NOTICE OF CITY COUNCIL MEETING

The City Council of the City of King City will hold a Regular City Council Meeting at 7:00 p.m., Wednesday-October 17, 2018 at the Crown Center, 16880 SW 126th Ave, King City, Oregon 97224

AGENDA			Action Item
		REGULAR SESSION	
Moment of Silence			Time:
7:00 p.m.	1.	**CALL TO ORDER**	
	2.	**ROLL CALL**	
	3.	**PLEDGE OF ALLEGIANCE**	
	4.	**APPROVAL OF MINUTES:**	M S A
7:05 p.m.	5.	**OPEN FORUM:** We welcome public comment. At this time, the Council will be happy to receive your comment pertaining to items on the agenda (including, questions, suggestions, complaints and items for future agendas). Each person's time will be limited to three minutes.	
7:15 p.m.	6.	**UNFINISHED BUSINESS**:	
7:25 p.m.	7.	**NEW BUSINESS:**	
		7.1 Ordinance 2018-05 FEMA Floodplain Revisions	M S A
7:45 p.m.	8.	**POLICE CHIEF'S REPORT**	
7:50 p.m.	9.	**CITY MANAGER'S REPORT**	
7:55 p.m.	10.	**MAYOR'S AND COUNCILOR'S REPORTS**	
8:25 p.m.	11.	**ADJOURN**	Time:

NEXT MEETING SCHEDULED FOR NOVEMBER 14, 2018 @ 7:00 PM

The meeting location is accessible to persons with disabilities. A request for an interpreter for the hearing impaired, or for other accommodations for persons with disabilities, should be made at least 48 hours in advance of the meeting to Mike Weston, City Recorder, 503-639-4082.
M=Motion; S=Second; A=Action/Vote

MEMORANDUM

TO: King City Council
FROM: Keith Liden, Planning Consultant
SUBJECT: File #O-2018-05, King City Floodplain Regulations
King City Community Development Code Amendments
Staff Report
DATE: October 11, 2018

GENERAL INFORMATION

Application

A legislative amendment to Chapter 16.140 Floodplain and Drainage Hazard Areas and related definitions in Chapter 16.24 of the King City Community Development Code (CDC). The purposes of the proposed amendments are to: 1) adopt revised Federal Emergency Management Agency (FEMA) requirements for flood prone areas including new Flood Insurance Rate Maps (FIRM); and 2) retain eligibility to participate in the National Flood Insurance Program. They represent minor changes to the amendments adopted by the city in 2016.

Location

The CDC amendments in ordinance Exhibit A apply to the properties within the 100-year floodplain of the Tualatin River as shown with an illustrative map in Exhibit B. The FEMA Flood Insurance Study and Flood Insurance Rate Maps (FIRM), which will actually be adopted along with the text amendments in Exhibit A, are available on the city website and listed in Exhibit C. The amendments and commentary from me on behalf of the city, Roxanne Pilkenton (FEMA), and Celinda Adair (DLCD) are shown in the final draft (Exhibit A). It is important to note that while on FIRM panel and the Flood Insurance Study (3 volumes) have been updated, there is no change to the floodplain or floodway locations in or near King City.

Comprehensive Plan and Zoning Designation

The current plan and zoning designations within the affected area involve two residential districts

- King City R-9
- King City R-12

Owners

There are multiple property owners within the affected area. The city notified all property owners located within the 100-year floodplain and the 500-year floodplain (not subject to CDC or FEMA requirements, but could flood in an event more severe than a 100-year flood).

RECOMMENDATION

The City Council should conduct a public hearing and consider the staff report, the FEMA floodplain data and maps (Exhibits B and C and online), any public comments, and recommendation from the Planning Commission. The Planning Commission recommends adoption of the proposed amendments to the CDC, which would include the text amendments in Exhibit A and the online FEMA materials. The illustrative map in Exhibit B is for general information only and will not be adopted. The only change to the draft amendments recommended by the Planning Commission is to move the Floodplain definitions in Section 16.140.200 to CDC 16.24.020 Definitions of specific terms. This recommendation is reflected in Exhibit A.

RECOMMENDED FINDINGS AND CONCLUSIONS

The relevant criteria for the King City Comprehensive Plan amendment are found in:

- The King City Comprehensive Plan
- The Oregon Statewide Planning Goals

Because the policy direction in the King City Comprehensive Plan is based directly upon the Oregon Statewide Planning Goals, addressing the comprehensive plan will simultaneously consider the state goals. The recommended findings are followed by background and supporting information in this report. The Planning Commission should consider the findings regarding the proposed CDC amendments.

The King City Comprehensive Plan is organized using the Statewide Planning Goals. The plan goals are satisfied as indicated below:

Citizen Involvement - Goal 1: To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

The FEMA Flood Insurance Rate Maps (FIRM) were available previously for public review. The city provided the required public notice in the newspaper to all property owners within the 100- and 500-year floodplain areas identified in the FIRM. This goal is satisfied.

Land Use Planning - Goal 2: To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

The city has adopted the King City Comprehensive Plan and Community Development Code in accordance this goal, and as noted above, citizens have been afforded an opportunity to participate. This goal is satisfied.

Agricultural Lands – Goal 3 and Forest Lands – Goal 4

These goals are not relevant because the property is designated for urban rather than resource use.

Open spaces, scenic and historic areas, and natural resources – Goal 5: To conserve open space and protect natural and scenic resources.

While limitations on development within the 100-year floodplain will have a beneficial effect on conserving these resources, it is not relevant to these regulations, which are focused on reducing flood damage to property.

Air, water and land resource quality – Goal 6: To maintain and improve the quality of the air, water, and land resources of the state.

While limitations on development within the 100-year floodplain will have a beneficial effect on maintaining or improving these resources, it is not relevant to these regulations, which are focused on reducing flood damage to property.

Natural Disasters and Hazards – Goal 7

The purpose of the CDC amendments is to keep the city's floodplain regulations compliant with current federal requirements and to enable property owners to continue to be eligible to participate in the national flood insurance program. Development within the 100-year floodplain will continue to be regulated in a manner designed to minimize flood hazards.

Recreational Needs – Goal 8: To satisfy the recreation needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

This goal is not relevant.

Economy – Goal 9: To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

The proposed CDC amendments will help minimize future flood damage and reduce the negative economic impact such damage can have on the local economy. This goal is satisfied.

Housing – Goal 10: To provide for the housing needs of citizens of the state.

Not only is it important to provide for community housing needs, it is critical to provide housing in areas that are reasonably safe from natural hazards. The CDC amendments will ensure that the city's regulations for flood protection are compliant with federal requirements. This goal is satisfied.

Public Facilities and Services – Goal 11: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Similar to housing, it is important to develop public facilities, which have minimal risk of flood damage. This goal is satisfied.

Transportation – Goal 12: To provide and encourage a safe, convenient and economic transportation system.

The CDC floodplain regulations will continue to require transportation facilities to be constructed in a manner that will minimize flood damage to the facilities and nearby properties. This goal is satisfied.

Energy Conservation – Goal 13: To conserve energy.

This goal is not relevant.

Urbanization – Goal 14: To provide for an orderly and efficient transition from rural to urban land use.

While this goal is not directly relevant, the CDC amendments will continue to ensure that new development within the city will be orderly by not occurring in inappropriate areas subject to flooding. This goal is satisfied.

Supporting Information

The FEMA Flood Insurance Rate Maps (FIRM) and Flood Insurance Study materials are quite extensive. They are not provided as part of this report, but are posted on the city's website (http://www.ci.king-city.or.us/departments/community_development/fema_floodplain_information.php). Along with the CDC amendments, this material must also be adopted by the city for the purpose of regulating development in the 100-year floodplain.

EXHIBIT A
CDC Amendments

CITY OF KING CITY

DRAFT

ORDINANCE NO. O-2018-05

AN ORDINANCE ADOPTING AMENDMENTS TO THE KING CITY COMMUNITY DEVELOPMENT CODE

WHEREAS, the Federal Emergency Management Agency (FEMA) developed revised floodplain regulations and Flood Insurance Rate Maps (FIRM), which apply within the city of King City; and

WHEREAS, adopting the updated FEMA requirements and flood information into the King City Community Development Code is necessary for continued participation in the National Flood Insurance Program; and

WHEREAS, the City is proposing new text, figures, and amendments to be adopted as part of the King City Community Development Code (CDC), Chapters 16.140 and 16.24; and

WHEREAS, the City provided notice of a hearing before the Planning Commission and City Council of the post-acknowledgement amendments as required by state law, including notice to the Department of Land Conservation and Development 35 days prior to the initial evidentiary hearing consistent with ORS 197.610, individual notice to property owners, and publication in a newspaper of general circulation within the City; and

WHEREAS, on October 10, 2018, the King City Planning Commission held a public hearing and recommended approval of the CDC amendments; and

WHEREAS, on October 17, 2018, the City Council of King City held a public hearing, to consider the Planning Commission's recommendation, hear public testimony, apply applicable decision-making criteria, and to consider appropriate findings and conclusions in support of adoption.

NOW, THEREFORE, THE CITY OF KING CITY ORDAINS AS FOLLOWS:

SECTION 1. The amendments to the King City CDC set forth in Exhibit 'A' are hereby adopted.

SECTION 2: The FEMA Flood Insurance Study, Washington County, Oregon, Volumes 1 through 3 and the FEMA Flood Insurance Rate Maps for King City referenced in Exhibit 'B' are hereby adopted.

SECTION 3: The findings and conclusions contained in Exhibit 'C' are hereby adopted as the basis in support of this Ordinance.

SECTION 4: This Ordinance shall be effective immediately upon passage by the Council, signature by the Mayor, and posting by the City Recorder. ***Not sure about the exact emergency language***

PASSED AND APPROVED this 17th day of October 2018.

Ayes: _____

Nayes: _____

Abstentions: _____

KING CITY: ATTEST:

_____ _____

Mayor Ken Gibson Michael Weston, City Manager/Recorder

Approved as to form:

_____

City Attorney

Chapter 16.140

FLOODPLAIN AND DRAINAGE HAZARD AREAS* - Preliminary Draft 9.17.18 9.26.18 response to FEMA comments

10.03.18 final draft per FEMA/DLCD comments

Sections:

* Prior ordinance history: Ords. 96-4 and O-02-4.

16.140.010 Purpose.

The regulations of this chapter are intended to achieve the following:

A. Implement the comprehensive plan;

B. Implement the Federal Emergency Management Agency's (FEMA) flood insurance program and to minimize flood damage to property;

C. Implement the Metro Urban Growth Management Functional Plan Title 3 Water Quality and Flood Management;

D. Implement Statewide Planning Goal 7 Areas Subject to Natural Hazards;

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

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

1. Protect human life and health;
2. Minimize expenditure of public money and 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, streets, and bridges located in areas of special flood hazard;

6. Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
7. Ensure that potential buyers are notified that property is in an area of special flood hazard; and1
8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

16.140.020 Applicability of provisions.

Floodplain and drainage hazard area review shall be applicable to all new development and modifications of existing development as provided in this chapter.

A. Unless specifically prohibited by this title, or the Clean Water Services (CWS) "Design and Construction Standards for Sanitary Sewer and Surface Water Management" or its successor, the following are not required to obtain a development permit for a floodplain or drainage hazard area alteration:

1. Uses and Activities Allowed in All Floodplain and Drainageway Locations.

a. Farming or raising of livestock not utilizing a structure;

b. Propagation or harvesting of timber for personal consumption, provided that the use of a caterpillar tractor, yarder, backhoe, grader or similar heavy mechanized equipment is prohibited;

c. A wire boundary fence designed to impede as little as practicable the movement of water or water borne materials;

d. Accessory residential or institutional uses such as lawns, gardens and play areas, provided that no structure is permitted;

e. Recreational and accessory recreational uses such as parks or game fields, provided that no grading or structures are permitted;

f. An emergency measure necessary for immediate safety of persons or protection of property, such as riprap for erosion control, provided however, that an application for a development permit shall be promptly filed if the measure otherwise would require such a permit but for the emergency;

g. Line borings for installation of utilities when certified by a registered civil engineer: that the line is located at least thirty-six inches below ground surface in floodways, floodplains and drainage hazard areas; that the land disturbance will not alter flood storage capacity or water velocities; that all surface construction will take place outside the delineated floodplain or drainage hazard area; and that all spoils will be removed from the flood area and placed in an appropriate disposal site.

2. Uses and Activities Allowed Only Within the Urban Growth Boundary.

a. A recreational vehicle, which is allowed by the provisions of this title;

b. A nonconforming recreational vehicle may be replaced, provided there is compliance with the standards of this title.

B. Uses and Activities Permitted Through a City Manager Review.

Unless specifically prohibited in this title or the Clean Water Services "Design and Construction Standards for Sanitary Sewer and Surface Water Management" or its successor, a development permit may be approved in a flood or drainage hazard area according to a city manager review procedure for the following:

1. Uses and Activities Allowed in All Floodplain and Drainageway Locations.

a. Recreation or nature trails and removal of vegetation down to duff or bare soil provided the applicant obtains a permit for erosion control;

b. Lot line adjustments;

c. Wildlife viewing areas, including interpretive signs and off-street parking, which require no grading, and viewing platforms or structures, provided that all viewing platforms or structures:

i. Are elevated by pilings,

ii. Have the lowest floor at least one foot above the base flood elevation, and

iii. A building permit is obtained for the proposed platform or structure;

d. Maintenance, preservation and repair of local public streets and private streets including paving and

grading of existing road surfaces, and grading and shaping of roadside ditches;

e. Above ground electrical, communication, and signal transmission and distribution lines on a single-pole system. For the purposes of this section, a single-pole system is defined as above ground electrical, communication or signal lines and their supporting concrete, and wood or metal poles, excluding self-supporting steel lattice-type structures;

f. Restoration and stabilization of the bank of a river or other watercourse or body of water for erosion control provided:

i. The application includes a registered civil engineer's certification that:

(A) The project is in response to a demonstrated bank failure that resulted from a specific flood event or which has occurred within the last two years,

(B) The project only restores and stabilizes the bank to its original location before the demonstrated bank failure,

(C) The length of the bank involved does not exceed two hundred fifty feet, and

(D) If riprap is used, it will be keyed in to the bed and bank of the body of water as specified in OAR 141-089-0005.

ii. Whether or not riprap is used, the length of bank within the project boundary, from the ordinary high water level to the top of the bank, shall be planted with vegetation that grows roots to stabilize the bank. Plant species used shall be those in the 1987 or most current list entitled "Shrubs, Trees and Aquatic Plants for Wildlife Plantings" prepared by the Oregon Department of Fish and Wildlife. The plantings shall meet the following requirements, unless different requirements are established for the project by the Oregon Division of State Lands through its permitting process:

(A) At least five plants shall be placed per one hundred square feet of bank area, and

(B) At least twenty percent of the plants placed shall be trees.

iii. Upon completion of the project, a registered civil engineer or landscape architect shall submit a statement certifying that the project was completed in compliance with the provisions of this section;

g. Maintenance, preservation or repair of drainage facilities located outside of public rights-of-way;

h. Maintenance of an existing vehicular access to a single-family residence or for farm or forest uses; including culverts for driveway crossings provided the application includes a registered civil engineer's certification that the project complies with Sections 16.140.060(A) through (I) of this chapter.

2. Uses and Activities Allowed Only Within the Urban Growth Boundary.

a. Construction or major improvement of local public streets and private streets except as provided for by subsection (A)(1)(f) of this section, including paving and grading, shaping of roadside ditches, and catch basins;

b. Construction of a vehicular access to a single-family residence or for farm or forest uses; including culverts for driveway crossings provided the application includes a registered civil engineer's certification that the project complies with Sections 16.140.060(A) through (I) of this chapter.

C. Uses and Activities Allowed Through a Planning Commission Review.

Unless specifically prohibited by this title, or the Clean Water Services "Design and Construction Standards for Sanitary Sewer and Surface Water Management" or its successor, a development permit may be approved in a flood or drainage hazard area through a planning commission review procedure for the following:

1. Uses and Activities Allowed in All Floodplain and Drainageway Locations.

a. Water quality or quantity improvement facilities, or a wetland mitigation project when:

i. Mandated or approved by a local, state or federal regulatory agency, or

ii. Designed to be consistent with CWS standards;

b. Dams, weirs, ponds and similar water impoundment devices, and mitigation and enhancement improvements for wetland and habitat areas;

c. Construction or major improvement or alteration of underground pipes and conduits, including sewer, water and gas lines, transmission and distribu-

tion lines for gas and oil, underground electrical, telephone and television transmission and distribution lines, including necessary accessory structures and drainage systems;

d. Above ground electrical, communication and signal transmission lines, except for those activities described in subsection (B)(1)(e) of this section;

e. Parks, golf courses and other recreational uses that do not include structures;

f. Recreation or nature trails and associated grading, piping, culverts or bridges that meet the provisions of this title and applicable local, state and federal agency requirements;

g. Creation or restoration of wetlands;

h. Culverts and piping to implement an approved development, other than public transportation facilities, when the pipe or culvert connects to an existing pipe, culvert or drainageway. Culverts and piping in a flood or drainage hazard area shall continue to be subject to applicable local, state and federal agency requirements;

i. Bank maintenance, restoration or stabilization, including riprap for erosion control, of a river or other watercourse or body of water inside an urban growth boundary or not otherwise permitted by subsection (B)(1)(f) of this section;

j. Subdivisions and land partitions, provided that none of the proposed parcels located outside of the UGB shall accommodate residential structures;

k. Driveways and off-street parking that comply with the provisions of this title and applicable local, state and federal agency requirements.

2. Uses and Activities Allowed Only Within the Urban Growth Boundary.

a. One detached dwelling (including a manufactured dwelling) together with no more than two accessory structures and off-street parking on a lawfully created lot, when the lot or parcel contains insufficient area outside of the flood area upon which to locate the dwelling and/or accessory structures;

b. Substantial improvements to structures where "substantial improvement" is defined as follows: Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure either:

i. Before the improvement or repair is started, or

ii. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this section, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure except as follows:

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

(B) Any alteration of a structure listed on the national register of historic places or a state or local inventory of historic places, or

(C) Applications for substantial improvements to structures shall comply with the requirements of this chapter;

c. Improvements to a lawfully established structure when the cost of the improvement is less than fifty percent of the market value of the structure and there is compliance with Section 16.140.060 of this chapter. For the purpose of this subsection, improvement means any repair, reconstruction, addition or improvement of a structure except as follows:

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

ii. Any alteration of a structure listed on the national register of historic places or a state or local inventory of historic places;

d. Accessory structure customarily provided in conjunction with the use set forth in the applicable zoning district;

e. Subdivisions and partitions that comply with the provisions of this title;

f. Vehicular access to permitted uses, including driveway crossings, except as permitted by subsection (B)(1)(h) of this section;

g. Parks, golf courses and other recreational uses that include structures;

h. Construction or major improvement or alteration of public local streets and private streets within the UGB, or approved as part of a land division, including culverts and piping, accessory drainage systems such as catch basins, and necessary accessory structures;

i. Parking area for an adjacent multi-family, institutional or commercial development.

16.140.030 Administration.

A. A floodplain and drainage hazard review shall be conducted concurrently with any other related land use application required by the city for the proposed development.

B. Floodplain and drainage hazard review applications described in Section 16.140.020(B) shall be administered and reviewed as a city manager decision in accordance with Article II of this title and applicable approval criteria in Sections 16.140.060 through 16.140.120 of this chapter.

C. All other floodplain and drainage hazard review applications described in Section 16.140.020 shall be administered and reviewed as a planning commission decision in accordance with Article II of this title and applicable approval criteria in Sections 16.140.060 through 16.140.120 of this chapter.

D. Review all development permits to determine that the permit requirements of this ordinance have been satisfied.

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

2. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 16.140.060 are met.

3. Provide to building officials the base flood elevation and freeboard applicable to any building requiring a building permit.

4. Review all development permit applications to determine if the proposed development qualifies as a substantial improvement, as set forth in Section 16.140.200

E. In addition to the notice requirements in Article II of this title, the city manager shall notify communities adjacent to the affected area and the Oregon Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. The city manager shall require that maintenance is provided within the altered and relocated portion of such watercourse so that the flood carrying capacity is not diminished.

F. Development Permit Required. A development permit shall be obtained before construction or development begins within any special flood hazard area established in Section 16.140.040(B) of this chapter. The permit shall be for all structures including manufactured homes, as set forth in the definitions (Section 16.140.180 of this chapter) and for all development including fill and other activities, also as set forth in the definitions.

G. Application for Development Permit. Application for a development permit shall be made on forms furnished by the city manager and may include but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

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

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

3. Certification by a registered professional engineer or architect that the floodproofing methods for

any nonresidential structure meet the floodproofing criteria in Section 16.140.090 of this chapter; and

4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

H. In the interpretation and application of this ordinance, all provisions shall be:

1. Considered as minimum requirements;

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

3. Deemed neither to limit or repeal any other powers granted under State statutes.

16.140.040 Basis for identifying lands subject to floodplain and drainage hazard area standards.

A. Lands to Which This Ordinance Applies.

This chapter shall apply to all areas of special flood hazard areas within the jurisdiction of city of King City, Oregon.

B. Basis for Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of King City, Oregon," dated October 19, 2018, with accompanying Flood Insurance Rate Maps (FIRM), are adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at 15300 SW 116th Ave., King City, OR 97224. The best available information for flood hazard area identification as outlined in subsection (B)(1) of this section, shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under subsection (B)(1) of this section.

1. When base flood elevation data has not been provided in accordance with subsection B of this section, the city manager 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 new construction, substantial improvements, or other development in Zone A on the FIRM.

2. Recognizing that the scale may be such that the true and accurate floodplain or drainage hazard area cannot be determined from the maps referenced in subsection B of this section alone, all persons seeking a development permit for lands within such areas and within two hundred fifty feet of the map boundary of a floodplain or drainage hazard area identified in subsection B of this section shall submit with the development permit application:

a. A delineation of the floodplain and the floodway boundaries, established by a registered engineer or surveyor from the surface elevations available from the city for the floodplain based upon maps referenced in subsection B of this section, and upon any other available authoritative flood data approved by the city manager, including but not limited to high water marks, photographs of past flooding, or historical flood data; and

b. A delineation of the drainage hazard area and drainageway by a registered surveyor or engineer from surface elevations prepared by a registered engineer. Such delineation shall be based on mean sea level datum and be field located using recognized landmarks.

C. Acceptance of Risk. Persons seeking to develop within a floodplain or drainage hazard area must do so with the understanding that they and their successors assume the risks and that the risks cannot be eliminated, even with strict compliance with the standards adopted herein. This chapter does not imply that lands outside of floodplain or drainage hazard areas, or development permitted within, will be free from flooding or flood damage.

16.140.050 Submittal requirements.

A. In addition to the form and information required in Section 16.44.030 of this title, an applicant shall submit the following:

1. Copies of the site plan, number to be determined at the preapplication conference, and necessary data or narrative, which explains how the development conforms to the applicable criteria, and:

a. The site plans and required drawings, prepared by a registered civil engineer, shall be drawn on sheets preferably not exceeding twenty-four inches by thirty-six inches,

b. The scale for the site plan shall be an engineering scale of not less than one inch equals fifty feet,

c. All drawings of structures elevations, prepared by a registered civil engineer or architect, shall be a standard architectural scale, being one-fourth inch or one-eighth inch equals one foot, and

d. Existing and proposed topography within the boundaries of the flood area using the following contour intervals:

i. For slopes of five percent or less, contour intervals not more than one foot,

ii. For slopes greater than five percent and up to and including ten percent, contour intervals not more than two feet, and

iii. For slopes greater than ten percent, contour intervals not more than five feet;

2. This information may be submitted with or be made part of a site plan or grading plan for the proposed development;

3. A list of names and addresses of all persons who are property owners of record within two hundred fifty feet of the subject property;

4. The required fee; and

5. The site plan, data and narrative shall be submitted for any related development applications as provided in this title.

B. Upon demonstration that no other alternative exists as determined by the City Engineer:

1. Applicants shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA before an encroachment, including fill, new construction, substantial improvement, fences or other development, in the regulatory floodway is permitted that will cause any increase in the Base Flood Elevation. The CLOMR shall be submitted prior to the application being deemed complete.

2. Within six (6) months of project completion, an applicant who obtains a CLOMR from FEMA, or whose development alters a watercourse, modifies floodplain boundaries, or modifies Base Flood Elevations within the regulatory floodway shall submit obtain evidence to the city that a Letter of Map Revision (LOMR) from FEMA has been requested that reflects the as-built changes to the Flood Insurance Study (FIS) and/or Flood Insurance Rate Map (FIRM).

16.140.060 Development standards for floodplain and drainage hazard area applications.

The applicant for a proposed floodplain or drainage hazard area development shall demonstrate compliance with the following applicable standards of this chapter.

A. Subdivision Proposals.

1. All subdivision proposals shall be consistent with the need to minimize flood damage;

2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage;

3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and

4. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty lots or five acres (whichever is less).

B. Development proposed to encroach into a regulatory floodway adopted and designated pursuant to FEMA regulations shall demonstrate through hydrologic and hydraulic analysis, performed in accordance with standard engineering practice by a registered civil engineer, that the cumulative effect of the proposal, when combined with all other existing and anticipated development within the basin based upon full development of the basin as envisioned in the relevant comprehensive plans for the city and Washington County, will not result in any increase in flood levels during the occurrence of the base (regional) flood discharge. Notwithstanding this provision, development that would result in such an increase may be approved if the city, at the sole expense of the applicant, first obtains FEMA approval in accordance with 44 CFR Ch. 1, Part 65 (October 1, 1990 edition, or its successor). No increase to the floodplain elevation shall be permitted unless the area in which the rise will occur contains no struc-

tures and the owner of such property signs a written acceptance of any increase in the floodplain elevation. These properties are not required to be part of the application for the proposed development.

C. Until a regulatory floodway is designated, no new construction, substantial improvements or other development (including fill) shall be permitted within Zones A1-30 and AE on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point.

D. Development proposed on a drainage hazard area site shall demonstrate through hydrologic and hydraulic analysis, performed in accordance with standard engineering practice by a registered civil engineer, that the cumulative effect of the proposal, when combined with all other existing and anticipated development within the basin based upon full development of the basin as envisioned in the relevant comprehensive plans for the city and Washington County, will not result in any increase to the drainage hazard area elevation at any point in the vicinity. Notwithstanding this provision, an increase may be approved if the area in which the rise will occur contains no structures and the owner of such property signs a written acceptance of any increase in the drainage hazard area elevation.

E. Encroachments into a floodway shall be designed so as to minimize the risk that the encroachment will catch substantial debris or otherwise significantly impede floodwater flows. Designs may include, but are not limited to, adequate sizing of openings, secured breakaway bridges, diverters or spacing of supports.

F. The proposal will not increase the existing velocity of flood flows so as to exceed the erosive velocity limits of soils in the flood area. Energy dissipation devices or other measures to control the mean velocity so as not to cause erosion of the flood area may be used to meet this standard. "Open Channel Hydraulics" by V.T. Chow, McGraw-Hill Book Company, Inc., 1988, is presumed to be the best available reference for maximum permissible velocity. "Hydraulic Engineering Circular No. 14," Hydraulic Design of Energy Dissipaters for Culverts and Channels, published by the Federal Highway Administration, September 1983, is presumed to be the best available reference for the design of energy dissipators.

G. All cut and fill shall be structurally sound and designed to minimize erosion. All fill below the flood surface elevation shall be accompanied by an equal amount of cut or storage within the boundary of the development site unless:

1. The proposed cut and fill is found to be in compliance with the King City storm drainage master plan and/or Clean Water Services requirements; or

2. Off-site excavation will be utilized to balance a fill, provided:

a. The off-site excavation area will be part of the application for the development proposing to place the fill,

b. The off-site excavation area will be located in the same drainage basin as the proposed fill area,

c. The off-site excavation area will be located within points of constriction on the drainage system, if any, and as close to the fill site as practicable. The applicant's registered civil engineer shall conduct a storage routing analysis to determine the location of the fill,

d. The off-site excavation area will be constructed as part of the development placing the fill,

e. Any use or future development of the excavated area shall comply with the standards of this chapter and Clean Water Services requirements,

f. Ownership of the excavated area shall be by one of the following mechanisms:

i. Dedication of the area to an appropriate public agency when a public agency is willing to accept the dedication,

ii. Ownership of the area by the applicant of the proposed development,

iii. Dedication of the development rights of the area to an appropriate public agency with ownership remaining with the property owner. Maintenance of the area shall be the responsibility of the applicant or property owner, and

iv. Deed or easement-restricted private ownership which prevents any use or future development of the area as specified by subsection (F)(2)(e) of this section. Maintenance of the area as conditioned by the city shall be the responsibility of the applicant or property owner.

H. There is adequate storm drainage behind a dike such as a lift pump or flap gate to drain the floodplain or drainage hazard area behind the dike.

I. That the environmental impact of the disturbance or alteration of riparian wildlife and vegetation has been minimized to the extent practicable as required by Clean Water Services. Enhancement of riparian habitats through planting or other such improvements may be required to mitigate adverse effects. Significant features such as natural ponds, large trees, and endangered vegetation within the flood or drainage hazard area shall be protected when practicable.

J. Drainage systems shall be designed and constructed according to the standards of Clean Water Services (CWS).

K. Proposed partitions and subdivisions shall minimize flooding by complying with the applicable standards of the Clean Water Services construction standards.

L. Public utilities and facilities in proposed partitions and subdivisions shall be located and constructed in a manner that will minimize flood damage.

16.140.070 Supplemental criteria for dwellings.

A. No new dwelling shall be constructed in a flood area if:

1. The lot or parcel contains sufficient, suitable, existing buildable land area that is located outside the flood area so as to permit construction at least one foot above the flood area;

2. The buildable land area shall be deemed suitable if it includes a minimum ten-foot perimeter setback around the proposed dwelling that is outside the flood area; and

3. The property is outside of the urban growth boundary (UGB).

B. Construction standards for new dwellings and substantial improvements to existing dwellings in flood areas:

1. All new dwellings and substantial improvements to existing dwellings shall have the lowest floor, including any basement, elevated to at least one foot above the flood surface elevation and shall be anchored so as to prevent flotation, collapse or lateral movement;

2. New dwellings and substantial improvements to existing dwellings may be placed on pressure treated pilings when:

a. Certified by a registered engineer as sufficient to prevent collapse or movement during a one hundred-year flood,

b. Pilings are placed on stable compacted fill on no greater than ten-foot centers, and

c. Pilings greater than six feet high are reinforced;

3. New dwellings and substantial improvements to existing dwellings may be placed on approved fill providing the building site, which includes the ground under the structure plus a ten-foot setback around all sides of the structure, is above the flood surface elevation;

4. All new construction and improvements to existing structures shall be done with approved materials and utility equipment resistant to flood damage, using approved construction methods and practices that minimize such damage. All new construction and improvements to existing structures shall be anchored to prevent flotation, collapse or lateral movement;

5. Fully enclosed areas below the lowest floor that are subject to flooding are permitted only if 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 must meet or exceed the following minimum criteria:

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

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

c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters without manual intervention;

d. Show how the structure is anchored to prevent flotation, collapse or lateral movement; and

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

16.140.080 Supplemental criteria for manufactured dwellings, manufactured dwelling parks and subdivisions.

In addition to the requirements of Chapter 16.120 of this title, new or substantially improved manufactured dwellings, manufactured dwelling parks and subdivisions located in a flood area shall comply with the following standards:

A. Manufactured dwellings shall not be located within the floodway except in a lawfully established manufactured dwelling park or subdivision.

B. New manufactured dwellings shall not be located outside of the UGB.

C. Manufactured dwellings shall:

1. Be anchored to prevent flotation, collapse or lateral movement of the structure;

2. Be anchored to prevent flotation, collapse, or lateral movement during the base flood, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas: guidebook for additional techniques);

3. Have solid flood openings that comply with C 2 of this section for solid foundation walls supporting the manufactured dwelling;

4. Have the bottom of the longitudinal chassis frame beam in A zones at or above the base flood elevation;

5. Have electrical crossover connections that are a minimum of one (1) foot above the base flood elevation.

D. In new manufactured dwelling parks and subdivisions, or in expansions to existing manufactured dwelling parks and subdivisions, or where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds fifty percent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced; and for manufactured dwelling park or subdivision, the following shall be required:

1. Stands or lots shall be elevated on compacted fill or on pilings so that the bottom of the longitudinal chassis frame beam of the manufactured dwelling shall be at or above the base flood surface elevation;

2. Adequate surface drainage and access for a hauler are provided; and

3. In the instance of elevation on pilings, that:

a. Lots are large enough to permit steps,

b. Piling foundations are placed in stable soil not more than ten feet apart, and

c. Reinforcement is provided for pilings more than six feet above the ground level.

E. Placement of, or substantial improvements to, manufactured dwellings on-sites outside of a manufactured dwelling park or subdivision, or in a new or existing manufactured dwelling park or subdivision, or in an expansion to an existing manufactured dwelling park or subdivision, shall be elevated on compacted fill or on pilings so that the bottom of the longitudinal chassis frame beam of the manufactured dwelling will be at or above the base flood surface elevation; elevation on pilings shall meet the requirements of subsection (D)(3) of this section.

16.140.085 Supplemental criteria for recreational vehicles.

A. Recreational vehicles placed on sites within a floodplain or drainage hazard area shall either:

1. Be on the site for fewer than one hundred eighty consecutive days;

2. Be fully licensed and ready for highway use; or

3. Meet all permitting requirements applicable to manufactured homes including all anchoring and

elevation requirements in Section 16.140.080 of this chapter.

B. For purposes of this section, a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

C. This section shall not be construed to permit location of a recreational vehicle which is otherwise prohibited by any other section of this code.

16.140.090 Supplemental criteria for non-dwelling structures.

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

A. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

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

C. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection 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 Section 16.140.030(G) of this chapter. (Application for Development Permit);

D. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in Section 16.140.070(B)(5) of this chapter.

E. In accordance with FEMA regulations, applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building floodproofed to the base flood level will be rated as one foot below) or as otherwise amended by FEMA.

16.140.100 Supplemental criteria for utilities and tanks.

A. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system. The applicant shall obtain all applicable local, state or federal permits.

B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into, or discharge from, the system. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding. The applicant shall obtain all applicable local, state or federal permits.

C. Above ground electrical, communication and signal transmission or distribution lines and related accessory structures other than poles or towers, shall be constructed at or above the flood surface elevation. Poles and towers shall be constructed and placed to minimize risk of damage.

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

E. Construction of utilities shall be done in a way, which minimizes the impact on the flood area. The site shall be restored, as far as practicable, to its original state according to CWS standards.

F. New and replacement tanks in flood hazard areas shall either be elevated above the base flood elevation on a supporting structure designed to prevent flotation, collapse or lateral movement during conditions of the base flood, or be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the base flood.

G. New and replacement tank inlets, fill openings, outlets and vents shall be placed a minimum of two (2) feet above base flood elevation or fitted with covers designed to prevent the inflow of flood water or outflow of the contents of the tank during conditions of the base flood.

16.140.110 Supplemental criteria for piping, culverts and man-made creek beds.

Piping or the use of culverts or man-made creek beds to drain or alter the water flow of a flood area shall be approved by Clean Water Services.

16.140.120 Criteria for multi-family, institutional and commercial development parking.

Land within the flood area and the UGB may be used for parking by multi-family, institutional or commercial developments, regardless of whether located on the same lot or parcel, if an approval for parking is obtained through the planning commission review procedure. The parking shall be approved only upon findings that:

A. The parcel or lot could not develop at the planned density, including any density transfers or bonuses, due to lack of land area to provide ground level parking areas on the same lot or parcel outside the floodplain or drainage hazard area;

B. Adequate drainage can be provided to minimize the off-site impact of changes in water flow, direction or velocity caused by creation of the parking area;

C. The applicant will minimize any adverse impacts on the natural integrity of the flood area, including wildlife and riparian vegetation to the extent practicable. Significant features such as natural ponds, large trees and significant vegetation shall be preserved according to CWS standards;

D. The parking area shall be posted to warn users that the area is within the flood area and shall not be used during periods of flood warning; and

E. Vehicular access will be provided on a roadway no portion of which is below the flood surface elevation. The parking area shall be located and oriented to minimize to the extent practicable the need to fill to provide such access. All fill shall be structurally sound and designed to avoid erosion.

16.140.130 Small accessory structures

Relief from elevation or floodproofing as required in this chapter may be granted for small accessory structures that are:

A. Less than 200 square feet and do not exceed one story;

B. Not temperature controlled;

C. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;

D. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality shall unless confined in a tank installed in compliance with this ordinance or stored at least one foot above Base Flood Elevation;

E. Located and constructed to have low damage potential;

F. Constructed with materials resistant to flood damage;

G. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;

H. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or

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

2. The bottom of all openings shall be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening;

3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions without manual intervention;

J. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

16.140.140 Below-grade crawl spaces

Below-grade crawlspaces are allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas:

A. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.

B. The crawlspace is an enclosed area below the base flood elevation and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.

C. Portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the base flood elevation. The recommended construction practice is to elevate the bottom of joists and all insulation above the base flood elevation.

D. Any building utility systems within the crawlspace must be elevated above base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the base flood elevation or sealed from floodwaters.

E. The interior grade of a crawlspace below the base flood elevation must not be more than two (2)_feet below the lowest adjacent exterior grade.

F. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.

G. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.

H. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

16.140.150 Critical facilities

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (100-year floodplain). Construction of new critical facilities shall be permissible within the 100-year floodplain if no feasible alternative site is available. Critical facilities constructed within the 100-year floodplain shall have the lowest floor elevated three feet above the base flood or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

16.140.160 General requirements and prohibitions.

A. Property owners shall maintain the flood area in such a manner as to prevent reduction of the natural carrying capacity. Maintenance outside of the public right-of-way shall be done by means of hand implements unless a development permit for an alter-

ation is first obtained (lawn mowers are considered hand implements).

B. Storage of petroleum products, explosives, herbicides, pesticides, insecticides, poisons, defoliants, fungicides, desiccants, nematocides and rodenticide is prohibited.

C. Dumping of solid waste in the flood area is prohibited.

D. The provisions of the chapter are in addition to any and all federal, state or special district laws and regulations in force at the time of approval of the development permit. Any permits required from a local, state or federal agency shall be obtained prior to any development within the flood area.

E. The standards and criteria of this chapter are cumulative and in addition to any other requirements of this title.

F. The approval authority may condition any development permit to the extent necessary to avoid any specifically identified deleterious impacts on the natural integrity of the flood area or to wildlife and vegetation within the flood area.

G. In the case of the partitioning or subdivision of land for the location of structures for human occupancy, such site shall provide a building site, which includes the ground under the structure plus a ten-foot setback around all sides of the structure, with a ground elevation at least one foot above the flood surface elevation. No partition or subdivision shall create a lot whose dimensions do not meet this standard.

H. There shall be no dumping of fill in a flood area without a floodplain or drainage hazard area alteration permit.

16.140.170 Duties of the city.

A. The city shall obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures located within the flood area and whether or not such structures contain a basement and, shall obtain and maintain for any floodproofed structure, the elevation to which the structure was floodproofed. Such information shall be public record.

B. The city manager shall notify adjacent communities and the relevant state agency of any approval prior to alteration of a watercourse. The city manager shall submit evidence of such notification to the Federal Insurance Administration. Maintenance is to be provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.

16.140.180 Abrogation.

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

If any section clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this ordinance.

16.140.190 Variances.

A. A variance application may be requested relating to any provision of this chapter.

B. Variance applications shall be subject to the provisions in Chapter 16.164 Variance.

C. In addition to the variance approval criteria in Section 16.164.050, the following factors shall be considered:

1. All technical evaluations and information;
2. The standards in this chapter;
3. The danger that materials may be swept onto other lands to the injury of others;
4. The danger to life and property due to flooding or erosion damage;
5. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
6. The importance of the services provided by the proposed facility to the community;
7. The necessity to the facility to have a waterfront location, where applicable;

8. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;

9. The compatibility of the proposed use with the floodplain management program;

10. The safety of access to the property in times of flood for ordinary and emergency vehicles;

11. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and

12. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, streets, and bridges.

D. Upon consideration of the factors of Section 16.140.190 (C), the approval authority may attach such conditions to variance approval as it deems necessary to further the purposes of this chapter.

16.140.200 Floodplain definitions.

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

"Appeal" means a request for a review of the interpretation of any provision of this chapter or a request for a variance.

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

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

"Below-grade crawl space" means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed 4 feet at any point.

"Conditional letter of map revision (CLOMR)" means a letter from FEMA commenting on whether a proposed project, if built as propose, would meet the minimum NFIP standards or proposed hydrology changes.

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

"Development" means any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the special flood hazard area.

"Drainage hazard area" Those areas subject to flooding as the result of a twenty-five (25) year storm.

"Elevated building" means, for insurance purposes, a nonbasement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

"Existing manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the adopted floodplain management regulations.

"Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"Flood" or "flooding" means:

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

a. The overflow of inland or tidal waters.

b. The unusual and rapid accumulation of run-off of surface waters from any source.

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

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

"Flood insurance rate map (FIRM)" means an official map 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).

"Flood Insurance Study" means the official report provided by the Federal Insurance Administration that is an examination, evaluation, and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

"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.

"Letter of map change (LOMC)" means an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and/or Flood Insurance Studies. LOMCs are issued in the following categories:

1. Letter of Map Amendment (LOMA). An amendment to the Flood Insurance Rate Maps based on technical data showing that an existing structure or parcel of land that has not been elevated by fill (natural grade) was inadvertently included in the special flood hazard area because of an area of naturally high ground above the base flood.

2. Letter of Map Revision (LOMR). LOMR-F (Letter of Map Revision based on Fill) is a letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.

A LOMR revises the current Flood Insurance Rate Map and/or Flood Insurance Study to show changes to the floodplains, Floodways or flood elevations. LOMRs are generally based on manmade alterations that affected the hydrologic or hydraulic characteristics of a flooding source and thus result in modification to the existing regulatory Floodway, the effective Base Flood Elevation, or the Special Flood Hazard Area. It is recommended a Conditional Letter of Map Revision be approved by FEMA prior to issuing a permit to start a project if the project has a potential to affect the special flood hazard area. (See Conditional Letter of Map Revision)

"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter found at Section 16.140.070(B)(5) of this chapter.

"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

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

"New construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

"Recreational vehicle" means a vehicle which 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 but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Special flood hazard area" means the land in the floodplain with a one percent or greater chance of flooding in any given year. It is also referred to as the 100-year floodplain. This area is shown on the Flood Insurance Rate Maps (FIRM) with the letter designation "AE" in the King City area.

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, additional placement or other improvement was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the 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; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"Structure" means a walled and roofed building, a modular or temporary building, or a gas or liquid storage tank that is principally above ground.

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

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which 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 existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or

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

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

"Water dependent" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

16.140.210 Penalties for noncompliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than *$ amount* or imprisoned for not more than *number* days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the city of King City from taking

such other lawful action as is necessary to prevent or remedy any violation.

Chapter 16.24

DEFINITIONS

Sections:

16.24.020 Definitions of specific terms.

EXHIBIT A
CDC Amendments

Chapter 16.140

FLOODPLAIN AND DRAINAGE HAZARD AREAS* - Preliminary Draft 9.17.18 9.26.18 response to FEMA comments 10.03.18 final draft per FEMA/DLCD comments 10.10.18 Planning Commission recommendation to move Floodplain definitions to CDC 16.24.020

Sections:

* Prior ordinance history: Ords. 96-4 and O-02-4.

16.140.010 Purpose.

The regulations of this chapter are intended to achieve the following:

A. Implement the comprehensive plan;

B. Implement the Federal Emergency Management Agency's (FEMA) flood insurance program and to minimize flood damage to property;

C. Implement the Metro Urban Growth Management Functional Plan Title 3 Water Quality and Flood Management;

D. Implement Statewide Planning Goal 7 Areas Subject to Natural Hazards;

E. The flood hazard areas of the city of King City are subject to periodic inundation which results in loss of life and property, health, and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood-proofed, elevated, or otherwise protected from flood damage also contribute to the flood loss. ~~Protect public health, safety and welfare through the regulation of special flood hazard areas.~~

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

1. Protect human life and health;
2. Minimize expenditure of public money and 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;

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

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

7. Ensure that potential buyers are notified that property is in an area of special flood hazard; and1

8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

16.140.020 Applicability of provisions.

Floodplain and drainage hazard area review shall be applicable to all new development and modifications of existing development as provided in this chapter.

A. Unless specifically prohibited by this title, or the Clean Water Services (CWS) "Design and Construction Standards for Sanitary Sewer and Surface Water Management" or its successor, the following are not required to obtain a development permit for a floodplain or drainage hazard area alteration:

1. Uses and Activities Allowed in All Floodplain and Drainageway Locations.

a. Farming or raising of livestock not utilizing a structure;

b. Propagation or harvesting of timber for personal consumption, provided that the use of a caterpillar tractor, yarder, backhoe, grader or similar heavy mechanized equipment is prohibited;

c. A wire boundary fence designed to impede as little as practicable the movement of water or water borne materials;

d. Accessory residential or institutional uses such as lawns, gardens and play areas, provided that no structure is permitted;

e. Recreational and accessory recreational uses such as parks or game fields, provided that no grading or structures are permitted;

f. An emergency measure necessary for immediate safety of persons or protection of property, such as riprap for erosion control, provided however, that an application for a development permit shall be promptly filed if the measure otherwise would require such a permit but for the emergency;

g. Line borings for installation of utilities when certified by a registered civil engineer: that the line is located at least thirty-six inches below ground surface in floodways, floodplains and drainage hazard areas; that the land disturbance will not alter flood storage capacity or water velocities; that all surface construction will take place outside the delineated floodplain or drainage hazard area; and that all spoils will be removed from the flood area and placed in an appropriate disposal site.

2. Uses and Activities Allowed Only Within the Urban Growth Boundary.

a. A recreational vehicle, which is allowed by the provisions of this title;

b. A nonconforming recreational vehicle may be replaced, provided there is compliance with the standards of this title.

B. Uses and Activities Permitted Through a City Manager Review.

Unless specifically prohibited in this title or the Clean Water Services "Design and Construction Standards for Sanitary Sewer and Surface Water Management" or its successor, a development permit may be approved in a flood or drainage hazard area according to a city manager review procedure for the following:

1. Uses and Activities Allowed in All Floodplain and Drainageway Locations.

a. Recreation or nature trails and removal of vegetation down to duff or bare soil provided the applicant obtains a permit for erosion control;

b. Lot line adjustments;

c. Wildlife viewing areas, including interpretive signs and off-street parking, which require no grading, and viewing platforms or structures, provided that all viewing platforms or structures:

i. Are elevated by pilings,

ii. Have the lowest floor at least one foot above the base flood elevation, and

iii. A building permit is obtained for the proposed platform or structure;

d. Maintenance, preservation and repair of local public streets and private streets including paving and grading of existing road surfaces, and grading and shaping of roadside ditches;

e. Above ground electrical, communication, and signal transmission and distribution lines on a single-pole system. For the purposes of this section, a single-pole system is defined as above ground electrical, communication or signal lines and their supporting concrete, and wood or metal poles, excluding self-supporting steel lattice-type structures;

f. Restoration and stabilization of the bank of a river or other watercourse or body of water for erosion control provided:

i. The application includes a registered civil engineer's certification that:

(A) The project is in response to a demonstrated bank failure that resulted from a specific flood event or which has occurred within the last two years,

(B) The project only restores and stabilizes the bank to its original location before the demonstrated bank failure,

(C) The length of the bank involved does not exceed two hundred fifty feet, and

(D) If riprap is used, it will be keyed in to the bed and bank of the body of water as specified in OAR 141-089-0005.

ii. Whether or not riprap is used, the length of bank within the project boundary, from the ordinary high water level to the top of the bank, shall be planted with vegetation that grows roots to stabilize the bank. Plant species used shall be those in the 1987 or most current list entitled "Shrubs, Trees and Aquatic Plants for Wildlife Plantings" prepared by the Oregon Department of Fish and Wildlife. The plantings shall meet the following requirements, unless different requirements are established for the project by the Oregon Division of State Lands through its permitting process:

(A) At least five plants shall be placed per one hundred square feet of bank area, and

(B) At least twenty percent of the plants placed shall be trees.

iii. Upon completion of the project, a registered civil engineer or landscape architect shall submit a statement certifying that the project was completed in compliance with the provisions of this section;

g. Maintenance, preservation or repair of drainage facilities located outside of public rights-of-way;

h. Maintenance of an existing vehicular access to a single-family residence or for farm or forest uses; including culverts for driveway crossings provided the application includes a registered civil engineer's certification that the project complies with Sections 16.140.060(A) through (I) of this chapter.

2. Uses and Activities Allowed Only Within the Urban Growth Boundary.

a. Construction or major improvement of local public streets and private streets except as provided for by subsection (A)(1)(f) of this section, including paving and grading, shaping of roadside ditches, and catch basins;

b. Construction of a vehicular access to a single-family residence or for farm or forest uses; including culverts for driveway crossings provided the application includes a registered civil engineer's certification that the project complies with Sections 16.140.060(A) through (I) of this chapter.

C. Uses and Activities Allowed Through a Planning Commission Review.

Unless specifically prohibited by this title, or the Clean Water Services "Design and Construction Standards for Sanitary Sewer and Surface Water Management" or its successor, a development permit may be approved in a flood or drainage hazard area through a planning commission review procedure for the following:

1. Uses and Activities Allowed in All Floodplain and Drainageway Locations.

a. Water quality or quantity improvement facilities, or a wetland mitigation project when:

i. Mandated or approved by a local, state or federal regulatory agency, or

ii. Designed to be consistent with CWS standards;

b. Dams, weirs, ponds and similar water impoundment devices, and mitigation and enhancement improvements for wetland and habitat areas;

c. Construction or major improvement or alteration of underground pipes and conduits, including sewer, water and gas lines, transmission and distribution lines for gas and oil, underground electrical, telephone and television transmission and distribution lines, including necessary accessory structures and drainage systems;

d. Above ground electrical, communication and signal transmission lines, except for those activities described in subsection (B)(1)(e) of this section;

e. Parks, golf courses and other recreational uses that do not include ~~habitable~~ structures;

f. Recreation or nature trails and associated grading, piping, culverts or bridges that meet the provisions of this title and applicable local, state and federal agency requirements;

g. Creation or restoration of wetlands;

h. Culverts and piping to implement an approved development, other than public transportation facilities, when the pipe or culvert connects to an existing pipe, culvert or drainageway. Culverts and piping in a flood or drainage hazard area shall continue to be subject to applicable local, state and federal agency requirements;

i. Bank maintenance, restoration or stabilization, including riprap for erosion control, of a river or other watercourse or body of water inside an urban growth boundary or not otherwise permitted by subsection (B)(1)(f) of this section;

j. Subdivisions and land partitions, provided that none of the proposed parcels located outside of the UGB shall accommodate residential structures;

k. Driveways and off-street parking that comply with the provisions of this title and applicable local, state and federal agency requirements.

2. Uses and Activities Allowed Only Within the Urban Growth Boundary.

a. One detached dwelling (including a manufactured dwelling) together with no more than two accessory structures and off-street parking on a lawfully created lot, when the lot or parcel contains insufficient area outside of the flood area upon which to locate the dwelling and/or accessory structures;

b. Substantial improvements to structures where "substantial improvement" is defined as follows: Any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure either:

i. Before the improvement or repair is started, or

ii. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this section, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure except as follows:

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

(B) Any alteration of a structure listed on the national register of historic places or a state or local inventory of historic places, or

(C) Applications for substantial improvements to structures shall comply with the requirements of this chapter;

c. Improvements to a lawfully established structure when the cost of the improvement is less than fifty percent of the market value of the structure and there is compliance with Section 16.140.060 of this chapter. For the purpose of this subsection, improvement means any repair, reconstruction, addition or improvement of a structure except as follows:

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

ii. Any alteration of a structure listed on the national register of historic places or a state or local inventory of historic places;

d. Accessory structure customarily provided in conjunction with the use set forth in the applicable zoning district;

e. Subdivisions and partitions that comply with the provisions of this title;

f. Vehicular access to permitted uses, including driveway crossings, except as permitted by subsection (B)(1)(h) of this section;

g. Parks, golf courses and other recreational uses that include ~~habitable~~ structures;

h. Construction or major improvement or alteration of public local streets and private streets within the UGB, or approved as part of a land division, including culverts and piping, accessory drainage systems such as catch basins, and necessary accessory structures;

i. Parking area for an adjacent multi-family, institutional or commercial development.

16.140.030 Administration.

A. A floodplain and drainage hazard review shall be conducted concurrently with any other related land use application required by the city for the proposed development.

B. Floodplain and drainage hazard review applications described in Section 16.140.020(B) shall be administered and reviewed as a city manager decision in accordance with Article II of this title and applicable approval criteria in Sections 16.140.060 through 16.140.120 of this chapter.

C. All other floodplain and drainage hazard review applications described in Section 16.140.020 shall be administered and reviewed as a planning commission decision in accordance with Article II of this title and applicable approval criteria in Sections 16.140.060 through 16.140.120 of this chapter.

D. Review all development permits to determine that the permit requirements of this ordinance have been satisfied.

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

2. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 16.140.060 are met.

3. Provide to building officials the base flood elevation and freeboard applicable to any building requiring a building permit.

4. Review all development permit applications to determine if the proposed development qualifies as a substantial improvement, as set forth in Section 16.140.200

~~The approval authority shall review all floodplain and drainage hazard applications to determine that all necessary permits shall be obtained from those federal, state or local governmental agencies from which approval is also required.~~

E. In addition to the notice requirements in Article II of this title, the city manager shall notify communities adjacent to the affected area and the Oregon Department of Land Conservation and Development prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration. The city manager shall require that maintenance is provided within the altered and relocated portion of such watercourse so that the flood carrying capacity is not diminished.

F. Development Permit Required. A development permit shall be obtained before construction or development begins within any special flood hazard area established in Section 16.140.040(B) of this chapter. The permit shall be for all structures including manufactured homes, as set forth in the definitions (Section 16.140.180 of this chapter) and for all development including fill and other activities, also as set forth in the definitions.

G. Application for Development Permit. Application for a development permit shall be made on forms furnished by the city manager and may include but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facili-

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ties, and the location of the foregoing. Specifically, the following information is required:

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

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

3. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 16.140.090 of this chapter; and

4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.

H. In the interpretation and application of this ordinance, all provisions shall be:

1. Considered as minimum requirements;

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

3. Deemed neither to limit or repeal any other powers granted under State statutes.

16.140.040 Basis for identifying lands subject to floodplain and drainage hazard area standards.

A. Lands to Which This Ordinance Applies.

This chapter shall apply to all areas of special flood hazard areas within the jurisdiction of city of King City, Oregon.

B. Basis for Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of King City, Oregon," dated ~~November 4, 2016~~October 19, 2018, with accompanying Flood Insurance Rate Maps (FIRM), are adopted by reference and declared to be a part of this chapter. The Flood Insurance Study is on file at 15300 SW 116th Ave., King City, OR 97224. The best available information for flood hazard area identification as outlined in subsection (B)(1) of this section, shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under subsection (B)(1) of this section.

1. When base flood elevation data has not been provided in accordance with subsection B of this section, the city manager 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 new construction, substantial improvements, or other development in Zone A on the FIRM.

2. Recognizing that the scale may be such that the true and accurate floodplain or drainage hazard area cannot be determined from the maps referenced in subsection B of this section alone, all persons seeking a development permit for lands within such areas and within two hundred fifty feet of the map boundary of a floodplain or drainage hazard area identified in subsection B of this section shall submit with the development permit application:

a. A delineation of the floodplain and the floodway boundaries, established by a registered engineer or surveyor from the surface elevations available from the city for the floodplain based upon maps referenced in subsection B of this section, and upon any other available authoritative flood data approved by the city manager, including but not limited to high water marks, photographs of past flooding, or historical flood data; and

b. A delineation of the drainage hazard area and drainageway by a registered surveyor or engineer from surface elevations prepared by a registered engineer. Such delineation shall be based on mean sea level datum and be field located using recognized landmarks.

C. Acceptance of Risk. Persons seeking to develop within a floodplain or drainage hazard area must do so with the understanding that they and their successors assume the risks and that the risks cannot be eliminated, even with strict compliance with the standards adopted herein. This chapter does not imply that lands outside of floodplain or drainage hazard areas, or development permitted within, will be free from flooding or flood damage.

16.140.050 Submittal requirements.

A. In addition to the form and information required in Section 16.44.030 of this title, an applicant shall submit the following:

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1. Copies of the site plan, number to be determined at the preapplication conference, and necessary data or narrative, which explains how the development conforms to the applicable criteria, and:

a. The site plans and required drawings, prepared by a registered civil engineer, shall be drawn on sheets preferably not exceeding twenty-four inches by thirty-six inches,

b. The scale for the site plan shall be an engineering scale of not less than one inch equals fifty feet,

c. All drawings of structures elevations, prepared by a registered civil engineer or architect, shall be a standard architectural scale, being one-fourth inch or one-eighth inch equals one foot, and

d. Existing and proposed topography within the boundaries of the flood area using the following contour intervals:

i. For slopes of five percent or less, contour intervals not more than one foot,

ii. For slopes greater than five percent and up to and including ten percent, contour intervals not more than two feet, and

iii. For slopes greater than ten percent, contour intervals not more than five feet;

2. This information may be submitted with or be made part of a site plan or grading plan for the proposed development;

3. A list of names and addresses of all persons who are property owners of record within two hundred fifty feet of the subject property;

4. The required fee; and

5. The site plan, data and narrative shall be submitted for any related development applications as provided in this title.

B. Upon demonstration that no other alternative exists as determined by the City Engineer:

1. Applicants shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA before an encroachment, including fill, new construction, substantial improvement, fences or other development, in the regulatory floodway is permitted that will cause any increase in the Base Flood Elevation. The CLOMR shall be submitted prior to the application being deemed complete.

2. Within six (6) months of project completion, an applicant who obtains a CLOMR from FEMA, or whose development alters a watercourse, modifies floodplain boundaries, or modifies Base Flood Elevations within the regulatory floodway shall submit obtain evidence to the city that a Letter of Map Revision (LOMR) from FEMA has been requested that reflects the as-built changes to the Flood Insurance Study (FIS) and/or Flood Insurance Rate Map (FIRM).

16.140.060 Development standards for floodplain and drainage hazard area applications.

The applicant for a proposed floodplain or drainage hazard area development shall demonstrate compliance with the following applicable standards of this chapter.

A. Subdivision Proposals.

1. All subdivision proposals shall be consistent with the need to minimize flood damage;

2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage;

3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and

4. Where base flood elevation data has not been provided or is not available from another authoritative source, it shall be generated for subdivision proposals and other proposed developments which contain at least fifty lots or five acres (whichever is less).

B. Development proposed to encroach into a regulatory floodway adopted and designated pursuant to FEMA regulations shall demonstrate through hydrologic and hydraulic analysis, performed in accordance with standard engineering practice by a registered civil engineer, that the cumulative effect of the proposal, when combined with all other existing and anticipated development within the basin based upon full development of the basin as envisioned in the relevant comprehensive plans for the city and Washington County, will not result in any increase in flood levels during the occurrence of the base (re-

gional) flood discharge. Notwithstanding this provision, development that would result in such an increase may be approved if the city, at the sole expense of the applicant, first obtains FEMA approval in accordance with 44 CFR Ch. 1, Part 65 (October 1, 1990 edition, or its successor). No increase to the floodplain elevation shall be permitted unless the area in which the rise will occur contains no structures and the owner of such property signs a written acceptance of any increase in the floodplain elevation. These properties are not required to be part of the application for the proposed development.

C. ~~Development proposed on a floodplain site where the development does not encroach into an adopted FEMA regulatory floodway shall demonstrate through hydrologic and hydraulic analysis, performed in accordance with standard engineering practice by a registered civil engineer, that the cumulative effect of the proposal, when combined with all other existing and anticipated development within the basin based upon full development of the basin as envisioned in the relevant comprehensive plans for the city and Washington County, will not increase the floodplain elevation more than one foot at any point in the vicinity. Notwithstanding this provision, an increase in excess of one foot may be approved if the city, at the sole expense of the applicant, first obtains FEMA approval in accordance with 44 CFR Ch. 1, Part 65 (October 1, 1990 edition, or its successor). No increase to the floodplain elevation shall be permitted unless the area in which the rise will occur contains no structures and the owner of such property signs a written acceptance of any increase in the floodplain elevation.~~Until a regulatory floodway is designated, no new construction, substantial improvements or other development (including fill) shall be permitted within Zones A1-30 and AE on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point.

D. Development proposed on a drainage hazard area site shall demonstrate through hydrologic and hydraulic analysis, performed in accordance with standard engineering practice by a registered civil engineer, that the cumulative effect of the proposal, when combined with all other existing and anticipated development within the basin based upon full development of the basin as envisioned in the relevant comprehensive plans for the city and Washington County, will not result in any increase to the drainage hazard area elevation at any point in the vicinity. Notwithstanding this provision, an increase may be approved if the area in which the rise will occur contains no structures and the owner of such property signs a written acceptance of any increase in the drainage hazard area elevation.

E. Encroachments into a floodway shall be designed so as to minimize the risk that the encroachment will catch substantial debris or otherwise significantly impede floodwater flows. Designs may include, but are not limited to, adequate sizing of openings, secured breakaway bridges, diverters or spacing of supports.

F. The proposal will not increase the existing velocity of flood flows so as to exceed the erosive velocity limits of soils in the flood area. Energy dissipation devices or other measures to control the mean velocity so as not to cause erosion of the flood area may be used to meet this standard. “Open Channel Hydraulics” by V.T. Chow, McGraw-Hill Book Company, Inc., 1988, is presumed to be the best available reference for maximum permissible velocity. “Hydraulic Engineering Circular No. 14,” Hydraulic Design of Energy Dissipaters for Culverts and Channels, published by the Federal Highway Administration, September 1983, is presumed to be the best available reference for the design of energy dissipators.

G. All cut and fill shall be structurally sound and designed to minimize erosion. All fill below the flood surface elevation shall be accompanied by an equal amount of cut or storage within the boundary of the development site unless:

1. The proposed cut and fill is found to be in compliance with the King City storm drainage master plan and/or Clean Water Services requirements; or

2. Off-site excavation will be utilized to balance a fill, provided:

Commented [PR2]: Even though the Tualatin floodway is designated FEMA requests that all of the provisions of CFR 60.3(c)(10) be in the King City ordinance.

Commented [KL3R2]: Amended as requested.

a. The off-site excavation area will be part of the application for the development proposing to place the fill,

b. The off-site excavation area will be located in the same drainage basin as the proposed fill area,

c. The off-site excavation area will be located within points of constriction on the drainage system, if any, and as close to the fill site as practicable. The applicant's registered civil engineer shall conduct a storage routing analysis to determine the location of the fill,

d. The off-site excavation area will be constructed as part of the development placing the fill,

e. Any use or future development of the excavated area shall comply with the standards of this chapter and Clean Water Services requirements,

f. Ownership of the excavated area shall be by one of the following mechanisms:

i. Dedication of the area to an appropriate public agency when a public agency is willing to accept the dedication,

ii. Ownership of the area by the applicant of the proposed development,

iii. Dedication of the development rights of the area to an appropriate public agency with ownership remaining with the property owner. Maintenance of the area shall be the responsibility of the applicant or property owner, and

iv. Deed or easement-restricted private ownership which prevents any use or future development of the area as specified by subsection (F)(2)(e) of this section. Maintenance of the area as conditioned by the city shall be the responsibility of the applicant or property owner.

H. There is adequate storm drainage behind a dike such as a lift pump or flap gate to drain the floodplain or drainage hazard area behind the dike.

I. That the environmental impact of the disturbance or alteration of riparian wildlife and vegetation has been minimized to the extent practicable as required by Clean Water Services. Enhancement of riparian habitats through planting or other such improvements may be required to mitigate adverse effects. Significant features such as natural ponds, large trees, and endangered vegetation within the flood or drainage hazard area shall be protected when practicable.

J. Drainage systems shall be designed and constructed according to the standards of Clean Water Services (CWS).

K. Proposed partitions and subdivisions shall minimize flooding by complying with the applicable standards of the Clean Water Services construction standards.

L. Public utilities and facilities in proposed partitions and subdivisions shall be located and constructed in a manner that will minimize flood damage.

16.140.070 Supplemental criteria for dwellings.

A. No new dwelling shall be constructed in a flood area if:

1. The lot or parcel contains sufficient, suitable, existing buildable land area that is located outside the flood area so as to permit construction at least one foot above the flood area;

2. The buildable land area shall be deemed suitable if it includes a minimum ten-foot perimeter setback around the proposed dwelling that is outside the flood area; and

3. The property is outside of the urban growth boundary (UGB).

B. Construction standards for new dwellings and substantial improvements to existing dwellings in flood areas:

1. All new dwellings and substantial improvements to existing dwellings shall have the lowest ~~habitable~~ floor, including any basement, elevated to at least one foot above the flood surface elevation and shall be anchored so as to prevent flotation, collapse or lateral movement;

2. New dwellings and substantial improvements to existing dwellings may be placed on pressure treated pilings when:

a. Certified by a registered engineer as sufficient to prevent collapse or movement during a one hundred-year flood,

b. Pilings are placed on stable compacted fill on no greater than ten-foot centers, and

Commented [PR4]: Please clarify that Dwelling = Residential structure. If you look at the code citation 16.140.070(B)(3) and (4) you will see that dwelling and structure are both used but there is no definition of dwelling in the ordinance. For consistency should King City use the term "Residential structure"

Commented [K5R4]: In CDC 16.24.030 Definitions of land use types, Subsection C. Residential Use Types includes definitions for different residential structures, including multi-family, single family (attached and detached), and duplex.

Commented [PR6]: Please confirm that CDC 16.24.030 pertains to CDC 16.140.070.

Commented [KL7R6]: Yes. CDC 16.24 Definitions apply to the entire Title 16, of which this chapter is a part.

Commented [PR8]: This is unclear, does the City regulate property outside of the UGB?

Commented [K9R8]: We can drop this if you like. While almost always land outside of the UGB isn't within a city limit, it's technically possible. There is one small "island" of land adjacent to the city limit (and in the Tualatin R. floodplain), which is outside of the UGB. Future annexation of adjacent areas could raise the question about annexation of this area outside of the UGB for other reasons not related to land development (e.g., police protection).

Commented [PR10]: If there is even a slight possibility, then the provision should remain. Thank you for the explanation.

Commented [K11]: Removed throughout.

c. Pilings greater than six feet high are reinforced;

3. New dwellings and substantial improvements to existing dwellings may be placed on approved fill providing the building site, which includes the ground under the structure plus a ten-foot setback around all sides of the structure, is above the flood surface elevation;

4. All new construction and improvements to existing structures shall be done with approved materials and utility equipment resistant to flood damage, using approved construction methods and practices that minimize such damage. All new construction and improvements to existing structures shall be anchored to prevent flotation, collapse or lateral movement;

5. Fully enclosed ~~non-habitable~~ areas below the lowest floor that are subject to flooding are permitted only if 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 must meet or exceed the following minimum criteria:

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

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

c. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters without manual intervention;

d. Show how the structure is anchored to prevent flotation, collapse or lateral movement; and

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

16.140.080 Supplemental criteria for manufactured dwellings, manufactured dwelling parks and subdivisions.

In addition to the requirements of Chapter 16.120 of this title, new or substantially improved manufactured dwellings, manufactured dwelling parks and subdivisions located in a flood area shall comply with the following standards:

A. Manufactured dwellings shall not be located within the floodway except in a lawfully established manufactured dwelling park or subdivision.

B. New manufactured dwellings shall not be located outside of the UGB.

C. Manufactured dwellings shall:

1. Be anchored to prevent flotation, collapse or lateral movement of the structure;

2. Be anchored to prevent flotation, collapse, or lateral movement during the base flood, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas: guidebook for additional techniques);

3. Have solid flood openings that comply with C 2 of this section for solid foundation walls supporting the manufactured dwelling;

4. Have the bottom of the longitudinal chassis frame beam in A zones at or above the base flood elevation;

5. Have electrical crossover connections that are a minimum of one (1) foot above the base flood elevation.

D. In new manufactured dwelling parks and subdivisions, or in expansions to existing manufactured dwelling parks and subdivisions, or where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds fifty percent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced; and for manufactured dwelling park or subdivision, the following shall be required:

1. Stands or lots shall be elevated on compacted fill or on pilings so that the ~~lowest floor~~bottom of the

Commented [PR12]: Please verify that this does not include replacement (and thus substantial improvement) of a Manufactured Dwelling in the floodway? (where substantial improvement would be as new construction & require a no-rise)

Commented [K13R12]: CDC 16.160 applies to nonconforming situations. CDC 16.160.050 B. Nonconforming Development or Structures states the following:
1. A nonconforming site development or structure may be expanded, enlarged or modified only if such change does not increase its degree of nonconformity with the provisions of this title.

2. When a nonconforming development or structure is damaged, it shall not be re-established if the repair cost of the structure is more than seventy-five percent of its assessed value.

The city's application for a manufactured home in the floodway would be that it's 1) nonconforming; 2) expansion would increase its nonconformity; and 3) if it's damaged beyond 75% of its value, it can't be replaced without meeting CDC standards including Chapter 16.140.

Commented [PR14]: Thank you for the explanation and verification.

Commented [PR15]: This is unclear, does the City regulate property outside of the UGB?

Commented [K16R15]: Currently - no, and in all probability – no, but as noted above there's a remote chance it could in the future. Can delete if you prefer.

Commented [PR17]: Please see the answer above. Thank you again for the explanation.

longitudinal chassis frame beam of the manufactured dwelling ~~will~~ shall be at ~~least one foot~~or above the base flood surface elevation;

2. Adequate surface drainage and access for a hauler are provided; and

3. In the instance of elevation on pilings, that:

a. Lots are large enough to permit steps,

b. Piling foundations are placed in stable soil not more than ten feet apart, and

c. Reinforcement is provided for pilings more than six feet above the ground level.

E. Placement of, or substantial improvements to, manufactured dwellings on-sites outside of a manufactured dwelling park or subdivision, or in a new or existing manufactured dwelling park or subdivision, or in an expansion to an existing manufactured dwelling park or subdivision, shall be elevated on compacted fill or on pilings so that the ~~lowest floor~~ bottom of the longitudinal chassis frame beam of the manufactured dwelling will be at ~~least one foot~~or above the base flood surface elevation; elevation on pilings shall meet the requirements of subsection (D)(3) of this section.

16.140.085 Supplemental criteria for recreational vehicles.

A. Recreational vehicles placed on sites within a floodplain or drainage hazard area shall either:

1. Be on the site for fewer than one hundred eighty consecutive days;

2. Be fully licensed and ready for highway use; or

3. Meet all permitting requirements applicable to manufactured homes including all anchoring and elevation requirements in Section 16.140.080 of this chapter.

B. For purposes of this section, a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

C. This section shall not be construed to permit location of a recreational vehicle which is otherwise prohibited by any other section of this code.

16.140.090 Supplemental criteria for non-dwelling structures.

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

A. Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

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

C. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection 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 Section 16.140.030(G) of this chapter. (Application for Development Permit);

D. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in Section 16.140.070(B)(5) of this chapter.

E. In accordance with FEMA regulations, applicants floodproofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level (e.g., a building floodproofed to the base flood level will be rated as one foot below) or as otherwise amended by FEMA.

16.140.100 Supplemental criteria for utilities and tanks.

A. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system. The applicant shall obtain all applicable local, state or federal permits.

B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into, or discharge from, the system. On-site waste disposal systems shall be located to

Commented [AC18]: The State of Oregon does not differentiate between new and existing manufactured home parks. The requirements in 16.140.080 (A) through (C) apply to all new or substantially improved manufactured dwellings regardless of the age of the mobile home parks. So I have recommended some revisions to align this section with the State of Oregon Manufactured Dwelling Installation Specialty Code.

avoid impairment to them or contamination from them during flooding. The applicant shall obtain all applicable local, state or federal permits.

C. Above ground electrical, communication and signal transmission or distribution lines and related accessory structures other than poles or towers, shall be constructed at or above the flood surface elevation. Poles and towers shall be constructed and placed to minimize risk of damage.

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

E. Construction of utilities shall be done in a way, which minimizes the impact on the flood area. The site shall be restored, as far as practicable, to its original state according to CWS standards.

F. New and replacement tanks in flood hazard areas shall either be elevated above the base flood elevation on a supporting structure designed to prevent flotation, collapse or lateral movement during conditions of the base flood, or be anchored to prevent flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy assuming the tank is empty, during conditions of the base flood.

G. New and replacement tank inlets, fill openings, outlets and vents shall be placed a minimum of two (2) feet above base flood elevation or fitted with covers designed to prevent the inflow of flood water or outflow of the contents of the tank during conditions of the base flood.

16.140.110 Supplemental criteria for piping, culverts and man-made creek beds.

Piping or the use of culverts or man-made creek beds to drain or alter the water flow of a flood area shall be approved by Clean Water Services.

16.140.120 Criteria for multi-family, institutional and commercial development parking.

Land within the flood area and the UGB may be used for parking by multi-family, institutional or commercial developments, regardless of whether located on the same lot or parcel, if an approval for parking is obtained through the planning commission review procedure. The parking shall be approved only upon findings that:

A. The parcel or lot could not develop at the planned density, including any density transfers or bonuses, due to lack of land area to provide ground level parking areas on the same lot or parcel outside the floodplain or drainage hazard area;

B. Adequate drainage can be provided to minimize the off-site impact of changes in water flow, direction or velocity caused by creation of the parking area;

C. The applicant will minimize any adverse impacts on the natural integrity of the flood area, including wildlife and riparian vegetation to the extent practicable. Significant features such as natural ponds, large trees and significant vegetation shall be preserved according to CWS standards;

D. The parking area shall be posted to warn users that the area is within the flood area and shall not be used during periods of flood warning; and

E. Vehicular access will be provided on a roadway no portion of which is below the flood surface elevation. The parking area shall be located and oriented to minimize to the extent practicable the need to fill to provide such access. All fill shall be structurally sound and designed to avoid erosion.

16.140.130 Small accessory structures

Relief from elevation or floodproofing as required in this chapter may be granted for small accessory structures that are:

A. Less than 200 square feet and do not exceed one story;

B. Not temperature controlled;

C. Not used for human habitation and are used solely for parking of vehicles or storage of items having low damage potential when submerged;

D. Not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality shall unless confined in a tank installed in compliance with this ordinance or stored at least one foot above Base Flood Elevation;

E. Located and constructed to have low damage potential;

F. Constructed with materials resistant to flood damage;

G. Anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, during conditions of the base flood;

H. Constructed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or

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

2. The bottom of all openings shall be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening;

3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions without manual intervention;

J. Constructed with electrical, and other service facilities located and installed so as to prevent water from entering or accumulating within the components during conditions of the base flood.

16.140.140 Below-grade crawl spaces

Below-grade crawlspaces are allowed subject to the following standards as found in FEMA Technical Bulletin 11-01, Crawlspace Construction for Buildings Located in Special Flood Hazard Areas:

A. The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Hydrostatic loads and the effects of buoyancy can usually be addressed through the required openings stated in Section B below. Because of hydrodynamic loads, crawlspace construction is not allowed in areas with flood velocities greater than five (5) feet per second unless the design is reviewed by a qualified design professional, such as a registered architect or professional engineer. Other types of foundations are recommended for these areas.

B. The crawlspace is an enclosed area below the base flood elevation and, as such, must have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening can be no more than one (1) foot above the lowest adjacent exterior grade.

C. Portions of the building below the base flood elevation must be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawlspace used to elevate the building, but also any joists, insulation, or other materials that extend below the base flood elevation. The recommended construction practice is to elevate the bottom of joists and all insulation above the base flood elevation.

D. Any building utility systems within the crawlspace must be elevated above base flood elevation or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the base flood elevation or sealed from floodwaters.

E. The interior grade of a crawlspace below the base flood elevation must not be more than two (2) feet below the lowest adjacent exterior grade.

F. The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed four (4) feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.

G. There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. The enclosed area should be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles or gravel or crushed stone drainage by gravity or mechanical means.

H. The velocity of floodwaters at the site should not exceed five (5) feet per second for any crawlspace. For velocities in excess of five (5) feet per second, other foundation types should be used.

16.140.150 Critical facilities

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (100-year floodplain). Construction of new critical facilities shall be permissible within the 100-year floodplain if no feasible alternative site is available. Critical facilities constructed within the 100-year floodplain shall have the lowest floor elevated three feet above the base flood or to the height of the 500-year flood, whichever is higher. Access to and from the critical facility should also be protected to the height utilized above. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

16.140.160 General requirements and prohibitions.

A. Property owners shall maintain the flood area in such a manner as to prevent reduction of the natural carrying capacity. Maintenance outside of the public right-of-way shall be done by means of hand implements unless a development permit for an alteration is first obtained (lawn mowers are considered hand implements).

B. Storage of petroleum products, explosives, herbicides, pesticides, insecticides, poisons, defoliants, fungicides, desiccants, nematocides and rodenticide is prohibited.

C. Dumping of solid waste in the flood area is prohibited.

D. The provisions of the chapter are in addition to any and all federal, state or special district laws and regulations in force at the time of approval of the development permit. Any permits required from a local, state or federal agency shall be obtained prior to any development within the flood area.

E. The standards and criteria of this chapter are cumulative and in addition to any other requirements of this title.

F. The approval authority may condition any development permit to the extent necessary to avoid any specifically identified deleterious impacts on the natural integrity of the flood area or to wildlife and vegetation within the flood area.

G. In the case of the partitioning or subdivision of land for the location of structures for human occupancy, such site shall provide a building site, which includes the ground under the structure plus a ten-foot setback around all sides of the structure, with a ground elevation at least one foot above the flood surface elevation. No partition or subdivision shall create a lot whose dimensions do not meet this standard.

H. There shall be no dumping of fill in a flood area without a floodplain or drainage hazard area alteration permit.

16.140.170 Duties of the city.

A. The city shall obtain and record the actual elevation (in relation to mean sea level) of the lowest ~~habitable~~ floor (including basement) of all new or substantially improved structures located within the flood area and whether or not such structures contain a basement and, shall obtain and maintain for any floodproofed structure, the elevation to which the structure was floodproofed. Such information shall be public record.

B. The city manager shall notify adjacent communities and the relevant state agency of any approval prior to alteration of a watercourse. The city manager shall submit evidence of such notification to the Federal Insurance Administration. Maintenance is to

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

16.140.180 Abrogation.

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

If any section clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this ordinance.~~The provisions of this chapter are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.~~

16.140.190 Variances.

A. A variance application may be requested relating to any provision of this chapter.

B. Variance applications shall be subject to the provisions in Chapter 16.164 Variance.

C. In addition to the variance approval criteria in Section 16.164.050, the following factors shall be considered:

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

D. Upon consideration of the factors of Section 16.140.190 (C), the approval authority may attach such conditions to variance approval as it deems necessary to further the purposes of this chapter.

~~**16.140.200 Floodplain definitions.**~~

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

~~"Appeal" means a request for a review of the interpretation of any provision of this chapter or a request for a variance.~~

~~"Base flood" means the flood having a one percent change of being equaled or exceeded in any given year. Also referred to as the "one hundred year flood." Designation on maps always includes the letter A.~~

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

~~"Below grade crawl space" means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed 4 feet at any point.~~

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~~"Conditional letter of map revision (CLOMR)" means a letter from FEMA commenting on whether a proposed project, if built as propose, would meet the minimum NFIP standards or proposed hydrology changes.~~

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

~~"Development" means any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the special flood hazard area.~~

~~"Drainage hazard area" Those areas subject to flooding as the result of a twenty five (25) year storm.~~

~~"Elevated building" means, for insurance purposes, a nonbasement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.~~

~~"Existing manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the adopted floodplain management regulations.~~

~~"Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).~~

~~"Flood" or "flooding" means:~~

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

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

~~b~~2. The unusual and rapid accumulation of run-off of surface waters from any source.

~~c. Mudslides (i.e., mudflows which are proximately caused by flooding as defined in subsection 1.b. of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.~~2a.

~~"Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).~~

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

~~"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.~~

~~"Letter of map change (LOMC)" means an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and/or Flood Insurance Studies. LOMCs are issued in the following categories:~~

~~1. Letter of Map Amendment (LOMA). An amendment to the Flood Insurance Rate Maps based on technical data showing that an existing structure or parcel of land that has not been elevated by fill (natural grade) was inadvertently included in the special flood hazard area because of an area of naturally high ground above the base flood.~~

~~2. Letter of Map Revision (LOMR). LOMR-F (Letter of Map Revision based on Fill) is a letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.~~

~~A LOMR revises the current Flood Insurance Rate Map and/or Flood Insurance Study to show changes to the floodplains, Floodways or flood elevations. LOMRs are generally based on manmade alterations that affected the hydrologic or hydraulic characteristics of a flooding source and thus result in modification to the existing regulatory Floodway, the effective Base Flood Elevation, or the Special Flood Hazard Area. It is recommended a Conditional Letter of Map Revision be approved by FEMA prior to issuing a permit to start a project if the project has a potential to affect the special flood hazard area. (See Conditional Letter of Map Revision)~~

~~"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter found at Section 16.140.070(B)(5) of this chapter.~~

~~"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."~~

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

~~"New construction" means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter a floodplain management regulation adopted by a community~~.

~~"Recreational vehicle" means a vehicle which 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 but as temporary living quarters for recreational, camping, travel, or seasonal use.~~

~~"Special flood hazard area" means the land in the floodplain with a one percent or greater chance of flooding in any given year. It is also referred to as the 100-year floodplain. This area is shown on the Flood Insurance Rate Maps (FIRM) with the letter designation "AE" in the King City area.~~

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

~~"Structure" means a walled and roofed building, a modular or temporary building, or a gas or liquid storage tank that is principally above ground.~~

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

~~"Substantial improvement" means any repair, rehabilitation, addition, reconstruction, or improvement of a structure, the cost of which equals or exceeds~~

~~fifty percent of the market value of the structure either:~~

~~1. Before the improvement or repair is started; or~~

~~2. If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, 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 correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or~~

~~b. Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.~~

~~"Variance" means a grant of relief from the requirements of this chapter which permits construction in a manner that would otherwise be prohibited by this chapter.~~

~~"Water dependent" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.~~

tained shall prevent the city of King City from taking such other lawful action as is necessary to prevent or remedy any violation.

16.140.200 Penalties for noncompliance.

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this ordinance and other applicable regulations. Violations of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall upon conviction thereof be fined not more than *$ amount* or imprisoned for not more than *number* days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein con-

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Commented [KL19]: Will need to confirm the penalties with the City Manager and City Attorney.

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Chapter 16.24

DEFINITIONS

Sections:

16.24.020 Definitions of specific terms.

~~As used in this title the following words and phrases shall mean:~~

~~"Flood plain," or "flood plain, one hundred year" means the flood hazard area adjoining a stream or drainageway feature that has a one percent chance of occurrence in any single year (one hundred year flood) and areas subject to flooding that have been identified based on historical information. It is also referred to as the "special flood hazard area."~~

~~"Flood surface elevation" means the elevation of the surface water of a floodplain or drainage hazard area.~~

~~"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.~~

Floodplain definitions.

"Appeal" means a request for a review of the interpretation of any provision of Chapter 16.140 or a request for a variance.

"Base flood" means the flood having a one percent change of being equaled or exceeded in any given year. ~~Also referred to as the "one hundred year flood." Designation on maps always includes the letter A.~~

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

"Below-grade crawl space" means an enclosed area below the base flood elevation in which the interior grade is not more than two feet below the lowest adjacent exterior grade and the height, measured from the interior grade of the crawlspace to the top of the crawlspace foundation, does not exceed 4 feet at any point.

"Conditional letter of map revision (CLOMR)" means a letter from FEMA commenting on whether a proposed project, if built as propose, would meet the minimum NFIP standards or proposed hydrology changes.

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

"Development" means any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the special flood hazard area.

"Drainage hazard area" Those areas subject to flooding as the result of a twenty-five (25) year storm.

"Elevated building" means, for insurance purposes, a nonbasement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, posts, piers, pilings, or columns.

"Existing manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the adopted floodplain management regulations.

"Expansion to an existing manufactured home park or subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

"Flood" or "flooding" means:

Commented [KL20]: To be more consistent with the ordinance format, King City may elect to place all of the definitions in this section in 16.24 Definitions in their distinct category of "Floodplain-related definitions." Currently, all sign-related definitions are handled this way.

Commented [PR21]: Please remove this portion of the definition to be compliant with the NFIP definition found in CFR 59.1.

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

a. The overflow of inland or tidal waters.

b. The unusual and rapid accumulation of run-off of surface waters from any source.

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

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

"Flood insurance rate map (FIRM)" means an official map 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).

"Flood Insurance Study" means the official report provided by the Federal Insurance Administration that is an examination, evaluation, and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

"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.

"Letter of map change (LOMC)" means an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps and/or Flood Insurance Studies. LOMCs are issued in the following categories:

1. Letter of Map Amendment (LOMA). An amendment to the Flood Insurance Rate Maps based on technical data showing that an existing structure or parcel of land that has not been elevated by fill (natural grade) was inadvertently included in the special flood hazard area because of an area of naturally high ground above the base flood.

2. Letter of Map Revision (LOMR). LOMR-F (Letter of Map Revision based on Fill) is a letter from FEMA stating that an existing structure or parcel of land that has been elevated by fill would not be inundated by the base flood.

A LOMR revises the current Flood Insurance Rate Map and/or Flood Insurance Study to show changes to the floodplains, Floodways or flood elevations. LOMRs are generally based on manmade alterations that affected the hydrologic or hydraulic characteristics of a flooding source and thus result in modification to the existing regulatory Floodway, the effective Base Flood Elevation, or the Special Flood Hazard Area. It is recommended a Conditional Letter of Map Revision be approved by FEMA prior to issuing a permit to start a project if the project has a potential to affect the special flood hazard area. (See Conditional Letter of Map Revision)

"Lowest floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this chapter found at Section 16.140.070(B)(5) of this chapter.

"Manufactured home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

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

Commented [PR22]: Please use the NFIP definition of 'Flood or Flooding' as found in CFR 59.1
'Flood or flooding means:
(a) A general and temporary condition of partial or complete inundation of normally dry land areas from:
(1) The overflow of inland or tidal waters.
(2) The unusual and rapid accumulation or runoff of surface waters from any source.
(3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
(b) 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 unforseeable event which results in flooding as defined in paragraph (*a)(1) of this definition.'

Commented [K23R22]: Amended as requested.

Commented [PR24]: Please use the NFIP definition of "Flood insurance rate map (FIRM) as found in CFR 59.1.
'Flood insurance rate map (FIRM) means an official map 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).'

Commented [K25R24]: Amended as requested.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

"Recreational vehicle" means a vehicle which 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 but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Special flood hazard area" means the land in the floodplain with a one percent or greater chance of flooding in any given year. It is also referred to as the 100-year floodplain. This area is shown on the Flood Insurance Rate Maps (FIRM) with the letter designation "AE" in the King City area.

"Start of construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, additional placement or other improvement was within one hundred eighty days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the 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; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"Structure" means a walled and roofed building, a modular or temporary building, or a gas or liquid storage tank that is principally above ground.

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

"Substantial improvement" means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which 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 existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
2. Any alteration of a "historic structure", provided that the alteration will not preclude the structure's designation as a "historic structure."

"Variance" as applied in Chapter 16.140 means a grant of relief from the requirements of Chapter 16.140 which permits construction in a manner that would otherwise be prohibited by Chapter 16.140.

"Water dependent" means a structure for commerce or industry which cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations.

Commented [PR26]: Please use the NFIP definition of "New construction' found in CFR 59.1. 'New construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.'

Commented [K27R26]: Amended as requested.

Commented [PR28]: Please use the NFIP definition of "Start of construction" found in CFR 59.1. "Start of construction includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of 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; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.'

Commented [K29R28]: Amended as requested.

EXHIBIT B
List of FEMA Exhibits

In addition to the amendments in Exhibit A, King City also adopts the following by reference (available at https://msc.fema.gov/portal/home):

- FIRM Index map number 41067CIND0B – ***Revised 10.19.18***
- FIRM Panel 539 of 650 / Community – King City / Number – 410269 / Panel 0539 / Suffix F / Version Number 2.3.3.3 / Map Number – 41067C0539F – ***Revised 10.19.18***
- FIRM Panel 541 of 650 / Community – King City / Number – 410269 / Panel 0541 / Suffix E / Map Number – 41067C0541E – ***Effective Date: 11.04.16***
- FIRM Panel 543 of 650 / Community – King City / Number – 410269 / Panel 0543 / Suffix E / Map Number – 41067C0543E – ***Effective Date: 11.04.16***
- Flood Insurance Study (FIS) Volume 1 of 3 - Number 41067CV001B, ***Revised 10.19.18***
- FIS Volume 2 of 3 – Number 41067CV002B, ***Revised 10.19.18***
- FIS Volume 3 of 3 – Number 41067CV003B, ***Revised 10.19.18***

EXHIBIT C
Findings and Conclusions

FINDINGS AND CONCLUSIONS

The relevant criteria for the King City Comprehensive Plan amendment are found in:

- The King City Comprehensive Plan
- The Oregon Statewide Planning Goals

Because the policy direction in the King City Comprehensive Plan is based directly upon the Oregon Statewide Planning Goals, addressing the comprehensive plan will simultaneously consider the state goals. The recommended findings are followed by background and supporting information in this report. The Planning Commission should consider the findings regarding the proposed CDC amendments.

The King City Comprehensive Plan is organized using the Statewide Planning Goals. The plan goals are satisfied as indicated below:

Citizen Involvement - Goal 1: To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

The FEMA Flood Insurance Rate Maps (FIRM) were available previously for public review. The city provided the required public notice in the newspaper to all property owners within the 100- and 500-year floodplain areas identified in the FIRM. This goal is satisfied.

Land Use Planning - Goal 2: To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

The city has adopted the King City Comprehensive Plan and Community Development Code in accordance this goal, and as noted above, citizens have been afforded an opportunity to participate. This goal is satisfied.

Agricultural Lands – Goal 3 and Forest Lands – Goal 4

These goals are not relevant because the property is designated for urban rather than resource use.

Open spaces, scenic and historic areas, and natural resources – Goal 5: To conserve open space and protect natural and scenic resources.

While limitations on development within the 100-year floodplain will have a beneficial effect on conserving these resources, it is not relevant to these regulations, which are focused on reducing flood damage to property.

Air, water and land resource quality – Goal 6: To maintain and improve the quality of the air, water, and land resources of the state.

While limitations on development within the 100-year floodplain will have a beneficial effect on maintaining or improving these resources, it is not relevant to these regulations, which are focused on reducing flood damage to property.

Natural Disasters and Hazards – Goal 7

The purpose of the CDC amendments is to keep the city's floodplain regulations compliant with current federal requirements and to enable property owners to continue to be eligible to participate in the national flood insurance program. Development within the 100-year floodplain will continue to be regulated in a manner designed to minimize flood hazards.

Recreational Needs – Goal 8: To satisfy the recreation needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

This goal is not relevant.

Economy – Goal 9: To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon's citizens.

The proposed CDC amendments will help minimize future flood damage and reduce the negative economic impact such damage can have on the local economy. This goal is satisfied.

Housing – Goal 10: To provide for the housing needs of citizens of the state.

Not only is it important to provide for community housing needs, it is critical to provide housing in areas that are reasonably safe from natural hazards. The CDC amendments will ensure that the city's regulations for flood protection are compliant with federal requirements. This goal is satisfied.

Public Facilities and Services – Goal 11: To plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

Similar to housing, it is important to develop public facilities, which have minimal risk of flood damage. This goal is satisfied.

Transportation – Goal 12: To provide and encourage a safe, convenient and economic transportation system.

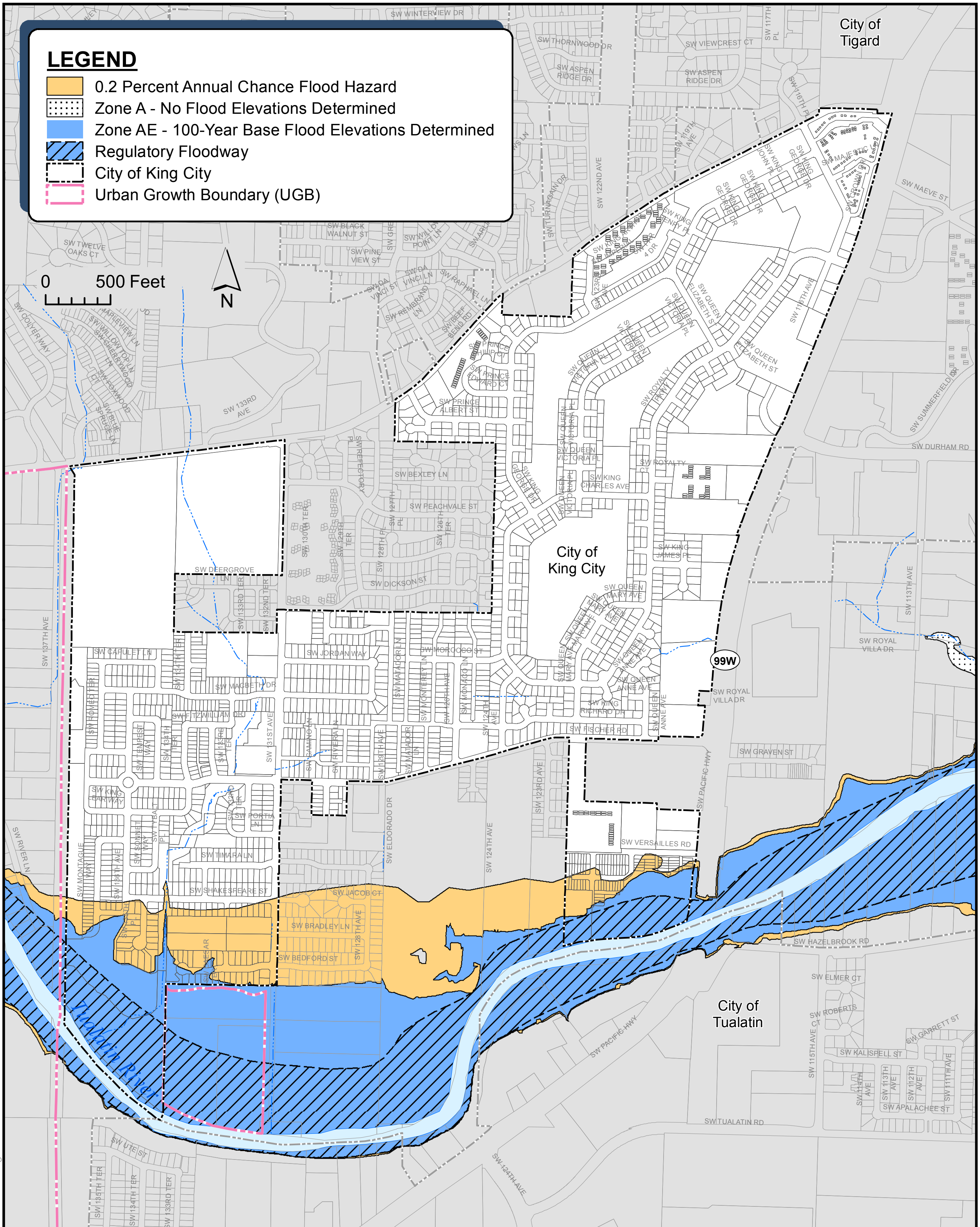
The CDC floodplain regulations will continue to require transportation facilities to be constructed in a manner that will minimize flood damage to the facilities and nearby properties. This goal is satisfied.

Energy Conservation – Goal 13: To conserve energy.

This goal is not relevant.

Urbanization – Goal 14: To provide for an orderly and efficient transition from rural to urban land use.

While this goal is not directly relevant, the CDC amendments will continue to ensure that new development within the city will be orderly by not occurring in inappropriate areas subject to flooding. This goal is satisfied.



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MSA
Murray, Smith & Associates, Inc.

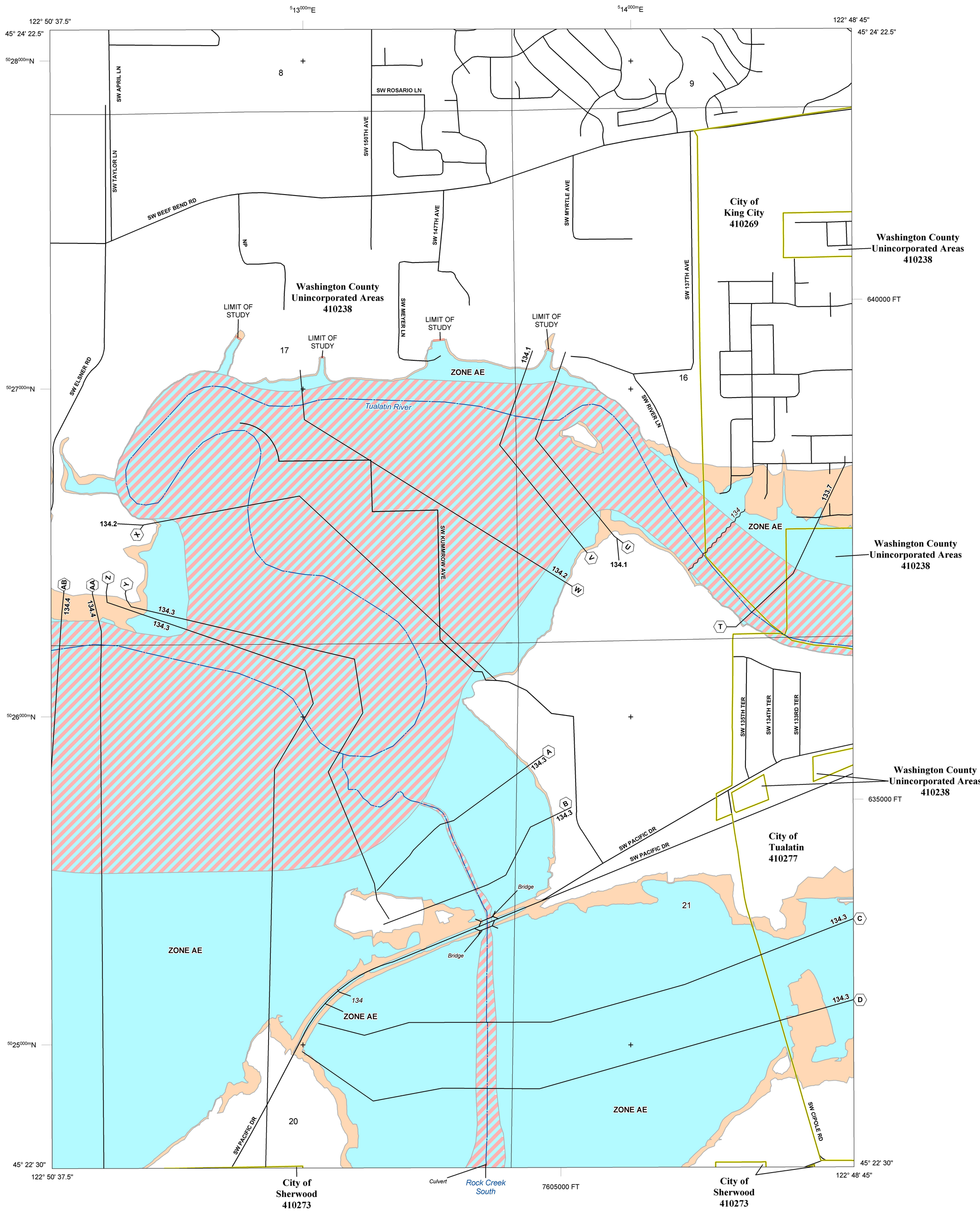
King City

Figure 1
FEMA
Flood Hazard Area Map

King City
Inc. 1966
A Community For All Ages

August 2016 92-0251.402

Source: Metro-RLIS May 2016 and FEMA FIRM Maps Nov. 2016..



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR ZONE DESCRIPTIONS AND INDEX MAP

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A,V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes. *Zone X*

OTHER AREAS
- NO SCREEN — Areas Determined to be Outside the 0.2% Annual Chance Floodplain *Zone X*
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- E — 18.2 / 17.5 — Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
- 8 — Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- 513 — Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this map, available products associated with this FIRM including historic versions of this FIRM, how to order products or the National Flood Insurance Program in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website. Users may determine the current map date for each FIRM panel by visiting the FEMA Map Service Center website or by calling the FEMA Map Information eXchange.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in the community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on this FIRM was derived from multiple sources. Base Map files were provided in digital format by the Metro Data Resource Center. This information was compiled from many local sources and include transportation features, water features, political boundaries, and Public Land Survey System features.

SCALE

N

Map Projection:
Universal Transverse Mercator Zone 10N; North American Datum 1983; Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR

* PANEL NOT PRINTED

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

WASHINGTON COUNTY, OREGON
And Incorporated Areas

PANEL 539 OF 650

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
KING CITY, CITY OF	410269	0539	F
SHERWOOD, CITY OF	410273	0539	F
TUALATIN, CITY OF	410277	0539	F
WASHINGTON COUNTY	410238	0539	F

VERSION NUMBER
2.3.3.3

MAP NUMBER
41067C0539F

MAP REVISED
OCTOBER 19, 2018