4.2.1 | Flood Plain Overlay District

FP

Purpose:

These regulations are adopted pursuant to the authority granted per <u>Va. Code §15.2-2280</u>. The purpose of these provisions is to prevent the loss of life and property, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

- Regulating uses, activities, and development which -- alone or in combination with other existing or future uses, activities, and development -- will cause unacceptable increases in flood heights, velocities, and frequencies;
- Restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding;
- Requiring all those uses, activities, and development that do occur in flood-prone areas to be protected and/or flood-proofed against flooding and flood damage; and,
- Protecting individuals from buying land and structures that are unsuited for intended purposes because of flood hazards.

A. General Provisions

1. <u>Applicability</u>. These regulations shall apply to all privately and publicly owned lands within the jurisdiction of Clarke County and identified as areas of special flood hazard identified by the community or shown on the flood insurance rate map (FIRM) or included in the flood insurance study (FIS) that are provided to Clarke County by the Federal Emergency Management Agency (FEMA).

2. Compliance and Liability.

- a. No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this Ordinance and any other applicable ordinances and regulations which apply to uses within the jurisdiction of this Ordinance.
- b. The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study, but does not imply total flood protection. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This Ordinance does not imply that districts outside the floodplain district or land uses permitted within such district will be free from flooding or flood damages.

- c. This Ordinance shall not create liability on the part of Clarke County or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.
- 3. <u>Records</u>. Records of actions associated with administering these regulations shall be kept on file and maintained by or under the direction of the Floodplain Administrator in perpetuity.
- 4. <u>Abrogation and Greater Restrictions</u>. To the extent that the provisions are more restrictive, these regulations supersede any ordinance or regulations currently in effect in flood-prone districts. To the extent that any other existing law or regulation is more restrictive or does not conflict it shall remain in full force and effect.

These regulations are not intended to repeal or abrogate any existing ordinances including subdivision regulations, zoning ordinances, or building codes. In the event of a conflict between these regulations and any other ordinance, the more restrictive shall govern.

- 5. <u>Severability</u>. If any section, subsection, paragraph, sentence, clause, or phrase of these regulations shall be declared invalid for any reason whatever, such decision shall not affect the remaining portions of these regulations. The remaining portions shall remain in full force and effect; and for this purpose, the provisions of these regulations are hereby declared to be severable.
- 6. <u>Penalty for Violations</u>. The failure of a structure or other development to be fully compliant with the community's floodplain management regulations shall be considered a violation of this Ordinance. 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.

Any person who fails to comply with any of the requirements or provisions of this article or directions of the Floodplain Administrator or any authorized employee of the County shall be guilty of the appropriate violation and subject to the penalties thereof.

The <u>Virginia Uniform Statewide Building Code</u> addresses building code violations and the associated penalties in <u>Section 104</u> and <u>Section 115</u>. Violations and associated penalties of the Zoning Ordinance are addressed in <u>Section 10 (Enforcement)</u> of this Ordinance.

In addition to the above penalties, all other actions are hereby reserved, including an action in equity for the proper enforcement of this article. The imposition of a fine or penalty for any violation of, or noncompliance with, this article shall not excuse the violation or noncompliance or permit it to continue; and all such persons shall be required to correct or remedy such violations within a reasonable time. Any structure constructed, reconstructed, enlarged, altered or relocated in noncompliance with this article may be declared by the County to be a public nuisance and abatable as such. Flood insurance may be withheld from structures constructed in violation of this article.

B. Administration

- 1. <u>Designation of the Floodplain Administrator</u>. The Zoning Administrator is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator. The Floodplain Administrator may:
 - a. Do the work themselves. In the absence of a designated Floodplain Administrator, the duties are conducted by the County's Director of Planning or other designee.
 - b. Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.
 - c. Enter into a written agreement or written contract with another community or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.
- 2. <u>Duties and Responsibilities of the Floodplain Administrator</u>. The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:
 - a. Review applications for permits to determine whether proposed activities will be located in the Special Flood Hazard Area (SFHA).
 - b. Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.
 - c. Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.
 - d. Review applications to determine whether all necessary permits have been obtained from the Federal, State, or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the 100-year frequency floodplain of free-flowing non-tidal waters of the State.
 - e. Verify that applicants proposing an alteration of a watercourse have notified adjacent communities, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), and other appropriate agencies (VADEQ, USACE), and have submitted copies of such notifications to FEMA.

- f. Approve applications and issue permits to develop in flood hazard areas if the provisions of these regulations have been met, or disapprove applications if the provisions of these regulations have not been met.
- g. Inspect or cause to be inspected, buildings, structures, and other development for which permits have been issued to determine compliance with these regulations or to determine if non-compliance has occurred or violations have been committed.
- h. Review Elevation Certificates and require incomplete or deficient certificates to be corrected.
- i. Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for the County, within six months after such data and information becomes available if the analyses indicate changes in base flood elevations.
- j. Maintain and permanently keep records that are necessary for the administration of these regulations, including:
 - Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies and maps and current effective studies and maps), and Letters of Map Change; and
 - Documentation supporting issuance and denial of permits, Elevation Certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been floodproofed, inspection records, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.
- k. Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.
- 1. Advise the Board of Zoning Appeals regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.
- m. Administer the requirements related to proposed work on existing buildings:
 - Make determinations as to whether buildings and structures that are located in flood hazard areas and that are damaged by any cause have been substantially damaged.
 - Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct. Prohibit the non-compliant repair of substantially damaged buildings except for temporary emergency protective measures necessary

to secure a property or stabilize a building or structure to prevent additional damage.

- n. Undertake, as determined appropriate by the Floodplain Administrator due to the circumstances, other actions which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other Federal, State, and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in special flood hazard areas; and assisting property owners with documentation necessary to file claims for Increased Cost of Compliance coverage under NFIP flood insurance policies.
- o. Notify the Federal Emergency Management Agency when the corporate boundaries of the County have been modified and:
 - Provide a map that clearly delineates the new corporate boundaries or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation; and
 - If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.
- p. Upon the request of FEMA, complete and submit a report concerning participation in the NFIP which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.
- q. It is the duty of the Floodplain Administrator to take into account flood, mudslide and flood-related erosion hazards, to the extent that they are known, in all official actions relating to land management and use throughout the entire jurisdictional area of the County, whether or not those hazards have been specifically delineated geographically (e.g. via mapping or surveying).
- 3. <u>Use and Interpretation of FIRMs</u>. The Floodplain Administrator shall make interpretations, where needed, as to the exact location of special flood hazard areas, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of FIRMs and data:

- a. Where field surveyed topography indicates that adjacent ground elevations:
 - Are below the base flood elevation in riverine SFHAs even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as special flood hazard area and subject to the requirements of these regulations
 - Are above the base flood elevation and the area is labelled as a SFHA on the FIRM, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change (LOMR) that removes the area from the SFHA.
- b. In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a Federal, State, or other source shall be reviewed and reasonably used.
- c. Base flood elevations and designated floodway boundaries on FIRMs and in FISs shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.
- d. Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRMs and in FISs.
- e. If a Preliminary Flood Insurance Rate Map and/or a Preliminary Flood Insurance Study has been provided by FEMA:
 - Upon the issuance of a Letter of Final Determination by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.
 - Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data shall be deemed the best available data pursuant to Section 4.2.1C-1c (Description of Special Flood Hazard Districts A Zone) and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.
 - Prior to issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.

4. <u>Jurisdictional Boundary Changes</u>. The County's floodplain regulations in effect on the date of annexation shall remain in effect and shall be enforced by the municipality for all annexed areas until the municipality adopts and enforces an ordinance which meets the requirements for participation in the National Flood Insurance Program. Municipalities with existing floodplain ordinances shall pass a resolution acknowledging and accepting responsibility for enforcing floodplain ordinance standards prior to annexation of any area containing identified flood hazards. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, the governing body shall prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.

In accordance with the <u>Code of Federal Regulations</u>, <u>Title 44 Subpart (B) Section</u> <u>59.22(a)(9)(v)</u>, all NFIP participating communities must notify the Federal Insurance Administration and optionally the State Coordinating Office in writing whenever the boundaries of the community have been modified by annexation or the community has otherwise assumed or no longer has authority to adopt and enforce floodplain management regulations for a particular area.

In order that all Flood Insurance Rate Maps accurately represent the community's boundaries, a copy of a map of the community suitable for reproduction, clearly delineating the new corporate limits or new area for which the community has assumed or relinquished floodplain management regulatory authority must be included with the notification.

- 5. <u>District Boundary Changes</u>. The delineation of any of the Floodplain Districts may be revised by the County where natural or man-made changes have occurred and/or where more detailed studies have been conducted or undertaken by the U. S. Army Corps of Engineers or other qualified agency, or an individual documents the need for such change. However, prior to any such change, approval must be obtained from the Federal Emergency Management Agency. A completed LOMR is a record of this approval.
- 6. <u>Interpretation of District Boundaries</u>. Initial interpretations of the boundaries of the Floodplain Districts shall be made by the Zoning Administrator. Should a dispute arise concerning the boundaries of any of the Districts, the Board of Zoning Appeals shall make the necessary determination. The person questioning or contesting the location of the District boundary shall be given a reasonable opportunity to present his case to the Board and to submit his own technical evidence if he so desires.
- 7. <u>Submitting Model Backed Technical Data</u>. The County's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the Federal Emergency Management Agency of the

changes by submitting technical or scientific data. The community may submit data via a LOMR. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and floodplain management requirements will be based upon current data.

8. <u>Letters of Map Revision</u>. When development in the floodplain will cause or causes a change in the base flood elevation, the applicant, including state agencies, must notify FEMA by applying for a Conditional Letter of Map Revision and then a Letter of Map Revision.

C. Description of Special Flood Hazard Districts

1. <u>Basis of Districts</u>. The Flood Plain Overlay District (FP) shall include the Special Flood Hazard Areas (SFHAs). The basis for the delineation of these districts shall be the FIS and the FIRM for Clarke County prepared by the Federal Emergency Management Agency, Federal Insurance Administration, dated September 28, 2007, and any subsequent revisions or amendments thereto.

The County may identify and regulate local flood hazard or ponding areas that are not delineated on the FIRM. These areas may be delineated on a "Local Flood Hazard Map" using best available topographic data and locally derived information such as flood of record, historic high water marks, or approximate study methodologies.

The boundaries of the SFHA Districts are established as shown on the FIRM which is declared to be a part of this ordinance and which shall be kept on file at the County offices.

a. The <u>Floodway District</u> is in an <u>AE Zone</u> and is delineated, for purposes of this ordinance, using the criterion that certain areas within the floodplain must be capable of carrying the waters of the one percent (1%) annual chance flood without increasing the water surface elevation of that flood more than one (1) foot at any point. The areas included in this District are specifically defined in Table 2 of the above-referenced FIS and shown on the accompanying FIRM.

The following provisions shall apply within the Floodway District of an AE zone:

• Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be

submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

Development activities which increase the water surface elevation of the base flood may be allowed, provided that the applicant first applies – with the County's endorsement – for a Conditional Letter of Map Revision (CLOMR), and receives the approval of the Federal Emergency Management Agency.

If the requirements listed above are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of **Section 4.2.1E** (**Permit and Application Requirements**).

- The placement of manufactured homes (mobile homes) is prohibited, except in an existing manufactured home (mobile home) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring, elevation, and encroachment standards are met. For floodplain management purposes, the term "manufactured home" shall also include park trailers, travel trailers, and other similar vehicles placed on a site for a period greater than 180 days.
- b. The AE Zones on the FIRM accompanying the FIS shall be those areas for which one percent (1%) annual chance flood elevations have been provided and the floodway has not been delineated. The following provisions shall apply within an AE zone where FEMA has provided base flood elevations:

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

Development activities in Zone AE on the County's FIRM which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the applicant first applies – with the County's endorsement – for a Conditional Letter of Map Revision, and receives the approval of the Federal Emergency Management Agency.

c. The A Zone on the FIRM accompanying the FIS shall be those areas for which no detailed flood profiles or elevations are provided, but the one percent (1%) annual chance floodplain boundary has been approximated. For these areas, the following provisions shall apply:

The Approximated Floodplain District shall be that floodplain area for which no detailed flood profiles or elevations are provided, but where a one percent (1%) annual chance floodplain boundary has been approximated. Such areas are shown as Zone A on the maps accompanying the FIS. For these areas, the base flood elevations and floodway information from Federal, State, and other acceptable sources shall be used, when available. Where the specific one percent (1%) annual chance flood elevation cannot be determined for this area using other sources of data, such as the U. S. Army Corps of Engineers Floodplain Information Reports, U. S. Geological Survey Flood-Prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this base flood elevation. For development proposed in the approximate floodplain the applicant must use technical methods that correctly reflect currently accepted practices, such as point on boundary, high water marks, or detailed methodologies hydrologic and hydraulic analyses. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Floodplain Administrator.

The Floodplain Administrator reserves the right to require a hydrologic and hydraulic analysis for any development. When such base flood elevation data is utilized, the lowest floor shall be elevated to or above the base flood level plus one (1) foot.

During the permitting process, the Floodplain Administrator shall obtain:

- The elevation of the lowest floor (in relation to mean sea level), including the basement, of all new and substantially improved structures; and,
- If the structure has been floodproofed in accordance with the requirements of this article, the elevation (in relation to mean sea level) to which the structure has been floodproofed.

Base flood elevation data shall be obtained from other sources or developed using detailed methodologies comparable to those contained in a FIS for subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser.

2. Overlay Concept.

The FP District described above shall be an overlay to the existing underlying districts as shown on the Official Zoning Map, and as such, the provisions for the FP District shall serve as a supplement to the underlying district provisions.

If there is any conflict between the provisions or requirements of the FP District and those of any underlying district, the more restrictive provisions and/or those pertaining to the FP District shall apply.

In the event any provision concerning an FP District is declared inapplicable as a result of any legislative or administrative actions or judicial decision, the basic underlying provisions shall remain applicable.

D. Permitted and Prohibited Uses; Special District Regulations

- 1. <u>Permitted Uses</u>. The following uses and activities are permitted in the FP District provided that they comply with the provisions of the underlying zoning district and are not prohibited by any other ordinance and provided that they do not require structures, fill, or storage of materials and equipment:
 - a. Agricultural uses, such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
 - b. Public and private recreational uses and activities, such as parks, day camps, picnic grounds, golf courses, horseback riding and hiking trails, wildlife and nature preserves, game farms, fish hatcheries, trap and skeet game ranges, and hunting and fishing areas.
 - c. Accessory residential uses, such as yard areas, gardens, play areas, and pervious loading areas.
 - d. Accessory business uses, such as yard areas, pervious parking and loading areas, etc.
- 2. <u>Permitted Uses Subject to Special Regulations</u>. The following uses may be permitted, with issuance of a Zoning and/or Building Permit, in the FP District limited by the regulations imposed by this Section, the underlying zoning district, and the <u>Uniform Statewide Building Code</u>:
 - a. Recreational Vehicles subject to the following regulations:
 - Shall not be located on the site for 180 consecutive days or more.
 - Shall be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions.
 - Shall not be located within 100 feet of the Shenandoah River from January 1 through March 31 of any year.
 - A truck camper or cap, located within 100 feet of the Shenandoah River, shall not be removed from its transporting vehicle nor shall wheels be removed from a trailer or recreational vehicle at any time of the year.

- b. Agricultural uses which do not include utilization of structures with an aggregate floor area of more than 500 square feet. However, no structure for such uses shall be allowed within 100 feet of the Shenandoah River.
- c. Recreational uses limited to parks, playgrounds, golf courses, driving ranges, picnic grounds, and transient amusement enterprises, provided such facilities are not usable for human habitation.
 - Structures with walls related to such uses shall not exceed an aggregate floor area of five hundred (500) square feet per lot or have less than the minimum floor area requiring a building permit as set forth in the Virginia Uniform Statewide Building Code. Such structures shall be set back at least 100 feet from the Shenandoah River.
 - Structures without walls related to such uses shall not exceed an aggregated floor area of 1500 square feet per lot or have less than the minimum floor area requiring a building permit as set forth in the Virginia Uniform Statewide Building Code. Such structures' roof framing shall be at least one foot above the one percent (1%) chance flood elevation; however, the structures' height shall not be more than 15 feet above grade. Such structures shall be set back at least 500 feet from the Shenandoah River.
- d. Accessory structures not more than 500 square feet or less than the minimum floor area requiring a building permit as set forth in the Virginia Uniform Statewide Building Code. Use of accessory structures shall be limited to roadside and park stands for the sale of food, fruit and vegetables, fishing bait, and boat rental, provided such facilities are not usable for human habitation. However, no structure for such uses shall be allowed within 100 feet of the Shenandoah River.
- e. Construction of boat ramps, boat landings, docks (permanent or floating), and similar structures shall meet the requirements set forth in <u>Section 4.2.3 (Stream Protection (SPO) Overlay District)</u>.
- f. Siting of portable privies shall meet the requirements of the <u>Clarke County</u> <u>Septic Ordinance (Chapter 143)</u> and <u>Section 4.2.3 (Stream Protection (SPO)</u> Overlay District).
- g. Siting of new onsite sewage disposal systems shall meet the requirements of the Clarke County Septic Ordinance (Chapter 143).
- 3. Prohibited Uses. The following uses and structures are prohibited in the FP District:
 - a. New residential structures including manufactured homes and accessory dwellings.

- b. Non-residential structures, either temporary or permanent, shall not be permitted in the Flood Plain District except as allowed by **Subsection 2** above.
- c. There shall be no land disturbance of any kind within 100 feet of the Shenandoah River except as provided in <u>Section 4.2.3 (Stream Protection (SPO) Overlay District)</u>.

E. <u>Permit and Application Requirements</u>

- 1. Permit Requirement. All uses, activities, and development occurring within the FP District shall be undertaken only upon the issuance of a permit. Such development shall be undertaken only in strict compliance with the provisions of the Ordinance and with all other applicable codes and ordinances, as amended, such as the Virginia Uniform Statewide Building Code and Article II (Subdivision Ordinance). Prior to the issuance of any such permit, the Floodplain Administrator shall require all applications to include compliance with all applicable state and federal laws and shall review all sites to assure they are reasonably safe from flooding. Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system.
- 2. <u>Site Development Plans and Permit Applications</u>. All applications for development within the FP District and all permits issued for the FP District shall incorporate the following information:
 - a. The elevation of the Base Flood at the site.
 - b. For structures to be elevated, the elevation of the lowest floor (including basement).
 - c. For structures to be floodproofed (non-residential only), the elevation to which the structure will be floodproofed.
 - d. Topographic information showing existing and proposed ground elevations.
 - e. Any other requirements as set forth in this section and in Section 4.2.3 (Stream Protection (SPO) Overlay District).

F. General Standards

The following provisions shall apply to all permits:

- New construction and substantial improvements shall be built according to this ordinance and the <u>Virginia Uniform Statewide Building Code</u>, and anchored to prevent flotation, collapse, or lateral movement of the structure.
- 2. New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

- 3. New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- 4. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- 5. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- 6. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- 7. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- 8. Any replacement sewer facilities and private package treatment plants (including all pumping stations and collector systems) shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into the flood waters. In addition, they shall be located and constructed to minimize or eliminate flood damage impairment.
- 9. All stormwater facilities shall comply with State stormwater management regulations.
- 10. All utilities such as gas lines, electrical and telephone systems being located in flood prone areas shall be located, elevated (where practicable) or buried and constructed to minimize the chance of impairment during a flood occurrence.
- 11. Streets and sidewalks shall be designed to minimize their potential for increasing and aggravating the levels of flood flow. Drainage openings shall be required to sufficiently discharge flood flows without unduly increasing flood heights.

In addition to subsections 1-11 above, in all special flood hazard areas, the additional provisions shall apply:

12. Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within this jurisdiction a permit shall be obtained from the U. S. Army Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission (a joint permit application is available from any of these organizations). Furthermore, in riverine areas, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), other required agencies, and the Federal Emergency Management Agency.

13. The flood carrying capacity within an altered or relocated portion of any watercourse shall be maintained.

G. <u>Elevation and Construction Standards</u>

In all identified flood hazard areas where base flood elevations have been provided in the FIS or generated by a certified professional in accordance with <u>Section 4.2.1C-1c (Description of Special Flood Hazard Districts – A Zone)</u> the following provisions shall apply:

1. <u>Residential Construction</u>. Substantial improvement of any existing residential structure in Zones AE and A with detailed base flood elevations shall have the lowest floor, including basement, elevated to or above the base flood level plus one (1) foot.

2. Non-Residential Construction.

- a. New construction or substantial improvement of any non-residential building shall have the lowest floor, including basement, elevated to or above the base flood level plus one (1) foot.
- b. Non-residential buildings located in Zone AE may be floodproofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the base flood elevation plus two (2) feet are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification, including the specific elevation (in relation to mean sea level) to which such structures are floodproofed, shall be maintained by the Floodplain Administrator.
- 3. <u>Space below the Lowest Floor</u>. In zones A and AE, fully enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation shall:
 - a. Not be designed or used for human habitation, but shall be used solely for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator).
 - b. Be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
 - c. Include measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the

openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:

- Provide a minimum of two openings on different sides of each enclosed area subject to flooding.
- The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.
- If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
- The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.
- Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
- Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.
- 4. <u>Accessory Structures</u>. Accessory structures in the SFHA shall comply with the elevation requirements and other requirements of <u>Section 4.2.1G-2</u> (<u>Elevation and Construction Standards Non-Residential Construction</u>) or, if not elevated or dry floodproofed, shall:
 - a. Not be used for human habitation.
 - b. Be limited to no more than 500 square feet or less than the minimum floor area requiring a building permit as set forth in the Virginia Uniform Statewide Building Code.
 - c. Be usable only for parking of vehicles or limited storage.
 - d. Be constructed with flood damage-resistant materials below the base flood elevation.
 - e. Be constructed and placed to offer the minimum resistance to the flow of floodwaters.
 - f. Be anchored to prevent flotation.
 - g. Have electrical service and mechanical equipment elevated to or above the base flood elevation.
 - h. Shall be provided with flood openings which shall meet the following criteria:

- There shall be a minimum of two flood openings on different sides of each enclosed area; if a building has more than one enclosure below the lowest floor, each such enclosure shall have flood openings on exterior walls.
- The total net area of all flood openings shall be at least 1 square inch for each square foot of enclosed area (non-engineered flood openings), or the flood openings shall be engineered flood openings that are designed and certified by a licensed professional engineer to automatically allow entry and exit of floodwaters; the certification requirement may be satisfied by an individual certification or an Evaluation Report issued by the ICC Evaluation Service, Inc.
- The bottom of each flood opening shall be 1 foot or less above the higher of the interior floor or grade, or the exterior grade, immediately below the opening.
- Any louvers, screens or other covers for the flood openings shall allow the automatic flow of floodwaters into and out of the enclosed area.
- i. A signed Declaration of Land Restriction (Non-Conversion Agreement) shall be recorded on the property deed.

5. Standards for Subdivisions

- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
- b. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- c. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and
- d. Base flood elevation data shall be obtained from other sources or developed using detailed methodologies, hydraulic and hydrologic analysis, comparable to those contained in a Flood Insurance Study for subdivision proposals and other proposed development proposals that exceed fifty lots or five acres, whichever is the lesser.

H. Existing Structures in the FP District

Any structure or use of a structure or premises must be brought into conformity with these provisions when it is changed, repaired, or improved unless one of the following exceptions is established before the change is made:

- 1. The Floodplain Administrator has determined that:
 - a. Change is not a substantial repair or substantial improvement AND

- b. No new square footage is being built in the floodplain that is not complaint AND
- c. No new square footage is being built in the floodway AND
- d. The change complies with this ordinance and the <u>Virginia Uniform Statewide</u> Building Code AND
- e. The change, when added to all the changes made during a rolling 5-year period does not constitute 50% of the structure's value.
- 2. The changes are required to comply with a citation for a health or safety violation.
- 3. The structure is a historic structure and the change required would impair the historic nature of the structure.

I. Variances; Factors to Be Considered

1. Variances shall be issued only upon (i) a showing of good and sufficient cause, (ii) after the Board of Zoning Appeals has determined that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) after the Board of Zoning Appeals has determined that the granting of such variance will not result in (a) unacceptable or prohibited increases in flood heights, (b) additional threats to public safety, (c) extraordinary public expense; and will not (d) create nuisances, (e) cause fraud or victimization of the public, or (f) conflict with local laws or ordinances.

While the granting of variances generally is limited to a lot size less than one-half acre, deviations from that limitation may occur. However, as the lot size increases beyond one-half acre, the technical justification required for issuing a variance increases. Variances may be issued by the Board of Zoning Appeals 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, in conformance with the provisions of this Section.

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 criteria of this Section are met, and 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.

In passing upon applications for variances, the Board of Zoning Appeals shall satisfy all relevant factors and procedures specified in other sections of the zoning ordinance and consider the following additional factors:

a. The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance shall be granted for any proposed use,

- development, or activity within any FP District that will cause any increase in the one percent (1%) chance flood elevation.
- b. The danger that materials may be swept on to other lands or downstream to the injury of others.
- c. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
- d. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.
- e. The importance of the services provided by the proposed facility to the community.
- f. The requirements of the facility for a waterfront location.
- g. The availability of alternative locations not subject to flooding for the proposed use.
- h. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- i. The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.
- j. The safety of access by ordinary and emergency vehicles to the property in time of flood.
- k. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.
- 1. The historic nature of a structure. Variances for repair or rehabilitation of historic structures may be granted upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- m. Variances will not be issued for any accessory structure within the SFHA.
- 2. The Board of Zoning Appeals may refer any application and accompanying documentation pertaining to any request for a variance to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for flood protection and other related matters.