

CHAPTER 12.2
FLOOD DAMAGE PREVENTION

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ARTICLE I. GENERAL PROVISIONS

Sec. 12.2-10. Short title

This chapter may be cited as "The Solano County Flood Damage Prevention Ordinance."

Sec. 12.2-11. Finding of fact

(a) The flood hazard areas of the County of Solano 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.

(b) These flood losses are increased by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

Sec. 12.2-12. Statement of purpose

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:

- (a) To protect human life and health;
- (b) To minimize expenditure of public money for costly flood control projects;
- (c) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (d) to minimize prolonged business interruptions;
- (e) 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;
- (f) To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;

(g) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

Sec. 12.2-13. Methods of reducing flood losses

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

- (a) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities;
- (b) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (c) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers which help accommodate or channel flood waters;
- (d) Controlling filling, grading, dredging, and other development which may increase flood damage; and
- (e) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

ARTICLE II. DEFINITIONS

Sec. 12.2-20. Definitions

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

Appeal means a request for a review of the floodplain administrator's interpretation of any provision of this ordinance.

Area of shallow flooding means a designed AO, AH or VO Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident.

Area of special flood hazard See Special flood hazard area.

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

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

Breakaway walls are any type of walls, whether solid or lattice, and whether constructed of concrete, masonry, wood, metal, plastic, or any other suitable material which is not part of the structural support of the building and which is designed to break away under abnormally high tides or wave action without causing any damage to the structural integrity of the building on which they are used or any buildings to which they might be carried by flood waters. A breakaway wall shall have a safe design loading resistance of not less than 10 nor more than 20 pounds per square foot. Use of breakaway walls must be certified by a registered engineer or architect and shall meet the following conditions:

- (1) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood; and
- (2) The elevated portion of the building shall not incur any structural damage due to the effects of wind and water loads acting simultaneously in the event of the base flood.

Coastal high hazard area is the area subject to high velocity waters, including coastal and tidal inundation or tsunamis. The area is designated on a Flood Insurance Rate Map (FIRM) as Zone V1-V30, VE or V.

Development means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Flood or flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from (1) the overflow of flood waters, (2) the unusual and rapid accumulation of runoff of surface waters from any source, and/or (3) the collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels; or suddenly caused by an unusually high water level in a natural body of water accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in this definition.

Flood Boundary and Floodway Map (FBFM) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of flood hazard and the floodway.

Flood Insurance Rate Map (FIRM) means the official map on which the Federal Emergency Management Agency or Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

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

Floodplain administrator means the official appointed to administer and implement this Chapter.

Floodplain or flood-prone area means any land area susceptible to being inundated by water from any source (see definition of "flooding").

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage; including, but not limited to, emergency preparedness plans, flood control works and floodplain management regulations.

Floodplain management regulations means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance, and erosion control ordinance) and other applications of police power. The term describes such standards for the purpose of flood damage prevention and reduction.

Flood proofing means any combination of structural and nonstructural additional changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. Also referred to as "regulatory floodway."

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

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

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

Manufactured home (for floodplain management purposes) means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" also includes park trailers, travel trailers and other similar vehicles placed on a site for greater than 180 consecutive days.

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

Mean sea level means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.

New construction means, for floodplain management purposes, structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by the County of Solano.

One hundred year flood or 100-year flood means a flood which has a one percent annual probability of being equaled or exceeded. It is identical to the "base flood," which will be the term used throughout this chapter.

Person means an individual or his agent, firm, partnership, association or corporation, or agent of the aforementioned groups, or this state or its agencies or political subdivisions.

Remedy a violation means to bring the structure or other development into compliance with state or local floodplain management regulations, or, if this is not possible, to reduce the impacts of its noncompliance. Ways that impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of the ordinance or otherwise deterring future similar violations, or reducing federal financial exposure with regard to the structure or other development.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Sand dunes means naturally occurring accumulation of sand in ridges or mounds landward of the beach.

Special flood hazard area (SFHA) means an area having special flood or flood-related erosion hazards, and shown on a Flood Boundary and Floodway Map (FBFM) or Flood Insurance Rate Map (FIRM) as Zone A, AO, A1-30, AE, A99, AH, V0, V1-V30, VE or V.

Start of construction includes substantial improvement, and means the date the building permit was issued; provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date.

The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the storage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erecting of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Structure means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial improvement means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 per cent 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 comply with existing state or local health, sanitary, or safety code specifications which are solely 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.

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

Violation means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance

required in this ordinance is presumed to be in violation until such time as that documentation is provided.

ARTICLE III. GENERAL PROVISIONS

Sec. 12.2-30. Lands to which this ordinance applies

This ordinance shall apply to all special flood hazard areas within the jurisdiction of the County of Solano.

Sec. 12.2-31. Basis for establishing special flood hazard areas

The special flood hazard areas identified by the Federal Emergency Management Agency or the Federal Insurance Administration in a scientific and engineering report entitled "Flood Insurance Study, Solano County, California," dated February 2, 1982, and subsequent revisions, along with accompanying Flood Insurance Rate Maps, is hereby adopted by reference and declared to be a part of this ordinance. This Flood Insurance Study is on file at the Office of Environmental Management. This Flood Insurance Study is the minimum area of applicability of this ordinance and may be supplemented by studies for other areas which allow implementation of this chapter and which are adopted by the board of supervisors.

Sec. 12.2-32. Compliance

No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this chapter and other applicable regulations. Violations of the provisions of this chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Nothing herein shall prevent the board of supervisors from taking such lawful action as is necessary to prevent or remedy any violation including, but not limited to, any civil action authorized by the laws of the State of California.

Sec. 12.2-33. Abrogation and greater restrictions

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

Sec. 12.2-34. Interpretation

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

- (a) considered as minimum requirements;
- (b) liberally construed in favor of the board of supervisors; and
- (c) deemed neither to limit nor repeal any other powers granted under state statutes.

Sec. 12.2-35. Warning and disclaimer of liability

The degree of flood protection required by this chapter 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 chapter 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 damage. This chapter shall not create liability on the part of the County of Solano, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made. Notwithstanding the use of the word "shall" in this chapter, the County of Solano, its officers, agents and employees are required to exercise discretion in carrying out all provisions of this chapter.

Sec. 12.2-36. Severability

This chapter and the various parts thereof are hereby declared to be severable. Should any section of this chapter be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the chapter as a whole, or any portion thereof other than the section so declared to be unconstitutional or invalid.

ARTICLE IV. ADMINISTRATION**Sec. 12.2-40. Designation of the floodplain administrator**

The director of the department of environmental management is hereby appointed to administer and implement this chapter by granting or denying permits in accordance with its provisions. (Ord. No. 1487, '1; Ord. No. 1506 '1.)

Sec. 12.2-41. Permits

Upon application for a building, zoning, use or grading permit, the Solano County building inspector, director of environmental management, or other employee responsible (responsible employee) for review of such applications, shall review the submitted application and plans and determine whether or not the site of the proposed structure is within any special flood hazard area established in Section 12.2-31. If the site of the proposed structure or development lies within any special flood hazard area, the application and plans shall be referred to the floodplain administrator for review as specified in Section 12.1-43. If the site of the proposed structure or development does not fall within said special flood zone, the permit need not be reviewed by the floodplain administrator in regard to the flood hazard regulations and shall be processed in accordance with standard procedure.

Sec. 12.2-42. Requirements for submission of information

The floodplain administrator shall review and approve all applications for permits before construction or development begins within any area of special flood hazards established in Section 12.2-31. The floodplain administrator may require submission of plans in

duplicate drawn to scale showing the nature, location, dimensions, and elevation 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 shall be required:

- (A) Proposed elevation in relation to mean sea level, of the lowest floor (including basement) of all structures; in Zone A0 or V0, elevation of highest adjacent grade and proposed elevation of lowest floor of all structures;
- (B) Proposed elevation in relation to mean sea level to which any structure will be flood proofed;
- (C) All appropriate certifications listed in Section 12.2-43(d) of this chapter; and
- (D) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

Sec. 12.2-43. Duties and responsibilities of the floodplain administrator

The duties and responsibilities of the floodplain administrator shall include, but not be limited to:

(a) Permit review.

- (1) Review all building, zoning, use or grading permit applications referred by the responsible employee to determine that the permit requirements of this chapter have been satisfied;
- (2) Advise applicant that other state and federal permits may be required;
- (3) Determine whether the site will be reasonably safe from flooding; and
- (4) Determine whether the proposed development will adversely affect the carrying capacity of areas where base flood elevations have been determined but a floodway has not been designated. For purposes of this chapter, **adversely affects** means 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.

(b) When base flood elevation data has not been provided in accordance with Section 12.2-31, the floodplain administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer Article V.

(c) Whenever a watercourse is to be altered or relocated:

- (1) Notify adjacent communities and the California Department of Water Resources prior to a significant alteration or relocation of a major watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - (2) Require that the flood carrying capacity of the altered or relocated portion of said watercourse is maintained.
- (d)** Obtain and maintain for public inspection and make available as needed:
- (1) the certification required in Section 12.2-50(c) (1) (floor elevations);
 - (2) the certification required in Section 12.2-50(C)(2) (elevations in areas of shallow flooding);
 - (3) the certification required in Section 12.2-50(C)(3)(c) (elevation or flood proofing of nonresidential structures);
 - (4) the certification required in Section 12.2-50(C)(4) (wet flood proofing standard);
 - (5) the certified elevation required in Section 12.2-52(B) (subdivision standards);
 - (6) the certification required in Section 12.2-54(A) (floodway encroachments); and
 - (7) the information required in Section 12.2-55(F) (coastal construction standards);
- (e)** Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards for the purposes of Section 12.2-43(A) (for example, where there appears to be a conflict between 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 12.2-60.
- (f)** Take action to remedy violations of this ordinance as specified in Section 12.2-32 herein.

ARTICLE V. PROVISION FOR FLOOD HAZARD REDUCTION

Sec. 12.2-50. Standards of construction

In all areas of special flood hazards, the following standards are required:

- (a) Anchoring.**

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

(2) All manufactured homes shall meet the anchoring standards of Section 12.2-50.

(b) Construction Materials and Methods.

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

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

(3) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

(4) Within Zones AH, AO, and VO, adequate drainage paths around structures on slopes to guide flood waters around and away from proposed structures shall be constructed.

(c) Elevation and Flood proofing.

(1) New construction and substantial improvements of any structure shall have the lowest floor, including basement, elevated at least one foot above the base flood elevation. Nonresidential structures may meet the standards in Section 12.2-50(C)(3). Upon the completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, or verified by the building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator.

(2) New construction and substantial improvement of any structure in Zone AO or VO shall have the lowest floor, including basement, elevated above the highest adjacent grade as follows: at least one foot higher than the depth number specified in feet, on the FIRM, or, if no depth number is specified on the FIRM, at least three feet. Nonresidential structures may meet the standards in Section 12.2-50(C)(3). Upon the completion of the structure, the elevation of the lowest floor, including basement, shall be certified by a registered professional engineer or surveyor, or verified by the community building inspector to be properly elevated. Such certification or verification shall be provided to the floodplain administrator. (Ord. No. 1506, '3.)

(3) Nonresidential construction shall either be elevated in conformance with Section 12.2-50(C)(1), or 12.2-50(C)(2), or together with attendant utility and sanitary facilities:

(A) be flood proofed 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; and

(C) be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the floodplain administrator.

(4) For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwater. Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:

(A) either 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. The bottom of all openings shall be no higher than one foot above grade. Openings may be quipped with screens, louvers, valves, or other coverings or devices; provided, that they permit the automatic entry and exit of floodwater; or

(B) be certified to comply with a local flood proofing standard approved by the Federal Insurance Administration.

(5) Manufactured homes shall also meet the standards in Section 12.2-53.

Sec. 12.2-51. Standards for utilities

(a) All new replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters.

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

Sec. 12.2-52. Standards for subdivisions

(a) All preliminary subdivision proposals shall identify the flood hazard area and the elevation of the base flood.

(b) All final subdivision plans will provide the elevation of proposed structure(s) and pads. If the site is filled above the base flood, the final pad elevation shall be certified by

a registered professional engineer or surveyor and provided to the floodplain administrator.

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

(d) All subdivisions shall provide adequate drainage to prevent increased exposure to flood hazards.

Sec. 12.2-53. Standards for manufactured homes

All new and replacement manufactured homes and additions to manufactured homes shall:

(a) Be elevated so that the lowest floor is at or above the base flood elevation; and

(b) Be securely anchored to a permanent foundation system to resist flotation, collapse, or lateral movement.

Sec. 12.2-54. Floodways

Locations within areas of special flood hazard established in Section 12.2-31 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 provisions apply:

(a) Encroachments, including fill, new construction, substantial improvements and other development, unless certification by a registered professional engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge, shall be prohibited.

(b) If Section 12.2-54(A) is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Article V.

Sec. 12.2-55. Coastal high hazard areas

Within coastal high hazard areas established in Section 12.2-31, the following standards shall apply:

(a) All new construction and substantial improvements shall be elevated on adequately anchored pilings or columns and securely anchored to such pilings or columns so that the lowest horizontal portion of the structural members of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood elevations.

(b) All new construction shall be located on the landward side of the reach of mean high tide.

- (c) All new construction and substantial improvements shall have the space below the lowest floor free of obstructions or constructed with breakaway walls. Such temporarily enclosed space shall not be used for human habitation.
- (d) Fill shall not be used for structural support of buildings.
- (e) Man-made alteration of sand dunes which would increase potential flood damage is prohibited.
- (f) The floodplain administrator shall obtain and maintain the following records:
 - (1) Certification by a registered engineer or architect that a proposed structure complies with Section 12.2-55(A).
 - (2) The elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest flood (excluding pilings or columns) of all new and substantially improved structures, and whether such structures contain a basement.

ARTICLE VI. VARIANCE AND APPEAL PROCEDURE

Sec. 12.2-60. Variance and appeal procedure

- (a) The floodplain administrator shall hear and decide requests for variances from the requirements of this Chapter.
- (b) Variance Procedure.
 - (1) Application for variances shall be filed with the floodplain administrator and shall contain a statement explaining the type of variance requested, the justification for the variance, and the hardship the applicant will suffer if the variance is not granted. The floodplain administrator may require submission of additional information necessary to make any determination required under this section.
 - (2) The floodplain administrator's decision granting or denying the variance shall be in writing. Findings shall be made as to each of the requirements of Section 12.2-60(E) justifying the granting or denial of the variance. Any applicant to whom a variance is granted shall be given written notice by the floodplain administrator that (i) the structure will be permitted to be built with a lowest floor elevation below the regulatory flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation, and (ii) such construction below the base flood level increases risk to life and property. A copy of the notice shall be recorded by the applicant in the office of the Solano County Assessor/Recorder and shall be indexed so that it appears in the chain of title of the affected parcel of land.

(c) The Board of Supervisors shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the floodplain administrator in the enforcement or administration of this Chapter.

(d) Appeal Procedure

(1) The decision of the floodplain administrator granting or denying a variance may be appealed to the board of supervisors by filing a copy of the decision and a statement of reason for the appeal with the clerk to the board of supervisors. The clerk shall set the matter for consideration by the board of supervisors and notify the floodplain administrator and applicant of the date and time of the hearing.

(2) The board of supervisors may affirm, reverse, or modify wholly or in part the decision of the floodplain administrator.

(e) In passing upon such applications, the floodplain administrator and the board of supervisors shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:

(1) the danger that materials may be swept onto other lands to the injury of others;

(2) the danger of 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 time of flood for ordinary and emergency vehicles;

(10) the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters 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.

(f) Generally, variances may be issued 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, all items in Section 12.2-60 have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

(g) Upon consideration of the factors of Section 12.2-60 and the purposes of this Chapter, the floodplain administrator and the board of supervisors may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Chapter.

(h) The floodplain administrator shall maintain the records of all variance and appeal actions and report any variances to the Federal Insurance Administration upon request.

Sec. 12.2-61. Conditions for variances

(a) Variances may be issued for the reconstruction, rehabilitation, or restoration of structures listed in the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.

(b) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

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

(d) Variances shall only be issued upon:

(1) a showing of good and sufficient cause;

(2) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and

(3) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expenses, or create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

(e) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided

that the provisions of this section are satisfied and that the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety. (Ord. No. 1506 '1, '2, '3.)