessed at the flood insurance rate based on the risk to which the building is exposed;~~

4.)) 2. Use materials and methods that are resistant to and minimize flood damage;

3. For nonresidential buildings that have not been dry floodproofed, design fully enclosed areas below the lowest floor and below the flood protection elevation, including crawlspaces or attached garages, 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 meet or exceed the following:

a. a minimum of two openings having a net total area of no less than one square inch for every one square foot of enclosed space shall be provided. The openings shall be located on at least two opposite-side walls in the direction of flow;

b. the bottom of all openings shall not be higher than one foot above adjacent grade;

c. openings may be equipped with screens, louvers, valves or other coverings or devices, but only if they allow the automatic entry and exit of floodwaters; and

d. if a building has more than one enclosed area, each area shall have openings to allow floodwaters

to automatically enter and exit;

4. Not have all sides of the building below grade for fully enclosed areas below the lowest floor meeting the criteria in subsection F.3. of this section;

5. ~~((Design and construct the areas and rooms below the lowest floor to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls by allowing for the entry and exit of floodwaters as follows:~~

~~a. provide a minimum of two openings on each of two opposite side walls in the direction of flow, with each of those walls having a total open area of not less than one square inch for every square foot of enclosed area subject to flooding;~~

~~b. design the bottom of all openings is no higher than one foot above grade; and~~

~~c. screens, louvers or other coverings or devices are allowed if they do not restrict entry and exit of floodwaters))~~ Fully enclosed areas below the lowest floor shall be used solely for the parking of vehicles, building access or limited storage of readily removable items; and

6. Elevate or ((D))dry ((flood proof)) floodproof all ((electrical, heating, ventilation, plumbing, air conditioning equipment and other utility and service facilities)) building utilities to((;)) or ((elevated)) above((;)) the flood protection elevation;

G. New, substantially improved or converted accessory buildings may have the lowest floor below the flood protection elevation, but only if the building complies with the following:

1. The building shall not be used for human habitation;

2. The use of the building shall be limited to parking of vehicles or limited storage of readily removable items;

3. The floor area shall not exceed four hundred square feet;

4. The building should be constructed with materials and practices to minimize flood damage;

5. The building shall be built of and have flood-resistant materials for portions below the flood

protection elevation;

6. The building 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:

a. a minimum of two openings having a net total area of no less than one square inch for every one square foot of enclosed space shall be provided. The openings shall be located on at least two opposite-side walls in the direction of flow;

b. the bottom of all openings shall not be higher than one foot above adjacent grade; and

c. openings may be equipped with screens, louvers, valves or other coverings or devices, but only if they allow the automatic entry and exit of floodwaters;

7. Building utilities shall not be installed except electrical fixtures, which must be elevated or dry floodproofed to or above the flood protection elevation; and

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

H. Anchor all new ~~((construction and))~~ or substantially improved ~~((structures))~~ buildings to prevent flotation, collapse or lateral movement of the ~~((structure))~~ building. The department shall approve the method used to anchor the ~~((new construction))~~ building;

~~((H-))~~ I.1. Newly sited manufactured homes and substantial improvements of existing manufactured homes shall meet the ~~((following standards:~~

~~1. Manufactured homes shall meet all the))~~ standards in subsections E. and H. of this section ~~((for residential structures and the following standards:~~

~~a. anchor all manufactured homes;))~~ and

~~((b-))~~ shall be installed ~~((manufactured homes))~~ using methods and practices that minimize flood damage;

2. All manufactured homes within a new mobile home park or expansion of an existing mobile home park must meet the requirements ~~((for flood hazard protection for residential structures; and))~~ of this subsection I;

3. ~~((Only manufactured homes are allowed i))~~In a new or existing mobile home park located in a flood hazard area, no buildings other than mobile homes are allowed;

~~((I. Public and private utilities shall meet the following standards:))~~

J.1. ((Dry flood-proof n))New and replacement public infrastructure and utilities including, but not limited to, sewage treatment and storage facilities, shall be elevated or dry floodproofed to~~((, or elevate above,))~~ or above the flood protection elevation;

2. ~~((Locate n))~~New on-site sewage disposal systems should be located outside of the floodplain. When there is insufficient area outside the floodplain, new on-site sewage disposal systems are allowed only in the zero-rise flood fringe. ~~((Locate o))~~On-site sewage disposal systems in the zero-rise flood fringe shall be designed and located to avoid:

- a. impairment to the system during flooding; and
- b. contamination from the system during flooding;

3. Design all new and replacement water supply systems to minimize or eliminate infiltration of floodwaters into the system;

4. Above-ground utility transmission lines~~((, except for electric transmission lines,))~~ are allowed only for the transport of nonhazardous substances~~((; and))~~ or electricity;

5. ~~((Bury u))~~Underground utility transmission lines transporting hazardous substances shall be buried at a minimum depth of four feet below the maximum depth of scour for the base flood, as predicted by a civil engineer, and achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated; and

6. New water wells shall be located where not subject to ponding and not in the FEMA floodway. The

well shall be protected to the flood protection elevation and shall be protected from any surface or subsurface drainage capable of impairing the quality of the groundwater supply, in accordance with WAC 173-160-171;

~~((J-))~~ K. Critical facilities are allowed within the zero-rise flood fringe only when a feasible alternative site is not available and the following standards are met, in addition to the other applicable standards in this section:

1. Elevate the lowest floor to the five-hundred year floodplain elevation or three or more feet above the base flood elevation, whichever is higher;
2. Dry ~~((flood-proof))~~ floodproof and seal ~~((structures))~~ buildings to ensure that hazardous substances are not displaced by or released into floodwaters; and
3. Elevate access routes to or above the base flood elevation from the critical facility to the nearest maintained public street or roadway;

~~((K-))~~ L. New construction or expansion of existing farm pads is allowed only on a site with existing agriculture, if emergency flood relief is required for the protection of livestock or assets or for operations that must continue during flood events as follows:

1. A farm pad is allowed only if there is no other suitable holding area on the site outside the floodplain;
2. Construct the farm pad to the standards in an approved farm management plan prepared in accordance with K.C.C. 21A.24.051 and K.C.C. chapter 21A.30~~((7))~~;
3. The farm pad proposal shall demonstrate compliance with the following:
 - a. flood storage compensation consistent with subsection A. of this section;
 - b. siting and sizing that do not increase base flood elevations consistent with K.C.C. 21A.24.250.B.
or, if any portion of the farm pad is located in the FEMA floodway, siting and sizing that do not increase base flood elevations consistent with K.C.C. 21A.24.260.B.;
 - c. siting that is located in the area least subject to risk from floodwaters; and

d. an alternatives analysis demonstrating adverse impacts to wetlands, wetland buffers and aquatic area buffers have been minimized;

4. The farm pad is constructed to base flood elevation plus one((-)) foot. An elevation report shall be completed after construction to demonstrate compliance with ~~((that))~~ this elevation requirement;

5.a. The farm pad should be sized as is necessary for the protection of livestock and assets and operations that must continue during flood events;

b. for farm pads larger than two thousand square feet of finished usable surface, a site specific evaluation of agricultural operations must demonstrate the need for the size of the pad; and

c. for farm pads larger than ten thousand square feet, an area-wide analysis must demonstrate that sufficient flood storage is available for reasonably foreseeable future land use needs in the vicinity;

6. If there are multiple areas on a site that meet all of the applicable criteria, the farm pad should be located as far as practical from the interior property lines;

7. ~~((Nonresidential-a))~~ Agricultural buildings are allowed on a farm pad as shelter for livestock or other farm animals, greenhouses for plant starts to be used on the property, milking parlors, storage of farm vehicles and agricultural equipment and shelter for farm products including, but not limited to, feed, seeds, flower bulbs and hay and farm operations that must continue during a flood event. ~~((Nonresidential-structures))~~ Agricultural buildings allowed on a farm pad shall not be used for retail operations or any residential or public use; and

~~((7.))~~ 8. The property owner shall file with the department of executive services, records and licensing services division, a notice approved by the department that restricts the use of the farm pad to nonresidential agricultural uses. The notice shall run with the land. The applicant shall submit to the department proof that the notice was filed before the department approves any permit for the construction of the farm pad;

~~((L.))~~ M. New ~~((construction))~~ or ~~((expansion of existing))~~ expanded livestock manure storage facilities ~~((is))~~ are only allowed as follows:

1. ~~((The livestock manure storage facility is only allowed if t))~~ There is not a feasible alternative area on the site outside the floodplain;

2. ~~((Construct t))~~ The livestock manure storage facility is constructed to the standards in an approved farm management plan prepared in accordance with K.C.C. 21A.24.051 and K.C.C. chapter 21A.30. The farm management plan shall demonstrate compliance with the following:

a. flood storage compensation consistent with subsection A. of this section;

b. siting and sizing that do not increase base flood elevations consistent with K.C.C. 21A.24.250.B. or, if the liquid manure storage facility is located in the FEMA floodway, siting and sizing that do not increase base flood elevations consistent with ~~((and))~~ 21A.24.260.~~((D))~~ B.;

c. ~~dry ((flood-proofing))~~ floodproofing the liquid manure storage facility to one foot above the base flood elevation; and

d. siting that is located in the area least subject to risk from floodwaters; ~~((and~~

~~M.))~~ N. Recreational vehicles must be on site for fewer than one hundred eighty consecutive days or be fully licensed and ready for highway use, which means on their wheels or jacking system, attached to the site only by quick-disconnect-type utilities and security devices and have no permanently attached additions; and

O. Any alteration or relocation of a watercourse shall comply with the following standards, in addition to the other applicable standards in this title:

1. The department shall notify adjacent communities and the Washington state Department of Ecology before any alteration or relocation of a watercourse proposed by the applicant and shall submit evidence of the notification to the Federal Emergency Management Agency within six months; and

2. The applicant shall ensure that the flood-carrying capacity is maintained.

SECTION 24. Ordinance 10870, Section 472, as amended, and K.C.C. 21A.24.250 are hereby amended to read as follows:

The following development standards apply to floodplain development ~~((proposals))~~ and alterations on

sites within the zero-rise floodway:

A. The development standards that apply to the zero-rise flood fringe also apply to the zero-rise floodway. The more restrictive requirements shall apply where there is a conflict;

B. ~~((A))~~ Floodplain development ~~((proposal))~~ shall not increase the base flood elevation ~~((except as follows:))~~. The applicant shall perform an analysis to demonstrate that there will be no increase in the base flood elevation in accordance with Section 4.4.2 of the King County Surface Water Design Manual. The director may make an exception if

~~((1. Revisions to the Flood Insurance Rate Map are approved by FEMA, in accordance with 44 CFR 70, to incorporate the increase in the base flood elevation; and~~

~~2. A))~~ appropriate legal documents are prepared and recorded in which all property owners affected by the increased flood elevations consent to the impacts on their property;

C. If post and piling foundation construction techniques are used to elevate a building and the area underneath is not enclosed, blocked or otherwise obstructed, the following are presumed to produce no increase in the base flood elevation and a critical areas report is not required to establish this fact:

1. New residential ~~((structures))~~ buildings outside the FEMA floodway on lots in existence before November 27, 1990, that contain less than five thousand square feet of buildable land outside the zero-rise floodway if the total building footprint of all existing and proposed ~~((structures))~~ buildings on the lot does not exceed two-thousand square feet;

2. Substantial improvements of existing residential ~~((structures))~~ buildings in the zero-rise floodway, but outside the FEMA floodway, if the footprint is not increased; or

3. Substantial improvements of existing residential ~~((structures))~~ buildings that meet the standards for new residential ~~((structures))~~ buildings and building utilities in K.C.C. 21A.24.240.E;

D. When post or piling foundation construction techniques are not used, a critical areas report is required in accordance with K.C.C. 21A.24.110 demonstrating that the proposal will not increase the base flood

elevation;

E. During the flood season from September 30 to May 1 the following are not allowed ~~((to be located))~~ in the zero-rise floodway;

1. ~~((All))~~ Temporary seasonal shelters, such as tents, awnings and greenhouses, except for those used for agricultural activities and domestic household use; and

2. Staging or stockpiling of equipment, materials or substances that the director determines may be hazardous to the public health, safety or welfare except for those used for agricultural activities and domestic household use;

F. New, substantially improved or converted residential ~~(((structures)))~~ buildings and ~~((substantial improvements to existing residential structures, or any structure))~~ accessory buildings to a residential use shall ~~((meet the following standards))~~ be located:

1. ~~((Locate the structures o))~~ Outside the FEMA floodway;
2. ~~((Locate the structures o))~~ Only on lots in existence before November 27, 1990, that contain less than five thousand square feet of buildable land outside the zero-rise floodway; and
3. To the maximum extent practical, ~~((locate the structures))~~ the farthest distance from the channel, unless the applicant can demonstrate that an alternative location is less subject to risk;

G. ~~((Public and private))~~ New and replacement infrastructure or utilities are only allowed if:

1. The department determines that a feasible alternative site is not available; and
2. A waiver is granted by the Seattle-King County department of public health for new on-site sewage disposal facilities;

~~((3. The utilities are dry flood proofed to or elevated above the flood protection elevation;~~

4. ~~Above ground utility transmission lines, except for electrical transmission lines, are only allowed for the transport of nonhazardous substances; and~~

5. ~~Underground utility transmission lines transporting hazardous substances are buried at a minimum~~

~~depth of four feet below the maximum dept of scour for the base flood, as predicted by a civil engineer, and achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated;))~~

H. Critical facilities, except for those listed in subsection I. of this section are not allowed within the zero-rise floodway; and

I. Structures ~~((and installations))~~ that are dependent upon the zero-rise floodway are allowed in the zero-rise floodway if the development proposal is approved by all agencies with jurisdiction and meets the development standards for the zero-rise floodway. These structures ~~((and installations))~~ may include, but are not limited to:

1. Dams or diversions for water supply, flood control, hydroelectric production, irrigation or fisheries enhancement;
2. Flood damage reduction facilities, such as levees, revetments and pumping stations;
3. Stream bank stabilization structures only if a feasible alternative does not exist for protecting structures, public roadways, flood protection facilities or sole access routes. Bank stabilization projects must be consistent with the Integrated Streambank Protection Guidelines (Washington State Aquatic Habitat Guidelines Program, 2002) and use bioengineering techniques to the maximum extent practical. An applicant may use alternative methods to the guidelines if the applicant demonstrates that the alternative methods provide equivalent or better structural stabilization, ecological and hydrological functions and salmonid habitat;
4. Surface water conveyance facilities;
5. Boat launches and related recreation structures;
6. Bridge piers and abutments; and
7. Approved aquatic area or wetland restoration projects including, but not limited to, fisheries enhancement projects.

SECTION 25. Ordinance 10870, Section 473, as amended, and K.C.C. 21A.24.260 are hereby amended to read as follows:

The following development standards apply to floodplain development and alterations on sites within the FEMA floodway:

A. The development standards that apply to the zero-rise floodway also apply to the FEMA floodway. The more restrictive standards apply where there is a conflict((:));

B. ((A)) Floodplain development ((proposal)) shall not increase the base flood elevation. A civil engineer shall certify, through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that any proposed ((encroachment)) floodplain development would not result in any increase in flood levels during the occurrence of the base flood discharge((:));

C. New, substantially improved or converted residential buildings are prohibited in the FEMA floodway, except those buildings meeting the provisions of subsections F. or G. of this section. A residential building cannot be constructed on fill placed within the FEMA floodway;

D. New ((residential or)) nonresidential ((structures)) buildings are prohibited within the ((mapped)) FEMA floodway, except for ((farm pads and nonresidential)) agricultural ((accessory)) buildings within an agricultural production district that meet applicable compensatory storage and conveyance standards((. A residential structure cannot be constructed on fill placed within the mapped FEMA floodway.

D.));

E. New livestock manure storage facilities for liquid and slurry manure are prohibited in the FEMA floodway. Existing livestock manure storage facilities may be repaired or enlarged as necessary to comply with the standards in the farm's nutrient management plan;

((E. If the footprint of the existing residential structure is not increased, substantial improvements of existing residential structures in the FEMA floodway, meeting the requirements of WAC 173-158-070, as amended, are presumed to not increase the base flood elevation and do not require a critical areas report to establish this fact.))

F. Maintenance, repair, replacement or improvement of an existing residential ((structure)) building

located within the agricultural production district on property that is zoned agriculture (A) is allowed in the FEMA floodway if the ((structure)) building meets the standards for residential ((structures)) buildings and building utilities in K.C.C. 21A.24.240 and also meets the following requirements:

1. The existing residential ((structure)) building was legally established;
2. The viability of the farm is dependent upon a residential ((structure)) building within close proximity to ((other)) agricultural structures; and
3. Replacing an existing residential ((structure)) building within the FEMA floodway is only allowed if:
 - a. there is not sufficient buildable area on the site outside the FEMA floodway for the replacement;
 - b. the replacement residential ((structure)) building is not located in an area that increases the flood hazard in water depth, velocity or erosion;
 - c. the building footprint of the existing residential ((structure)) building is not increased; and
 - d. the existing ((structure)) building, including the foundation, is completely removed within ninety days of receiving a certificate of occupancy, or temporary certificate of occupancy, whichever occurs first, for the replacement ((structure)) building;

G. Maintenance, repair or replacement of a substantially damaged existing residential ((structure)) building, other than a residential ((structure)) building located within the agricultural production district on property that is zoned agricultural (A), is allowed in the FEMA floodway if the ((structure)) building meets the standards for existing residential ((structures)) buildings and building utilities in K.C.C. 21A.24.240 and also meets the following requirements:

1. The Washington state Department of Ecology has assessed the flood characteristics of the site and determined:
 - a. base flood depths will not exceed three feet;
 - b. base flood velocities will not exceed three feet per second;

c. there is no evidence of flood-related erosion, as determined by location of the project site in relationship to mapped channel migration zones or, if the site is not mapped, evidence of overflow channels and bank erosion; and

d. a flood warning system or emergency plan is in operation;

2. The Washington state Department of Ecology has prepared a report of findings and recommendations to the department that determines the repair or replacement will not result in an increased risk of harm to life based on the characteristics of the site;

3. The department has reviewed the Washington state Department of Ecology report and concurs that the development proposal is consistent with the findings and recommendations in the report;

4. The development proposal is consistent with the findings and recommendations of the Washington state Department of Ecology report;

5. The existing residential ((structure)) building was legally established; and

6. Replacing an existing residential ((structure)) building within the FEMA floodway is only allowed if:

a. there is not sufficient buildable area on the site outside the FEMA floodway;

b. the replacement ((structure)) building is a residential ((structure)) building built as a substitute for a previously existing residential ((structure)) building of equivalent use and size; and

c. the existing residential ((structure)) building, including the foundation, is removed within ninety days of receiving a certificate of occupancy, or temporary certificate of occupancy, whichever occurs first, for the replacement ((structure)) building;

H. Maintenance or repair of a ((structure, as defined in WAC 173-158-030,)) building that is identified as a historic resource, as defined in K.C.C. 21A.06.597, is allowed in the FEMA floodway if the ((structure)) building and building utilities meet the standards of K.C.C. 21A.24.240 for residential ((structures)) or nonresidential ((structures)) buildings, as appropriate; and

I. Water wells shall be located outside of the FEMA floodway.

SECTION 26. Ordinance 10870, Section 474, as amended, and K.C.C. 21A.24.270 are hereby amended to read as follows:

A. For all new ~~((structures or))~~ buildings, substantial improvements or additions affixed to the side of a building in a flood hazard area, the applicant shall provide a FEMA elevation certificate completed by a land surveyor licensed by the state of Washington documenting the as-built elevations of:

1. The ~~((actual as-built elevation of the lowest))~~ top of the bottom floor, including basement, crawlspace or enclosure floor;
2. The ~~((actual as-built elevation to which the structure is dry flood-proofed, if applicable and~~
3. ~~If the structure has a basement))~~ top of the next-higher floor;
3. In coastal high hazard areas, the bottom of the lowest horizontal structure member;
4. The top of the slab of an attached garage;
5. The lowest elevation of machinery or equipment servicing the building;
6. The lowest adjacent finished grade next to the building;
7. The highest adjacent finished grade next to the building; and
8. The lowest adjacent grade at the lowest elevation of a deck or stairs, including structural support.

B. The applicant shall submit a complete FEMA elevation certificate on the most current version of the form before the issuance of a certificate of occupancy or temporary certificate of occupancy, whichever occurs first. For unoccupied ~~((structures))~~ buildings, the applicant shall submit the FEMA elevation certificate before the issuance of the final letter of completion or temporary letter of completion, whichever occurs first.

C. For all dry floodproofed nonresidential buildings, a FEMA floodproofing certificate shall be submitted by the applicant on the most current version of the form. A land surveyor licensed by the state of Washington shall complete the elevation information on the certificate and an engineer licensed by the state of Washington shall provide the floodproofed certification on the certificate. The certificate shall show the actual

as-built elevation to which the building is dry floodproofed. In addition to the certificate, the following must be provided:

1. Photographs of and engineering performance documentation for all shields, gates, barriers and other components designed to provide floodproofing protection to the building; and

2. A comprehensive maintenance plan for the performance of the floodproofing components in times of flood. The maintenance plan shall address the storage or staging location of all shields, gates, barriers and floodproofing components, as well as all associated hardware and any materials or specialized tools necessary to seal the building. The maintenance plan shall also address maintenance of the following:

a. exterior envelope of the building;

b. all potential entry points of floodwater to the exterior of the building;

c. all shields, gates, barriers or other components designed to provide floodproofing protection to the building; and

d. all seals or gaskets for shields, gates, barriers, or other floodproofing components.

D. The department shall maintain the certifications required by this section for public inspection and for certification under the National Flood Insurance Program.

SECTION 27. Ordinance 17539, Section 54, and K.C.C. 21A.24.271 are hereby amended to read as follows:

Before initiating any new floodplain development, the person proposing the development shall obtain a floodplain development permit from King County. ~~((The specific details on the floodplain permit process for activities exempt from other King County permits as well as how to coordinate floodplain development review into other King County permit reviews will be established in a public rule.))~~ Exceptions to other permit requirements do not apply to floodplain development. The applicant shall ensure that all necessary permits have been obtained from those federal, state or local government agencies from which prior approval is required.

SECTION 28. Ordinance 17173, Section 2, and K.C.C. 21A.24.272 are hereby amended to read as follows:

Within coastal high hazard areas, which includes zone VE and adjacent zone AE areas on the Flood Insurance Rate Maps, the following applies:

A. All new, substantially improved or converted residential or nonresidential buildings (~~and substantial improvements to existing buildings~~) shall be elevated on pilings and columns so that:

1. The bottom of the lowest horizontal structural member of the lowest floor, excluding the pilings or columns, is elevated to or above the flood protection elevation; (~~and~~)

2. The pile or column foundation and building attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year; and

3. All building utilities are elevated to or above the flood protection elevation;

B. A registered professional engineer or architect licensed by the state of Washington shall prepare the structural design, specifications and plans for the building, 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 A. of this section. The information should be, in part, provided on a V Zone Design Certificate;

C. The applicant shall provide a complete FEMA elevation certificate on the most current version of the form completed by a land surveyor licensed by the state of Washington documenting the elevation of the bottom of the lowest structural member of the lowest floor, excluding pilings and columns, of all new and substantially improved buildings and additions affixed to the side of a building. The elevation certificate should note whether or not such buildings contain a basement. The department shall maintain the FEMA elevation certificates required by this section for public inspection and for certification under the National Flood Insurance Program;

D. All new buildings shall be located landward of the reach of mean high tide;

E. All new buildings and substantial improvements to existing buildings shall maintain the space below the lowest floor free of obstruction. Breakaway walls are prohibited. The space can include nonsupporting open wood lattice-work or insect screening that is intended to collapse under wind and wave loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. The space below the lowest floor can be used only for parking of vehicles, building access or limited storage of readily removable items. The space shall not be used for human habitation;

F. Fill for structural support of buildings is prohibited;

G. Alteration of sand dunes is prohibited;

H. All manufactured homes to be placed or substantially improved within coastal high hazard areas shall meet the standards in subsections A. through F. of this section;

~~((H-))~~ I. Recreational vehicles placed on sites within zones ~~((V1-30,))~~ VE and ~~((V-and))~~ adjacent AE(~~(, AO-and-AH))~~ zones must either:

1. Be on the site for fewer than one hundred eighty consecutive days; or
2. Be fully licensed and ready for highway use, which means on their wheels or jacking system, attached to the site only by quick_disconnect-type utilities and security devices~~((;))~~ and have no permanently attached additions; and

~~((F-))~~ J. The following flood hazard standards ~~((in K.C.C. 21A.24.230 through 21A.24.270))~~ do not apply to coastal high hazard areas: K.C.C. 21A.24.240.A., B., C., E., F. and G.; K.C.C. 21A.24.250; and K.C.C. 21A.24.260.

SECTION 29. The following are hereby repealed:

- A. Ordinance 15051, Section 9, and K.C.C. 21A.06.087;
- B. Ordinance 15051, Section 48, and K.C.C. 21A.06.476;
- C. Ordinance 15051, Section 71, and K.C.C. 21A.06.683; and

D. Ordinance 15051, Section 72, and K.C.C. 21A.06.684.

SECTION 30. The executive shall submit section 17 of this ordinance to the state Department of Ecology for its approval, as provided in RCW 90.58.090.

SECTION 31. Section 17 of this ordinance takes effect within the shoreline jurisdiction fourteen days after the state Department of Ecology provides written notice of final action stating that the proposal is approved, in accordance with RCW 90.58.909. The executive shall provide the written notice of final action to the clerk of the council.

SECTION 32. **Severability.** If any provision of this ordinance or its application to any person or circumstance is held invalid, the remainder of the ordinance or the application of the provision to other persons or circumstances is not affected.