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Chapter 16.20

FLOOD DAMAGE PREVENTION

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35 Article I. General Provisions

36 **16.20.010 Statutory authority.**

37 The Legislature of the State of Washington has delegated the responsibility to local governmental units to adopt
38 regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the city
39 council ordains as set out in this chapter. (Ord. 937 § 1, 2005; Ord. 419 § 1.1, 1989)

40 **16.20.020 Findings of fact.**

41 A. The flood hazard areas of the city are subject to periodic inundation which results in loss of life and property,
42 health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for
43 flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and
44 general welfare.

45 B. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazard which
46 increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are

1 adequately floodproofed, elevated or otherwise protected from flood damage also contribute to the flood loss. (Ord.
2 937 § 1, 2005; Ord. 419 § 1.2, 1989)

3 **16.20.030 Purpose.**

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

6 A. To protect human life and health;

7 B. To minimize expenditure of public money for costly flood-control projects including restoration of wetlands and
8 streams;

9 C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the
10 expense of the general public;

11 D. To minimize prolonged business interruptions;

12 E. To minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone and sewer
13 lines, streets, and bridges located in areas of special flood hazard;

14 F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood
15 hazard so as to minimize future flood blight areas;

16 G. To ensure that potential buyers are notified that property is in an area of special flood hazard; ~~and~~

17 H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions; ~~and-~~

18 I. To participate in, and maintain eligibility for, flood insurance and disaster relief.

19 (Ord. 937 § 1, 2005; Ord. 419 § 1.3, 1989)

20 **16.20.040 Methods of reducing flood losses.**

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

22 A. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion
23 hazards, or which result in damaging increases in erosion or in flood heights or velocities;

24 B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood
25 damage at the time of initial construction;

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

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

29 E. Preventing or regulating the construction of flood barriers which will unnaturally divert floodwaters, or which
30 may increase flood hazards in other areas. (Ord. 937 § 1, 2005; Ord. 419 § 1.4, 1989)

31 **16.20.050 Applicability.**

32 This chapter shall apply to all areas of special flood hazard within the jurisdiction of the city. (Ord. 937 § 1, 2005;
33 Ord. 419 § 3.1, 1989)

34 **16.20.060 Areas of special flood hazard – Basis for establishment.**

35 The areas of special flood hazard identified by the Federal Insurance ~~and Mitigation Administration~~ Administrator in
36 a scientific and engineering report entitled “The Flood ~~Study for the City of Lake Forest Park~~ Insurance Study for
37 King County, Washington, and Incorporated Areas,” (FIS) dated ~~April 19, 2005~~ August 19, 2020, with
38 accompanying ~~Flood Insurance Rate Maps (FIRM)~~ Flood Insurance Study is FIS and FIRM are and any revisions thereto, are hereby adopted by reference
39 and declared to be a part of this chapter. The ~~Flood Insurance Study is~~ FIS and FIRM are on file at the City of Lake

1 Forest Park City Hall, 17425 Ballinger Way N.E. (Ord. 1150 § 2, 2017; Ord. 937 § 1, 2005; Ord. 636 § 1, 1995;
2 Ord. 419 § 3.2, 1989)

3 **16.20.070 Abrogation and greater restrictions.**

4 The ordinance codified in this chapter is not intended to repeal, abrogate or impair any existing easements,
5 covenants or deed restrictions. However, where the ordinance codified in this chapter and another ordinance,
6 easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall
7 prevail. (Ord. 937 § 1, 2005; Ord. 419 § 3.4, 1989)

8 **16.20.080 Interpretation.**

9 In the interpretation and application of this chapter, all provisions shall be:

10 A. Considered as minimum requirements;

11 B. Liberally construed in favor of the governing body; and

12 C. Deemed neither to limit nor repeal any other powers granted under state statutes. (Ord. 937 § 1, 2005; Ord. 419 §
13 3.5, 1989)

14 **16.20.090 Warning and disclaimer of liability.**

15 The degree of flood protection required by this chapter is considered reasonable for regulatory purposes, and is
16 based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood
17 heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of
18 special flood hazard, or uses permitted within such areas, will be free from flooding or flood damages. This chapter
19 shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance
20 Administration for any flood damages that result from reliance on this chapter or any administrative decision
21 lawfully made hereunder. (Ord. 937 § 1, 2005; Ord. 419 § 3.6, 1989)

22 Article II. Definitions

23 **16.20.100 Definitions – Generally.**

24 Unless specifically defined in this article, words or phrases used in this chapter shall be interpreted so as to give
25 them the meaning they have in common usage, and to give this chapter its most reasonable application. (Ord. 937 §
26 1, 2005; Ord. 419 § 2, 1989)

27 **16.20.105 Alteration of watercourse.**

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

30 **16.20.110 Appeal.**

31 “Appeal” means a request for a review of the City’s city council’s interpretation of any provision of this chapter, or
32 a request for a variance. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

33 **~~16.20.115~~30 Area of special flood hazard.**

34 “Area of special flood hazard” means the land in the floodplain within a community subject to a one percent or
35 greater chance of flooding in any given year. Designation on maps always includes the letters A or V. (Ord. 937 § 1,
36 2005; Ord. 419 § 2, 1989)

37 **~~16.20.120~~—Area of shallow flooding.**

38 ~~“Area of shallow flooding” means a designated AO or AH zone on the Flood Insurance Rate Map (FIRM). The base~~
39 ~~flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is~~
40 ~~unpredictable and indeterminate; and velocity flow may be evident. AO is characterized as sheet flow and AH~~
41 ~~indicates ponding. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)~~

42

43 **16.20.120 Base flood.**

44 “Base flood” means the flood having a 1% chance of being equaled or exceeded in any given year (also referred to
45 as the “100-year flood”).

1 **16.20.125 Base Flood Elevation (BFE).**

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

3 **16.20.1305 Basement.**

4 “Basement” means any area of the building having its floor subgrade (below ground level) on all sides. See LFPMC
5 16.20.410, Residential construction, for usage of this defined term. (Ord. 937 § 1, 2005)

6 **16.20.13540 Critical facility.**

7 “Critical facility” means a facility for which even a slight chance of flooding might be too great. Critical facilities
8 include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations,
9 and installations which produce, use, or store hazardous materials or hazardous waste. (Ord. 937 § 1, 2005; Ord. 419
10 § 2, 1989)

11 **16.20.14050 Development.**

12 “Development” means any manmade change to improved or unimproved real estate, including but not limited to
13 buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage
14 of equipment or materials located within the area of special flood hazard. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

15 **16.20.14560 Flood or flooding.**

16 “Flood” or “flooding” means ~~a general and temporary condition of partial or complete inundation of normally dry~~
17 ~~land areas from:~~

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

19 1. The overflow of inland or tidal waters.

20 2. The unusual and rapid accumulation or runoff of surface waters from any source.

21 3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (A)(2) of this
22 definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when
23 earth is carried by a current of water and deposited along the path of the current

24 ~~The overflow of inland or tidal waters; and/or~~

25 B. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or
26 undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an
27 unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force
28 of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event
29 which results in flooding as defined in paragraph (A)(1) of this definition.~~The unusual and rapid accumulation of~~
30 ~~runoff of surface waters from any source.~~ (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

31 **16.20.150 Flood elevation study.**

32 “Flood elevation study” means an examination, evaluation and determination of flood hazards and, if appropriate,
33 corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow)
34 and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

35 **16.20.15570 Flood Insurance Rate Map (FIRM).**

36 “Flood Insurance Rate Map (FIRM)” means the official map on which the Federal Insurance Administration~~ior~~ has
37 delineated both the areas of special flood hazard and the risk-premium zones applicable to the community. (Ord. 937
38 § 1, 2005; Ord. 419 § 2, 1989)

39 **16.20.16080 Flood Insurance Study.**

40 “Flood Insurance Study” means the official report provided by the Federal Insurance Administration~~ior~~ that includes
41 flood profiles, the Flood Boundary Floodway Map, and the water surface elevation of the base flood. (Ord. 937 § 1,
42 2005; Ord. 419 § 2, 1989)

1 **16.20.165 Floodplain or flood-prone area.**

2 “Floodplain or flood-prone area” means any land area susceptible to being inundated by water from any source. See
3 “Flood or flooding.”

4 **16.20.170 Floodplain Administrator.**

5 “Floodplain Administrator” means the Building Inspector or designee, or any other official designated by title to
6 administer and enforce the floodplain management regulations.

7 **16.20.175 Floodproofing.**

8 “Floodproofing” means any combination of structural and nonstructural additions, changes, or adjustments to
9 structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary
10 facilities, structures, and their contents. Flood proofed structures are those that have the structural integrity and
11 design to be impervious to floodwater below the Base Flood Elevation (BFE).

12 **16.20.180~~90~~ Floodway.**

13 “Floodway” means the channel of a river or other watercourse and the adjacent land areas that must be reserved in
14 order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
15 (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

16 **16.20.185 Functionally dependent use.**

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

21 **16.20.190 Highest adjacent grade.**

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

24 **16.20.195 Historic structure.**

25 “Historic structure” means any structure that is:

26 A. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior)
27 or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the
28 National Register;

29 B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance
30 of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered
31 historic district;

32 C. Individually listed on a state inventory of historic places in states with historic preservation programs which have
33 been approved by the Secretary of Interior; or

34 D. Individually listed on a local inventory of historic places in communities with historic preservation programs that
35 have been certified either:

36 1. By an approved state program as determined by the Secretary of the Interior; or

37 2. Directly by the Secretary of the Interior in states without approved programs.

38 **16.20.200 Lowest floor.**

39 “Lowest floor” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood-
40 resistant enclosure, usable solely for the parking of vehicles, building access or storage, in an area other than a
41 basement area, is not considered a building’s lowest floor; provided, that such enclosure is not built so as to render
42 the structure in violation of the applicable nonelevation design requirements of LFPMC 16.20.410(B). (Ord. 937 § 1,
43 2005; Ord. 419 § 2, 1989)

1 **16.20.210 Manufactured home.**

2 “Manufactured home” means a structure, transported in one or more sections, which is built on a permanent chassis
3 and is designed for use with or without a permanent foundation when connected to the required utilities. For
4 floodplain management purposes, the term “manufactured home” also includes park trailers, travel trailers and other
5 similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes, the term
6 “manufactured home” does not include park trailers, travel trailers and other similar vehicles. (Ord. 937 § 1, 2005;
7 Ord. 419 § 2, 1989)

8 **16.20.220 Manufactured home park or subdivision.**

9 “Manufactured home park or subdivision” means a parcel or contiguous parcels of land divided into two or more
10 manufactured home lots for rent or sale. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

11 **16.20.225 Mean sea level.**

12 “Mean sea level” means, for purposes of the National Flood Insurance Program (NFIP), the vertical datum to which
13 Base Flood Elevations (BFE) shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

14 **16.20.230 New construction.**

15 “New construction” means, for the purposes of determining insurance rates, structures for which the “start of
16 construction” commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31,
17 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management
18 purposes, “new construction” means structures for which the “start of construction” commenced on or after the
19 effective date of a floodplain management regulation adopted by a community and includes any subsequent
20 improvements to such structures—structures for which the start of construction commenced on or after the effective
21 date of the ordinance codified in this chapter. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

22 **16.20.235 Recreational vehicle.**

23 “Recreational vehicle” means a vehicle:

- 24 A. Built on a single chassis;
- 25 B. Four hundred square feet or less when measured at the largest horizontal projection;
- 26 C. Designed to be self-propelled or permanently towable by a light-duty truck; and
- 27 D. Designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational,
28 camping, travel, or seasonal use. (Ord. 937 § 1, 2005)

29 **16.20.240 Start of construction.**

30 “Start of construction” includes substantial improvement, and means the date the building permit was issued,
31 provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180
32 days of the permit date. The actual start means either the first placement of permanent construction of a structure on
33 a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work
34 beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction
35 does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets
36 and/or walkways; nor does it include excavation for a basement, footings, piers or foundation, or the erection of
37 temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds
38 not occupied as dwelling units or not part of the main structure. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

39 **16.20.250 Structure.**

40 “Structure” means a walled and roofed building including a gas or liquid storage tank that is principally above
41 ground. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

42 **16.20.255 Substantial damage.**

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

1 **16.20.260 Substantial improvement.**

2 ~~A. “Substantial improvement” means any reconstruction, rehabilitation, addition, or other improvement of a~~
3 ~~structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of~~
4 ~~construction” of the improvement. This term includes structures which have incurred “substantial damage,”~~
5 ~~regardless of the actual repair work performed. The term does not, however, include either:~~

6 ~~A. Any project for improvement of a structure to correct previously identified existing violations of state or local~~
7 ~~health, sanitary, or safety code specifications that have been identified by the local code enforcement official and~~
8 ~~that are the minimum necessary to assure safe living conditions; or~~

9 ~~B. Any alteration of a “historic structure,” provided that the alteration will not preclude the structure’s continued~~
10 ~~designation as a “historic structure.” means any repair, reconstruction or improvement of a structure, the cost of~~
11 ~~which equals or exceeds 50 percent of the market value of the structure, either:~~

12 ~~1. Before the improvement is started;~~

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

14 ~~B. For the purposes of this definition, “substantial improvement” is considered to occur when the first alteration of~~
15 ~~any wall, ceiling, floor or other structural part of the building commences, whether or not that alteration affects the~~
16 ~~external dimensions of the structure.~~

17 ~~C. The term does not, however, include either:~~

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

20 ~~2. Any alteration of a structure listed on the National Register of Historic Places or a State Inventory of Historic~~
21 ~~Places. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)~~

22 **16.20.270 Variance.**

23 “Variance” means a grant of relief from the requirements of this chapter, which permits construction in a manner
24 that would otherwise be prohibited by this chapter. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

25 **16.20.280 Water dependent.**

26 “Water dependent” means a structure for commerce or industry which cannot exist in any other location and is
27 dependent on the water by reason of the intrinsic nature of its operations. (Ord. 937 § 1, 2005; Ord. 419 § 2, 1989)

28 Article III. Administration

29 **16.20.290 Development permit – Required – Application information.**

30 A. Development Permit Required. A development permit shall be obtained before construction or development
31 begins within any area of special flood hazard established in LFPMC 16.20.060. The permit shall be for all
32 structures including manufactured homes, as set forth in Article II of this chapter, and for all development including
33 fill and other activities, also as set forth in Article II of this chapter.

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

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

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

40 3. Certification by a registered professional engineer or architect that the floodproofing methods for any
41 nonresidential structure meet the floodproofing criteria in LFPMC 16.20.420; and

1 4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed
2 development. (Ord. 937 § 1, 2005; Ord. 419 § 4.1, 1989)

3 5. Any other such information that may be reasonably required by the Floodplain Administrator in order to
4 review the application.

5 **16.20.300 ~~Building inspector~~Floodplain Administrator – ~~Designation and a~~Authority.**

6 The building inspector is appointed to administer, ~~and~~ implement, ~~and enforce~~ this chapter by granting or denying
7 development permit applications in accordance with its provisions. The Floodplain Administrator may delegate
8 authority to implement these provisions. (Ord. 937 § 1, 2005; Ord. 419 § 4.2, 1989)

9 **16.20.310 ~~Building inspector~~Floodplain Administrator – Duties and responsibilities.**

10 ~~Duties of the building inspector, under this chapter, shall include, but not be limited to:~~

11 **A. Permit Review.** The Floodplain Administrator shall:

12 1. Review all development permits to determine that the permit requirements of this chapter have been
13 satisfied;

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

16 3. Review all development permits to ensure that the site is reasonably safe from flooding; and

17 4. Notify FEMA when annexations occur in the special flood hazard area.

18 ~~3. Review all development permits to determine if the proposed development is located in the floodway. If~~
19 ~~located in the floodway, assure that the provisions of LFPMC 16.20.450 are met.~~

20 ~~B. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with LFPMC~~
21 ~~16.20.060, the city council shall obtain, review and reasonably utilize any base flood elevation and floodway data~~
22 ~~available from a federal, state or other source in order to administer LFPMC 16.20.400 and 16.20.450.~~

23 **BC.** Information to Be Obtained and Maintained.

24 1. Where base flood elevation data is provided through the Flood Insurance Study or required as in subsection
25 B of this section, the Floodplain Administrator shall obtain and record the actual (as-built) elevation (in relation
26 to mean sea level) of the lowest floor (including basement), of all new or substantially improved structures, and
27 whether or not the structure contains a basement.;

28 2. For all new or substantially improved floodproofed structures, the Floodplain Administrator shall:

29 a. Verify and record the actual elevation (in relation to mean sea level); and

30 b. Maintain the floodproofing certifications required in LFPMC 16.20.290(B)(3).;

31 3. The Floodplain Administrator shall mMaintain for public inspection all records pertaining to the provisions
32 of this chapter.

33 4. The Floodplain Administrator shall maintain rRecords of all variance actions, including justification for their
34 issuance.

35 5. The Floodplain Administrator shall maintain iImprovement and damage calculations.

36 **CD.** Alteration of Watercourses.

1. The Floodplain Administrator shall notify adjacent communities and the Washington State Department of Ecology prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration; and

2. Shall repuire that maintenance is provided within the altered or relocated portion of the watercourse so that the flood-carrying capacity is not diminished.

DE. Interpretation of FIRM Boundaries. The Floodplain Administrator shall make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazard (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 Article IV of this chapter. (Ord. 937 § 1, 2005; Ord. 419 § 4.3, 1989)

16.20.315 Changes to special flood hazard area.

A. If a project will alter the BFE or boundaries of the SFHA, then the project proponent shall provide the community with engineering documentation and analysis regarding the proposed change. If the change to the BFE or boundaries of the SFHA would normally require a Letter of Map Change, then the project proponent shall initiate, and receive approval of, a Conditional Letter of Map Revision (CLOMR) prior to approval of the development permit. The project shall be constructed in a manner consistent with the approved CLOMR.

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

Article IV. Variances

16.20.320 Appeals~~Variances~~.

A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this Chapter 16.20 LFPMC would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.

It is the duty of the City to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below the Base Flood Elevation are so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided herein are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate. ~~A~~–The hearing examiner shall hear and decide any application for a variance from the requirements of this chapter.

~~B. Those aggrieved by the decision of the city may appeal such decision to the King County superior court.~~

~~C. In passing upon such applications, the hearing examiner shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:~~

~~1. The danger that materials may be swept 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;~~

- 1 ~~6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion-~~
2 ~~damage;~~
- 3 ~~7. The compatibility of the proposed use with existing and anticipated development;~~
- 4 ~~8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that~~
5 ~~area;~~
- 6 ~~9. The safety of access to the property in times of flood for ordinary and emergency vehicles;~~
- 7 ~~10. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters, and the~~
8 ~~effects of wave action, if applicable, expected at the site; and~~
- 9 ~~11. The costs of providing governmental services during and after flood conditions, including maintenance and~~
10 ~~repair of public utilities, and facilities, such as sewer, gas, electrical and water systems, and streets and bridges.~~
- 11 ~~D. Upon consideration of the factors in subsection C of this section and the purposes of this chapter, the hearing-~~
12 ~~examiner may attach such conditions to the granting of variances as it deems necessary to further the purposes of~~
13 ~~this chapter.~~
- 14 ~~E. The city clerk shall maintain the records of all appeal actions and report any variances to the Federal Insurance-~~
15 ~~Administration upon request. (Ord. 937 § 1, 2005; Ord. 836 § 1, 2000; Ord. 419 § 4.4-1, 1989)~~

1 **16.20.325 Variance Criteria.**

2 A. In considering variance applications, the Hearing Examiner shall consider all technical evaluations, all relevant
3 factors, all standards specified in this chapter, and:

- 4
- 5 1. The danger that materials may be swept onto other lands to the injury of others;
- 6
- 7 2. The danger to life and property due to flooding or erosion damage;
- 8
- 9 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on
10 the individual owner;
- 11
- 12 4. The importance of the services provided by the proposed facility to the community;
- 13
- 14 5. The necessity to the facility of a waterfront location, where applicable;
- 15
- 16 6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion
17 damage;
- 18
- 19 7. The compatibility of the proposed use with existing and anticipated development;
- 20
- 21 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that
22 area;
- 23
- 24 9. The safety of access to the property in time of flood for ordinary and emergency vehicles;
- 25
- 26 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at
27 the site; and
- 28
- 29 11. The costs of providing governmental services during and after flood conditions, including maintenance and
30 repair of public utilities and facilities, such as sewer, gas, electrical, water system, and streets and bridges.

31

32 **16.20.330 Conditions for variances.**

33 A. Variances shall only be issued:

- 34
- 35 1. Upon a determination that the granting of a variance will not result in increased flood heights, additional
36 threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the
37 public, or conflict with existing local laws or ordinances;
- 38
- 39 2. For the repair, rehabilitation, or restoration of historic structures upon a determination that the proposed
40 repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the
41 variance is the minimum necessary to preserve the historic character and design of the structure;
- 42
- 43 3. Upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford
44 relief;
- 45
- 46 4. Upon a showing of good and sufficient cause;
- 47
- 48 5. Upon a determination that failure to grant the variance would result in exceptional hardship to the applicant;
49 and
- 50
- 51 6. Upon a showing that the use cannot perform its intended purpose unless it is located or carried out in close
52 proximity to water. This includes only facilities defined in LFPMC 16.20.185, "Functionally Dependent Use."

53

54 B. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge
55 would result.

56

1 C. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of
2 one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the
3 BFE, provided the procedural requirements of this chapter have been fully considered. As the lot size increases
4 beyond one-half acre, the technical justification required for issuing the variance increases.

5 ~~A. Generally, the only condition under which a variance from the elevation standard may be issued is for new~~
6 ~~construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and~~
7 ~~surrounded by lots with existing structures constructed below the base flood level, providing items listed in LFPMC-~~
8 ~~16.20.320(D) have been fully considered. As the lot size increases the technical justification for issuing the variance~~
9 ~~increases.~~

10 ~~B. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National~~
11 ~~Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in this~~
12 ~~section.~~

13 ~~C. Variances shall not be issued within a designated floodway if any increase in flood levels during the base flood~~
14 ~~discharge would result.~~

15 ~~D. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the~~
16 ~~flood hazard, to afford relief.~~

17 ~~E. Variances shall only be issued upon:~~

18 ~~1. A showing of good and sufficient cause;~~

19 ~~2. A determination that failure to grant the variance would result in exceptional hardship to the applicant;~~

20 ~~3. A determination that the granting of a variance will not result in increased flood heights, additional threats to~~
21 ~~public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as~~
22 ~~identified in LFPMC 16.20.320(D), or conflict with existing local laws or ordinances.~~

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

27 ~~G. Variances may be issued for nonresidential buildings in very limited circumstances to allow a lesser degree of~~
28 ~~floodproofing than watertight or dry floodproofing, where it can be determined that such action will have low~~
29 ~~damage potential, complies with all other variance criteria except subsection A of this section, and otherwise~~
30 ~~complies with LFPMC 16.20.350 and 16.20.360.~~

31 ~~H. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to~~
32 ~~be built with a lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be~~
33 ~~commensurate with the increased risk resulting from the reduced lowest floor elevation. (Ord. 937 § 1, 2005; Ord.~~
34 ~~419 § 4.4-2, 1989)~~

1 **16.20.335 Additional requirements for the issuance of a variance.**

2 Variations as interpreted in the NFIP are based on the general zoning law principle that they pertain to a physical
3 piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or
4 financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such,
5 variances from flood elevations should be quite rare.

6
7 A. Any applicant to whom a variance is granted shall be given written notice over the signature of a community
8 official that:

9
10 1. The issuance of a variance to construct a structure below the BFE will result in increased premium
11 rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage; and

12 2. Such construction below the BFE increases risks to life and property.

13
14
15 B. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their
16 issuance.

17
18 C. The Floodplain Administrator shall condition the variance as needed to ensure that the requirements and criteria
19 of this chapter are met.

20
21 **Article V. Flood Hazard Reduction**

22 **16.20.340 General standards.**

23 In all areas of special flood hazard, the standards set out in this article are required. (Ord. 937 § 1, 2005; Ord. 419 §
24 5.1, 1989)

25 **16.20.350 Anchoring.**

26 A. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral
27 movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy.

28 B. All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement and shall
29 be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not
30 limited to, use of over-the-top or frame ties to ground anchors (reference FEMA’s “Manufactured Home Installation
31 in Flood Hazard Areas” guidebook for additional techniques). (Ord. 937 § 1, 2005; Ord. 419 § 5.1-1, 1989)

32 **16.20.360 Construction materials and methods.**

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

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

37 C. Electrical, heating, ventilation, plumbing and air-conditioning equipment and other service facilities shall be
38 designed and/or otherwise elevated and located so as to prevent water from entering or accumulating within the
39 components during conditions of flooding. (Ord. 937 § 1, 2005; Ord. 419 § 5.1-2, 1989)

40 **16.20.365 Storage of materials and equipment.**

41
42 A. The storage or processing of materials that could be injurious to human, animal, or plant life if released due to
43 damage from flooding is prohibited in special flood hazard areas.

44 B. Storage of other material or equipment may be allowed if not subject to damage by floods and if firmly anchored
45 to prevent flotation, or if readily removable from the area within the time available after flood warning.

46 **16.20.370 Utilities.**

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

- 1 B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of
2 floodwaters into the systems and discharge from the systems into floodwaters; and
- 3 C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during
4 flooding. (Ord. 937 § 1, 2005; Ord. 419 § 5.1-3, 1989)

5 **16.20.380 Subdivision proposals and development.**

- 6 A. All subdivision proposals shall be consistent with the need to minimize flood damage;
- 7 B. All subdivision proposals shall have public utilities and facilities, such as sewer, gas, electrical and water systems
8 located and constructed to minimize flood damage;
- 9 C. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
- 10 D. Where subdivision proposals and other proposed developments contain Where base flood elevation data has not
11 been provided or is not available from another authoritative source, it shall be generated for subdivision proposals
12 and other proposed developments which contain at least greater than 50 lots or five acres (–whichever is less), base
13 flood elevation data shall be included as part of the application. (Ord. 937 § 1, 2005; Ord. 419 § 5.1-4, 1989)

14 **16.20.390 Review of building permits.**

15 Where elevation data is not available either through the Flood Insurance Study or from another authoritative source
16 (LFPMC 16.20.310(B)), applications for building permits shall be reviewed to assure that proposed construction will
17 be reasonably safe from flooding. The test of reasonableness is a local judgment and includes the use of historical
18 data, high water marks, photographs of past flooding, etc., where available. Failure to elevate at least two feet above
19 grade in these zones may result in higher insurance rates. (Ord. 937 § 1, 2005; Ord. 419 § 5.1-5, 1989)

20 Article VI. Specific Standards

21 **16.20.400 Specific standards designated.**

22 In all areas of special flood hazard where base flood elevation data has been provided as set forth in LFPMC
23 16.20.060 or 16.20.310(B), the provisions set out in this article are required. (Ord. 937 § 1, 2005; Ord. 419 § 5.2,
24 1989)

25 **16.20.410 Residential construction.**

- 26 A. New construction and substantial improvement of any residential structure shall have the lowest floor, including
27 basement, elevated one foot above the base flood level. Mechanical equipment and utilities shall be waterproof or
28 elevated at least one foot above the BFE.
- 29 B. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to
30 automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.
31 Designs for meeting this requirement must ~~either be certified by a registered professional engineer or architect or~~
32 ~~must~~ meet or exceed the following minimum criteria:

- 33 1. A minimum of two openings having a total net area of not less than one square inch for every square foot of
34 enclosed area subject to flooding shall be provided.
- 35 2. The bottom of all openings shall be no higher than one foot above grade.
- 36 3. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit
37 the automatic entry and exit of floodwaters. (Ord. 937 § 1, 2005; Ord. 419 § 5.2-1, 1989)

38 4. A garage attached to a residential structure, constructed with the garage floor slab below the BFE must be
39 designed to allow for the automatic entry and exit of floodwaters.

40 **16.20.420 Nonresidential construction.**

41 New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall
42 meet the requirements of subsection A or B, below.

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

3 1. In AE and A1-30 zones or other A zoned areas where the BFE has been determined or can be reasonably
4 obtained:

5 New construction and substantial improvement of any commercial, industrial, or other nonresidential structure
6 shall have the lowest floor, including basement, elevated one foot or more above the BFE, or elevated as
7 required by ASCE 24, whichever is greater. Mechanical equipment and utilities shall be waterproofed or
8 elevated least one foot above the BFE, or as required by ASCE 24, whichever is greater,

9 2. If located in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained, the
10 structure shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above
11 the Highest Adjacent Grade.

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

16 a. Have a minimum of two openings with a total net area of not less than one square inch for every square foot
17 of enclosed area subject to flooding.

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

19 c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they
20 permit the automatic entry and exit of floodwater.

21 d. A garage attached to a residential structure, constructed with the garage floor slab below the BFE must be
22 designed to allow for the automatic entry and exit of floodwaters.

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

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

26 1. Be dry flood proofed so that below one foot or more above the base flood level the structure is watertight
27 with walls substantially impermeable to the passage of water or dry flood proofed to the elevation required by
28 ASCE 24, whichever is greater;

29 2. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of
30 buoyancy;

31 3. Be certified by a registered professional engineer or architect that the design and methods of construction are
32 in accordance with accepted standards of practice for meeting provisions of this subsection based on their
33 development and/or review of the structural design, specifications and plans. Such certifications shall be
34 provided to the official as set forth in LFPMC 16.20.310(B);

35 (Applicants who are flood proofing nonresidential buildings shall be notified that flood insurance premiums will
36 be based on rates that are one foot below the flood proofed level (e.g. a building flood proofed to the base flood
37 level will be rated as one foot below). Flood proofing the building an additional foot will reduce insurance
38 premiums.)

39 either have the lowest floor, including basement, elevated one foot or more above the level of the base flood
40 elevation; or, together with attendant utility and sanitary facilities, shall:

41 A. Be floodproofed so that below one foot above the base flood level the structure is watertight, with walls
42 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 16.20.310(C)(2);~~

~~D. Nonresidential structures that are elevated, not floodproofed, must meet the same standards for space below the lowest floor as described in LFPMC 16.20.410(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 one foot above the base flood level will be rated as at the base flood level). (Ord. 937 § 1, 2005; Ord. 419 § 5.2-2, 1989)~~

16.20.430 Critical facility.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the base floodplain. Construction of new critical facilities shall be permissible within the base floodplain if no feasible alternative site is available. Critical facilities constructed within the base floodplain shall have the lowest floor elevated to three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base floodplain shall be provided to all critical facilities to the extent possible. (Ord. 937 § 1, 2005; Ord. 419 § 5.2-3, 1989)

16.20.440 Manufactured homes.

All manufactured homes to be placed or substantially improved within zones A1 through A30, AH and AE on the community's FIRM shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is one foot or more above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provisions of 16.20.350(B). (Ord. 937 § 1, 2005; Ord. 419 § 5.2-4, 1989)

16.20.445 Recreational vehicles.

Recreational vehicles placed on sites are required to either:

A. Be on the site for fewer than 180 consecutive days; or

B. Be fully licensed and ready for highway use, on wheels or jacking systems, attached to the site only by quick disconnect-type utilities and security devices, and have no permanently attached additions; or

C. Meet the requirements of LFPMC 16.20.440 and the elevation and anchoring requirements for manufactured homes. (Ord. 937 § 1, 2005)

16.20.450 Floodways.

~~Located within areas of special flood hazard established in LFPMC 16.20.060 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. Prohibit encroachments, including fill, new construction, substantial improvements and other development unless certification by a registered professional engineer or architect is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase of flood levels during the occurrence of the base flood discharge.~~

~~B. Construction or reconstruction of residential structures is prohibited within designated floodways, except for (a) repairs, reconstruction, or improvements to a structure which do not increase the ground floor area; and (b) repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either (i) before the repair, reconstruction, or repair is started, or (ii) if the structure has been damaged, and is being restored, before the damage occurred. 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 to structures identified as historic places, may be excluded in the 50 percent.~~

~~C. If subsection (A) of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article. (Ord. 937 § 1, 2005; Ord. 419 § 5.3, 1989)~~

16.20.450 Enclosed area below the lowest floor.

If buildings or manufactured homes are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage.

16.20.455 Appurtenant structures (detached garages and small storage structures).

A. Appurtenant structures used solely for parking of vehicles or limited storage may be constructed such that the floor is below the BFE, provided the structure is designed and constructed in accordance with the following requirements:

1. Use of the appurtenant structure must be limited to parking of vehicles or limited storage;
2. The portions of the appurtenant structure located below the BFE must be built using flood resistant materials;
3. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement;
4. Any machinery or equipment servicing the appurtenant structure must be elevated or flood proofed to or above the BFE;
5. The appurtenant structure must be designed to allow for the automatic entry and exit of floodwaters in accordance with LFPMC 16.20.410(B);
6. The structure shall have low damage potential;
7. If the structure is converted to another use, it must be brought into full compliance with the standards governing such use; and
8. The structure shall not be used for human habitation.

B. Detached garages, storage structures, and other appurtenant structures not meeting the above standards must be constructed in accordance with all applicable standards in LFPMC 16.20.410.

C. Upon completion of the structure, certification that the requirement of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

16.20.460 Wetlands management.

To the maximum extent possible, avoid the short- and long-term adverse impacts associated with the destruction or modification of wetlands, especially those activities which limit or disrupt the ability of the wetland to alleviate flooding impacts. The following process should be implemented:

A. Review proposals for development within base floodplains for their possible impacts on wetlands located within the floodplain.

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

C. Request technical assistance from the Department of Ecology in identifying wetland areas. Existing wetland map information from the National Wetlands Inventory (NWI) can be used in conjunction with the community's FIRM to prepare an overlay zone indicating critical wetland areas deserving special attention. (Ord. 937 § 1, 2005; Ord. 419 § 5.4, 1989)

1 **16.20.465 AE and A1-30 zones with Base Flood Elevations (BFE) but no Floodways.**

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

7 **16.20.470 General requirements of other development.**

8 All development, including manmade changes to improved or unimproved real estate for which specific provisions
9 are not specified in this ordinance or the state building codes with adopted amendments and any {community name}
10 amendments, shall:

11 A. Be located and constructed to minimize flood damage;

12 B. Meet the encroachment limitations of this ordinance if located in a regulatory floodway;

13 C. Be anchored to prevent flotation, collapse, or lateral movement resulting from hydrostatic loads, including the
14 effects of buoyancy, during conditions of the design flood;

15 D. Be constructed of flood damage-resistant materials;

16 E. Have mechanical, plumbing, and electrical systems above the design flood elevation or meet the requirements of
17 ASCE 24, except that minimum electric service required to address life safety and electric code requirements is
18 permitted below the design flood elevation provided it conforms to the provisions of the electrical part of building
19 code for wet locations.

20
21 **16.20.470—Standards for shallow flooding areas (AO zones).**

22 Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones
23 range from one to three feet above ground where a clearly defined channel does not exist, or where the path of
24 flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet
25 flow. In these areas, the following provisions apply:

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

29 B. New construction and substantial improvements of nonresidential structures within AO zones shall either:

30 1. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site,
31 one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is
32 specified); or

33 2. Together with attendant utility and sanitary facilities, be completely floodproofed to or above that level so
34 that any space below that level is watertight with walls substantially impermeable to the passage of water and
35 with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of
36 buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect
37 as in LFPMC 16.20.420(C).

38 C. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from
39 proposed structures. (Ord. 937 § 1, 2005; Ord. 419 § 5.5, 1989)

40 Article VII. Compliance

1 **16.20.480 Compliance.**

2 All development within special flood hazard areas is subject to the terms of this ordinance and other applicable
3 regulations.

4
5 **16.20.4980 Noncompliance – Penalties.**

6 A. No structure or land shall hereafter be constructed, located, extended, converted or altered without full
7 compliance with the terms of this chapter and other applicable regulations. Violation of the provisions of this
8 chapter by failure to comply with any of its requirements (including violations of conditions and safeguards
9 established in connection with conditions) shall constitute a misdemeanor.

10 B. Any person who violates this chapter or fails to comply with any of its requirements shall upon conviction thereof
11 be fined not more than \$500.00 or imprisoned for not more than six months, or both, for each violation, and in
12 addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the city from
13 taking such other lawful action as is necessary to prevent or remedy any violation. (Ord. 937 § 1, 2005; Ord. 419 §
14 3.3, 1989)

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