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Administration

RESOLUTION

WHEREAS, the U.S. Congress, under the National Flood Insurance Act and the Maryland General Assembly, under the Flood Control and Watershed Management Act, Section 8-9A-01 Natural Resources Article of the Annotated code of Maryland has authorized counties to adopt rules and regulations to control floodplain development in order to protect persons and property from danger and destruction and in order to participate in the National Flood Insurance Programs; and

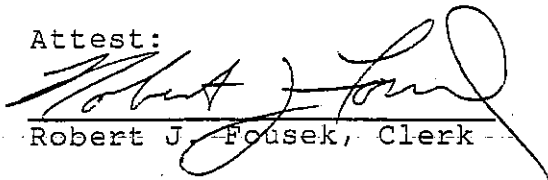
WHEREAS, the establishment of floodplain management is appropriate and desirable to protect human life and health; to minimize property damage; to protect water supply, sanitary sewage disposal and natural drainage; to reduce financial burdens imposed on the community; and to provide for the biological and environmental quality of the County's watersheds; and


WHEREAS, a duly advertised public hearing on the proposed standards and regulations has been held;


NOW, THEREFORE, BE IT RESOLVED THAT THE GARRETT COUNTY BOARD OF COUNTY COMMISSIONERS DO HEREBY ADOPT THE FOLLOWING, BEING

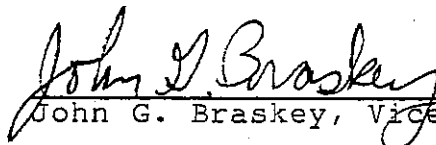
AN ORDINANCE, adopted on the 22 day of October 1991, to take effect on and from the 15th day of November 1991 promulgating, rules and regulations to establish minimum control measures and proper management of floodplain development in Garrett County. This Ordinance supersedes and replaces the Garrett County Floodplain Management Ordinance which was adopted on February 21, 1989 and took effect on March 2, 1989.

Attest:


Robert J. Fousek, Clerk


Brenda J. Butscher, Chairman


Elwood L. Groves, II, Vice-Chairman


John G. Braskey, Vice-Chairman

GARRETT COUNTY FLOODPLAIN MANAGEMENT ORDINANCE

<u>Table of Contents</u>	<u>Page</u>
Article I - Purpose and General Provisions	1
Section 1.1 - Purpose, Authority and Jurisdiction	1
Section 1.2 - Abrogation and Greater Restrictions	1
Section 1.3 - Applicability	2
Section 1.4 - Partial Invalidity and Severability	2
Section 1.5 - Disclaimer of Liability	2
Article II - Definitions	3
Article III - Permit Procedures	6
Section 3.1 - General	6
Section 3.2 - Information for a Permit	6
Section 3.3 - Subdivision Proposals	7
Section 3.4 - Issuance of Permit	7
Section 3.5 - Conditioned Permits	8
Section 3.6 - Fees	8
Section 3.7 - Penalties	8
Article IV - Establishment of Floodplain Zones	10
Section 4.1 - Identification of Zones	10
Section 4.2 - Floodplain Zones	10
Section 4.3 - Floodplain Boundaries	10
Article V - Development Regulations in Floodplain Zones ...	11
Part A - Floodway Fringe Zone	11
Section 5.1 - General	11
Section 5.2 - Elevation Requirements	12
Section 5.3 - Fill	12
Section 5.4 - Subdivision Requirements	12
Part B - Floodway Zone	13
Section 5.5 - General	13
Section 5.6 - Alternative Analysis Requirement	13
Section 5.7 - Existing Structures	14
Section 5.8 - Maintenance of Natural Channels	14
Section 5.9 - Obstructions	15
Article VI - Specific Requirements	15
Section 6.1 - Placement of Buildings and Materials ...	15
Section 6.2 - Enclosures Below Lowest Floor	15
Section 6.3 - Manufactured Homes and Parks	16
Section 6.4 - Anchoring	16
Section 6.5 - Utilities	16
Section 6.6 - Accessory Structures and Garages	17

Table of Contents (cont'd)

Section 6.7 - Recreational Vehicles	18
Section 6.8 - Fill	18
Article VII - Variances	19
Section 7.1 - Reasons for Granting	19
Section 7.2 - Conditions	19
Section 7.3 - Functionally Dependent Uses	20
Article VIII - Amendments	21

Article I - Purpose and General Provisions

Section 1.1 Purpose, Authority and Jurisdiction

The purposes of this Ordinance are to protect human life and health, minimize property damage, encourage appropriate construction practices to minimize future damage, protect individuals from unwittingly buying land subject to flood hazards, and to protect water supply, sanitary sewage disposal, and natural drainage. The prevention of unwise development in areas subject to flooding will reduce financial burdens to the community and the State, and will prevent future displacement and suffering of its residents. This protection is achieved through this review of all activities proposed within identified floodplains and by the issuance of permits for those activities that comply with the objectives of this Ordinance.

Floodplains are an important asset to the community. They perform vital natural functions such as temporary storage of floodwaters, moderation of peak flood flows, maintenance of water quality, groundwater recharge, prevention of erosion, habitat for diverse natural wildlife populations, recreational opportunities, and aesthetic quality. These functions are best served if floodplains are kept in their natural state. Wherever possible, the natural characteristics of floodplains and their associated wetlands and water bodies should be preserved and enhanced.

This Ordinance provides a unified, comprehensive approach to floodplain management which addresses these natural floodplain functions and the Federal and State programs concerned with floodplain management.

This Ordinance is adopted under the authority of and in compliance with the National Flood Insurance Act of 1968, as amended, the Flood Disaster Protection Act of 1973, as amended, and the Flood Control and Watershed Management Act. Section 8-9A-01, Natural Resources Article of the Annotated Code of Maryland.

This Ordinance shall apply to the unincorporated part of Garrett County and any incorporated municipality which may enter into an agreement with the County to enforce floodplain management regulations within municipal boundaries.

Section 1.2 - Abrogation and Greater Restrictions

This Ordinance supersedes and is intended to replace the Garrett County Floodplain Management Ordinance adopted on February 21, 1989. However, any other ordinance shall remain in full force to the extent that its provisions are more restrictive.

Section 1.3 - Applicability

Any person or entity proposing to do any development within the floodplain zone regulated by this Ordinance must first obtain a permit for that development from the local permitting agency, and must comply with all provisions of this Ordinance.

Section 1.4 - Partial Invalidity and Severability

If any part of this Ordinance is declared invalid, the remainder of the Ordinance shall not be affected and shall remain in force.

Section 1.5 - Disclaimer of Liability

The degree of flood protection provided by this Ordinance is considered reasonable for regulatory purposes and is based on engineering experience and scientific methods of study. Floods of greater magnitude may occur or flood heights may be increased by man-made and natural causes. This Ordinance does not imply that flooding will not occur outside of the delineated floodplain zone, nor that permitted development and land uses within the floodplain will be free of flooding and associated flood damage. This Ordinance does not create liability on the part of the Community, any officer, or employee thereof for any damage which may result from reliance on this Ordinance.

Article II - Definitions

- 2.1 Accessory structure - a detached structure on the same parcel of property as the principal structure, the use of which is incidental to the principal structure, eg. a shed or detached garage.
- 2.2 Base Flood - the 100-year frequency flood event as indicated in the Flood Insurance Study, as amended, the elevation of which is used for regulatory purposes in this Ordinance.
- 2.3 Basement - an enclosed area which is below grade on all four sides.
- 2.4 Certificate of Occupancy - means an official form issued by Garrett County certifying that the structure has been built consistent with approved plans and with the Floodplain Management Ordinance and may be legally inhabited or used for the intended purpose.
- 2.5 Development - any man-made change to improved or unimproved real estate, including, but not limited to buildings and other structures, dredging, fill, grading, paving, clearing, excavation, dumping, extraction, or storage of equipment or materials. Development includes subdivision of land.
- 2.6 Elevation Certificate - form supplied by the Federal Emergency Management Agency (FEMA) to certify as-built elevations of structures above mean sea level (NGVD).
- 2.7 Flood - general and temporary condition of partial or complete inundation of normally dry land areas from overflow of inland or tidal waters, or rapid unusual accumulation of runoff from any source.
- 2.8 Flood Insurance Rate Map (FIRM) - map which depicts the minimum special flood hazard area to be regulated by this Ordinance (unless a Floodway map is available).
- 2.9 Floodplain - means a relatively flat or low land area adjoining a river, stream or watercourse which is subject to partial or complete inundation and is mapped by FEMA as being in a Floodway, Floodway Fringe (Detailed Floodplain), or Approximate Floodplain.
- 2.10 Floodproofing - any combination of structural or nonstructural changes which reduce or eliminate flood damage to improved property.
- 2.11 Floodproofing Certificate - form supplied by FEMA to certify that a building has been designed and constructed to be structurally dry floodproofed to the Flood Protection Elevation.
- 2.12 Flood Protection Elevation (FPE) - the elevation of the base flood plus one foot freeboard.

- 2.13 Floodway - the channel and adjacent land area required to discharge the waters of the 100-year flood of a watercourse without increasing the water surface elevations more than a specified height.
- 2.14 Floodway Map - map which depicts floodways and special flood hazard areas to be regulated by this Ordinance.
- 2.15 Floodway Fringe - that portion of the floodplain outside the floodway.
- 2.16 Freeboard - an increment of elevation added to the base flood elevation to provide a factor of safety for uncertainties in calculations, wave actions, subsidence, or other unpredictable effects.
- 2.17 Historic Structure - a structure listed individually on the National Register of Historic Places, the Maryland Inventory of Historic Properties, a local inventory of historic places certified by the Maryland Historic Trust or the Secretary of the Interior, or preliminarily determined as meeting the requirements for such listing by the Maryland Historic Trust or the Secretary of the Interior, or determined as contributing to the historic significance of a historic district registered with Secretary of the Interior.
- 2.18 Lowest Floor - the lowest floor of the lowest enclosed area, including basement. An unfinished enclosure constructed of flood resistant materials used solely for parking of vehicles, storage, or building access in an area other than a basement is not the lowest floor, as long as it is supplied with water equalizing vents.
- 2.19 Manufactured Home - a transportable structure which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities.
- 2.20 NGVD - National Geodetic Vertical Datum of 1929 elevation reference points set by the National Geodetic Survey based on mean sea level.
- 2.21 New Construction - a structure for which the start of construction commenced on or after the effective date of the adoption of a Floodplain Management Ordinance, and includes any subsequent improvements.
- 2.22 One Hundred (100) Year Frequency Flood - the Base Flood, having a one chance in a hundred (one percent chance) of being equalled or exceeded in any year.
- 2.23 Permanent Construction - any structure occupying a site for more than 180 days per year.
- 2.24 Recreational Vehicle - a vehicle built on a single chassis which is 400 square feet or less at the longest horizontal projection, self propelled or towable, and designed primarily for temporary living while traveling or camping.
- 2.25 Start of Construction - The first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work

- beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For substantial improvement, the start of construction is the first alteration of any structural part of the building.
- 2.26 Structure - a walled and roofed building, including but not limited to, manufactured homes, gas and liquid storage tanks, garages, barns, and sheds.
- 2.27 Subdivision - means the division or redivision of lots, tracts, parcels or other divisions of land, including a change in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership, building or lot development.
- 2.28 Substantial Damage - damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50% of the market value of the structure before the damage occurred.
- 2.29 Substantial Improvements - any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50% of the market value of the structure (less land value) either: (a) before the improvement or repair is started; or (b) if the structure has incurred substantial damage and been restored, before the damage occurred. Substantial improvement occurs when the first alteration of any wall, ceiling, floor, or other structural part of the building commences. The minimum repairs needed to correct previously identified violations of local health, safety, or sanitary codes, and alterations to historic structures which do not preclude their continued designation as historic structures are not considered substantial improvements.
- 2.30 Temporary Structure - any structure completely removed within 180 days from issuance of the permit.
- 2.31 Variance - the grant of relief from a term or terms of this Ordinance.
- 2.32 Wetland - any land which is: (1) considered private wetland or State wetland pursuant to Title 9, Wetland and Riparian Rights, Natural Resources Article, Annotated Code of Maryland; or (2) defined as wetland under the procedures described in the "Federal Manual for Identifying and Delineating Jurisdictional Wetlands" by the Federal Interagency Committee for Wetland Delineation, 1987 as amended.

Article III - Permit Procedures**Section 3.1 - General**

A Floodplain Management Permit is required for all development in any designated Floodplain area. It shall be granted only after all necessary permit applications are submitted to federal and State agencies. A permit issued by the local permitting official under this Ordinance is not valid until all necessary permits for development are obtained. Receipt of federal or State permits does not exempt development from the provisions of this Ordinance.

Section 3.2 - Information for a Permit

Applications for a Floodplain Management Permit shall contain, at a minimum, the following information:

- a. name, address, and phone number of applicant (owner or agent of owner);
- b. name, address, and phone number of owner, if different;
- c. name, address, and phone number of contractor
- d. legal description of site location;
- e. proposed uses for the site;
- f. type, dimensions, and estimated cost of development proposed;
- g. site characteristics and improvements; and
- h. other information deemed appropriate by the local permitting official.

All permit applications must have a site plan drawn to scale which shows:

- a. dimensions of site;
- b. size and location of existing and proposed structures or alterations;
- c. setbacks;
- d. elevation contours in mean sea level (NGVD);
- e. delineation of the 100-year flood elevation and boundary; and
- f. proposed elevation of the lowest floor and method of elevation, if applicable.

All applicants shall agree in writing to provide an Elevation Certificate completed by a registered professional engineer or surveyor to certify the as-built lowest floor of a structure which must be elevated to or above the Flood Protection Elevation. An Elevation Certificate must be submitted before a Certificate of Occupancy or Use may be issued. Work undertaken prior to submission of the certification is at the applicant's risk. For enclosed areas below the Flood Protection Elevation, a Non-conversion Agreement may be required, in addition to an agreement to install water equalizing vents as specified in Section 6.2 of this Ordinance.

If an improvement to an existing structure is proposed, adequate information on the cost of the improvement and the market value of structure before the improvement must be supplied to the local permitting official to allow a determination of substantial improvement. The local permitting official may use tax assessment records to determine substantial improvement. In floodway and coastal high hazard areas, permits shall be tracked by property location to determine if the cumulative value

of improvements constitutes substantial improvement of a structure.

Section 3.3 - Subdivision Proposals

In addition to the information required in Section 3.2, an applicant for subdivision in the nontidal floodplain zone shall submit a plan to demonstrate that a building site and on-site sewerage disposal for each lot is outside of the 100-year floodplain. The plan for utility ingress, stormwater drainage structures, road access, and other rights of way shall be evaluated in light of the site characteristics.

Section 3.4 - Issuance of Permit

Considerations

Prior to issuance of a permit, the local permitting official shall determine the location of the project relative to floodways and floodplains, and shall note on the permit the proper elevation to which the lowest floor of proposed structures must be elevated. In approximate floodplains where an elevation is not available, the applicant shall be required to obtain such elevation. The applicant must agree to secure all other required permits, an Elevation Certificate, Floodproofing Certificate, engineering analysis, or other required verifications deemed appropriate by the local permitting official.

Permits shall be granted by the local permitting official only after determining that the proposed development will be in complete conformance with the requirements of this Ordinance and all other applicable local codes and ordinances. All other necessary permits or approvals must be applied for or granted. Permits are valid only after all other necessary permits are granted.

Dam Safety

Caution should be exercised when approving development downstream of existing or proposed dams. The condition of the dam, as well as the design criteria, hazard class, and the danger reach, should be investigated to avoid increasing potential hazards. Dams must meet design criteria based on the potential impacts downstream of the dam. Downstream development within the dam break flood wave shall be denied unless the dam meets the design standards for a high hazard dam.

After Issuance and During Construction

After issuance of a permit, no changes of any kind shall be made to the application, permit, or any of the plans, specifications, or other documents submitted with the application without the written approval of the local permitting official. A copy of the permit or other verification must be displayed at the construction site during construction activity.

Work on the permitted activity shall begin within one year of the issuance of the permit, or the permit shall expire, unless a written extension is granted by the local permitting official. Work shall be completed within two years of the date of the permit unless a

greater time is specified in the permit or a written extension is granted.

During construction, the local permitting official or an authorized representative shall inspect the site to determine that the work is in compliance with the permit. Any work found to be noncompliant must be corrected before any additional work is undertaken.

Record of Permits

A record of all floodplain permits shall be maintained and be available upon request for the Federal Emergency Management Agency or its authorized agent (Water Resources Administration) during periodic assessments of this community's participation in the National Flood Insurance Program. All documents needed to support any permit action, such as Elevation Certificates, map amendments or revisions, variance actions, shall be available for review during these assessments.

Section 3.5 - Conditioned Permits for Accessory Structures and Garages

A conditioned permit may be issued at the discretion of the local permitting official when the 300 square foot exemption is exceeded for accessory structures up to a total size of 600 square feet. In order to qualify the structure's use must be incidental to the primary structure, and it can be used only for limited storage and parking of vehicles. The provisions of Section 6.6 must be met. A conditioned permit is subject to the applicant's completion of a Nonconversion Agreement stating that the use of the accessory structure may not change from that permitted. A statement of the greater flood risk and possibly higher flood insurance premiums must be included. In addition, a recordation on the deed or Memorandum of Land Restriction must be made as described in Section 7.2, stating that the permitted structure may not be used for human habitation without first complying with the construction requirements of this Ordinance and must be equipped with the proper water equalizing vents.

Section 3.6 - Fees

A fee may be charged at the time of application.

Section 3.7 - Penalties

Any person who fails to comply with any or all of the requirements or provisions of this Ordinance or direction of the Garrett County Planning and Zoning Office or any other authorized employee of Garrett County shall be guilty of a misdemeanor and subject to a fine of not more than \$500.

Each day during which any violation of this Ordinance continues shall constitute a separate offense.

The imposition of a fine or penalty for any violation of or non-compliance with this Ordinance shall not excuse the violation or non-compliance or permit it to continue, and all such persons shall

be required to correct or remedy such violations and non-compliance within a reasonable time.

Any structure constructed, reconstructed, enlarged, altered, or re-located in non-compliance with this Ordinance shall be declared by Garrett County to be a public nuisance and abateable as such.

The Federal Insurance Administrator and the Maryland Water Resources Administration shall be notified immediately in writing of any structure or property built or being used in violation of this Ordinance, including failure to submit as-built elevation certificates.

New or renewal National Flood Insurance shall be denied for any structure remaining in violation or situated on property in violation of this Ordinance.

Article IV - Establishment of Floodplain Zones**Section 4.1 - Identification of Flood Zones**

The regulatory floodplain shall be those areas of Garrett County which are subject to the 100-year flood, delineated on the most recent revision of the community's Floodway maps and Flood Insurance Rate Maps (FIRM) and described in the Flood Insurance Study (FIS) prepared by the Federal Emergency Management Agency (FEMA). Floodway Maps and the FIS, if available for the community, must be used.

Section 4.2 - Floodplain Zones

A community may have these nontidal floodplain zones:

- A. Floodway Fringe; that part of the floodplain outside of the floodway.
- B. Floodway: reserved to carry the waters of the 100-year flood.

Nontidal floodplains may have detailed engineering study data, profiles, and water surface elevations, or may have approximate delineations only.

Section 4.3 - Floodplain Boundaries**Floodplain Zone Determination**

The local permitting official will determine the Floodplain zone in which the development activity is proposed using the Floodway Maps and FIS if available, or, if not, by using the FIRM. Without prior approval from FEMA, the community shall use no other data to enforce floodplain management regulations. Where map boundaries and elevations disagree, elevations prevail, with no approval from FEMA required.

Approximate Floodplain Determination

For development proposed in the approximate floodplain (no water surface elevations or floodway data provided), the applicant must use the best available information to determine the elevation of the 100-year flood and the extent of the floodway, and must delineate these on the site plan submitted for approval. For new subdivisions, the applicant must have the 100-year flood elevations certified by a registered professional engineer based on hydrologic and hydraulic analyses which include a floodway analysis. For individual lot development, if no data are available, the point-on-the boundary method may be used. In this method, the distance is scaled from a reference point at the site to the edge of the 100-year floodplain boundary indicated on the FIRM. An elevation of the 100-year flood is determined at that point by survey.

Article V - Development Regulations in Floodplain Zones

In order to prevent excessive flood damage and to allow for the protection of the natural and beneficial floodplain functions, the following provisions shall apply to all development, new construction, and substantial improvements to existing structures in all floodplain zones. If a structure is in more than one zone, the more stringent provisions shall apply to the entire structure. The specific requirements contained in Article VI also apply to development in this Article. Any approved development shall comply with all other zoning, environmental, water quality and sanitary regulations, as well as applicable State and federal requirements.

Watercourses

In all floodplain zones, any development which proposes to alter a watercourse must obtain a variance. All conditions for encroachment in the floodway must be met and adverse impacts to aquatic resources must be minimized. Adjacent communities and property owners, FEMA, and the Maryland Water Resources Administration must be notified by the applicant before any modification may occur to watercourses. Any activity falling within the 100-year nontidal floodplain may require a waterway construction permit from the Water Resources Administration.

Wetlands

Encroachment by development into wetlands is not allowed without State and federal permits. It is State and federal policy that disturbance of wetlands shall be avoided. The applicant must demonstrate that no alternatives exist and the encroachment is the minimum necessary. Mitigation may be required by the appropriate regulatory authorities.

Sediment and Stormwater Management

Any land disturbance permitted in the floodplain must have a stormwater management and sediment and erosion control plan as required by State and local regulations. The plan must include design of land contours that will not increase surface water runoff onto neighboring properties. Ground cover must be established immediately after disturbance.

Part A. Floodway Fringe zone

Section 5.1 - General

Development may not occur in the floodplain where alternative locations exist due to the inherent hazards and risks involved. Before a permit is issued, the applicant shall demonstrate that new structures cannot be located out of the floodplain and that encroachments onto the floodplain are minimized.

Section 5.2 - Elevation Requirements - New and Substantially Improved Structures

Residential Structures

All new or substantially improved residential structures, including manufactured homes, shall have the lowest floor elevated to or above the Flood Protection Elevation. Basements are not permitted. The elevation of the lowest floor shall be certified by a registered surveyor or professional engineer on the Elevation Certificate, after the lowest floor is in place. Enclosures below the Flood Protection Elevation must be constructed with water equalizing vents to meet the specifications of Section 6.2. Improvements which are less than substantial shall be constructed to minimize damage during flooding or shall be elevated to the greatest extent possible.

Nonresidential Structures

All new or substantially improved nonresidential structures shall either be elevated as set forth above for residential structures or shall be floodproofed. Floodproofing designs must insure that areas below the Flood Protection Elevation are watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If the floodproofing option is chosen, a Floodproofing Certificate must be completed by a registered professional engineer or architect who shall review the design and specifications and certify that the nonresidential structure will meet this standard. State regulations do not allow basements in nonresidential buildings in the nontidal floodplain.

Section 5.3 - Fill

The placement of more than 600 cubic yards of fill per parcel/lot in the floodplain is prohibited except by variance. Elevating buildings by other methods must be considered unless 600 cubic yards or less of fill are required. An applicant shall demonstrate that fill is the only alternative to raising the building to at least the Flood Protection Elevation, and that the amount of fill used will not affect the flood storage capacity or increase flooding onto neighboring properties.

In the event buildings on adjacent properties are known or determined to be subject to flooding under current conditions, the local permitting official may require submission of hydrologic and hydraulic analyses to adequately demonstrate the effects of the proposed fill. The conditions described in Section 6.8 must be met whenever fill is used.

Section 5.4 - Subdivision Requirements

In any Floodplain area, lots may be subdivided only if each new lot has a buildable site outside the boundary of the One Hundred (100) Year

Floodplain. All proposals and applications for the subdivision of land and/or new development in any Floodplain area shall include a plan drawing showing the location of all existing and proposed public and private utilities, facilities, drainage structures, and road access. If the One Hundred (100) Year Flood Elevation(s) have been determined by the Flood Insurance Study or other reliable source approved by the Water Resources Administration, such Flood Elevation(s) shall be delineated on the proposed plan. If the proposal involves more than fifty (50) lots or greater than five (5) acres and the One Hundred (100) Year Flood Elevation has not been determined for the land area, the developer shall determine the One Hundred (100) Year Flood Elevation and delineate such Flood Elevation on the proposed plan. All plans shall be certified by a Registered Professional Engineer and shall be reviewed by the County to assure that:

1. All such proposals are consistent with the need to minimize flood damage;
2. All necessary permits have been received from the State of Maryland, Water Resources Administration and appropriate Federal agencies;
3. All public and private utilities and facilities (including sewer, water, telephone, electric, gas, etc.) are located, constructed and floodproofed to minimize or eliminate flood damage;
4. Adequate drainage is provided to reduce exposure to flood hazards;
5. At least one access which, during the One Hundred (100) Year Flood, shall provide safe vehicular access to and egress from the subdivision and/or new development; and
6. Adequate measures have been taken to minimize adverse environmental impacts of the proposed development.

Part B - Floodway Zone

Section 5.5 - General

Floodways shall be preserved to carry the discharge of the 100-year flood. Floodways present increased risks to human life and property because of their relatively faster and deeper flowing waters. Fill shall not be permitted. New residential structures shall not be permitted. Other new development shall not be permitted in the floodway except where the lowest floor of the new structure is at or above the Flood Protection Elevation (FPE) and the effect of such development on flood heights is fully offset by accompanying stream modification in accord with Section 5.7 and the development is approved by the Maryland Water Resources Administration through the issuance of a Waterway Construction Permit and when necessary, the U.S. Army Corps of Engineers. Any development in the floodway which may result in any increase in water surface elevations or change to the floodway must be submitted to FEMA for a Conditional Letter of Map Revision. Hydrologic and hydraulic analyses based on existing floodway

models and performed in accordance with standard engineering practices and certified by a registered professional engineer must be submitted. Failure to receive this letter shall be grounds for denial of the permit. An alternative analysis must be prepared for any development in the floodway before a permit may be issued. The provisions of Part A above, as well as Part B, apply to floodways.

Section 5.6 - Alternative Analysis Requirement

Before a permit may be issued, an applicant shall submit an alternative analysis which demonstrates that:

- a. No reasonable alternatives exist outside the floodway;
- b. Encroachment in the floodway is the minimum necessary;
- c. The development will withstand the 100-year flood without significant damage; and
- d. The development will not increase downstream or upstream flooding or erosion.

Section 5.7 - Existing Structures

Existing structures in the Floodway shall not be substantially improved (more than 50% of market value) or replaced unless the lowest floor of the structure is elevated at or above the Flood Protection Elevation (FPE) and the effect of the proposed development or improvement on flood heights is fully offset by accompanying stream modifications. All proposals to offset the effects of building in the Floodway by construction of stream modifications, shall be documented by an engineering study prepared by a Registered Professional Engineer which fully evaluates the effects of such construction and shall be submitted to the Maryland Water Resources Administration. The report shall use the Flood Insurance Study and the Flood Insurance Rate Maps as prepared by the Federal Emergency Management Agency and adopted herein as the basis of the analysis. The County shall not issue any permit for construction in the Floodway until it has received written notice from the Maryland Water Resources Administration that a waterway construction permit for the proposal has been approved.

The placement of any manufactured homes or buildings in the Floodway shall be prohibited except where the manufactured home is replacing an existing manufactured home of equal dimensions, has a lowest floor which is one (1) foot above the elevation of the One Hundred (100) Year Flood, and has no effect on flood heights. Such replacement must be approved by the Water Resources Administration through the issuance of a Waterway Construction Permit.

Section 5.8 - Maintenance of Natural Channel

The natural watercourse shall be maintained for protection of aquatic resources. A variance is required for alteration of watercourses. Any variance issued must assure that the conditions for encroachment in the floodway are met, adverse impacts to aquatic resources are minimized, and the public good outweighs the adverse impacts. The provisions of Article V pertaining to altering a watercourse must be met.

Section 5.9 - Obstructions

Structures or fill which may impede, retard, or change the direction of the flow of flood waters, or any materials that may be carried downstream to cause damage shall not be placed in the floodway. Fences, except two wire fences, shall not be placed in the floodway.

Article VI - Specific Requirements

In addition to the requirements outlined in Article V, the following specific requirements must be applied.

Section 6.1 - Placement of Buildings and Materials

In general, buildings and accessory structures should be located entirely out of the floodplain, or on land that is least susceptible to flooding. All structures permitted in the floodplain shall be oriented so as to offer the least resistance to the flow of flood waters. Materials which are buoyant, flammable, explosive, hazardous to health, or which at times of flooding may be injurious to human, animal, or plant life, shall not be stored below the Flood Protection Elevation.

Section 6.2 - Enclosures Below Lowest Floor

Buildings which have been elevated and have fully enclosed areas below the Flood Protection Elevation (other than basements), as well as garages and accessory structures which are not elevated (Section. 6.6), shall be constructed with water equalizing vents which meet or exceed the following standards:

- a. a minimum of two openings on different walls having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
- b. the bottom of all openings shall be no higher than one foot above grade; and
- c. openings may be equipped with screens, louvers, valves, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters to equalize hydrostatic forces on the walls.

Fully enclosed areas below the Flood Protection Elevation shall be used solely for parking of vehicles, access to the building, or storage. If such areas are enclosed, a Nonconversion Agreement as described in Section 3.5 must be signed by the applicant.

Section 6.3 - Manufactured Homes and Manufactured Home Parks

New manufactured homes and manufactured home parks are prohibited in the floodway except for replacement units as specified in Section 5.7. In the floodway fringe, all new, replacement, or substantially improved manufactured homes, whether in a manufactured home park or not, shall comply with Section 5.2 of this Ordinance.

Methods of anchoring shall include use of over-the-top and frame ties to ground anchors. Pilings or columns shall be used to maintain storage capacity of the floodplain. Concrete block support pilings must be reinforced by filling the hollows with cement, placing reinforcing bars inside and extending them into the footing, and using mortar to cement the blocks together. FEMA Publication 85, "Manufactured Home Installation in Flood Hazard Areas", should be consulted for specific recommendations.

Manufactured homes repaired or replaced because of substantial damage due to flooding or other causes must fully comply with Section 5.2.

Owners of manufactured home parks or subdivisions that are partially or fully within the floodplain must file an evacuation plan with the local emergency management agency. A flood free access road shall be provided in all new manufactured home parks and subdivisions.

Section 6.4 - Anchoring

All structures shall be firmly anchored in accordance with acceptable engineering practices to prevent flotation, collapse, and lateral movement during flooding. All air ducts, large pipes, and storage tanks located below the Flood Protection Elevation shall be firmly anchored to resist flotation.

Section 6.5 - Utilities

Electric

All electric utilities to the building side of the meter, both interior and exterior to the building, are regulated by this Ordinance. Distribution panel boxes must be at least 2 feet above the Flood Protection Elevation. All outlets and electrical installations, such as heat pumps, air conditioners, water heaters, furnaces, generators, distribution systems, must be installed at or above the Flood Protection Elevation.

Plumbing

Toilets, sinks, showers, water heaters, pressure tanks, furnaces, and other permanent plumbing installations must be installed at or above the Flood Protection Elevation.

Gas

Gas meters, distribution lines, and gas appliances must be installed at or above the Flood Protection Elevation.

Water Supply and Sanitary Facilities

Water supply distribution and sanitary disposal collection systems must be designed to minimize or eliminate the infiltration of flood waters into the systems or discharges from the systems into Flood waters and shall be located and constructed so as to minimize or eliminate flood damage. On-site sewage disposal systems including septic tanks, cesspools, seepage pits, and drain fields are prohibited in all floodplain zones.

Section 6.6. - Accessory Structures and Garages

Where feasible, accessory structures and garages should be located out of the floodplain or elevated to or above the Flood Protection Elevation. When these measures are not feasible the following apply:

- a. The floor of the structure must be at or above grade;
- b. The structure must be located, oriented, and constructed so as to minimize flood damage; and
- c. The structure must be firmly anchored to prevent flotation.

Attached Garages

A garage attached to the main structure shall be elevated to the greatest extent possible, but may be permitted as an exemption to the strict elevation requirement if it is used solely for parking of vehicles, storage, or building access and is no more than 600 feet feet in area. Attached garages must meet the venting requirements of Section 6.2, have all interior walls, ceilings, and floors below the Flood Protection Elevation unfinished, and have no machinery or electric devices or appliances located below the Flood Protection Elevation. A nonconversion Agreement as described in Section 3.5 must be signed by the property owner stating that the garage may never be used for human habitation without first becoming fully compliant with this Ordinance.

Detached Garages and Accessory Structures

An accessory structure or detached garage may be permitted as an exemption to the elevation requirement if it is less than 300 square feet, used solely for parking of vehicles and limited storage, meets the venting requirements of Section 6.2, has all interior wall, ceiling, and floor elements below the Flood Protection Elevation unfinished, and has no machinery, electric devices, or appliances located below the Flood Protection Elevation. A Nonconversion Agreement must be signed by the property owner.

An accessory structure or a detached garage between 300 square feet and 600 square feet may be permitted below the Flood Protection Elevation only by a conditioned permit described in Section 3.5.

An accessory structure or garage larger than 600 square feet in area must be elevated properly or be able to meet all applicable requirements under the variance procedure in Section 7.1 of this Ordinance.

Section 6.7 Recreational Vehicles

Recreational vehicles located within the floodplain may be exempted from the elevation and anchoring requirements provided they are:

- a. Located on the site less than 180 consecutive days per year;
- b. Fully licensed and ready for highway use; and
- c. Properly permitted.

A recreational vehicle is ready for highway use if it is on its wheels and jacking system, is attached to the site only by quick disconnect type utilities and securing devices, and has no permanently attached additions. If it cannot meet all of these criteria, the recreational vehicle must be considered a manufactured home and is subject to the elevation and construction standards of this Ordinance.

Section 6.8 - Fill

Fill is discouraged because storage capacity is removed from floodplains. Other methods of elevating structures should be considered first, and fill used only if other methods are not feasible. Fill may not be placed in the floodway. Fill may not be placed in nontidal wetlands without the required State and federal permits.

Fill must consist of soil and rock materials only. Dredged material may be used as fill only upon certification of suitability by a registered professional geotechnical engineer. Landfills, rubble fills, dumps and sanitary fills are not permitted in the floodplain.

Fill used to support structures must be compacted to 95% of the maximum density obtainable by the Standard Proctor Test (ASTM Standard D-698), and its suitability to support structures certified by a registered professional engineer. Fill slopes shall be no greater than two horizontal to one vertical. Flatter slopes may be required where velocities may result in erosion.

The use of fill shall not increase flooding or cause drainage problems on neighboring properties.

Article VII - Variances

Section 7.1 - Reasons for Granting

The local permitting official shall review requests for variances from the requirements of this Ordinance. Conditions may be attached to the variance action, and variance actions must be consistent with sound floodplain management. Variances may not be issued except as specified below, nor shall variances be issued for an encroachment in floodways if any increase in the 100-year flood levels will result.

Variances shall only be issued upon:

- a. A showing of good and sufficient cause;
- b. A determination that failure to grant a variance would result in exceptional hardship (other than economic) to the applicant; and
- c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud or victimization of the public, or conflict with existing local and State laws or ordinances.

The variance action shall be the minimum necessary, considering the flood hazard, to afford relief. In considering a variance action, comments from the State Coordinating Office of the Water Resources Administration must be taken into account and maintained with the permit file.

Section 7.2 - Conditions

Variances may not be granted for the following:

- a. Placement of fill or any development in the floodway if any increase in flood levels would result; or
- b. New buildings in the floodway.

For any variance issued, a letter shall be sent to the applicant indicating the terms and conditions of the variance, the increased risk to life and property in granting the variance, and the increased premium rates for National Flood Insurance coverage. The applicant shall be notified in writing of the requirement for recordation of these conditions on the deed or Memorandum of Land Restriction prior to obtaining a permit, and of the need to secure all necessary permits as conditions for granting a variance. The Memorandum is described in Article 3-102 and 3-103 of the Real Property Article of the Annotated Code of Maryland.

The local permitting official shall maintain a record of all variance actions and the justification for their issuance, as well as all correspondence. This record must be submitted as a part of the Biennial Report to FEMA, and be available for periodic review. The number of Variance actions should be kept to a minimum.

Section 7.3 - Functionally Dependent Uses

Variations may be issued for new construction and substantial improvements for the conduct of a functionally dependent use. A functionally dependent use cannot perform its intended purpose unless it is located or carried out in close proximity to water. It 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. The variance may be issued only upon sufficient proof of the functional dependence. The provisions of Section 7.1 and 7.2 must be met and the structure must be protected by methods that minimize flood damage up to the Flood Protection Elevation and must create no additional threats to public safety. This may require methods of "wet floodproofing" which allow the structure to flood without significant damage. Methods of floodproofing must not require human intervention.

Article VIII - Amendments

This Ordinance shall be amended as required by the Federal Emergency Management Agency, 44 Code of Federal Regulations. All subsequent amendments to this Ordinance are subject to approval of the Federal Emergency Management Agency and the Maryland Department of Natural Resources.