

ORDINANCE NO. 2016-16

**ORDINANCE REPEALING ORDINANCE NUMBER 2005-17 AND DELETING
FOREST GROVE CITY CODE SECTION 5.800 TO 5.860 AREAS OF SPECIAL
FLOOD HAZARD IN ITS ENTIRETY; AND AMENDING FOREST GROVE
DEVELOPMENT CODE ARTICLES 2, 5, 8 AND 12 TO ADOPT NEW FLOOD
DAMAGE PREVENTION REGULATIONS AND DEFINITIONS
FILE NO. 311-16-000133-PLNG**

WHEREAS, Oregon Constitution Article XI Section 2 delegates the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

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

WHEREAS, in order to accomplish its purposes, this ordinance includes methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging, and other development which may increase flood damage;
5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas;
6. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances; and

WHEREAS, the flood hazard areas of Forest Grove 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; and

WHEREAS, 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; and

WHEREAS, the City mailed by first class mail notice required under Measure 56 to affected property owners on July 25, 2016; and

WHEREAS, the Planning Commission held a public hearing on the proposed amendments on August 15, 2016; and

WHEREAS, the Planning Commission adopted Planning Commission Findings and Decision Number 2016-10 recommending approval of the proposed amendments; and

WHEREAS, the City Council held a duly-noticed Public Hearing on the proposed ordinance on September 12, 2016, and continued the hearing on September 26, 2016.

NOW, THEREFORE, THE CITY OF FOREST GROVE ORDAINS AS FOLLOWS:

Section 1: The City Council hereby adopts the Planning Commission's Findings and Decision Number 2016-10 dated August 16, 2016 as shown on Exhibit A.

Section 2: The City Council of the City of Forest Grove hereby repeals Ordinance Number 2005-17.

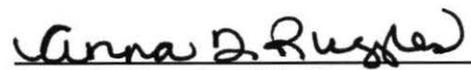
Section 3: The City Council of the City of Forest Grove hereby deletes City Code Chapter 5, Sections 5.800 to 5.860 in its entirety as shown on Exhibit B.

Section 4: The City Council of the City of Forest Grove hereby adopts the text amendments to the Development Code, Articles 2, 5, 8 and 12 as shown on Exhibit C.

Section 5: This ordinance is effective 30 days following its enactment by the City Council.

PRESENTED AND PASSED the first reading this 12th day of September, 2016.

PASSED the second reading this 26th day of September, 2016.



Anna D. Ruggles, City Recorder

APPROVED by the Mayor this 26th day of September, 2016.



Peter B. Truax, Mayor

EXHIBIT A

PLANNING COMMISSION DECISION AND FINDINGS

NUMBER 2016-10

**Planning Commission Findings and Decision Number 2016-10
To Recommend Approval of an Ordinance to Amend Forest Grove
Development Code Articles 2, 5, 8, and 12 to Adopt New Flood Damage
Prevention Regulations and Definitions
File Number 311-16-000133-PLNG**

WHEREAS, Oregon Constitution Article XI Section 2 delegates the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

WHEREAS, the purpose of the proposed amendments is 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; and
8. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions; and

WHEREAS, in order to accomplish its purposes, the proposed amendments include methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging, and other development which may increase flood damage;
5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas;
6. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances; and

WHEREAS, the flood hazard areas of Forest Grove 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; and

WHEREAS, 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; and

WHEREAS, the City mailed by first class mail notice required under Measure 56 to affected property owners on July 25, 2016; and

WHEREAS, notice of the Planning Commission hearing on this ordinance was published in the *News Times* on August 10, 2016; and

WHEREAS, the Planning Commission held a public hearing on the proposed amendments on August 15, 2016.

The City of Forest Grove Planning Commission does hereby recommend to the City Council approval of the Development Code amendments as provided in Exhibit A, making the following specific findings in support of this decision:

Development Code Section 10.2.630 *Review Criteria* lists two standards to be satisfied to adopt a text amendment:

A. *The text amendment is consistent with relevant goals and policies of the Forest Grove Comprehensive Plan; and*

Finding: Comprehensive Plan goals and policies address flood hazards as follows:

Natural Resources and Natural Hazards Goals

(1) *All development shall consider, take into account and demonstrate suitability relative to the natural hazard limitations of the Forest Grove area;*

Finding: This goal applies to the actual development of land, not to the code regulating how the land develops. This goal does not apply to an ordinance revision. Since current code §10.8.310(D)(3) already limits use of the land below the base flood elevation to open space, parking lots or landscaped areas, and since that section will be incorporated into the new code as §10.8.320(C), there should be little if any effect on future development.

(2) *Floodplain areas shall be protected from incompatible uses to reduce potential for property damage;*

Finding: Adoption of the proposed amendments would:

1. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which would result in damaging increases in erosion or in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Control filling, grading, dredging, and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which would unnaturally divert flood waters or may increase flood hazards in other areas;

6. Coordinate and supplement the provisions of the state building code with local land use and development ordinances.

Conclusion: With adoption of the proposed ordinance, floodplain areas would be protected from incompatible uses because they would be prohibited from locating in a flood hazard area, or would be required to be protected against flood damage at the time of initial construction.

Natural Resources and Natural Hazards Policies

- (2) *Those involved in development will be required to address hazard conditions by the inclusion of basic environmental data (i.e. soil type, elevation of the floodplain, geologic limitations, etc.) and related designs and for engineering solutions in the submittal requirements for the development;*

Finding: This goal applies to the actual development of land, not to the code regulating how the land develops. This goal does not apply to an ordinance revision. Since current code §10.8.310(D)(3) already limits use of the land below the base flood elevation to open space, parking lots or landscaped areas, and since that section will be incorporated into the new code as §10.8.320(C), there should be little if any effect on future development.

- (3) *Adopt as a provision in both the zoning and subdivision ordinances that an environmental report be prepared and certified by a qualified engineer for all development proposals in areas having natural physical hazards and/or limitations. As part of the environmental report, the engineer shall identify the intensity of urban development to be permitted based upon the carrying capacity of the land. Open space may be required within the development in order to protect the public health and safety;*

Finding: New §10.8.320(A) will require a permit before development or construction begins in an area of special flood hazard. New §10.8.320(B) will require submittal of plans 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. In addition, the following information will be required: elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; elevation in relation to mean sea level of floodproofing in any structure; certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in §10.8.335(B)(3); and description of the extent to which a watercourse will be altered or relocated as a result of proposed development. Adoption of these new code provisions would comply with this policy.

- (4) *Permanent structural improvements will not be permitted in areas delineated as being located within the floodway of the 100-year floodplain as indicated from floodplain surface elevations provided by the U.S. Army Corps of Engineers;*

Finding: The proposed amendments will prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which would result in damaging increases in erosion or in flood heights or velocities. Furthermore, the amendments would prevent or regulate the construction of flood barriers which would unnaturally divert flood waters or may increase flood hazards in other areas. The intent of this goal is satisfied.

- (5) *The development of areas delineated as being within the 100-year floodplain as indicated from floodplain surface elevations provided in the most current Washington County, Oregon - U.S. Army Corps of Engineers information shall be limited to appropriate open space uses;*

Finding: §10.8.310(D)(3) currently limits use of the land below the base flood elevation to open space, parking lots or landscaped areas. This code provision has been included in the amendments as §10.8.320(C). Thus, this policy is met.

- (6) *Fill and compensatory excavation of the floodplain shall be used only as a final design solution for development adjacent to the floodway. Developers shall be required to spell out how development alternatives were evaluated and conclusions were made;*

Finding: The amendments would control filling, grading, dredging, and other development which may increase flood damage; and would prevent or regulate the construction of flood barriers which would unnaturally divert flood waters or may increase flood hazards in other areas. Development would also have to be coordinated and comply with provisions of the state building code with other local land use and development ordinances. Compliance with these provisions would ensure that fill and compensatory excavation would be considered only as the final design solution for development adjacent to the floodway.

- B. *The text amendment is consistent with relevant statewide and regional planning goals, programs and rules.*

Finding: Statewide Planning Goal 7 Areas Subject to Natural Hazards is "To protect people and property from natural hazards." Natural Hazards are defined as floods (coastal and riverine), landslides, earthquakes and related hazards, tsunamis, coastal erosion, and wildfires. To protect people and property from natural hazards, local governments are required to adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property. Local governments are deemed to have complied with Goal 7 for riverine flood hazards by adopting and implementing local floodplain regulations that meet the minimum National Flood Insurance Program (NFIP) requirements. With the adoption of the proposed amendments, Forest Grove would be in compliance with NFIP requirements and thus also with Statewide Planning Goal 7.



TOM BECK, Chair

8-16-16

Date

EXHIBIT B

FOREST GROVE CODE SECTION 5.800 – 5.860

AREAS OF SPECIAL FLOOD HAZARD

EXHIBIT B

~~AREAS OF SPECIAL FLOOD HAZARD~~

~~5.800 Statement of Purpose.~~

~~It is the purpose of sections 5.800 to 5.860 of this code to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:~~

- ~~(1) To protect human life and health;~~
- ~~(2) To minimize expenditure of public money and costly flood control projects;~~
- ~~(3) To minimize the need for rescue and relief efforts associated with flooding, and generally undertaken at the expense of the general public;~~
- ~~(4) To minimize 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;~~
- ~~(5) To ensure that those who propose development in the areas of special flood hazard assume responsibility for their actions.~~

~~5.805 Definitions.~~

~~Area of special flood hazard. The land in the flood plain within the city of Forest Grove subject to a one percent or greater chance of flooding in any given year. This is commonly referred to as the "100 year floodplain."~~

~~Basement. Any area of the building having its floor subgrade, below ground level, on all sides.~~

~~Base flood. The flood having a one percent chance of being equalled or exceeded in any given year.~~

~~Development. Any man-made change to improved or unimproved real estate, including but not limited to structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.~~

~~Elevated Building. For insurance purposes, a nonbasement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.~~

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

- ~~(1) The overflow of inland or tidal waters and/or~~
- ~~(2) The unusual and rapid accumulation of runoff of surface waters from any source.~~

~~Flood Insurance Rate Map(FIRM). 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.~~

~~Flood Insurance Study(FIS). 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. 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 by more than one foot.~~

~~Lowest Floor. 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.~~

~~Manufactured Home. 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."~~

~~Recreational Vehicle. A vehicle which is:~~

- ~~(a) Built on a single chassis;~~
- ~~(b) 400 square feet or less when measured at the largest horizontal projection;~~
- ~~(c) Designed to be self-propelled or permanently towable by a light duty truck; and~~
- ~~(d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.~~

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

~~Substantial Improvement. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 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:~~

- ~~(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 structure listed on the National Register of Historic Places or a State Inventory of Historic Places.~~

~~5.810 Lands to Which This Code Applies. This code applies to all areas of special flood hazard within the jurisdiction of the city.~~

~~5.815 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 Forest Grove," dated September 15, 1981, with accompanying Flood Insurance Rate Maps, is hereby adopted by reference and declared to be a part of this code. The Flood Insurance Study is on file at the Administrative offices of the city.~~

~~5.820 Compliance.~~

~~No structure or land shall be under development, constructed, located, extended, converted, or altered without full compliance with the terms of this code and other applicable regulations.~~

~~5.825 Abrogation and Greater Restrictions.~~

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

~~5.830 Designation of the City Engineer, or Designee.~~

~~The City Engineer, or his/her designee, is hereby appointed to administer and implement this ordinance by granting or denying development permit applications in accordance with its provisions.~~

~~5.835 Review of Applications for Permits and Approvals.~~

~~In reviewing applications for permits or approvals required by the city for development in any area of special flood hazard, including, but not limited to site plan approvals and subdivision approvals, the city engineer shall:~~

- ~~(1) Review all development permits to determine that the requirements of this code have been satisfied.~~
- ~~(2) Review all development permits to determine that all necessary permits have been obtained from those federal, state, or local government agencies from which prior approval is required.~~
- ~~(3) Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the provisions of Section 5.850 are met.~~
- ~~(4) Obtain and record the actual (i.e., as-built) elevation in relation to mean sea level of the lowest floor, including basement, of all new or substantially improved structures, and whether or not the structures contain a basement.~~
- ~~(5) For all new or substantially improved non-residential structures that are floodproofed instead of elevated, obtain and record the actual elevation in relation to mean sea level to which the structures were floodproofed. Maintain for public inspection all records pertaining to the provisions of this code.~~
- ~~(6) Maintain for public inspection all records pertaining to the provisions of this code, including elevation and floodproofing certifications.~~
- ~~(7) Notify adjacent communities and the Oregon Department of Land Conservation and Development prior to any alteration or relocation of a watercourse and submit evidence of notification to the Federal Insurance Administration.~~

- ~~(8) Require that maintenance be provided within the altered or relocated portion of the watercourse and submit evidence of such notification to the Federal Insurance Administration so that the flood carrying capacity is not diminished.~~
- ~~(9) Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.~~
- ~~(10) Make interpretations, where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation, such appeals shall be granted consistent with the standards of Section 60.6 of the Rules and Regulations of the National Flood Insurance Program (44 CFR 59-76).~~
- ~~(11) Obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, as criteria for requiring that new construction, substantial improvements, or other development meet the standards of sections 5.840 and 5.845.~~

~~5.840 General Standards.~~

~~In all areas of special flood hazard, the following standards apply:~~

- ~~(1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.~~
- ~~(2) All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).~~
- ~~(3) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.~~
- ~~(4) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.~~
- ~~(5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.~~
- ~~(6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.~~
- ~~(7) No on-site waste disposal systems shall be allowed.~~
- ~~(8) All subdivision proposals shall be consistent with the need to minimize flood damage.~~
- ~~(9) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.~~
- ~~(10) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.~~
- ~~(11) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be elevated [designed and/] or located so as to prevent water from entering or accumulating within the components during conditions of flooding.~~

~~5.845 Specific Standards.~~

~~In all areas of special flood hazards where base flood elevation data has been provided the requirements of Section 5.846 to 5.849 shall be met.~~

~~5.846 Residential Construction~~

~~(1) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot above the base flood elevation.~~

~~(2) Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:~~

- ~~(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.~~
- ~~(ii) The bottom of all openings shall be no higher than one foot above grade.~~
- ~~(iii) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.~~

~~5.847 Nonresidential Construction~~

~~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:~~

- ~~(1) Be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;~~
- ~~(2) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;~~
- ~~(3) Be certified by a registered professional 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 City's Engineer.~~
- ~~(4) Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in 5.841(1);~~
- ~~(5) 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.~~

~~5.848 Manufactured Homes~~

~~(1) All manufactured homes to be placed or substantially improved on sites:~~

- ~~(i) Outside of a manufactured home park or subdivision,~~
- ~~(ii) In a new manufactured home park or subdivision,~~
- ~~(iii) In an expansion to an existing manufactured home park or subdivision, or~~
- ~~(iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood; shall be elevated on a permanent foundation such that the lowest floor~~

~~of the manufactured home is elevated one foot above the base flood elevation and be securely anchored to an adequately designed foundation system to resist flotation, collapse and lateral movement.~~

- ~~(2) Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within the City's FIRM that are not subject to the above manufactured home provisions be elevated so that either:~~
- ~~(i) The lowest floor of the manufactured home is elevated one foot above the base flood elevation, or~~
 - ~~(ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately designed foundation system to resist flotation, collapse, and lateral movement.~~

~~5.849 Recreational Vehicles~~

~~Recreational vehicles placed in special flood hazard areas are required to either:~~

- ~~(i) Be on the site for fewer than 180 consecutive days,~~
- ~~(ii) Be fully licensed and ready for highway use, 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; or~~
- ~~(iii) Meet the requirements of 5.848 above and the elevation and anchoring requirements for manufactured homes.~~

~~5.850 Floodways.~~

~~Located within areas of special flood hazard established in section 5.815 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provision shall apply:~~

~~Prohibit encroachments, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating that encroachment will not result in any increase in flood levels during the occurrence of the base flood discharge; provided, however, that under no condition shall any fill be permitted within a floodway.~~

~~5.860 Violations and Penalties.~~

~~No structure or land shall be constructed, located, extended, converted, or altered without full compliance with the terms of sections 5.800 to 5.855 of this code and other applicable regulations. Violations of the provisions of this code by failure to comply with any of its requirements shall constitute a misdemeanor. Any person who violates this code or fails to comply with any of its requirements shall, upon conviction, be fined not more than \$1,000 for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing contained in this code shall prevent the city from taking other lawful action as necessary to prevent or remedy any violation.~~

EXHIBIT C

FOREST GROVE DEVELOPMENT CODE AMENDMENTS

ARTICLE 2 SECTION 10.2.700 VARIANCES

ARTICLE 5 SECTION 10.5.010 NATURAL RESOURCE AREAS

ARTICLE 8 SECTION 10.8.310 HAZARDS AND RESOURCES

ARTICLE 12 SECTION 10.12.210 USE CATEGORIES & DEFINITIONS

VARIANCE

10.2.700 PURPOSE

The variance procedure is intended to allow modification of specific standards contained in the Development Code. Requests to modify a yard setback, height or lot coverage standard by 20% or less are processed as Adjustments. The variance procedure is used when an applicant is requesting modification of more than 20% of a yard setback, height, or lot coverage standard, or modification of a standard not qualified for an Adjustment under Section 10.2.100. Requests for variances from the Floodplains and Flood Management Areas provisions of Section 10.8.315 shall be considered pursuant to Section 10.8.330 Variance Procedure.

NATURAL RESOURCE AREAS

10.5.005 INTENT

10.5.010 INFORMATION REQUIRED

- B. For the entire subject property (natural resource area and non-natural resource area), applicants must submit a scale map of the property that includes:
1. Location of all natural resource areas on the property;
 2. Outline of any existing disturbance area, including the location of existing adjacent streets and paved areas, utilities, culverts, storm water management facilities, or bridges;
 3. Location of any wetlands or water bodies on the property, including a delineation of the sensitive lands and vegetative corridors consistent with Clean Water Services Design and Construction Standards;
 4. Location of 100-year floodplain and floodway boundary as defined by Section ~~5.805 and determined by Section 5.815 of the Municipal Code~~ Section 10.8.315(B) Basis for Establishing Areas of Special Flood Hazard; and
 5. Topography shown by contour lines of 2-foot intervals for slopes less than 15% and by 10-foot intervals for slopes 15% or greater. On properties that are two acres or larger, such a contour map is required only for the portion of the property to be developed.

HAZARDS AND RESOURCES

10.8.310 HAZARD AREAS

- A. Information and studies for hazards shall be provided as follows:
1. For development sites partially or totally within Flood Management Areas or areas of special flood hazard as determined by ~~Chapter 5.800 et. seq. of the Municipal Code~~ Section 10.8.315(B), there shall be provided a study prepared by an engineer certified by the State of Oregon to provide hydraulic, flood plain elevation and any other necessary analysis to meet the requirements of ~~Chapter 5.800 et. seq. of the Municipal Code~~ Section 10.8.325(D), as determined by the City Engineer. ~~The analysis shall address the analysis required by Section 5.835~~

~~and demonstrate that applicable standards pursuant to Sections 5.840 to 5.850 have been met.~~

10.8.310B. (Hazard Studies Required)

10.8.310C. (Hazard Avoidance Measures)

~~10.8.310D.~~ FLOODPLAINS AND FLOOD MANAGEMENT AREAS

10.8.315

- ~~1. In addition to compliance with the requirements of Municipal Code Section 5.800, et. seq. pertaining to areas of special flood hazard, the standards of this section shall apply. In the event of any conflict, the most restrictive requirement shall prevail.~~
- ~~2. Limited balanced cut and fill may be allowed within Flood Management Areas provided that the following conditions will be met:~~
 - ~~a. The proposed fill will not have a serious tendency to change the direction, velocity, or elevation of future flood waters so as to compound flood hazards;~~
 - ~~b. The proposed fill will not seriously harm the natural ecosystems of the immediate and downstream areas; and~~
 - ~~c. Evidence is submitted that permits have been obtained from the appropriate Regional, State and Federal agencies; and~~
 - ~~d. Any required buffer has been reserved; and~~
 - ~~e. No fill shall be proposed within a flood way.~~
- ~~3. Land below the elevation of the base flood shall be placed in open space or parking lot and landscaped areas if within the developed portion of the site.~~
- ~~4. All new development, additions or other substantial improvements to be constructed within the Flood Management Area shall comply to the following requirements:~~
 - ~~a. Have the lowest floor elevation, including basements, elevated one foot above the base flood elevation;~~
 - ~~b. Be anchored to prevent flotation, collapse or lateral movement of the structure;~~
 - ~~c. Electrical, heating, ventilation, plumbing and air conditional equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding;~~
 - ~~d. All trash enclosures and other facilities that are separate from buildings shall be adequately anchored so as not to be moved by flood waters. These facilities shall be designed either to be watertight or allow conveyance of flood waters provided that structural components are capable of resisting hydrostatic and hydrodynamic loads;~~
 - ~~e. All new and replacement water supply and sanitary sewer systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge of effluent from the sewage system into flood waters; and~~
 - ~~f. All other applicable public utilities and facilities shall be designed to minimize damage from flooding.~~

- ~~2. Hazardous materials not properly managed or contained, as defined by the Department of Environmental Quality, are prohibited within Flood Management Areas.~~
- ~~3. The degree of flood protection required by this code is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can occur on rare occasions. Flood heights may be increased by man-made or natural causes. This code does not imply that land outside Flood Management Areas or uses permitted within such areas will be free from flooding or flood damages. This code shall not create a liability on the part of the City of Forest Grove, any officer or employee thereof, or the Federal Insurance Administration, for flood damages that result from reliance on this code or any administrative decision lawfully made hereunder.~~

A. LANDS TO WHICH THIS CODE APPLIES

This code applies to all areas of special flood hazard within the jurisdiction of the City of Forest Grove.

B. BASIS FOR ESTABLISHING 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 Washington County and Incorporated Areas” dated November 4, 2016, with accompanying Flood Insurance Rate Maps (FIRM) are hereby adopted by reference and declared to be a part of this code. The Flood Insurance Study is on file at the Forest Grove Engineering Department. The best available information for flood hazard area identification as outlined in Section 10.8.325(C) shall be the basis for regulation until a new FIRM is issued which incorporates the data utilized under Section 10.8.325(C).

C. WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this code is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This code does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This code shall not create liability on the part of the City of Forest Grove, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this code or any administrative decision lawfully made hereunder.

10.8.320 ESTABLISHMENT OF DEVELOPMENT PERMIT

- A. Development Permit Required. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 10.8.315(B). The permit shall be for all structures including manufactured homes, as set forth in the definitions and for all development including fill and other activities, also as set forth in the definitions.
- B. Application for Development Permit. Application for a development permit shall be made on forms furnished by the Engineering Department 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 of floodproofing in any structure;
 3. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 10.8.335(B)(3); and
 4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development.
- C. Land below the elevation of the base flood shall be placed in open space or parking lot and landscaped areas if within the developed portion of the site.

10.8.325 DESIGNATION, DUTIES AND RESPONSIBILITIES OF THE CITY ENGINEER

- A. The City Engineer is hereby appointed to administer and implement this code by granting or denying development permit applications in accordance with its provisions.
- B. The duties of the City Engineer shall include, but not be limited to:
1. Reviewing all development permits to determine that the permit requirements of this code have been satisfied.
 2. Reviewing 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.
 3. Reviewing all development permits to determine if the proposed development is located in the floodway. If located in the floodway, ensure that the encroachment provisions of Section 10.8.345 are met.
 4. Providing the base flood elevation as has been determined in accordance with Section 10.8.315(B) Basis for Establishing Areas of Special Flood Hazard to the Building Official, along with any freeboard requirements established in Section 10.8.335(B) Specific Standards.

C. Use of Other Base Flood Data in “A” Zones. When base flood elevation data has not been provided in accordance with Section 10.8.315(B) Basis for Establishing the Areas of Special Flood Hazard, the City Engineer shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source, in order to administer Sections 10.8.335(B) Specific Standards and 10.8.345 Floodways.

D. Information to be Obtained and Maintained.

1. Where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 10.8.325, the City Engineer shall obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.
2. For all new or substantially improved floodproofed structures where base flood elevation data is provided through the Flood Insurance Study, FIRM, or as required in Section 10.8.325, the City Engineer shall:
 - a. Verify and record the actual elevation (in relation to mean seal level), and
 - b. Maintain the floodproofing certifications required in Section 10.8.320(B)(3).
 - c. Maintain for public inspection all records pertaining to the provisions of this code.

E. Alteration of Watercourses.

1. Development shall not diminish the flood-carrying capacity of a watercourse. If any watercourse will be altered or relocated as a result of the proposed development, the applicant shall submit certification by a registered professional engineer that the flood-carrying capacity of the watercourse will not be diminished.
2. The City Engineer shall:
 - a. Notify adjacent communities, the Department of Land Conservation and Development and other appropriate state and federal agencies, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - b. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
3. Applicants shall obtain a Conditional Letter of Map Revision (CLOMR) from FEMA before any encroachment, including fill, new construction, substantial improvement, or other development, in the regulatory floodway is permitted. The applicant shall be responsible for preparing

technical data to support the CLOR application any paying any processing or application fees to FEMA.

F. Requirement to Submit New Technical Data.

1. The City Engineer shall:

- a. Notify FEMA within six months of project completion when an applicant had obtained a Conditional Letter of Map Revision (CLOMR) from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified Base Flood Elevations. This notification shall be provided as a Letter of Map Revision (LOMR).
- b. Be under no obligation to sign the Community Acknowledgement Form, which is part of the CLOMR/LOMR application, until the applicant demonstrates that the project will or has met the requirements of this code and all applicable State and Federal laws.

2. The applicant shall be responsible for preparing technical data to support the LOMR application and paying any processing or application fees to FEMA.

G. Non-Conversion of Enclosed Areas Below the Lowest Floor. To ensure that enclosed areas below the lowest floor continue to be used solely for parking vehicles, limited storage, or access to the building and not be finished for use as human habitation/recreation/bathrooms, etc., the City Engineer shall:

1. Determine which applicants for new construction and/or substantial improvements have fully-enclosed areas below the lowest floor that are 5 feet or higher;
2. Require such applicants to enter in a “Non-Conversion Deed Declaration for Construction within Flood Hazard Areas” or equivalent. The deed declaration shall be recorded with Washington County and shall be in a form acceptable to the City Engineer.

H. Interpretation of FIRM Boundaries. The City Engineer shall make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 10.8.330.

10.8.330 VARIANCE PROCEDURE

- A. Appeal Board. The Planning Commission shall hear and decide appeals and requests for variances from the requirements of this code. The Planning Commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the City of Forest Grove in the enforcement or administration of this code.
- B. Any affected party may appeal the decision of the Planning Commission to the City Council, as provided in Section 10.1.640.
- C. In passing upon such applications, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this code, and:
1. The danger that materials may be swept onto other lands to the injury of others;
 2. The danger to life and property due to flooding or erosion damage;
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 4. The importance of the services provided by the proposed facility to the community;
 5. The necessity to the facility of a waterfront location, where applicable;
 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 7. The compatibility of the proposed use with existing and anticipated development;
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 10. 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,
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- D. Upon consideration of the factors of Section 10.8.330(C) and the purposes of this code, the Planning Commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this code.
- E. The City Engineer shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request.

F. Conditions for Variances.

1. Generally, the only condition under which a variance from the elevation standard may be issued is for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1-11) in Section 10.8.330(C) have been fully considered. As the lot size increases the technical justification required for issuing the variance increases.
2. Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed on the National Register of Historic Places or the Statewide Inventory of Historic Properties, without regard to the procedures set forth in this section.
3. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood discharge would result.
4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
5. Variances shall only be issued upon:
 - a. A showing of good and sufficient cause;
 - b. A determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 10.8.330(C), or conflict with existing local laws or codes.
6. Variances as interpreted in the National Flood Insurance Program are based on the general zoning law principle that they pertain to a physical piece or property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances, they primarily address small lots in densely populated residential neighborhoods. As such, variances from the flood elevations should be quite rare.
7. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of floodproofing than watertight or dry-floodproofing, where it can be determined that such action will have low damage potential, complies with all other variance criteria except Section 10.8.330(F)(1), and otherwise complies with Section 10.8.335(A)(1)-(3) of the General Standards.
8. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

10.8.335 PROVISIONS FOR FLOOD HAZARD REDUCTION

A. GENERAL STANDARDS. In all areas of special flood hazards, the following standards are required:

1. Anchoring.

- a. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
- b. All manufactured homes must likewise be anchored to prevent flotation, collapse, or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Refer to FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).

2. Construction Materials and Methods.

- a. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- b. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- c. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

3. Utilities.

- a. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- b. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and
- c. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with the Oregon Department of Environmental Quality.

4. Subdivision Proposals.

- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
- b. 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;
- c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
- d. 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 50 lots or 5 acres (whichever is less).

5. Review of Building Permits. Where elevation data is not available either through the Flood Insurance Study, FIRM, or from another authoritative source (Section 10.8.325(C)), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

B. SPECIFIC STANDARDS. In all areas of special flood hazards where base flood elevation data has been provided (Zones A1-30, AH, and AE) as set forth in Section 10.8.315(B) Basis for Establishing the Areas of Special Flood Hazard, or Section 10.8.325(C) Use of Other Base Flood Data in "A" Zones, the following provisions are required:

1. Residential Construction.

- a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to a minimum of one foot above the base flood elevation.
- b. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must be either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
- c. 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.
- d. The bottom of all openings shall be no higher than one foot above grade.
- e. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

2. Manufactured Dwellings.

- a. Manufactured dwellings supported on solid foundation walls shall be constructed with flood openings that comply with Section 10.8.335(A)(1)(b) above.
- b. The bottom of the longitudinal chassis frame beam in A zones, shall be at or above BFE;
- c. The manufactured dwelling shall be anchored to prevent flotation, collapse, and lateral movement during the base flood. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Refer to FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques); and
- d. Electrical crossover connections shall be a minimum of 12 inches above BFE.

3. Nonresidential Construction. 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 10.8.320(B)(3);
- d. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in Section 10.8.335(B)(1)(b);
- e. 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.
- f. Applicants shall supply a Maintenance Plan for the entire structure to include but not limited to: exterior envelope of structure; all penetrations to the exterior of the structure; all shields, gates, barriers, or components designed to provide floodproofing protection to the structure; all seals or gaskets for shields, gates, barriers, or components; and, the location of all shields, gates, barriers, and components as well as all associated hardware, and any materials or specialized tools necessary to seal the structure.
- g. Applicants shall supply an Emergency Action Plan (EAP) for the installation and sealing of the structure prior to a flooding event that clearly identifies what triggers the EAP and who is responsible for enacting the EAP.

4. Recreational Vehicles. Recreational vehicles placed on sites are required to:
- a. Be on the site for fewer than 180 consecutive days, and
 - b. Be fully licensed and ready for highway use, 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; or
 - c. Meet the requirements of Section 10.8.335(B)(2) above and the elevation and anchoring requirements for manufactured homes.
5. Accessory Structures. Relief from elevation or floodproofing as required in Section 10.8.335(B)(1) or 10.8.335(B)(3) above may be granted for 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; not used to store toxic material, oil or gasoline, or any priority persistent pollutant identified by the Oregon Department of Environmental Quality unless confined in a tank installed in compliance with this code or stored at least one foot above Base Flood Elevation;
 - d. located and constructed to have low damage potential;
 - e. constructed with materials resistant to flood damage;
 - f. 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;
 - g. 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:
 - i. 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;
 - ii. 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;
 - iii. the 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;
 - iv. be 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.
6. 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 Subsection (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 (BFE) 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 BFE 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 BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.
- d. Any building utility systems within the crawlspace must be elevated above BFE 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 BFE or sealed from floodwaters.
- e. The interior grade of a crawlspace below the BFE 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. For more detailed information refer to FEMA Technical Bulletin 11-01.

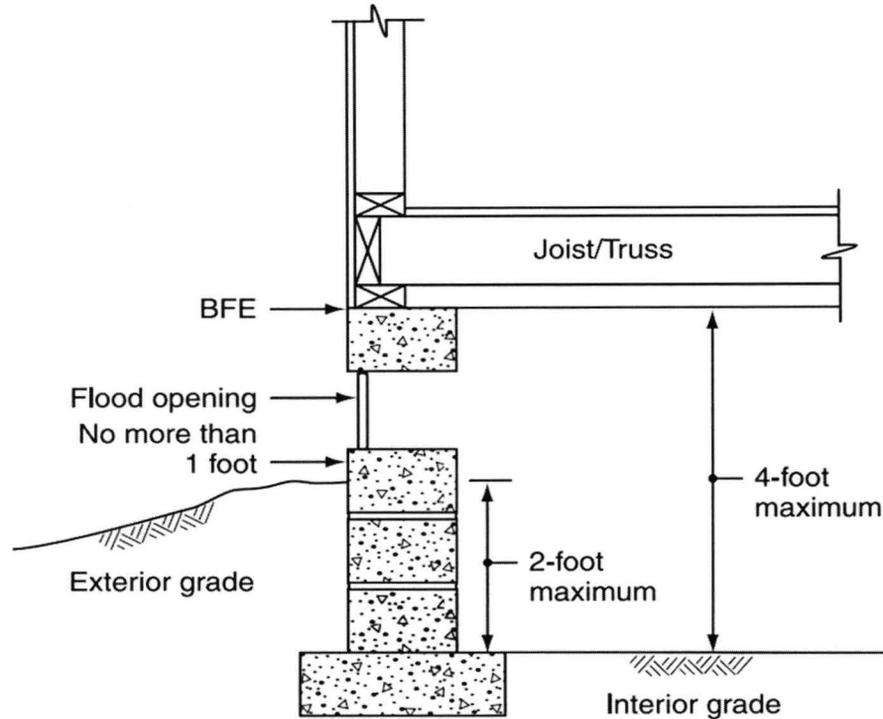


Figure 5-1: Limitations on Below-Grade Crawlspace
Residential Structures must be elevated a minimum of one foot
above the Base Flood Elevation (BFE)

10.8.340 BEFORE REGULATORY FLOODWAY

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

10.8.345 FLOODWAYS

Located within areas of special flood hazard established in Section 10.8.315(B) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- A. Except as provided in paragraph (C) below, prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional civil engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.

- B. If Section 10.8.345(A) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 10.8.335 Provisions for Flood Hazard Reduction.
- C. Projects for stream habitat restoration may be permitted in the floodway provided:
1. The project qualifies for a Department of the Army, Portland District Regional General Permit for Stream Habitat Restoration (NWP-2007-1023); and
 2. A qualified professional (a Registered Professional Engineer; or staff of NRCS; the county; or fisheries, natural resources, or water resources agencies) has provided a feasibility analysis and certification that the project was designed to keep any rise in 100-year flood levels as close to zero as practically possible given the goals of the project; and
 3. No structures would be impacted by a potential rise in flood elevation; and
 4. An agreement to monitor the project, correct problems, and ensure that flood carrying capacity remains unchanged is included as part of the local approval.
- D. Temporary structures placed in the floodway: Relief from no-rise evaluation, elevation or dry flood-proofing standards may be granted for a non-residential structure placed during the dry season (June – October) and for a period of less than 90 days. A plan for the removal of the temporary structure after the dry season or when a flood event threatens shall be provided. The plan shall include disconnecting and protecting from water infiltration and damage all utilities servicing the temporary structure.
- E. Temporary storage of goods and materials, not including hazardous materials, is allowed in the floodway for a period of less than 90 days within the dry season (June – October).

10.8.350 CRITICAL FACILITY

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the Special Flood Hazard Area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet above BFE 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.

10.8.355 ENVIRONMENTAL PRACTICE

ARTICLE 12 USE CATEGORIES & DEFINITIONS

- 10.12.200 MEANING OF WORDS GENERALLY
10.12.205 MEANING OF COMMON WORDS
10.12.210 MEANING OF SPECIFIC WORDS AND TERMS

As used in this Code, the following words and phrases shall mean:

- B1. Basement. ~~Any floor level below the first story in a building, except that a floor level in a building having only one (1) floor level shall be classified as a basement unless such floor level qualifies as a first story as defined in this section.~~ Any area of the building having its floor subgrade (below ground level) on all sides.
- D7. Development. ~~1) A building or mining operation; 2) a material change in the use or appearance of a structure or land; Any man-made change to improved or unimproved estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or material located within the area of special flood hazard; or 3) 2) division of land into two or more parcels, including partitions and subdivisions as provided in Oregon Revised Statutes Chapter 92.~~
- F1. Flood-Related Definitions:
- a. Area of Special Flood Hazard - The land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. Designation on maps always includes the letter "A".
- a.b Base Flood - The flood having a 1% chance of being equaled or exceeded in any given year. Also referred to as the "one-hundred-year flood." Designation on maps always includes the letter "A".
- c. Below-Grade Crawl Space - 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.
- d. Conditional Letter of Map Revision (CLOMR) – A letter from FEMA commenting on whether a proposed project, if built as proposed, would meet the minimum NFIP standards or proposed hydrology changes.
- e. Critical Facility - 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.

- f. Elevated Building - For insurance purposes, a non-basement building which has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.
- g. Flood or Flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from:
- (1) The overflow of inland waters and/or
 - (2) The unusual and rapid accumulation of runoff of surface waters from any source.

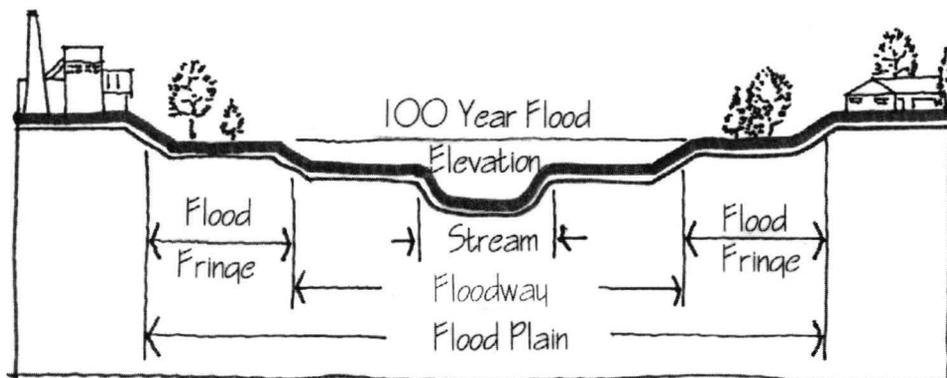
e.h. Floodplain -

- d.i. Floodway - The normal stream or drainage channel and that adjoining area of the natural floodplain needed to convey the waters, including the zero-foot rise floodway area defined by the U.S. Corps of Engineers. Floodways must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation.

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.

- e.j. Floodway Fringe - The area of the floodplain lying outside of the floodway.

Figure 12-1: Flood-Related Terms



- k. Flood Insurance Rate Map (FIRM) - 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.
- l. Flood Insurance Study - The official report provided by the Federal Insurance Administration that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.
- m. Flood Management Area (FMA) –

- n. Highest Adjacent Grade – The highest natural elevation of the ground surface prior to construction, adjacent to the proposed wall of a structure.
 - o. Letter of Map Change (LOMC) – An official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps (FIRM) and/or Flood Insurance Studies (FIS). LOMCs are issued in the following categories:
 - 1. Letter of Map Amendment – 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) -
 - i. LOMR-F (Letter of Map Revision Based on Fill) – 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.
 - ii. A LOMR revises the current FIRM and/or FIS 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, of 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).
 - p. Lowest Floor - 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 Section 10.5.640(B)(1)(b).
- N3. New Construction. Structures for which the “start of construction” commenced on or after the effective date of this ordinance.
- N4. Nonconforming.
- S9. Structure. A walled and roofed building including a gas or liquid storage tank that is principally above ground.
- S10. Substantial Damage. Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.
- S11. Substantial Improvement.

New Text is Underlined

Deleted Text is ~~Struck-Through~~

V1. Variance. A grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

V2. Vehicular Parking Space.

W1. Water Dependent. 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.

W2. Water Quality Sensitive Areas.

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DRAFT
PLANNING COMMISSION MEETING MINUTES
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DRAFT

1. CALL TO ORDER:

Chairman Beck called the work session to order at 6:05 p.m.

Planning Commission Present: Tom Beck Carolyn Hymes, Dale Smith, Phil Ruder and Hugo Rojas.

Absent: Sebastian B. Lawler, Lisa Nakajima

Staff Present: Jon Holan, Community Development Director; James Reitz, Senior Planner; Dan Riordan, Senior Planner; Derek Robbins, City Engineer; Marcia Phillips, Assistant Recorder.

2. WORK SESSION ITEMS:

A. Amend Forest Grove City Code to delete Section 5.800 through 5.860 (and repeal Ordinance # 2005-17) *Areas of Special Flood Hazard* in its entirety.

Amend Forest Grove Development Code Article 2 *Variances*, Article 5 *Natural Resource Areas*, Article 8 *Hazards and Resources*, and Article 12 *Definitions* to adopt new Flood Damage Prevention Regulations and Definitions; and adoption of new Flood Insurance Rate Maps (FIRMs). File # 311-16-000133-PLNG

Mr. Holan explained that City staff noted a discrepancy in the new digital floodplain overlay view as compared to the Flood Insurance Study (FIS) profiles. He said the new digital flood areas overlay view included developed lots along Strasburg Drive and Willamina Avenue along the City's southwest boundary. However, the record drawings for development in the area and the new FIS profiles show that development above the flood areas. He said the new digital flood area overlay appears to be off in elevation by about 10 feet. In other words, the new digital overlay should be aligned below the low side elevation property lines as defined in the City's as-built drawings and as shown in the FIS profile. Holan further explained that the City will be asked to adopt maps that are wrong to remain in compliance with FEMA. Mr. Holan introduced Derek Robbins, City Engineer, and explained that the Engineering Dept. is handling the floodplain issue.

Mr. Robbins showed the new FEMA maps, and stated that FEMA has digitized the floodplain maps, and when staff went to their website to look at these maps, it was discovered that some houses showed in the gray area (floodplain). He said FEMA's flood elevations do not match their own maps - FEMA did not have good points on the old survey information they used. Robbins stated that the Engineering Dept. has been in contact with FEMA, and has shown them the City's as-builts. FEMA is going to do a map revision as their budget allows – probably not until next year some time. He explained that FEMA will not allow the City to accept only part – the City must accept everything, even the maps that are not correct. Robbins said the Engineering Dept. is working with FEMA to develop a standard letter that can be given to the property owners in question.

Mr. Holan said information will be handed out at the meeting tonight, and it along with the City's as-builts can be submitted to FEMA to avoid paying flood insurance until the maps are corrected.

Commissioner Hymes stated that flood insurance is expensive.

Chairman Beck told Mr. Robbins that during the public hearing he would ask him specifically what the City will do for these property owners.

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Mr. Robbins explained that he will give affected property owners the City's as-builts and the application, then direct them to our FEMA representative. He explained that this is a three party deal.

Mr. Reitz said how the flood elevation is measured has changed, and the levels have all gone up 2-5 feet.

Mr. Holan said the area around Beal Road is affected.

Chairman Beck stated that other than the bad maps, everything else is just fine.

Mr. Holan said that is correct.

Chairman Beck said he had a question about floodplains due to dams breaking. He stated that the Commission should have a meeting for property owners who would be affected to bring some awareness. Staff agreed that would be a good idea.

B. Affordable Housing

Mr. Riordan explained that on August 8, 2016, staff held a work session with the City Council regarding affordable housing. He explained that since 1999 state law prohibited local jurisdictions from adopting "inclusionary zoning" programs to promote affordable housing. Inclusionary zoning refers to policies that require developers to sell or rent a percentage of homes to moderate or low income households. He explained that the prohibition against inclusionary zoning in Oregon was lifted with the adoption of SB 1533 during the last Legislative session.

Mr. Riordan explained that under SB 1533 "affordable housing" is defined to mean housing that is affordable to households with incomes equal to or higher than 80 percent of the median family income for the county in which housing is built. Riordan said the Median Family Income in Washington County (2014) is \$77,235 and 80% of Median Family Income in Washington County (2014) is \$61,788. He said the Median Family Income in Forest Grove is \$58,212, and 80% of Median Family Income in Forest Grove (2014) is \$46,570. Riordan said SB 1533 does not stipulate when housing becomes unaffordable for households earning 80% of the county's median family income. An accepted rule of thumb is that housing becomes unaffordable when a household spends more than 30% of income on housing costs. He calculated that using 80% of Washington County's median family income and the 30% threshold, housing is affordable if less than \$1,545 is spent on housing costs (rent/mortgage & utilities) per month. At 80% of Forest Grove median family income the amount is \$1,164 before exceeding 30%. The median monthly housing cost for a renter occupied housing unit in Forest Grove is \$792 per month and an owner occupied unit is \$1,386 per month.

Mr. Holan stated that SB 1533 is pointless here in Forest Grove.

Mr. Riordan explained that SB 1533 provides authority to cities and counties to adopt policies that effectively establish the sales/rental price for certain new multifamily units; and allows for a construction excise tax on certain property to fund affordable housing programs and developer incentives. He said policies establishing sales or rental price may take the form of land use regulations or conditions of approval imposed on land use permits. Such regulations or conditions

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apply only to multifamily projects with 20 or more units, and regulations or conditions applied by a city may not require more than 20% of housing units within a multifamily structure to be sold or rented as affordable housing. Riordan said that under SB 1533 a city or county may establish a construction excise tax on residential, commercial, industrial and mixed-use property to fund affordable housing incentives and programs. A tax on residential property may not exceed 1% of the permit valuation for permits that result in a new residential structure, or additional square footage in an existing residential structure including remodeling that adds living space. Unlike a tax on residential property, SB 1533 does not establish a maximum tax rate on commercial, industrial and mixed-use real property, but the ordinance establishing the tax on non-residential property must state the rate and base of the tax.

Mr. Holan said that reducing system development charges (SDC) would help make housing affordable, unfortunately most SDC fees here are from other agencies.

Mr. Riordan stated that SB 1533 raises a number of policy questions that could be considered as part of the affordable housing work program. Some of these policy questions include: does SB 1533 target households most in need of affordable housing in Forest Grove, if the City proceeds with an inclusionary zoning requirement how long should affordability be required, how will required affordability be monitored and by whom, should the City establish a construction excise tax as allowed by SB 1533 to promote housing affordability, should the tax apply to residential property only or to non-residential property as well, what should the amount and base of the tax be? He said there is also the question should the City reduce fees for accessory dwelling units (ADU).

Mr. Holan stated that some jurisdictions count ADUs towards density calculations, but City of Forest Grove does not.

Mr. Riordan said the next steps include identifying goals, objectives and policies in the Forest Grove Comprehensive Plan for affordable housing, compiling data on local housing needs, identifying possible tools on housing needs, and identifying barriers and local capacity to deliver affordable housing. He said with City Council direction, staff is looking to establish a technical advisory committee (TAC) and a Citizen Advisory Committee to guide program and policy recommendations. Riordan said it would be good to have a volunteer from the Planning Commission to serve on the Citizen Advisory Committee, and the goal is to kick things off in October if the City Council gives their approval.

Commissioner Hymes volunteered to be the representative from the Commission.

3. PUBLIC MEETING:

2.1 PUBLIC COMMENT PERIOD FOR NON-AGENDA ITEMS: None.

2.2 PUBLIC HEARING:

A. Amend Forest Grove City Code to delete Section 5.800 through 5.860 (and repeal Ordinance # 2005-17) *Areas of Special Flood Hazard* in its entirety.

Amend Forest Grove Development Code Article 2 *Variances*, Article 5 *Natural Resource Areas*, Article 8 *Hazards and Resources*, and Article 12 *Definitions* to adopt new Flood Damage

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Prevention Regulations and Definitions; and adoption of new Flood Insurance Rate Maps (FIRMs). File # 311-16-000133-PLNG

Chairman Beck opened the public hearing at 7:02 p.m. He explained that because this was a legislative hearing the procedures were a little different, and he stated the order of events. Beck explained to those in the audience that this situation was unique and a real conundrum. FEMA is requiring cities to adopt floodplain maps which control who needs flood insurance. He explained that if the City does not adopt the maps it could have serious repercussions, and the City could not service its citizens. Beck said the problem is in some areas the maps are wrong, and FEMA must go through a process to correct the maps. This probably will not happen until next year. Staff will explain tonight how the City can help citizens whose property has been affected by the incorrect maps. Beck called for the staff report.

Mr. Reitz briefly went through the Code amendments, and stated that most people in the audience were interested in the maps, especially the Willamina, Strasburg, Kalex area. He explained that Derek Robbins from the City's Engineering Dept. was present, and has been talking to FEMA daily. He said staff has posted the amendments on the City's website for citizens to view. Reitz explained that the Code is bisected because Chapter # 5 (Protecting the Public) holds the majority of it, and the Development Code has a little about floodplain management. He said these will be combined in the Development Code so they are all in one place in Chapter # 10.

Mr. Robbins showed the new FEMA maps, which do not show detail such as lot lines and house locations. He said Washington County had an open house with digital maps available for viewing which did show more detail, and these maps are on the Washington County website. Robbins showed the detailed map with houses in the floodplain. He then showed the 1982 map from the FEMA engineers that indicated in white the area in error. FEMA has stated the white area will be taken back to the 1982 levels. He explained that the FEMA data is correct, but the digital mapping is not.

Mr. Holan explained that this correction process probably will not happen until next year. He said that because we have to have these adopted by November 4th of this year, there will be a period of time until the correction is made.

Mr. Robbins said staff showed FEMA the City's as-builts, and the Flood Insurance Studies show these houses above the 100-year floodplain. He said FEMA is aware of the error, and will make the changes eventually. If property owners need to make the correction earlier to avoid paying flood insurance, there is a LOMA process in place, and the application can be submitted along with the City's as-builts to help expedite the change. Robbins had information about the LOMA process for interested citizens.

Chairman Beck restated that property owners impacted by the error can avoid paying flood insurance in the interim by submitting the LOMA application using the City's maps so a surveyor does not have to be hired. If the house is shown in the floodplain it matters, but if part of the property is in the flood zone it does not matter.

PROPONENTS: None

OPPONENTS: None

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OTHER:

Ron Calkins, 3261 Burnet St., Forest Grove, OR. Mr. Calkins stated that his house is near Beal Pond where he saw some men surveying and would be doing some excavating in the wetland. His question was will that put his house in or near the floodplain.

Mr. Robbins explained that the City's Engineering Dept. has grading plans for that property, and if Mr. Calkins will come into the office they can take a look, but they cannot do anything to put his property in the floodplain.

Linda Hedland, 3255 Barnet St., Forest Grove, OR. Ms. Hedland asked if Beal Pond is in the floodplain. She said they did not receive a letter from the City, and she wanted to know if their property is inside or outside the floodplain.

Mr. Robbins showed Ms. Hedland a detailed map of the area that answered her question.

Chairman Beck noted that there were several properties on Main St. that are affected, and asked if that will change.

Mr. Robbins said as the City gets more information, staff will be able to answer that.

Elaine Bohlmeier, 1107 Birch St., Forest Grove, OR. Ms. Bohlmeier stated that she called the City's Engineering Dept. and was told her property was not affected. She said the letter sent out by the City was unduly upsetting, and the City should have waited until they had good information before sending the letter to people who were not impacted. Bohlmeier said in future the City should wait, and not upset people.

Fernando Cuaierroz, 510 Willamina Ave., Forest Grove, OR. Mr. Cuaierroz said the FEMA map shows his property in the flood zone, and asked if this was an error.

Mr. Robbins said yes it was an error, and FEMA would eventually correct it.

Chairman Beck explained that if his house is on the front of the property outside the floodplain there is no problem, but if it is in the blue area on the back of his property it may be a problem.

Martin Elliott, 2336 Strasburg Drive, Forest Grove, OR. Mr. Elliott said he has been talked to staff, and attended the open house. He had questions about procedure, and whether or not there were charges involved with the LOMA process.

Mr. Robbins stated that last week FEMA told staff there would be no charges.

Chairman Beck explained that as far as accepting the FEMA floodplain maps, the ordinance will go before the City Council in a couple of weeks and then there is a 30-day waiting period before it goes into effect.

In answer to a question from Mr. Elliott, Mr. Robbins stated that staff has it in writing that FEMA will move forward on the LOMA applications.

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Mr. Elliott stated that we are talking about hundreds of thousands of dollars in flood insurance – this is not a small deal.

Mr. Robbins stated that the City feels caught in the middle, and is trying to relay information to help its citizens.

Tim Rippe, 3334 Edgeview Lane, Forest Grove, OR. Mr. Rippe stated that he has a friend who could not be at the meeting who heard that the FEMA maps or data are not accurate.

Mr. Robbins stated that the maps are wrong, but the data is accurate.

Chairman Beck explained what is inaccurate is FEMA's interpretation of the data.

Deborah Ripa, 1110 Birch St., Forest Grove, OR. Ms. Ripa wanted to echo her neighbor's statement that they also received a letter from the City, but their property is not affected. She said it would be nice to be more selective as to who those letters go out to. Ripa asked if the Code changes will impact the walking trail behind her property, which she and her neighbor's oppose. She said her concern is the water that accumulates on the back of her property each year, and if the path is raised that water would be trapped.

Mr. Robbins invited Ms. Ripa to come into the office to discuss the path.

Blaine Nunnenkamp, 2382 Willamina Ave., Forest Grove, OR. Mr. Nunnenkamp asked whether or not the insurance companies will receive the same mailing.

Mr. Robbins said they would not.

Jeff Roth, 514 Willamina Ave., Forest Grove, OR. Mr. Roth asked what the City's stance is on where the line should go.

Chairman Beck explained that a bunch of Mr. Roth's property will be in the floodplain as it always has been.

Chairman Beck closed the public hearing at 8:05.

COMMISSION DISCUSSION:

Chairman Beck stated that the text for the amendments is pretty straight forward, and staff has shown a willingness to work with the citizens affected.

Commissioner Ruder made a motion to recommend approval of amendments to Forest Grove City Code to delete Section 5.800 through 5.860 (and repeal Ordinance # 2005-17) *Areas of Special Flood Hazard* in its entirety, and to amend Forest Grove Development Code Article 2 *Variances*, Article 5 *Natural Resource Areas*, Article 8 *Hazards and Resources*, and Article 12 *Definitions* to adopt new Flood Damage Prevention Regulations and Definitions; and adoption of new Flood Insurance Rate Maps (FIRMs). File # 311-16-000133-PLNG. Commissioner Smith seconded. Motion passed 5-0.

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QUESTIONS FROM THE AUDIENCE

In response to a question from the audience, Chairman Beck explained that the purpose of the meeting tonight was to allow the Planning Commission to recommend approval to the City Council of the FEMA floodplain amendments. He said the City Council is the official body who gives the final approval.

Mr. Holan explained there will be two City Council meetings on the floodplain. The first meeting will be held on September 12th for the first reading and they will accept public testimony. The second meeting will be held on September 26th for the second reading, and if they approve the amendments there is a 30-day period before it takes effect which puts it into October. He said FEMA has stated the amendments must be approved before November 4th.

Commissioner Ruder said hopefully this will all get fixed in a few months.

2.3 **ACTION ITEMS:** None.

4. BUSINESS MEETING:

3.1 **APPROVAL OF MINUTES:** Commissioner Smith made a motion to approve the minutes from the June 20, 2016 meeting. Commissioner Hymes seconded. Motion passed 5-0.

3.2 **REPORTS FROM COMMISSIONERS/SUBCOMMITTEES:** None.

3.3 **DIRECTOR'S REPORT:** None.

3.4 **ANNOUNCEMENT OF NEXT MEETING:** Mr. Holan said there will be no meetings in September, unless an application comes in. He said the Westside Planning project may come before the Commission in October, along with a joint work session on the Parks & Recreation Master Plan.

3.5 **ADJOURNMENT:** The meeting adjourned at 8:17 p.m. Derek Robbins stayed afterwards to answer questions from people in the audience.

Respectfully submitted by:
Marcia Phillips
Planning Commission Coordinator

PLANNING COMMISSION STAFF REPORT

OF

AUGUST 15, 2016



Forest Grove Code Text Amendment Staff Report and Recommendation

Community Development Department, Planning Division

REPORT DATE: August 8, 2016

HEARING DATE: August 15, 2016

REQUEST: Amend the Forest Grove City Code to delete Section 5.800 through 5.860 (and repeal Ordinance Number 2005-17) *Areas of Special Flood Hazard* in its entirety

Amend Forest Grove Development Code Article 2 *Variances*, Article 5 *Natural Resource Areas*, Article 8 *Hazards and Resources*, and Article 12 *Definitions* to adopt new Flood Damage Prevention Regulations and Definitions; and adoption of new Flood Insurance Rate Maps (FIRMs)

FILE NUMBER: 311-16-000133-PLNG

PROPERTY LOCATION: Not applicable

LEGAL DESCRIPTION: Not applicable

APPLICANT: City of Forest Grove, PO Box 326, Forest Grove, Oregon 97116-0326

APPLICABLE STANDARDS AND CRITERIA: City of Forest Grove Code:

- §1.040 *Amendment and Repeal of Code Sections*
- §10.1.700 et. seq. *Legislative Land Use Decision*
- §10.2.600 et. seq. *Development Code Text Amendment*

REVIEWING STAFF: Robert A. Foster, Public Works Director
Derek Robbins, Civil Engineer
James Reitz, AICP, Senior Planner

RECOMMENDATION: Staff recommends approval of the amendments

I. BACKGROUND

Forest Grove's existing codes regulating floodplain hazard areas are contained within both the City Code (Section 5.800-5.860 *Areas of Special Flood Hazard*) and the Development Code (Section 10.8.310 *Hazard Areas*). While §5.800 et. seq. has been periodically updated to remain compliant with Federal standards; it has not been updated since 2005. The Development Code was adopted in 2009, but no amendments to date have been made to the *Hazards and Resources* section of Article 8.

These code sections regulate the flood hazard areas as defined by the Federal Emergency Management Agency (FEMA), based on the Flood Insurance Rate Maps (FIRMs). The FIRMs for the Tualatin Basin were last adopted by FEMA in 1982. Over the past several years, FEMA has been working on a "Flood Map Modernization" project to improve and update the nation's flood maps and create digital FIRMs.

The new FIRMs were released for public review earlier this year. The new FIRMs are based on an updated Flood Insurance Study (FIS) of Washington County and incorporated areas. The FIS notes that "Due to the undeveloped or lightly developed state of the floodplains within Forest Grove, damages caused by (past) flooding have been minimal. Water-related damage in the city generally results from high ground water and local drainage problems."

The new FIRMs will go into effect on November 4, 2016. To help implement the new FIRMs, the Department of Land Conservation and Development (DLCD) created a model ordinance for use statewide. Adoption of this ordinance would ensure continued compliance with the standards for participation in the National Flood Insurance Program (NFIP) and will enable Forest Grove to avoid suspension from the NFIP.

If the new regulations are not adopted by November 4th, Forest Grove would be suspended from the NFIP, and the following sanctions could apply (see pp. 5-6 in FEMA Bulletin #495, attached as Exhibit B):

- Property owners will not be able to purchase NFIP flood insurance policies and existing policies will not be renewed.
- Federal grants or loans for development will not be available in identified flood hazard areas under programs administered by Federal agencies such as HUD, EPA and SBA.
- Federal disaster assistance will not be provided to repair insurable buildings located in identified flood hazard areas for damage caused by a flood.
- Federal mortgage insurance or loan guarantees will not be provided in identified flood hazard areas such as those written by FHA and DVA.
- Federally insured or regulated lending institutions, such as banks and credit unions, are allowed to make conventional loans for insurable buildings in flood-hazard areas of non-participating communities. However, the lender must notify applicants that the property is in a flood hazard area and that the property is not eligible for Federal disaster assistance. Some lenders may not voluntarily choose to make these loans.

The model ordinance includes standards and provisions that encourage sound floodplain management that when implemented would continue to allow property owners to obtain flood insurance at a more affordable rate.

Forest Grove's current floodplain regulations are located in two Municipal Code chapters (3 *Public Protection* and 10 *Development Code*). This proposal would replace the existing code with the model ordinance, and place it exclusively into the Development Code. Doing so would simplify the code and negate the need for cross references between two otherwise unrelated municipal code chapters. Staff has custom-tailored the model ordinance to address local conditions; these edits have already been reviewed and approved by DLCD staff.

To comply with Federal regulations, the new ordinance must be in place prior to November 4, 2016. The public hearings before the City Council have therefore already been scheduled for September 12th and 26th; assuming that the ordinance is signed shortly after the final hearing on September 26th, it would take effect 30 days later, just prior to the November 4th deadline.

OPEN HOUSE - On March 17, 2016 an open house was held at the Washington County Public Services Building in Hillsboro about the updated FIRMs. The City sent invitations for the open house to those property owners whose land has been identified as having any portion thereof located in a floodplain or floodplain management area. Staff from the City of Forest Grove, Washington County, FEMA, and DLCDC were present to answer questions. About eight residents attended from the Forest Grove area. Attendees learned that:

- The new digital floodplain maps will be the primary regulatory tool used by the National Flood Insurance Program (NFIP) and the insurance industry to regulate floodplain development and rates for flood insurance policies; and
- The maps will also be used by federally-regulated lending institutions and insurance agents to determine who must purchase flood insurance, and the cost of that insurance; and
- The maps will also be used by city and county officials for floodplain management and permitting purposes.

City staff noted a discrepancy in the new digital floodplain overlay view as compared to the Flood Insurance Study (FIS) profiles. The new digital flood area overlay view included developed lots along Strasburg Drive and Willamina Avenue along the City's southwest boundary. However, the record drawings for development in the area and the new FIS profiles show development *above* the flood area. The new digital flood area overlay appears to be off in elevation by about 10 feet. In other words, the new digital overlay should be aligned *below* the low side elevation property lines as defined in the City's as-built drawings and as shown in the FIS profile.

FEMA staff has acknowledged the mapping error, and is now working on a plan to revise the maps for the Forest Grove area. This process is called a Letter of Map Revision (LOMR). However, this LOMR cannot become effective prior to the effective date of this update process (November 4, 2016). Staff understands that the City would need to adopt the proposed ordinance and FIRMs in order to remain compliant with National Flood Insurance Program (NFIP) regulations and State requirements. FEMA is currently working on the scope, schedule, and funding for the Forest Grove-area LOMR; the effective date of the LOMR could be as early as the end of the calendar year. More discussion of this topic follows in the Adoption of New Flood Insurance Rate Maps section below.

No other issues with the Forest Grove-area FIRMs were noted or public comments received at the open house.

PUBLIC NOTICE / MEASURE 56 NOTICE— In addition to the open house, public notice for this proposal was mailed to affected parties on July 25, 2016. Affected Parties would be those property owners whose land has been identified as having any portion thereof located in a floodplain or floodplain management area (the same mailing list as was used for the March 17 open house). This mailing also included a Measure 56 notice, required whenever a code amendment is proposed that might affect the value of property. Notice of this proposal was also published in the *News Times* on August 10, 2016.

As of the date of this report, no comments have been received from the public.

II. DESCRIPTION OF PROPOSAL

This section addresses the code update, how the proposed code differs from the current code, and adoption of the new Flood Insurance Rate Maps.

CODE UPDATE - The proposal would delete all flood-related code from Chapter 5 *Public Protection* and consolidate it into the Development Code (DC). DC Articles 2, 5, 8 and 12 would be amended. While the text would be new to the Development Code, much of it has already been adopted into FGC Chapter 5. The proposed amendments to the Development Code are as follows:

§10.2.700 VARIANCE – This section would be amended to add a cross-reference to new §10.8.330. This new section would establish criteria specific to requests for a variance from floodplain regulations.

§10.5.010 NATURAL RESOURCE AREAS – This section would be amended to remove the cross-reference to §5.805 and §5.815 and replace them with a cross-reference to new §10.8.315(B).

§10.8.310(D) HAZARDS AND RESOURCES – This section would be amended to delete all existing text pertaining to floodplains and flood management areas.

The following amendments would be new additions to the Development Code:

§10.8.315 FLOODPLAINS AND FLOOD MANAGEMENT AREAS

A. LANDS TO WHICH THIS CODE APPLIES – This section defines where the code applies. It is presently codified as §5.810.

B. BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD - This section lists the source material for the new Flood Insurance Rate Maps, and declares that the new maps are adopted by reference, with an effective date of November 4, 2016. It is presently codified as §5.815, but references the 1981 FIS.

C. WARNING AND DISCLAIMER OF LIABILITY – This new section exempts the City and any officer or employee thereof from liability.

§10.8.320 ESTABLISHMENT OF DEVELOPMENT PERMIT – This new section requires that an applicant obtain a permit for all work proposed within a floodplain or flood management area, and notes that land below the elevation of the base flood shall be placed in open space or parking lot and landscaped areas if within the developed portion of the site. This section also includes text from the current code (§10.8.310(D)(3)) that limits use of the land below the base flood elevation to open space, parking lots or landscaped areas.

§10.8.325 DESIGNATION, DUTIES AND RESPONSIBILITIES OF THE CITY ENGINEER – This section designates the City Engineer as the Floodplain Administrator, and lists the duties thereof. It is presently codified as §5.830.

§10.8.330 VARIANCE – This new section establishes eleven new review criteria specific to requests to vary from these floodplain and flood management area regulations. The Planning Commission would be the designated review body, just as it is for other Development Code variance requests.

§10.8.335 PROVISIONS FOR FLOOD HAZARD REDUCTION –

- **GENERAL STANDARDS** – This section would apply to all proposals for construction or substantial improvement within all special flood hazard zones. It is presently codified as §5.830.
- **SPECIFIC STANDARDS** – In addition to the General Standards, this section would establish specific standards to be met for residential construction, manufactured dwellings, non-residential construction, recreational vehicles, and accessory structures. The subsections addressing accessory structures and below-grade crawl spaces are new, but the rest is presently codified as §5.845 *Specific Standards*, §5.846 *Residential Construction*, §5.847 *Nonresidential Construction*, §5.848 *Manufactured Homes*, and §5.849 *Recreational Vehicles*.

§10.8.340 BEFORE REGULATORY FLOODWAY – This new section would prohibit construction or substantial improvements in areas where a regulatory floodway has not been designated, unless it is demonstrated that the anticipated development would not substantially increase the water surface elevation of the base flood.

§10.8.345 FLOODWAYS – This section would prohibit encroachments in floodways, including fill, new construction, substantial improvements, and other development. Projects might be allowed provided an applicant could demonstrate that there would be no increase in flood levels. Certain stream habitat restoration projects could also be permitted. It is presently codified as §5.850.

§10.8.350 CRITICAL FACILITY – This new section requires that a Critical Facility be located in other than a flood hazard area, unless no alternative exists. “Critical Facility” would be defined in Article 12.

§10.8.355 ENVIRONMENTAL PRACTICE – This section is currently numbered §10.8.315; this amendment would update the section number only.

In addition to the amendments to the above articles, the Definitions of Article 12 would also be amended:

§10.12.210 MEANING OF SPECIFIC WORDS AND TERMS

Several definitions would be re-defined (i.e., basement, development, and floodway). Several of the following terms are defined in §5.805 but need to be added to the definitions section of the Development Code, while others additions (in italics) are entirely new.

Area of Special Flood Hazard	Flood Insurance Study (FIS)
Base Flood	<i>Highest Adjacent Grade</i>
<i>Below-Grade Crawl Space</i>	<i>Letter of Map Change</i>
<i>Conditional Letter of Map Revision (CLOMR)</i>	<i>New Construction</i>
<i>Critical Facility</i>	<i>Structure</i>
Elevated Building	Substantial Damage
Flood or Flooding	<i>Variance</i>
Flood Insurance Rate Map (FIRM)	<i>Water Dependent</i>

NEW CODE V. CURRENT CODE – Most of the proposed additions to the Development Code are already codified in §5.800 through §5.860 as noted above. The proposed code differs from existing code as follows:

§10.8.315(B) BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD – The current FIRMs date from 1982. This section would adopt new maps, with an effective date of November 4, 2016.

§10.8.315(C) WARNING AND DISCLAIMER OF LIABILITY – The current code has no such disclaimer.

§10.8.320 ESTABLISHMENT OF DEVELOPMENT PERMIT – This section requires that an applicant obtain a permit for all work proposed within a floodplain or flood management area. Current code does not explicitly require a permit; it only notes that “applications for permits or approvals required by the City” shall be reviewed by the City Engineer (§§ 5.830 and 5.835).

§10.8.330 VARIANCE – This new section would establish eleven new review criteria specific to requests to vary from these floodplain and flood management area regulations. These criteria include consideration of how - if approved - a proposal may result in danger to life and property, and the availability of alternative locations for the proposed activity or construction, among others. The Planning Commission would be the designated review body, just as it is for other Development Code variance requests, but would consider an application based on these new criteria, not the variance criteria listed in §10.2.720.

§10.8.340 BEFORE REGULATORY FLOODWAY - This new section would prohibit construction or substantial improvements in areas where a regulatory floodway has not been designated. Current code does not address areas where a regulatory floodway has not been designated.

§10.8.350 CRITICAL FACILITY – This new section requires that a Critical Facility be located in other than a flood hazard area, unless no alternative exists. “Critical Facility” would be defined in Article 12. Current code does not address the siting of new critical facilities such as schools, hospitals, or hazardous material storage.

ADOPTION OF NEW FLOOD INSURANCE RATE MAPS – As noted above, the current FIRMs for the Tualatin Basin were last adopted by FEMA in 1982. Over the past several years, FEMA has been working on a “Flood Map Modernization” project to improve and update the nation’s flood maps and create digital FIRMs. The new FIRMs will be adopted concurrent with this Development Code amendment, as per §10.8.315(B) *Basis for Establishing Areas of Special Flood Hazard*. Forest Grove is covered by four FIRMs, as follows:

Panel 294 (West City Limits at Gales Creek Road southeast to Pacific Avenue). As noted above, City staff noted a discrepancy in the new digital floodplain overlay view as compared to the FIS profiles for this area. The new digital flood area overlay view includes developed lots along Strasburg Drive and Willamina Avenue while the record drawings for development in the area and the new FIS profiles show development *above* the flood area. The new digital flood area overlay appears to be off in elevation by about 10 feet. In other words, the new digital overlay should be aligned *below* the low side elevation property lines as defined in the City’s as-built drawings and as shown in the FIS profile.

FEMA staff has acknowledged the mapping error, and they are currently refining the scope, schedule, and funding for a Letter of Map Revision (LOMR). The LOMR would include all the

affected properties. They anticipate having the process complete by the end of the calendar year, or shortly thereafter. No action on the part of the property owners is necessary.

If a property owner needs a determination before the LOMR process is completed (e.g., to obtain homeowner insurance or obtain a mortgage), they could file for a Letter of Map Amendment (LOMA). To do so, each property owner would submit evidence to FEMA that the home is located above the Base Flood Elevation (BFE) as identified in the Flood Insurance Study. This evidence could include copies of the subdivision grading plans on file with the City, an elevation certificate prepared by a licensed surveyor, etc. (Note: when the Knox Ridge neighborhood was being developed, the City required elevation certificates for the homes along the west side of Strasburg Drive). The LOMA would apply to the home only; it would not declare that the entire lot was necessarily above the floodplain elevation. Staff understands that FEMA does not charge an application fee to request a LOMA.

Panel 311 (Sunset Drive - Beal Road area). The 1982 FIRM did not include the area upstream of Beal Pond on the west side of Sunset Drive. The new FIRM includes the area upstream to the vicinity of Bonnie Lane and Primrose Lane. The new FIRM indicates an approximate 3-foot increase in potential flood level, from the current 169-foot contour to the 172 foot-contour. Even so, it appears that the homes bordering this drainage way would remain above the floodplain.

Panel 313 (Gales Creek Terrace vicinity east to the vicinity of Cedar Street). The new FIRM indicates an approximate 4-foot increase in potential flood level, from the current 172-foot contour to the 176 foot-contour. The land in the Gales Creek Terrace area sits up on a bluff and this map revision would appear to have little if any affect. Property in the Old Town area east of "B" Street is similarly situated. The potential flood elevation adjacent to the Fairmount 2 subdivision along Birch Street and 11th Avenue does not appear to be substantially different than what is indicated on the 1982 FIRM. The west boundary of Fairmount 2 was surveyed to overlap the 100-year floodplain elevation, and the homes were constructed above that level.

Panel 314 (CWS Treatment Plant Area and Council Creek). The new FIRM indicates an approximate 5-foot increase in potential flood level, from the current 158-foot contour to the 163-foot contour. More of the old treatment ponds/Fern Hill Wetlands site would be in the floodplain, but the treatment plant near Taylor Way would not, although it is now identified as being within the 500-year floodplain. The Homestead MHP appears to be only somewhat affected, as more of it too would be in the 500-year floodplain. The Taylor Way Industrial Park and the Elm Street urban growth boundary study area appear to be virtually unaffected.

The Council Creek floodplain is located on the north side of the Highway 47 bypass. While the new FIRM indicates an approximate 4-5 foot increase in potential flood level, the adjoining properties would be virtually unaffected because the creek and floodplain are in more of a defined channel.

III. APPROVAL CRITERIA AND FINDINGS

Forest Grove Code §1.040 *Amendment and Repeal of Code Sections* reads as follows:

This Code is the general and permanent law of the City. The Council may enact three types of general Ordinances to affect this Code. Such Ordinances may:

- (1) Amend the Code to change provisions;*
- (2) Add new provisions to the Code; or*
- (3) Repeal existing Code provisions*

A general Ordinance shall specifically amend or repeal a particular Section of this Code, and a general Ordinance creating a new Code Section shall integrate the new Section into the numbering system and organization of this Code.

No specific criteria or findings of fact are required in order to amend or repeal sections of the general Code, but Development Code Section 10.2.630 *Review Criteria* lists two standards to be satisfied to adopt a text amendment:

- A. *The text amendment is consistent with relevant goals and policies of the Forest Grove Comprehensive Plan; and*

Finding: Comprehensive Plan goals and policies address flood hazards as follows:

Natural Resources and Natural Hazards Goals

- (1) *All development shall consider, take into account and demonstrate suitability relative to the natural hazard limitations of the Forest Grove area;*

Finding: This goal applies to the actual development of land, not to the code regulating how the land develops. This goal does not apply to an ordinance revision. Since current code §10.8.310(D)(3) limits use of the land below the base flood elevation to open space, parking lots or landscaped areas, and since that section will be incorporated into the new code as §10.8.320(C), there should be little if any effect on future development.

- (2) *Floodplain areas shall be protected from incompatible uses to reduce potential for property damage;*

Finding: Adoption of the proposed ordinance would:

1. Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which would result in damaging increases in erosion or in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Control filling, grading, dredging, and other development which may increase flood damage;
5. Prevent or regulate the construction of flood barriers which would unnaturally divert flood waters or may increase flood hazards in other areas;
6. Coordinate and supplement the provisions of the state building code with local land use and development ordinances.

Conclusion: With adoption of the proposed ordinance, floodplain areas would be protected from incompatible uses because they would be prohibited from locating in a flood hazard area, or would be required to be protected against flood damage at the time of initial construction.

Natural Resources and Natural Hazards Policies

- (2) *Those involved in development will be required to address hazard conditions by the inclusion of basic environmental data (i.e. soil type, elevation of the floodplain, geologic*

limitations, etc.) and related designs and for engineering solutions in the submittal requirements for the development;

Finding: This goal applies to the actual development of land, not to the code regulating how the land develops. This goal does not apply to an ordinance revision. Since current code §10.8.310(D)(3) limits use of the land below the base flood elevation to open space, parking lots or landscaped areas, and since that section will be incorporated into the new code as §10.8.320(C), there should be little if any effect on future development.

- (3) *Adopt as a provision in both the zoning and subdivision ordinances that an environmental report be prepared and certified by a qualified engineer for all development proposals in areas having natural physical hazards and/or limitations. As part of the environmental report, the engineer shall identify the intensity of urban development to be permitted based upon the carrying capacity of the land. Open space may be required within the development in order to protect the public health and safety;*

Finding: New §10.8.320(A) will require a permit before development or construction begins in an area of special flood hazard. New §10.8.320(B) will require submittal of plans 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. In addition, the following information will be required: elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; elevation in relation to mean sea level of floodproofing in any structure; certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in §10.8.335(B)(3); and description of the extent to which a watercourse will be altered or relocated as a result of proposed development. Adoption of these new code provisions would comply with this policy.

- (4) *Permanent structural improvements will not be permitted in areas delineated as being located within the floodway of the 100-year floodplain as indicated from floodplain surface elevations provided by the U.S. Army Corps of Engineers;*

Finding: The proposed ordinance will prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, or which would result in damaging increases in erosion or in flood heights or velocities. Furthermore, the ordinance would prevent or regulate the construction of flood barriers which would unnaturally divert flood waters or may increase flood hazards in other areas. The intent of this goal is satisfied.

- (5) *The development of areas delineated as being within the 100-year floodplain as indicated from floodplain surface elevations provided in the most current Washington County, Oregon - U.S. Army Corps of Engineers information shall be limited to appropriate open space uses;*

Finding: §10.8.310(D)(3) currently limits use of the land below the base flood elevation to open space, parking lots or landscaped areas. This code provision has been included in the amendments as §10.8.320(C). Thus, this policy is met.

- (6) *Fill and compensatory excavation of the floodplain shall be used only as a final design solution for development adjacent to the floodway. Developers shall be required to spell out how development alternatives were evaluated and conclusions were made;*

Finding: The ordinance would control filling, grading, dredging, and other development which may increase flood damage; and would prevent or regulate the construction of flood barriers which would unnaturally divert flood waters or may increase flood hazards in other areas. Development would also have to be coordinated and comply with

provisions of the state building code with other local land use and development ordinances. Compliance with these provisions would ensure that fill and compensatory excavation would be considered only as the final design solution for development adjacent to the floodway.

- B. *The text amendment is consistent with relevant statewide and regional planning goals, programs and rules.*

Finding: Statewide Planning Goal 7 Areas Subject to Natural Hazards is "To protect people and property from natural hazards." Natural Hazards are defined as floods (coastal and riverine), landslides, earthquakes and related hazards, tsunamis, coastal erosion, and wildfires. To protect people and property from natural hazards, local governments are required to adopt comprehensive plans (inventories, policies and implementing measures) to reduce risk to people and property. Local governments are deemed to have complied with Goal 7 for riverine flood hazards by adopting and implementing local floodplain regulations that meet the minimum National Flood Insurance Program (NFIP) requirements. With the adoption of the proposed ordinance, Forest Grove would be in compliance with NFIP requirements and thus also with Statewide Planning Goal 7.

IV. ALTERNATIVES

The Planning Commission may recommend that the City Council approve the proposal as submitted or with modifications. As noted above, because the new ordinance must be in effect by November 4, 2016, the usual third and fourth options (denial, or continuance of deliberations to a date certain) are not available. Further, any modification must be minor to ensure continued compliance with FEMA requirements.

V. RECOMMENDATION

Based on the findings above, staff recommends approval of the proposal, with any amendments found appropriate by the Planning Commission.

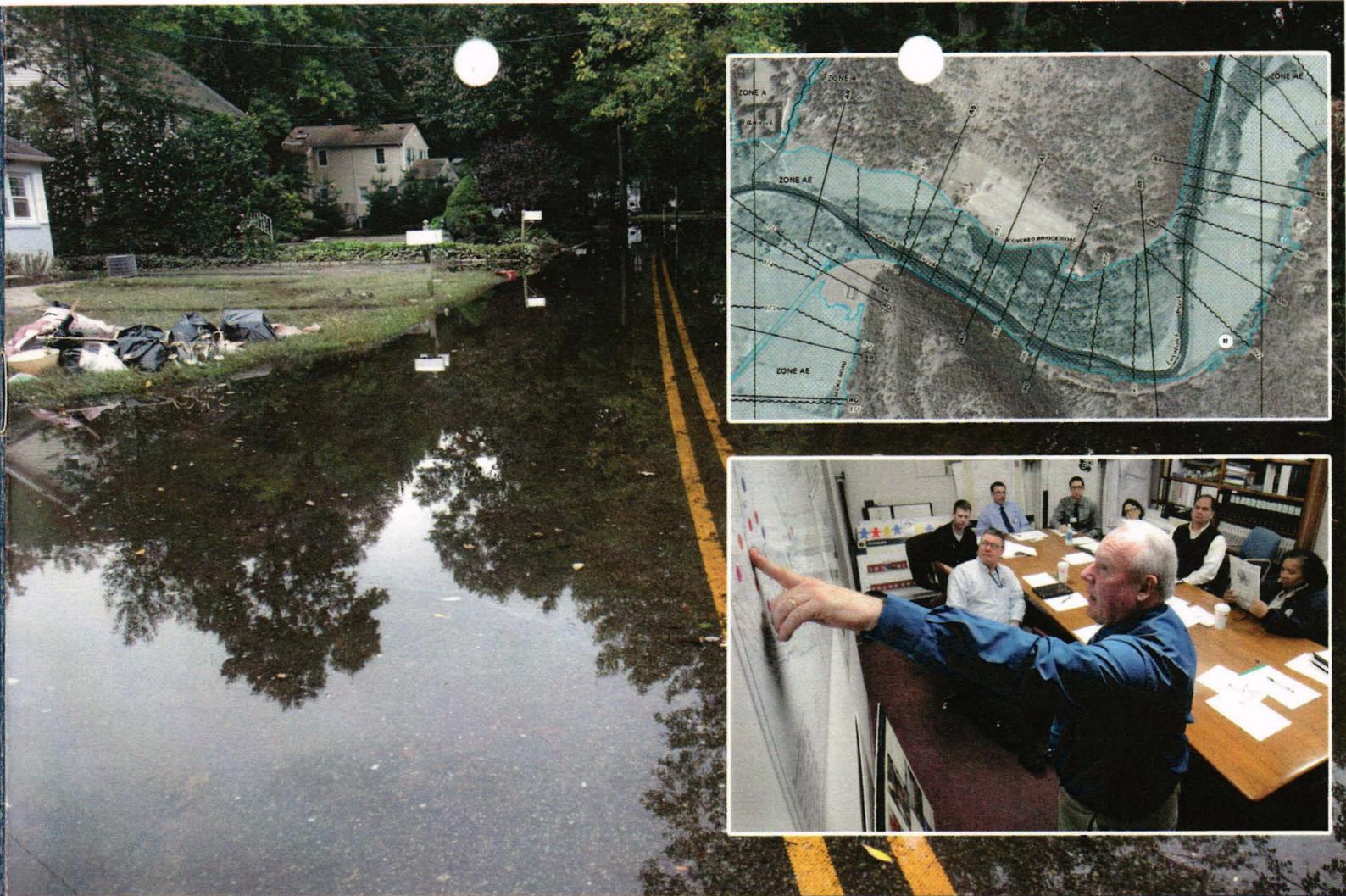
VI. LIST OF EXHIBITS

The following exhibits were received, marked, and entered into the record as evidence for this application at the time this staff report was written. Exhibits received after the date of this report will be marked beginning with the next consecutive letter and will be entered into the record at the time the public hearing is opened, prior to oral testimony.

- | | |
|------------------|--|
| Exhibit A | Proposed Development Code Text Amendments |
| Exhibit B | FEMA Bulletin #495 <i>Adoption of Flood Insurance Rate Maps by Participating Communities</i> |
| Exhibit C | Forest Grove-Area Floodplain Maps |

EXHIBIT B

FEMA BULLETIN #495



Adoption of Flood Insurance Rate Maps by Participating Communities

FEMA 495 / September 2012



FEMA

Adoption of Flood Insurance Rate Maps by Participating Communities

The National Flood Insurance Program (NFIP) was established with the passage of the National Flood Insurance Act of 1968. The NFIP is a Federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Over 21,000 communities participate in the Program.

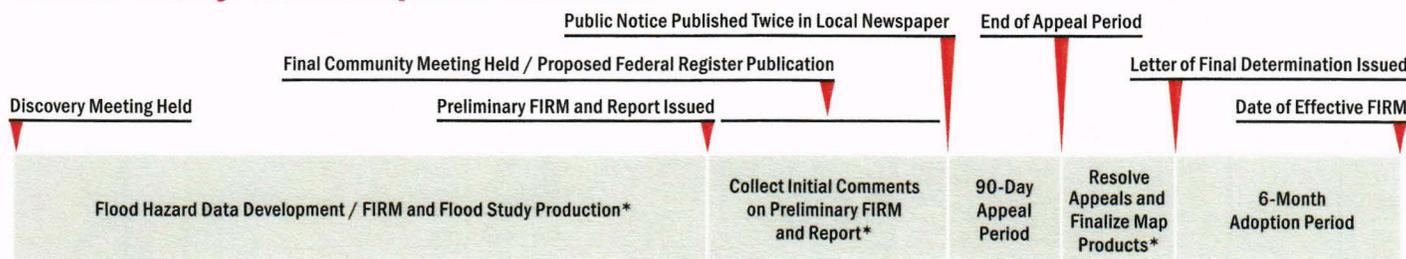
This brochure addresses several questions about community adoption of the Flood Insurance Rate Map (FIRM). As a participating community in the NFIP, your community is responsible for making sure that its floodplain management regulations meet or exceed the minimum requirements of the NFIP. By law, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) cannot offer flood insurance in communities that do not have regulations that meet or exceed these minimum requirements. These regulations can be found in **Title 44** of the **Code of Federal Regulations (44 CFR) Section 60.3**. You can also find them in model ordinances developed by most States and by FEMA Regional Offices.

The basis of your community's floodplain management regulations is the flood hazard data provided to the community by FEMA. FEMA identifies flood hazards nationwide and publishes and periodically updates flood hazard data in support of the NFIP. Flood hazard data is provided to communities in the form of a FIRM and Flood Insurance Study (FIS) report, typically prepared in a countywide format. Please be aware that while an FIS report accompanies most FIRMs, it is not created for all flood studies.

The identification of flood hazards serves many important purposes. Identifying flood hazards creates an awareness of the hazard, especially for those who live and work in floodprone areas. The FIRM and FIS report provide States and communities with the information needed for land use planning and to reduce flood risk to floodplain development and implement other health and safety requirements through codes and regulations. States and communities can also use the information for emergency management.

Each time FEMA provides your community with additional flood hazard data, your community must adopt new floodplain management regulations or amend existing regulations to incorporate the new data and meet any additional requirements that result from any changes in the data, such as the designation of a regulatory floodway for the first time. Your floodplain management regulations must also meet any additional State requirements and be adopted through a process that complies with any procedural requirements established in your State for the adoption of ordinances or regulations.

Flood Study and Adoption Timeline



*The timeframe for completing these activities may vary.

What is the process for developing new flood hazard data or revising existing data?

FEMA coordinates closely with communities to develop new flood risk data or revise existing data during the flood study process. This coordination may lead to new or updated flood hazard mapping (i.e., the update of a community's FIRM and FIS report), flood risk assessment projects, and/or mitigation planning assistance. In general, the process includes the following activities:

- Under FEMA's Risk MAP program, FEMA engages in a Discovery process with communities and other local stakeholders to obtain a comprehensive picture of flooding issues, flood risk, and the potential for the performance of additional flood mitigation activities, including the adoption of more restrictive floodplain management criteria by communities. Stakeholders may include, but are not limited to, local officials, citizen associations, representatives of levee boards, conservation districts, Tribal Nations, and economic development organizations. Information obtained during the Discovery meeting helps determine whether a flood risk assessment project, including new or updated flood hazard data and a corresponding FIRM and FIS report, is needed.
- Once it is determined that the creation or revision of flood hazard data, including an update to the FIRM and FIS report, is needed, FEMA works with communities and other Discovery stakeholders to determine the parameters of the project, including flooding sources and the type and extent (number of stream or coastline miles) of the study.
- The mapping process typically includes development of Base Flood Elevations (BFEs) and floodways for the project area. In addition, the mapping process includes activities such as obtaining the digital base map, developing the FIRM flood hazard database and, when appropriate, incorporating or revalidating previously issued Letters of Map Change, or LOMCs. LOMCs, which include Letters of Map Revision (LOMRs), Letters of Map Revision Based on Fill and Letters of Map Amendment, serve to officially revise the effective FIRM and FIS report without requiring the physical revision and republication of these materials.
- When the study is completed, FEMA provides the community with a preliminary FIRM and FIS report for review. In addition, FEMA may hold public meetings—often referred to as the Final Meeting and Open House—to explain and obtain comments on the preliminary FIRM and FIS report.
- FEMA provides a 90-day appeal period for all new or modified flood hazard information shown on a FIRM, including additions or modifications of any BFEs, base flood depths, Special Flood Hazard Area (SFHA) boundaries or zone designations, or regulatory floodways. SFHAs are areas subject to inundation by the base (1-percent-annual-chance) flood and include the following flood zones: A, AO, AH, A1-A30, AE, A99, AR, AR/A1-A30, AR/AE, AR/AO, AR/AH, AR/A, VO, V1-V30, VE, and V. The regulatory floodway is 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 a designated height. Before the appeal period is initiated, FEMA will publish a notice of proposed flood hazard determinations in the Federal Register and notify the community's Chief Executive Officer of the determination. FEMA will then publish information about the flood hazard determinations at least twice in a local newspaper. The appeal period provides the community and owners or lessees of property in the community an opportunity to submit scientific or technical information if they believe the flood hazard determinations are scientifically or technically incorrect.
- Following the 90-day appeal period, FEMA resolves all appeals and finalizes all changes to the FIRM and FIS report.
- FEMA then issues a Letter of Final Determination (LFD), which establishes the final flood hazard data and the effective date of the new FIRM and FIS report for the community. The LFD also initiates the six-month adoption period during which the community must adopt or amend its floodplain management regulations to reference the new FIRM and FIS report.
- The FIRM and FIS report become effective at the end of the six-month period. The effective date is also the date when flood insurance rates will be based on the new flood data for new construction built after this date. The effective FIRM will be used by Federally insured or regulated lenders to determine if flood insurance is required as a condition of a loan.

FEMA has entered into agreements with nearly 250 communities, States, and regional agencies to be active partners in FEMA's flood hazard mapping program under the Cooperating Technical Partners (CTP) Program. These agencies are participating with FEMA in developing and updating FIRMs. (See the box on the inside of the back cover page for a brief description of the CTP program.)



FIRM

What must an NFIP participating community do when FEMA provides new or revised flood hazard data?

Each time FEMA provides a community with new or revised flood hazard data, the community must either adopt new floodplain management regulations, or amend its existing regulations to reference the new FIRM and FIS report. In some cases, communities may have to adopt additional floodplain management requirements if a new type of flood hazard data is provided, such as a new flood zone (e.g., going from a Zone A without BFEs to a Zone AE with BFEs or going from a Zone AE to a Zone VE – the coastal high hazard area), or with the addition of a regulatory floodway designation.

The following guide is to help you determine whether changes need to be made in your community’s floodplain management regulations when a new or revised FIRM and FIS report are provided:

- If the community’s floodplain management regulations are compliant with the NFIP requirements when the LFD is issued, the community needs to amend only the map reference section of their floodplain management regulations to identify the new FIRM and FIS report.
- If the community has a legally valid automatic adoption clause established in the map reference section of the regulations and the community’s regulations are otherwise compliant with the NFIP requirements, then the floodplain management

regulations do not need to be amended. Automatic adoption clauses adopt all future revisions to the FIRM without further action by the community. However, keep in mind that the FIRM and FIS report update process outlined above still applies for communities with automatic adoption clauses. Automatic adoption clauses are not permitted in many States.

- If the community is provided a new type of flood hazard data, the community will need to either adopt new regulations or amend existing regulations to include the appropriate NFIP requirements, in addition to referencing the new FIRM and FIS report.

The LFD indicates the sections of the NFIP floodplain management requirements at 44 CFR Section 60.3 that a community must adopt based on the type of flood hazard data provided to the community.

You can contact the FEMA Regional Office or your State NFIP Coordinating Agency for assistance on the specific requirements your community will need to adopt. (See “For Assistance” on the back cover page for contact information.)

If your community has adopted higher standards than the minimum requirements of the NFIP, your community may qualify for a reduction in flood insurance premiums for your citizens under the Community Rating System (CRS). (See the box on the inside of the back cover for a brief description of the CRS.)



Janesville, Wisconsin, 2008

When must a community adopt the new or revised flood hazard data?

Your community must amend its existing floodplain management regulations or adopt new regulations before the effective date of the FIRM and FIS report, which is identified in the LFD. The LFD initiates the six-month adoption period.

Communities are encouraged to adopt the appropriate floodplain management regulations as soon as possible after the LFD is issued. The adopted regulations must be submitted to FEMA or the State and be approved by FEMA before the effective date of the FIRM and FIS report.

FEMA will send two letters notifying the community that it must have approved floodplain management regulations in place before the effective date of the FIRM. The first letter is a reminder letter and is sent to the community 90 days before the effective date. The second letter is sent to the community 30 days before the effective date of the FIRM. This letter is FEMA's final notification that the community will be suspended from the NFIP if it does not adopt the FIRM before the effective date. Notice of the suspension is also published in the *Federal Register*.

If the community adopts or amends its floodplain management regulations prior to the effective date of the FIRM and FIS report and the FEMA Regional Office approves the community's regulations, the suspension will not go into effect and the community will remain eligible for participation in the NFIP.

What happens if a community does not adopt the appropriate floodplain management regulations during the six-month adoption period?

If a community does not adopt new floodplain management regulations or amend its existing regulations before the effective date of the FIRM and FIS report, the community will be suspended from the NFIP.

The following sanctions apply if a community is suspended from the NFIP:

- Property owners will not be able to purchase NFIP flood insurance policies and existing policies will not be renewed.
- Federal grants or loans for development will not be available in identified flood hazard areas under programs administered by Federal agencies such as the Department of Housing and Urban Development, the Environmental Protection Agency, and the Small Business Administration.
- Federal disaster assistance will not be provided to repair insurable buildings located in identified flood hazard areas for damage caused by a flood.
- Federal mortgage insurance or loan guarantees will not be provided in identified flood hazard areas such as those written by the Federal Housing Administration and the Department of Veteran Affairs.
- Federally insured or regulated lending institutions, such as banks and credit unions, are allowed to



Elevated home on pile foundation



Elevated home on crawl space foundation

make conventional loans for insurable buildings in flood hazard areas of non-participating communities. However, the lender must notify applicants that the property is in a flood hazard area and that the property is not eligible for Federal disaster assistance. Some lenders may voluntarily choose not to make these loans.

If a community is suspended, it may regain its eligibility in the NFIP by enacting the floodplain management measures established in 44 CFR Section 60.3 of the NFIP regulations. If development takes place in your community during suspension that does not meet the minimum NFIP requirements, your community will be asked to take actions to reduce the increased flood hazard prior to reinstatement.

Digital Flood Hazard Information Resources

In accordance with the Flood Insurance Reform Act of 2004, FEMA has implemented a policy that allows the use of digital data for official NFIP purposes. All FEMA's flood mapping products are now prepared digitally, and a number of different digital options are available to view the flood hazard information shown on community FIRMs. All digital flood hazard resources referenced below can be accessed through FEMA's Map Service Center (MSC) at <http://msc.fema.gov>.

- Once effective, copies of the FIRM panels in digital format will be provided to your community and will also be available through the MSC. Note that Letters of Map Change (LOMCs) are also available through the MSC in .pdf format.
- FIRMettes show a desired section of a FIRM panel specified by a user, plus map scale, and other legend information from the FIRM. FIRMettes can be created online through the MSC, and printed or saved in .pdf format at no cost.
- The FIRM database is designed for use with specialized Geographic Information System (GIS) software. Users are able to integrate local data sets with the FEMA flood hazard data in the FIRM database to assist with floodplain management or mitigation planning measures. The FIRM

database is provided to your community once the FIRM becomes effective and is also available for download through the MSC.

- The National Flood Hazard Layer (NFHL) contains all effective digital flood hazard information from FIRM databases and LOMRs produced by FEMA in one integrated nationwide dataset. It also contains point locations of other LOMCs, such as Letters of Map Revision Based on Fill and Letters of Map Amendment. The NFHL is available for viewing through FEMA's online map viewer which can be accessed through the MSC. The NFHL can also be viewed as a layer in Google Earth or accessed via Web Map Service (WMS), a web-based method of viewing map information using commercial GIS software, such as ESRI's ArcGIS. Additional information on these services is available through the MSC.

Note for communities that do not yet have digitally produced FIRMs: scanned digital versions of the paper FIRM panels are available through the MSC. However, since the FIRMs were not produced digitally, a FIRM database will not be available and the flood hazard information shown on the FIRMs will not be included in the NFHL.

Becoming a Cooperating Technical Partner



FEMA established the Cooperating Technical Partner (CTP) program to increase local involvement in, and

ownership of, the flood study process and the flood hazard data developed as part of that process. This program enables communities, and regional and State agencies that have the interest, capabilities, and resources to be active partners in FEMA's flood hazard mapping program.

One of the major objectives of the CTP program is to recognize States, regional agencies, and communities with proactive floodplain management programs that include identifying the flood risk and getting the information incorporated into official FEMA flood hazard data. The CTP Program maintains national standards consistent with the NFIP Regulations. The following are some of the benefits of being a CTP.

- CTPs are given an opportunity to develop more detailed maps by making local geospatial data a part of the FIRM

- CTPs receive support such as access to existing data, access to custom-made FEMA tools, technical assistance, and national recognition
- CTPs receive mentoring support, online examples of "best practices," and free training
- Communities that participate in the Community Rating System (CRS) that also become CTPs or are in an area covered by a regional or State CTP may be eligible to receive CRS credit for CTP activities

Another major objective and benefit of the CTP Program is the ability to leverage available funding and local data to make the most of limited resources. Communities, States, and regional agencies can take advantage of these benefits by entering into an agreement with FEMA that formalizes the types of mapping activities and support the CTP will provide. Nearly 250 communities, States, and regional agencies are currently participating in the CTP Program.

To learn more about becoming a CTP, visit www.fema.gov/plan/prevent/fhm/ctp_main.shtm or contact your FEMA regional office (see back page for contact information)

Becoming an NFIP Community Rating System Community



The NFIP Community Rating System (CRS) recognizes community floodplain management practices that exceed the minimum requirements of the NFIP. CRS recognizes these efforts by

reducing the cost of flood insurance premiums from 5 percent to 45 percent for flood insurance policies in communities that participate in the CRS.

Many communities may already be doing activities that would earn credit under the CRS which would reduce flood insurance premiums for their citizens. Here are a few examples:

- Adopting and enforcing more protective building standards that result in safer new construction
- Informing the public about flood hazards and flood insurance and how to reduce flood damage
- Preserving open space in the floodplain

To receive CRS credit, a community must submit a CRS application to FEMA which identifies floodplain management practices being implemented by the community. FEMA can help with the application. After FEMA reviews and verifies the application, the flood insurance premium discounts will go into effect. The amount of flood insurance policy premium discount depends on the number of CRS-credited activities a community performs.

Community participation in the CRS has many benefits:

- Discounts for flood insurance premiums from 5 percent to 45 percent
- Enhanced public safety
- Reduced flood damage
- Increased environmental protection
- Informed community residents supporting improved flood protection measures that will make communities safer from flood risks.

To learn more about CRS, visit www.fema.gov/business/nfip/crs.shtm or call 317-848-2898

For Assistance

If your community needs assistance in adopting the FIRM, you may contact the FEMA Regional Offices listed below. You may also contact your State Coordinating Agency for the NFIP.

Additional information is available at www.fema.gov/rm-main/regional-contact-information.

REGION I

CT, ME, MA, NH, RI, VT
99 High Street, 6th Floor
Boston, MA 02110
617-956-7506

REGION II

NJ, NY, PR, VI
26 Federal Plaza, Suite 1337
New York, NY 10278-0002
212-680-3600

REGION III

DE, DC, MD, PA, VA, WV
615 Chestnut Street
1 Independence Mall, 6th Floor
Philadelphia, PA 19106-4404
215-931-5500

REGION IV

AL, FL, GA, KY, MS, NC, SC, TN
3003 Chamblee-Tucker Road
Atlanta, GA 30341
770-220-5200

REGION V

IL, IN, MI, MN, OH, WI
536 South Clark Street, 6th Floor
Chicago, IL 60605
312-408-5500

REGION VI

AR, LA, NM, OK, TX
Federal Regional Center
800 North Loop 288
Denton, TX 76209-3698
940-898-5399

REGION VII

IA, KS, MO, NE
9221 Ward Parkway, Suite 300
Kansas City, MO 64114-3372
816-283-7061

REGION VIII

CO, MT, ND, SD, UT, WY
Denver Federal Center, Building 710, Box 25267
Denver, CO 80225-0267
303-235-4800

REGION IX

AZ, CA, HI, NV, American Samoa, Guam,
Marshall Islands and Northern Mariana Islands
1111 Broadway, Suite 1200
Oakland, CA 94607
510-627-7100

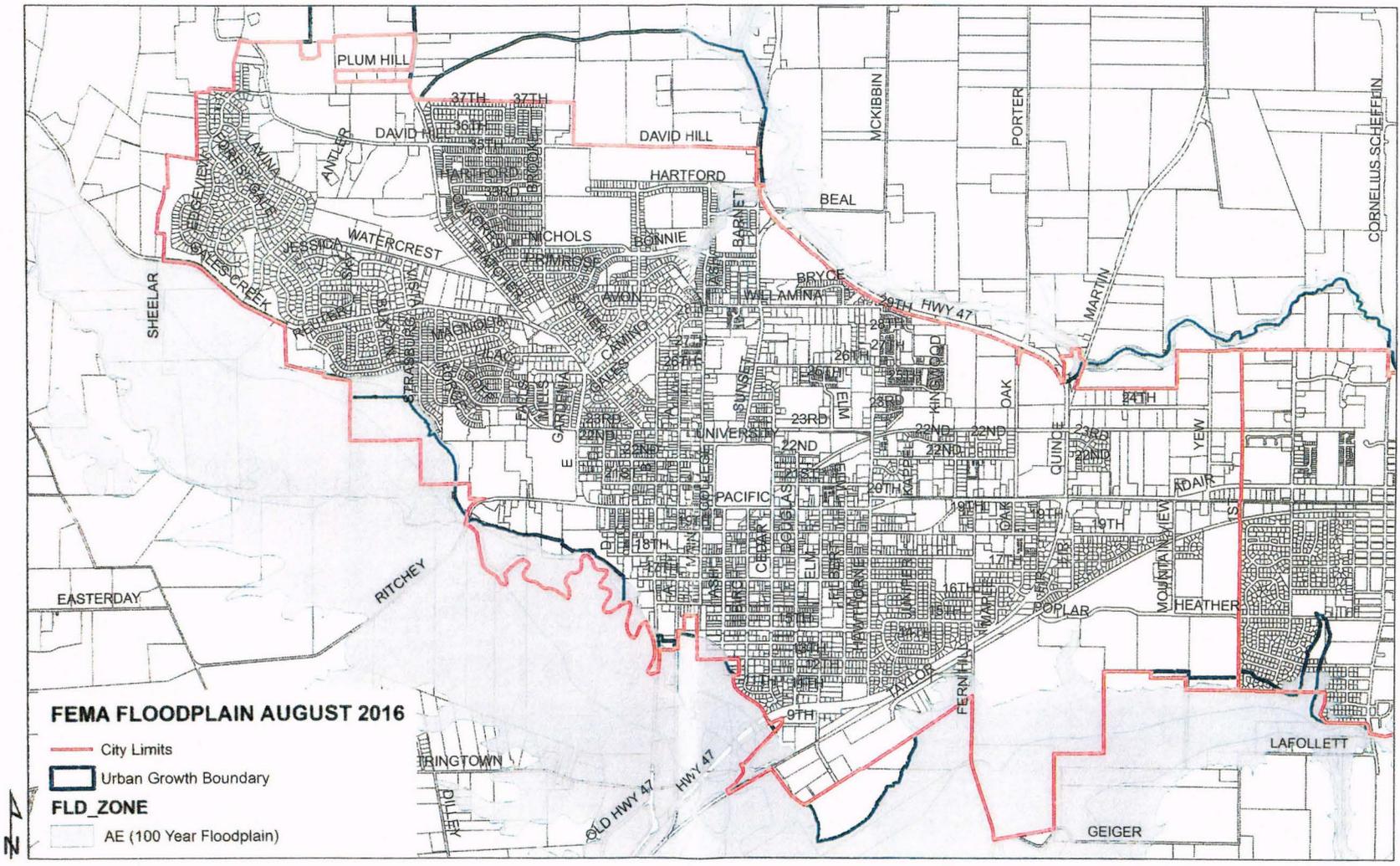
REGION X

AK, ID, OR, WA
Federal Regional Center
130 228th Street SW
Bothell, WA 98021-8627
425-487-4600

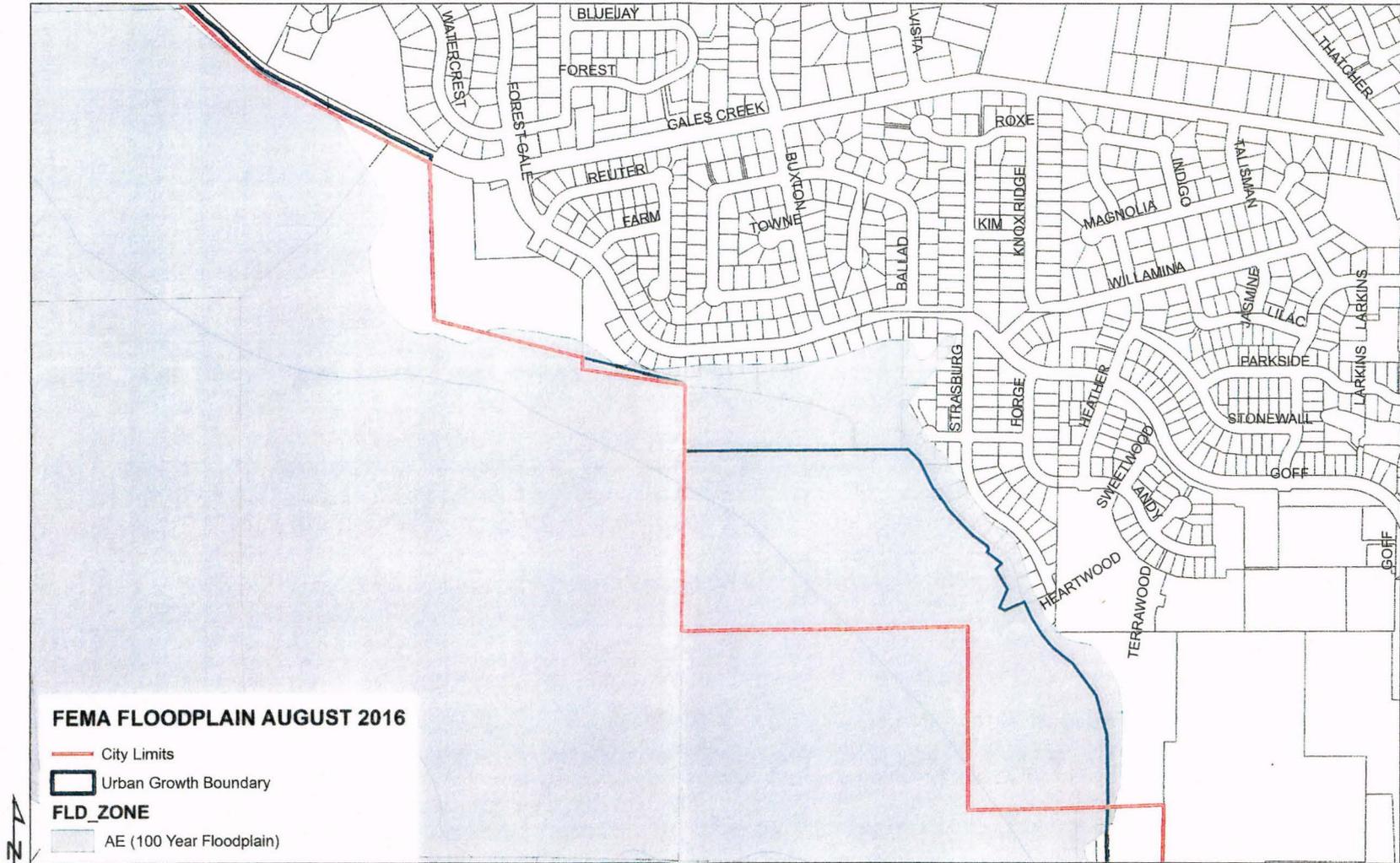
EXHIBIT C

FEMA FLOODPLAIN MAPS

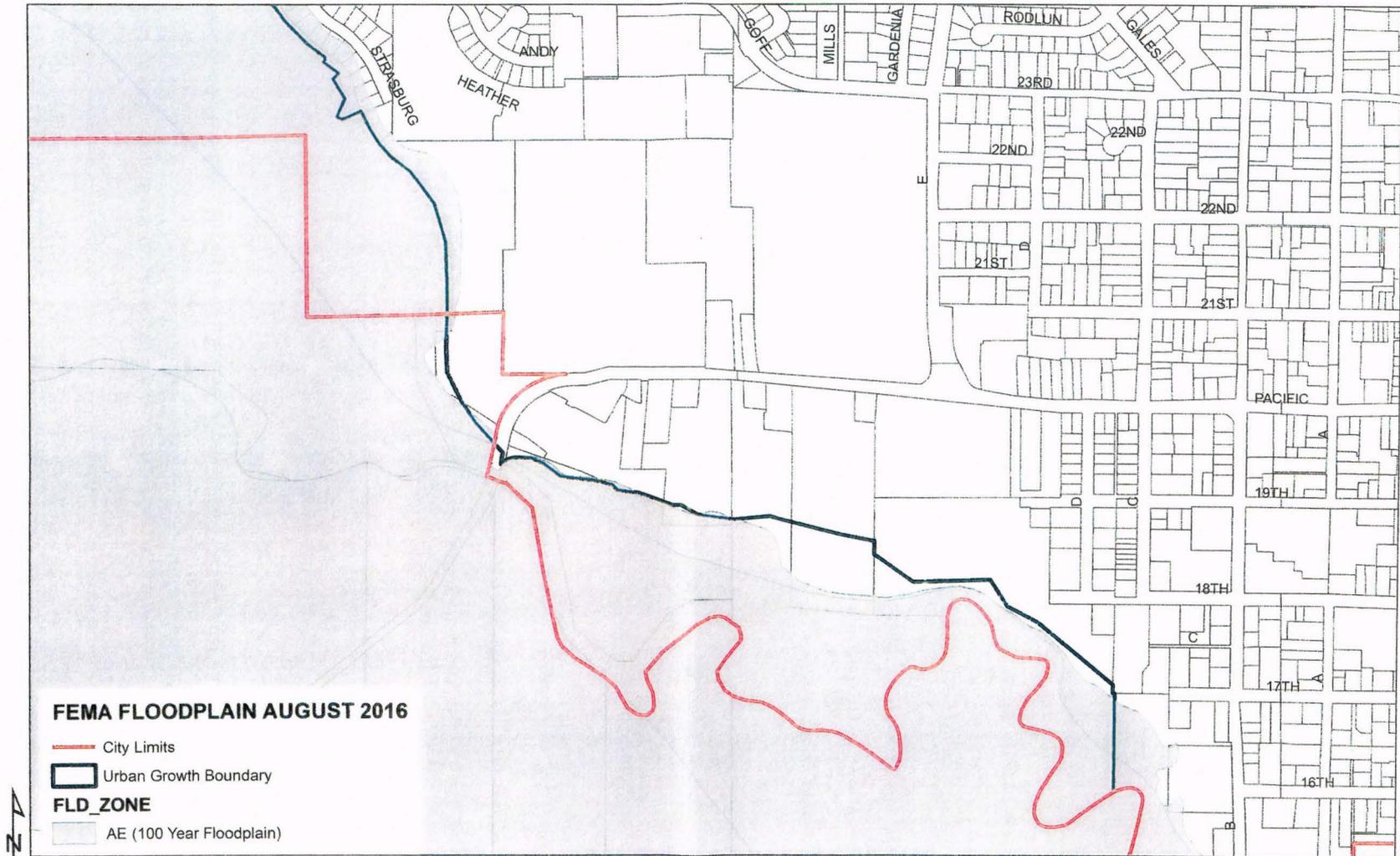
FEMA UPDATED 100 YEAR FLOODPLAIN



FEMA UPDATED 100 YEAR FLOODPLAIN



FEMA UPDATED 100 YEAR FLOODPLAIN



FEMA UPDATED 100 YEAR FLOODPLAIN



CITY COUNCIL ACTION	
MEETING DATE:	9/12/16
APPROVED:	
FIRST READING:	
ADJOURNED:	
DENIED:	
NO ACTION:	
OTHER:	1st Reading

ORDINANCE NO. 2016-16

**ORDINANCE REPEALING ORDINANCE NUMBER 2005-17 AND DELETING FOREST GROVE CITY CODE SECTION 5.800 TO 5.860 AREAS OF SPECIAL FLOOD HAZARD IN ITS ENTIRETY; AND AMENDING FOREST GROVE DEVELOPMENT CODE ARTICLES 2, 5, 8 AND 12 TO ADOPT NEW FLOOD DAMAGE PREVENTION REGULATIONS AND DEFINITIONS
FILE NO. 311-16-000133-PLNG**

WHEREAS, Oregon Constitution Article XI Section 2 delegates the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry; and

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

WHEREAS, in order to accomplish its purposes, this ordinance includes methods and provisions for:

1. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
4. Controlling filling, grading, dredging, and other development which may increase flood damage;
5. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or may increase flood hazards in other areas;
6. Coordinating and supplementing the provisions of the state building code with local land use and development ordinances; and

WHEREAS, the flood hazard areas of Forest Grove 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; and

WHEREAS, 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; and

WHEREAS, the City mailed by first class mail notice required under Measure 56 to affected property owners on July 25, 2016; and

WHEREAS, the Planning Commission held a public hearing on the proposed amendments on August 15, 2016; and

WHEREAS, the Planning Commission adopted Planning Commission Findings and Decision Number 2016-10 recommending approval of the proposed amendments; and

WHEREAS, the City Council held a duly-noticed Public Hearing on the proposed ordinance on September 12, 2016, and continued the hearing on September 26, 2016.

NOW, THEREFORE, THE CITY OF FOREST GROVE ORDAINS AS FOLLOWS:

Section 1: The City Council hereby adopts the Planning Commission's Findings and Decision Number 2016-10 dated August 16, 2016 as shown on Exhibit A.

Section 2: The City Council of the City of Forest Grove hereby repeals Ordinance Number 2005-17.

Section 3: The City Council of the City of Forest Grove hereby deletes City Code Chapter 5, Sections 5.800 to 5.860 in its entirety as shown on Exhibit B.

Section 4: The City Council of the City of Forest Grove hereby adopts the text amendments to the Development Code, Articles 2, 5, 8 and 12 as shown on Exhibit C.

Section 5: This ordinance is effective 30 days following its enactment by the City Council.

PRESENTED AND PASSED the first reading this 12th day of September, 2016.

PASSED the second reading this 26th day of September, 2016.

Anna D. Ruggles, City Recorder

APPROVED by the Mayor this 26th day of September, 2016.

Peter B. Truax, Mayor



A place where businesses and families thrive

CITY RECORDER USE ONLY:	
AGENDA ITEM #:	6
MEETING DATE:	SEPT 12, 2016 ✓
FINAL ACTION:	FIRST READING
	<i>Second Reading</i>
	<i>9/20/16</i>
	<i>Ord 2016-16</i>

CITY COUNCIL STAFF REPORT

TO: City Council

FROM: Jesse VanderZanden, City Manager

MEETING DATE: September 12, 2016

PROJECT TEAM: Robert A. Foster, Public Works Director
Derek Robbins, Civil Engineer
James Reitz, AICP, Senior Planner

SUBJECT TITLE: Public hearing and first reading of an ordinance to amend City Code Chapter 5 and Chapter 10, to adopt new Floodplain and Flood Management Area regulations and updated Flood Insurance Rate Maps

ACTION REQUESTED:	<input checked="" type="checkbox"/> Ordinance	<input type="checkbox"/> Order	<input type="checkbox"/> Resolution	<input type="checkbox"/> Motion	<input type="checkbox"/> Informational
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X all that apply

ISSUE STATEMENT: Forest Grove’s existing codes regulate flood hazard areas as defined by the Federal Emergency Management Agency (FEMA), based on the Flood Insurance Rate Maps (FIRMs) dating from 1982. The last amendment to the City’s flood hazard regulations occurred in 2005. Over the past several years, FEMA has been working on a “Flood Map Modernization” project to improve and update the nation’s flood maps and create digital FIRMs. The new maps for the Tualatin River Basin will go into effect on November 4, 2016. To comply with Federal regulations, the City must have an updated ordinance including the code update and map adoption prior to that date.

BACKGROUND: The new FIRMs were released for public review earlier this year. The new FIRMs are based on an updated Flood Insurance Study (FIS) of Washington County and incorporated areas. The FIS notes that “Due to the undeveloped or lightly developed state of the floodplains within Forest Grove, damages caused by (past) flooding have been minimal. Water-related damage in the city generally results from high ground water and local drainage problems.”

To help implement the new FIRMs, the Department of Land Conservation and Development (DLCD) created a model ordinance for use statewide. Adoption of this ordinance would ensure continued compliance with the standards for participation in the National Flood Insurance Program (NFIP) and will enable Forest Grove to avoid suspension from the NFIP. The ordinance includes standards and provisions that encourage sound floodplain management that would continue to allow property owners to obtain flood insurance at a more affordable rate. The current code (DC §10.8.310(D)(3)) already limits use of the land below the base flood elevation to open space, parking lots or landscaped areas. The proposed code (DC §10.8.320(C)) would incorporate this same provision, so there would be no material change in what is allowed in a floodplain or flood management area.

The new FIRMs will be adopted concurrent with this Development Code amendment, as per §10.8.315(B) *Basis for Establishing Areas of Special Flood Hazard*. City staff noted a discrepancy in the new FIRM digital floodplain overlay view as compared to the FIS profiles. The new digital flood area overlay view included developed lots along Strasburg Drive and Willamina Avenue along the City’s southwest boundary. However,

the record drawings for development in the area and the new FIS profiles show development is located *above* the flood area. The new digital flood area overlay appears to be off in elevation by about 10 feet. In other words, the new digital overlay should be aligned *below* the low side elevation property lines as documented in the City's as-built drawings and as shown in the FIS profile.

FEMA staff has acknowledged the mapping discrepancy, and is now planning to revise the maps for the area. This process is called a Letter of Map Revision (LOMR). However, this LOMR will not become effective prior to the effective date of this update process (November 4, 2016). Staff understands that the City would need to adopt the proposed ordinance and FIRMs in order to remain compliant with NFIP regulations and State requirements. The effective date of the LOMR could be as soon as the end of the calendar year, but more likely will occur in early 2017.

At the August 15, 2016 Planning Commission public hearing, no residents spoke in favor of or in opposition to the new ordinance. Several residents testified about the mapping discrepancy, how it might affect them, what the potential cost might be, and how long it would be before the map was corrected (see pp. 3-7 of the draft Planning Commission minutes, attached).

Staff responded to each question, noting that property owners may also request a Letter of Map Amendment (LOMA) for their specific property. To do so, each property owner would submit evidence to FEMA that the home is located above the Base Flood Elevation (BFE) as identified in the Flood Insurance Study. This evidence could include copies of the subdivision grading plans on file with the City, an elevation certificate prepared by a licensed surveyor, etc. Staff understands that FEMA does not charge a fee to process a LOMA request, and staff has volunteered to help homeowners prepare their applications. However, FEMA has noted that the typical time to process a LOMA request is 4-6 months, which is essentially the same time frame identified for the area-wide LOMR process.

FISCAL IMPACT: Adoption of the ordinance regulating Floodplains and Flood Management Areas will have no direct fiscal impact on the City, since no significant change in the regulation of activities allowed in the floodplain is proposed.

STAFF RECOMMENDATION: Staff recommends adoption of the ordinance to:

- Repeal Ordinance Number 2005-17; and
- Delete Forest Grove Code Section 5.800 to 5.860 *Areas of Special Flood Hazard* in its entirety; and
- Amend Forest Grove Development Code Articles 2, 5, 8 and 12 to adopt new Flood Damage Prevention Regulations and Definitions

ATTACHMENTS:

- Ordinance to Amend Forest Grove Code Chapters 5 and 10
 - Planning Commission Decision and Findings Number 2016-10
 - Forest Grove Code Section 5.800 – 5.860
 - Forest Grove Development Code Amendments
- Planning Commission Meeting Minutes (draft) of August 15, 2016
- Planning Commission Staff Report dated August 15, 2016



A place where families and businesses thrive.

NOTICE OF PUBLIC HEARING FOR THE CITY OF FOREST GROVE

NOTICE IS HEREBY GIVEN that the Forest Grove City Council will hold a Public Hearing on **Monday, September 12, 2016**, at 7:00 p.m. or thereafter, in the Community Auditorium, 1915 Main Street, Forest Grove, to consider the following request:

File No: 311-16-000133-PLNG

- Amend the Forest Grove City Code to delete Section 5.800 through 5.860 (and repeal Ordinance Number 2005-17) *Areas of Special Flood Hazard* in its entirety.
- Amend the Forest Grove Development Code Article 2 *Variances*, Article 5 *Natural Resource Areas*, Article 8 *Hazards and Resources*, and Article 12 *Definitions* to adopt new Flood Damage Prevention Regulations and Definitions.

Criteria: The proposal will be reviewed based on the following review criteria:

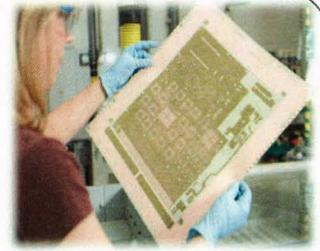
Development Code Text Amendments (DC 10.2.630)

- A. The text amendment is consistent with the relevant goals and policies of the Forest Grove Comprehensive Plan.
- B. The text amendment is consistent with the relevant statewide and regional planning goals, program and rules.

All persons will be given reasonable opportunity to give testimony about this proposal responding to the review criteria. If an issue is not raised in the hearing (by person or by letter) or if the issue is not explained in sufficient detail to allow the City Council to respond to the issue, then that issue cannot be used as the basis for an appeal to the Land Use Board of Appeals (LUBA). If additional documents or evidence are provided in support of an application, any party shall be entitled to a continuance of the hearing. Unless there is a continuance, if a participant so requests before the conclusion of the initial evidentiary hearing, the record shall remain open for at least seven days after the hearing. A copy of the report is available for inspection before the hearing at the City Recorder's Office or by visiting the City's website at www.forestgrove-or.gov. Written comments or testimony may be submitted at the hearing or e-mailed to City Recorder's Office, aruggles@forestgrove-or.gov, or sent to P.O. Box 326, 1924 Council Street, Forest Grove, OR 97116, prior to the hearing. For further information, pertaining to this proposal, please contact the Engineering Department, 1928 Council Street, (503) 992-3228, between 9 a.m. and 5 p.m., Robert Foster, Director, rfoster@forestgrove-or.gov

Anna D. Ruggles, CMC, City Recorder
City of Forest Grove

Published Wednesday, September 7, 2016
NewsTimes



CITY COUNCIL MEETING

September 12, 2016

NEW FLOOD ORDINANCE & FLOOD MAPS

James Reitz (AICP), Senior Planner

Derek Robbins (PE), Project Engineer

A place where families and businesses thrive.

MEETING OBJECTIVE

- ADOPT NEW CITY FLOODPLAIN ORDINANCE
 - Current ordinance (last update 2005)
- ADOPT NEW CITY FLOODPLAIN MAPS
 - Current maps (adopted 1982)
- ADOPTION DEADLINE – November 4, 2016
 - FEMA National Flood Insurance Program (NFIP) requirement
 - Non-Compliant: Federal flood insurance, assistance, and loans are gone or compromised
 - All municipalities in the Tualatin River Basin are required by FEMA to adopt the new maps and update their ordinances

Process to Date

- Public Open House (Hillsboro) by FEMA - March 2016
 - FEMA, DLCD, County and City staff were present
 - New digital data presented
<http://www.co.washington.or.us/LUT/Divisions/Engineering/flood-data.cfm>
- Official Notification by FEMA/STATE - May 2016
 - Required to adopt new ordinance and maps
- Model Ordinance provided by DLCD
- Planning Commission Hearing – August 15, 2016

Planning Commission Hearing Highlights

- Public Hearing Presentation - August 15, 2016
 - Notice to all who own property in or near floodplain
 - Presented proposed ordinance and updated maps
- Public Testimony Received
 - Mapping discrepancy primary focus
- Planning Commission Vote
 - Recommend adoption of the new ordinance (unanimously)
- Planning Commission Comment
 - Mapping discrepancy is beyond the City's ability to correct

New Code v. Current Code

Most of the proposed additions to the Development Code are already codified in Forest Grove Code §5.800 through §5.860. The significant differences between the current code and the proposed Development Code amendments are:

§10.8.315(B) BASIS FOR ESTABLISHING AREAS OF SPECIAL FLOOD HAZARD – The current Flood Insurance Rate Maps (FIRMs) date from 1982. This section would adopt new maps, with an effective date of November 4, 2016.

§10.8.320 ESTABLISHMENT OF DEVELOPMENT PERMIT – This section requires that an applicant obtain a permit for all work proposed within a floodplain or flood management area. Current code does not explicitly require a permit, although it is implicit since permits are already required for building, grading, and filling in a floodplain; and for any work proposed in a wetland.

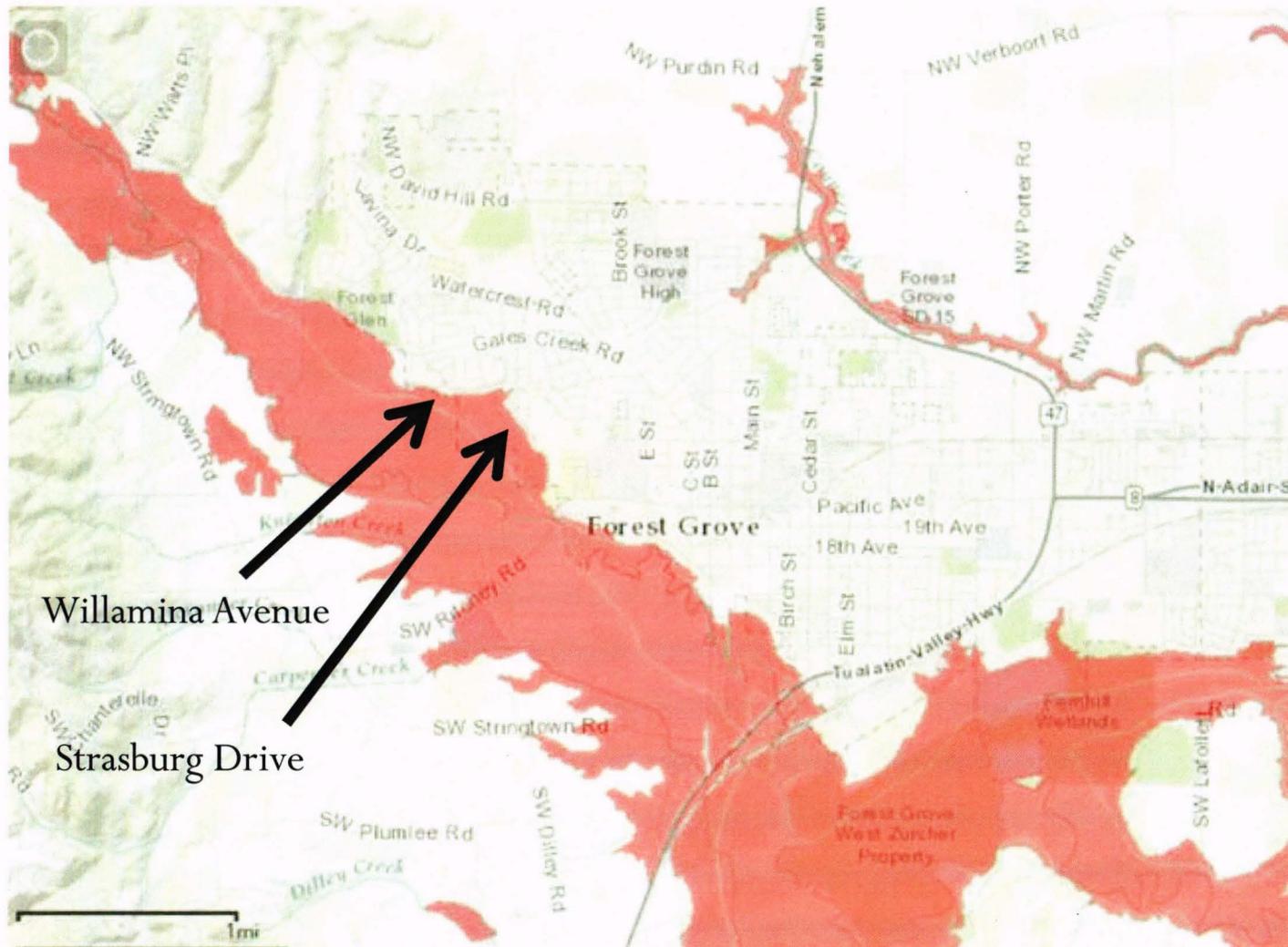
Permit requests for proposed activities in Forest Grove-area floodplains are rare.

New Code v. Current Code

- **§10.8.330 VARIANCE** – This new section would establish eleven new review criteria specific to requests to vary from these regulations. The Planning Commission would be the designated review body, but would consider an application based on these new criteria, not the Variance Criteria listed in §10.2.720.
- **§10.8.350 CRITICAL FACILITY** – This new section requires that a Critical Facility be located in other than a flood hazard area, unless no alternative exists. Current code does not address the siting of new critical facilities such as schools, hospitals, or hazardous material storage.

NEW FEMA MAPS

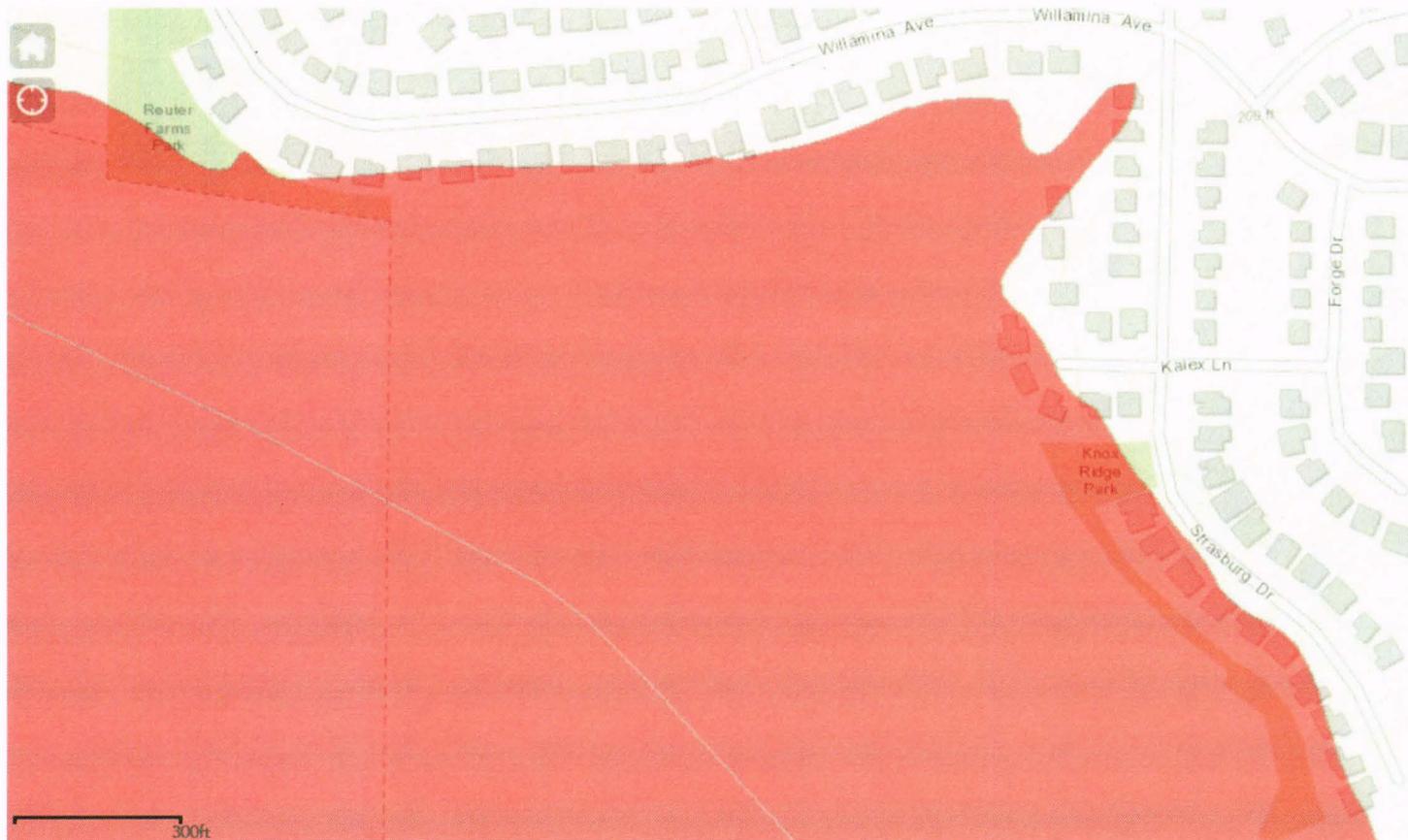
(Inaccurate in two areas in Forest Grove
discovered by City Staff)



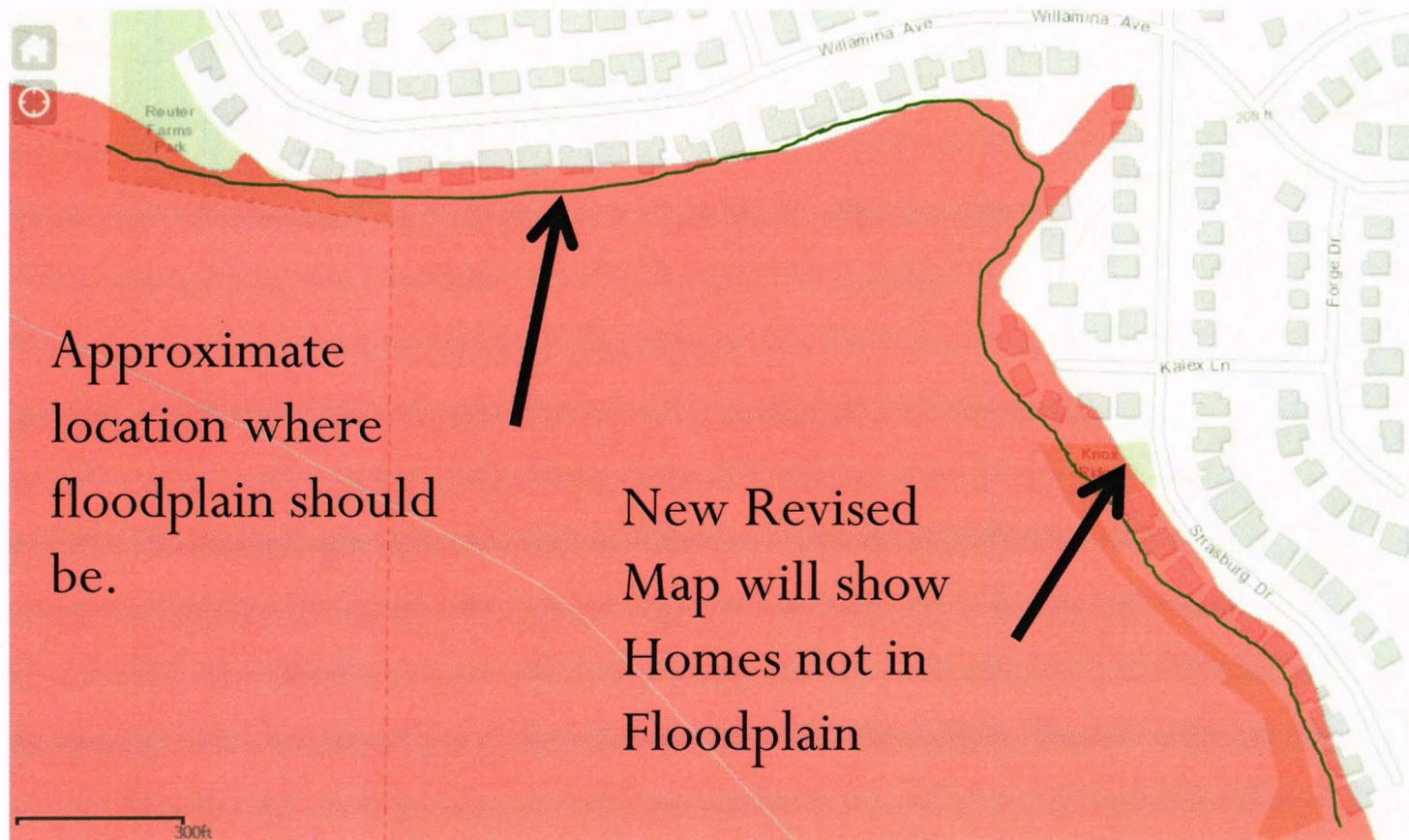
A place where businesses and families thrive.

NEW FEMA MAP: Two Areas Inaccurate (detailed map)

- Shaded area shows some homes in floodplain



FEMA revising the Floodplain maps



Response to Discrepancy

- **LOMR** – City Staff has filed for a Letter of Map Revision
 - A LOMR is locally-initiated and addresses all properties in one revision
 - The scope, schedule and funding are being finalized
 - FEMA is working with City staff and is anticipating LOMR to be completed early 2017
- **LOMA** - Property owners submit Letter of Map Amendment
 - A LOMA is owner-initiated and addresses one property at a time
 - Uses development as-built elevation data
 - No application fee
 - City staff can provide assistance
 - Typical Review Timelines: 4-6 months

Date: SEPTEMBER 12, 2016

Agenda Item: 6.

Subject: PUBLIC HEARING AND FIRST READING OF ORDINANCE NO. 2016-16 REPEALING ORDINANCE NO. 2005-17 AND DELETING FOREST GROVE CITY CODE SECTION 5.800 TO 5.860 AREAS OF SPECIAL FLOOD HAZARD IN ITS ENTIRETY AND AMENDING FOREST GROVE DEVELOPMENT CODE ARTICLES 2, 5, 8 AND 12 TO ADOPT NEW FLOOD DAMAGE PREVENTION REGULATIONS AND DEFINITIONS; FILE NO. 311-16-000133-PLNG

CITY COUNCIL MEETING

Request to Testify at Public Hearing

Public Hearings – Public hearings are held on each matter required by state law or City policy. Anyone wishing to testify should sign-in for the Public Hearing prior to the meeting. The Mayor or presiding officer will review the complete hearing instructions prior to testimony. The Mayor or presiding officer will call the individual or group by the name given on the sign-in form. When addressing the Mayor and Council, please move to the witness table (center front of the room). Each person should speak clearly into the microphone and must state their first and last name and provided a mailing address for the record. All testimony is electronically recorded. In the interest of time, Public Hearing testimony is limited to three minutes unless the Mayor or presiding officer grants an extension. Written or oral testimony is heard prior to any Council action.

Please sign-in below to testify.

PROPONENTS: (Please print legibly)

First & Last Name:

FERNANDO GUTIERREZ

Address:

City, State & Zip Code:

510 WILLAMINA FG OR

OPPONENTS: (Please print legibly)

First & Last Name:

Address:

City, State & Zip Code:

OTHERS: (Please print legibly)

First & Last Name:

Address:

City, State & Zip Code:



6605 S.E. Lake Road, Portland, OR 97222
 PO Box 22109 • Portland, OR 97269-2109
 Phone: 503-684-0360 Fax: 503-620-3433
 E-mail: legals@commnewspapers.com

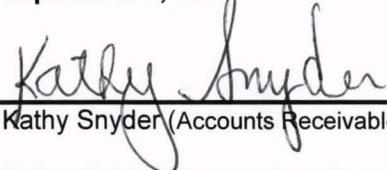
AFFIDAVIT OF PUBLICATION

State of Oregon, County of Washington, SS I, Kathy Snyder being the first duly sworn, depose and say that I am the Accounts Receivables Manager of the *Forest Grove News-Times*, a newspaper of general circulation, published at Forest Grove, in the aforesaid county and state, as defined by ORS 193.010 and 193.020, that

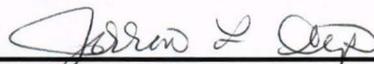
City of Forest Grove
Notice of Public Hearing – File No. 311-16-000133-PLNG
FGNT7641

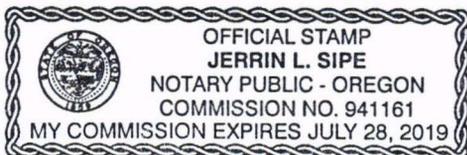
a copy of which is hereto attached, was published in the entire issue of said newspaper for

1
 week in the following issue:
September 7, 2016


 Kathy Snyder (Accounts Receivables Manager)

Subscribed and sworn to before me this September 7, 2016.


 NOTARY PUBLIC FOR OREGON



Acct #298024
 PO #: 20165070
Attn: Anna Ruggles
 City of Forest Grove
 PO Box 326
 Forest Grove, OR 97116
 Size: 2 x 7.75
 Amount Due: \$148.02*
 *Please remit to the above address.

NOTICE OF PUBLIC HEARING FOR THE CITY OF FOREST GROVE

NOTICE IS HEREBY GIVEN that the Forest Grove City Council will hold a Public Hearing on **Monday, September 12, 2016**, at 7:00 p.m. or thereafter, in the Community Auditorium, 1915 Main Street, Forest Grove, to consider the following request:

- File No: 311-16-000133-PLNG
- Amend the Forest Grove City Code to delete Section 5.800 through 5.860 (and repeal Ordinance Number 2005-17) Areas of *Special Flood Hazard* in its entirety.
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- Development Code Text Amendments (DC 10.2.630)
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 - B. The text amendment is consistent with the relevant statewide and regional planning goals, program and rules.

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Anna D. Ruggles, CMC, City Recorder
 City of Forest Grove
 Published 09/07/2016.

FGNT7641

Date: SEPTEMBER 26, 2016

Agenda Item: 6.

Subject: PUBLIC HEARING AND SECOND READING OF ORDINANCE NO. 2016-16 REPEALING ORDINANCE NO. 2005-17 AND DELETING FOREST GROVE CITY CODE SECTION 5.800 TO 5.860 AREAS OF SPECIAL FLOOD HAZARD IN ITS ENTIRETY AND AMENDING FOREST GROVE DEVELOPMENT CODE ARTICLES 2, 5, 8 AND 12 TO ADOPT NEW FLOOD DAMAGE PREVENTION REGULATIONS AND DEFINITIONS; FILE NO. 311-16-000133-PLNG

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Please sign-in below to testify.

PROPONENTS: *(Please print legibly)*

First & Last Name:

Address:

City, State & Zip Code:

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OPPONENTS: *(Please print legibly)*

First & Last Name:

Address:

City, State & Zip Code:

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OTHERS: *(Please print legibly)*

First & Last Name:

Address:

City, State & Zip Code:

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