DRAFT
County Floodplain Management Ordinance
December 21, 2012

Talbot County has participated since 1985 in the National Flood Insurance Program (NFIP), which makes flood insurance available to property owners in participating communities. In return, local governments must adopt ordinances to manage development within floodplains to prevent increased flooding and minimize future flood damage. Floodway and Flood Insurance Rate Maps (FIRMs) published by the Federal Emergency Management Agency (FEMA) are used to identify regulated floodplains.

FEMA is currently updating Talbot County's Flood Insurance Rate Maps. To continue participating in the National Flood Insurance Program, Talbot County must update its Floodplain Management Ordinance to accurately reflect current federal and state requirements. The updated ordinance must take effect within six months of FEMA's acceptance of the revised FIRMs.

This draft is presented as an entirely new ordinance, rather than revisions to the County's current Floodplain Management Ordinance, because of the extensive reorganization and revisions. The basis of this ordinance is the August, 2011 Model Floodplain Management Ordinance prepared by the Maryland Department of the Environment. While there are some substantive revisions, many of the revisions update terminology and procedures and incorporate federal or state policies and regulations that are already in effect.

A "track changes" version is available that shows where this draft ordinance differs from the Model Floodplain Management Ordinance. Supplemental materials are also available that note key differences in requirements between this draft and the current ordinance.

The Talbot County Planning Commission will hold public hearings on this proposed Floodplain Management Ordinance on January 2, 2013, at 9:30 a.m. and January 9, 2013 at 5:30 pm, at the Talbot County Courthouse, Bradley Meeting Room, 11 North Washington Street, Easton, MD, 21601. After the Planning Commission makes its recommendation, legislation will be prepared for County Council consideration.

For assistance, please contact the Talbot County Office of Planning and Permits at 410-770-8030.

This draft ordinance and supplemental materials were prepared for Talbot County by Environmental Resources Management, Inc., under award number NA 11 NOS4190 151 from the Office of Ocean and Coastal Resource Management COCRM), National Oceanic and Atmospheric Administration CNOAA), through the Maryland Department of Natural Resources Chesapeake and Coastal Program. The statements, findings, conclusions and recommendations are those of the author(s) and do not necessarily reflect the views of NOAA or the U.S. Department of Commerce.

Talbot County
Preliminary Draft

Floodplain Management Ordinance

December 21, 2012

Contents

Chapter 70. Floodplain Management
Talbot County, Maryland

ARTICLE I GENERAL PROVISIONS

70-1. Findings

A. The *Federal Emergency Management Agency (FEMA)* has identified *special flood hazard areas* within Talbot County. *Special flood hazard areas* are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare. *Structures* that are inadequately elevated, improperly *floodproofed*, or otherwise unprotected from *flood* damage also contribute to *flood* losses.

B. *Floodplains* perform vital natural functions such as temporary storage of floodwaters, moderation of peak flood flows, water quality maintenance, groundwater recharge, erosion control, wildlife habitat, recreational opportunities, and improved aesthetics. 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. Decisions to alter *floodplains*, especially *floodways* and stream channels, should be carefully planned and the resource consequences and human needs carefully balanced.

~~A.~~C. This chapter provides a comprehensive approach to *floodplain* management addressing natural *floodplain* functions and the federal and state *floodplain* management programs. These programs are: the *National Flood Insurance Program* (44 CRF 59-79); the State Wetlands and Waterway Program; U.S Army Corps of Engineers' Section 10 and 404 Permit Programs; and the State Coastal Zone Management Program.

~~B.~~D. Talbot County, by resolution, agreed to meet the requirements of the *National Flood Insurance Program* and was accepted for participation in the program on ~~[DATE OF REGULAR PROGRAM ENTRY]~~May 15, 1985. The effective date of Talbot County's Floodplain Management Ordinance was June 11, 1985. As of ~~that date or as of [DATE OF FIRST EFFECTIVE *FIRM*] the initial effective date of the Talbot County *Flood Insurance Rate Map*~~June 11, 1985, all *development* and *new construction* as defined herein, ~~are~~ are to comply with these regulations.

70-2. Statutory Authorization

~~The Maryland General Assembly, in Article 66B, Section 4, General Development Regulations and Zoning (Annotated Code of Maryland), has established as policy of the State that the orderly development and use of land and structures requires comprehensive regulation through the implementation of planning and zoning control, and that planning and zoning controls shall be~~

~~implemented by local government in order to, among other purposes, secure the public safety, promote health and general welfare, and promote the conservation of natural resources.~~ Talbot County is organized pursuant to Art. XI-A of the Maryland Constitution and derives its authority for planning and land use regulation from Article 25A §5, Maryland Annotated Code and certain provisions of the Land Use Article of the Maryland Annotated Code, Division I, Title 1, Subtitle 4. ~~Therefore,~~ Pursuant to its authority, the County Council of Talbot County does hereby adopt this Chapter 70 of the Talbot County Code. ~~the following floodplain management regulations.~~

70-3. ~~Statement of~~ Purpose

It is the purpose of these regulations to promote the public health, safety and general welfare, and to:

A. Protect human life, health, property and welfare;

B. Encourage the ~~utilization~~ use of appropriate construction practices in order to prevent or minimize future *flood* damage ~~in the future~~;

C. Minimize *flooding* of water supply and sanitary sewerage disposal systems;

D. Maintain natural drainage;

E. Reduce financial burdens imposed on the ~~*community*~~ *County*, its government~~al units~~ and its residents, by discouraging unwise design and construction of *development* in areas subject to *flooding*;

F. Minimize the need for rescue and relief efforts associated with *flooding* and generally undertaken at the general public's expense ~~of the general public~~;

G. Minimize ~~prolonged~~ business interruptions;

H. Minimize damage to public facilities and other utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges;

I. ~~Reinforce~~ Educate~~that~~ those who build in and occupy *special flood hazard areas* in the need to ~~should~~ assume responsibility for their actions;

J. Minimize ~~the~~ development impacts ~~of *development*~~ on adjacent properties within and near *flood*-prone areas;

K. ~~Provide~~ Maintain~~that~~ the *flood* storage and conveyance functions of *floodplains* ~~are maintained~~;

L. Minimize the impact of *development* on the natural and other beneficial functions of *floodplains*;

M. Prevent *floodplain* uses and structures that are either *hazardous* or environmentally incompatible; and

N. Meet ~~community participation requirements of~~ the *National Flood Insurance Program's* participation requirements as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.

70-4. ~~Areas to Which These Regulations Apply~~Compliance Required

~~These regulations shall apply to all *special flood hazard areas* within the jurisdiction of the Talbot County, and identified in Section 1.5.~~These regulations apply to all *special flood hazard areas* within the unincorporated areas of Talbot County, as identified in Section 70-12, *Flood Insurance Rate Map* Use and Interpretation.

A. All *development* shall fully comply with these regulations and all other applicable regulations.

B. A permit is required for *development* in a *special flood hazard area*. Failure to obtain a permit shall be a *violation* of these regulations and shall be subject to penalties in accordance with Section 70-48, Enforcement.

C. Permits issued on the basis of plans and applications approved by the Floodplain Administrator authorize only the specific activities set forth in the approved plans and applications. *Development* activities contrary to that authorization are a *violation* of these regulations.

~~**1.5** Basis for Establishing Special Flood Hazard Areas and BFEs~~[J1]

~~(A) Basis for Establishing Special Flood Hazard Areas and BFEFor the purposes of these regulations, the minimum basis for establishing *special flood hazard areas* and *base flood elevations* is the *Flood Insurance Study* for [TITLE OF *FIS*] dated [DATE OF *FIS*], or the most recent revision thereof, and the accompanying *Flood Insurance Rate Map(s)* and all subsequent amendments and revisions to the *FIRMs*. The *FIS* and *FIRMs* are retained on file and available to the public at the INSERT LOCATION].~~

~~(B) Where field surveyed topography or digital topography indicates that ground elevations are below the closest applicable *base flood elevation*, even in areas not delineated as a special flood hazard on the *FIRM*, the area shall be considered as *special flood hazard area*.~~

~~(C) To establish *base flood elevations* in *special flood hazard areas* that do not have such elevations shown on the *FIRM*, the Floodplain Administrator may provide the best available data for *base flood elevations*, may require the applicant to obtain available information from Federal, State or other sources, or may require the applicant to establish *special flood hazard areas* and *base flood elevations* as set forth in Section 3.3, Section 3.4, and Section 3.5 of these regulations.~~

70-5. Abrogation and Greater Restrictions

These regulations are not intended to repeal or abrogate any existing regulations and ordinances, including subdivision regulations, zoning ordinances, *building codes*, or any existing easements,

covenants, or deed restrictions. In the event of a conflict between these regulations and any other ordinance, the more restrictive shall govern.

70-6. Interpretation

A. In the interpretation and application of these regulations, all provisions shall be:

(1) Considered as minimum requirements;

(2) Liberally construed in favor of the governing body; and,

(3) Deemed neither to limit nor repeal any other powers granted under state statutes.

B. The following~~Notes referencing~~ publications of the *Federal Emergency Management Agency* provide useful guidance in understanding and applying these regulations. This list is intended to refer to the most recent edition of those publications. They~~,~~ are intended only as guidance, and do not bind or alter the authority of the Floodplain Administrator to interpret and apply these regulations.

(1) *Managing Floodplain Development in Approximate Zone A Areas: A Guide for Obtaining and Developing Base (100-Year) Flood Elevations"* (FEMA 265)

(2) *Protecting Manufactured Homes from Floods and Other Hazards: A Multi-Hazard Foundation and Installation Guide* (FEMA P-85)

(3) *Coastal Construction Manual* (FEMA 55)

(4) NFIP Technical Bulletin #1, *Openings in Foundation Walls and Walls of Enclosures*

(5) NFIP Technical Bulletin #2, *Flood Damage-Resistant Materials Requirements*

(6) NFIP Technical Bulletin #5, *Free-of-Obstruction Requirements*

~~(1)~~

C. Terms in this ordinance that are in italics are defined in Article VIII, Definitions.

70-7. Warning and Disclaimer of Liability

The degree of *flood* protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger *floods* can and will occur, and *flood* heights may be increased by man-made or natural causes. These regulations do not imply that land outside of the *special flood hazard areas* or uses that are permitted within such areas will be free from *flooding* or *flood* damage.

These regulations shall not create liability ~~on the part of~~ for ~~the~~ Talbot County, any officer or employee thereof, the Maryland Department of the Environment (MDE) or the *Federal Emergency Management Agency* (FEMA), for any *flood* damage that results from reliance on these regulations or any administrative decision lawfully made hereunder.

70-8. Severability

Should any section or provision of these regulations be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the regulations as a whole, or any part thereof other than the part so declared to be unconstitutional or invalid.

70-9. Effective date and subsequent amendments[J2]

This Floodplain Management Ordinance was enacted on (insert date) with an effective date of (insert effective date.) The previously enacted Floodplain Management Ordinance, Chapter 70 of the Talbot County Code, adopted February 11, 1992, is hereby repealed. 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 the approval of the *Federal Emergency Management Agency* and the *Maryland Department of the Environment*.

~~SECTION 3.0 ADMINISTRATION~~

~~70-9.~~70-10. ~~Designation of the~~ Floodplain Administrator Designation

The ~~[AGENCY/OFFICE/POSITION DESIGNATED BY COMMUNITY]~~Director of Planning and Permits is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator. The Floodplain Administrator may:

A. Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.

B. Enter into a written agreement or written contract with another Maryland *community* or private sector entity to administer specific provisions of these regulations, subject to the approval of the Talbot County Council. Administration of any part of these regulations by another entity shall not relieve the ~~community~~ County 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.

~~70-10.~~70-11. Floodplain Administrator Duties and Responsibilities ~~of the Floodplain Administrator~~

The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:

A. Review permit applications ~~for permits~~ to determine whether proposed activities will be located in *special flood hazard areas*.

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. Approve applications and issue permits to develop in *flood* hazard areas if these regulations' provisions ~~of these regulations~~ have been met, or disapprove applications if these regulations' provisions ~~of these regulations~~ have not been met.

E. Inspect permitted ~~or cause to be inspected, buildings, *structures*, and other~~ *development* ~~for which permits have been issued~~ to determine compliance or noncompliance with these regulations ~~or to determine if non-compliance has occurred or *violations* have been committed~~.

F. Review *Elevation Certificate*s and other certificates and documentation; ~~and~~ require incomplete or deficient certificates to be corrected.

G. Submit to the ~~FEMA~~*Federal Emergency Management Agency*, or require applicants to submit to the ~~FEMA~~*Federal Emergency Management Agency*, data and information necessary to maintain ~~*FIRMs*~~*Flood Insurance Rate Maps*, including *hydrologic and hydraulic engineering analyses* prepared by or for ~~the [COMMUNITY]~~Talbot County, within six months of its availability ~~after such data and information becomes available~~ if the results ~~analyses~~ indicate changes ~~in~~ to *base flood elevation*s.

H. ~~Review~~ Determine if applications received ~~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 the *Maryland Department of the Environment* Wetlands and Waterways program~~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 *nontidal waters of the State*~~.

I. Verify for any proposed *watercourse* ~~that applicants proposing an *alteration* of a watercourse~~ that applicants have notified adjacent communities and the *Maryland Department of the Environment*~~DE (NFIP State Coordinator),~~ and have submitted copies of such notifications to ~~FEMA~~the *Federal Emergency Management Agency*.

J. Advise applicants for *new construction* or *substantial improvement* of *structures* that are located within an area of the Coastal Barrier Resources System established by the Coastal Barrier Resources Act that federal flood insurance is not available on such *structures*; these areas ~~subject to this limitation~~ are shown on *Flood Insurance Rate Maps* as Coastal Barrier Resource System Areas (CBRS) or Otherwise Protected Areas (OPA).

K. Maintain ~~and~~ permanent~~ly~~ administrative ~~keep~~ records ~~that are necessary for the administration of these regulations~~, including:

(1) *Flood Insurance Studies*, *Flood Insurance Rate Maps* (including historic studies and maps and current effective studies and maps) and *Letters of Map Change*; and

(2) Supporting d~~D~~ocumentation of permit reviews~~supporting issuance and denial of permits~~, *Elevation Certificate*s and~~, documentation of the elevation (in relation to the datum on the *FIRM*) to which *structures* have been *floodproofed,*~~ other required design certifications, *variances*, and enforcement records ~~of enforcement actions taken to correct *violations* of these regulations~~.

L. Enforce the regulations' provisions ~~of these regulations, investigate *violations*, issue notices of *violations* or stop work orders, and require permit holders to take corrective action~~.

M. Advise the ~~[BODY DESIGNATED TO HEAR VARIANCES]~~Talbot County Board of Appeals about ~~regarding the intent of~~ the~~se~~ regulations' intent and, for each *variance* application ~~for a *variance*~~, prepare a staff report and recommendation.

N. Administer the requirements ~~related~~ for~~to~~ proposed work on existing *building*s, including:

(1) Determination of *substantially damaged* ~~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*~~.

(2) Make reasonable efforts to notify ~~owners of~~ *substantially damaged structures'* owners of the ~~need to obtain a~~ permit required for ~~to~~ repair, rehabilitat~~e~~ion, or reconstruction, and

~~(2)~~(3) P~~p~~rohibit ~~the~~ non-compliant repair of *substantially damaged building*s except for temporary emergency ~~protective~~ measures necessary to secure a property ~~or stabilize a building or *structure*~~ to prevent additional damage.

O. Undertake~~, as determined appropriate by the Floodplain Administrator due to the circumstances,~~ other actions which may include but are not limited to:

~~P.~~(1) I~~i~~ssuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged *structures*;

~~Q.~~(2) C~~c~~oordinating with other federal, state, and local agencies to assist with substantial damage determinations;

~~R.~~(3) P~~p~~roviding ~~owners of~~ damaged *structure~~s~~'* owner~~s~~s information ~~related to the~~about the proper repair of damaged *structures* in *special flood hazard areas*; and

~~S.~~(4) ~~and~~ A~~a~~ssisting property owners with documentation necessary to file claims for Increased Cost of Compliance coverage under ~~*NFIP*~~ *National Flood Insurance Program* flood insurance policies.

~~T.~~ Notify the *Federal Emergency Management Agency* ~~when the corporate boundaries~~ of any ~~the [COMMUNITY]~~Talbot County boundary changes resulting from annexations by municipalities within the County; ~~have been modified and:~~

~~U.~~P. p~~P~~rovide a map that clearly delineates the new ~~corporate~~ County boundaries and the parcels annexed by the municipality ~~or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation~~.

~~V.~~Q. ~~Upon the request of~~ If ~~FEMA~~the *Federal Emergency Management Agency* requests, ~~complete and s~~ deliver ~~ubmit~~ a report ~~concerning~~ documenting the County's participation in the ~~*NFIP*~~ *National Flood Insurance Program* ~~which may request information regarding~~including the number of *building*s in the ~~*SFHA*~~*special flood hazard area*, and the number of permits ~~issued for *development* in the SFHA,~~ and ~~number of~~ *variances* issued for *development* in the ~~SFHA~~special flood hazard area.

~~70-11.~~70-12. ~~Use and Interpretation~~Flood Insurance Rate Map Use and Interpretation ~~of FIRMs~~

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*~~*Flood Insurance Rate Maps* and data[J3]:

A. The minimum basis for establishing *special flood hazard areas* and *base flood elevations* is the Talbot County *Flood Insurance Study* dated [DATE OF *FIS*], or its most recent revision, and the accompanying *Flood Insurance Rate Map(s)* and all subsequent amendments and revisions to the *Flood Insurance Rate Maps*. The *Flood Insurance Study* and *Flood Insurance Rate Maps* are available for public review at the Talbot County Office of Planning and Permits[J4] .

~~A.~~B. Where a certified field survey ~~field surveyed~~ or digital[J5] topography indicates that ground elevations:

(1) Are below the *base flood elevation*, even in areas not delineated as a *special flood hazard area* on a ~~*FIRM*~~*Flood Insurance Rate Maps*, the area shall be considered as *special flood hazard area* ~~and subject to the requirements of these regulations;~~.

(2) Are above the *base flood elevation*, and the area is mapped as a *special flood hazard area* on a *Flood Insurance Rate Map*, the area shall be regulated as a *special flood hazard area* unless the applicant obtains a *Letter of Map* ~~*Ch*~~*Change*~~*ange*~~ that removes the area from the *special flood hazard area*.

C. Where ~~In FEMA-identified~~ a *special flood hazard area*~~s~~ is identified on the *Flood Insurance Rate Map*, but ~~where~~ *base flood elevation*s and *floodway*s ~~data~~ have not been identified by the *Federal Emergency Management Agency*, ~~and in areas where FEMA has not identified *special flood hazard areas*, any other flood hazard data available from a Federal, State, or other source shall be reviewed and reasonably used.~~ the Floodplain Administrator may:

(1) Provide the best available data to determine the *base flood elevation*, or,

(2) Require an applicant to obtain information available from federal, state, or other sources, or

(3) If reliable data is not available, require an applicant for *development* within the *special flood hazard area* to document the *base flood elevation* and the elevation of the site using accepted engineering practices[J6].~~.~~ Appropriate methods include one of the following:

(a) Simplified engineering methods, as approved by the Floodplain Administrator, may be used to identify the *base flood elevation* for single-lot residential development or other development not requiring subdivision or a *major site plan*.

~~(3)~~(b) For subdivision of land or *major site plans*, a *hydrologic and hydraulic engineering analysis* shall be submitted to identify *base flood elevations*, such analyses shall be performed in accord with *Maryland Department of the Environment* and *Federal Emergency Management Agency*[J7] requirements and specifications.

~~B.~~D. *Base flood elevations* and designated *floodway* boundaries on ~~*FIRMs*~~*Flood Insurance Rate Maps* and in *Flood Insurance Studies* ~~*ISs*~~ shall take precedence over ~~*base flood elevations* and *floodway* boundaries by~~ any other sources, even if such sources show reduced *floodway* widths and/or lower *base flood elevations*, unless the applicant obtains a *Letter of Map Change* that removes the area from the *special flood hazard area*, revises the *base flood elevation* or moves the *floodway* boundary.

~~C.~~E. Other data sources ~~of data~~ shall be ~~reasonably~~ used if ~~such sources show~~ they result in increased *base flood elevations* and/or larger *floodway* areas than are shown on ~~*FIRMs*~~*Flood*

Insurance Rate Maps and in ~~FEMA~~*Federal Emergency Management Agency* ~~*FIS*~~*Flood Insurance Studies*.

~~D.~~F. If a ~~P~~preliminary *Flood Insurance Rate Map* and/or a ~~P~~preliminary *Flood Insurance Study* has been provided by ~~FEMA~~the *Federal Emergency Management Agency*:

~~(1) 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.~~

(1) Before a *Federal Emergency Management Agency* ~~Prior to the issuance of a~~ Letter of Final Determination ~~by FEMA~~is issued,

~~(2)~~(a) P~~the use of p~~reliminary *flood* hazard data shall be deemed the best available data as in ~~pursuant to Section 1.5(C)~~ paragraph (C) of Section 70-12, *Flood Insurance Rate Map* Use and Interpretation, and shall be used for locations where ~~no~~ *base flood elevations* and/or *floodway* areas are not provided on the effective ~~*FIRM*~~*Flood Insurance Rate Maps*.

(b) ~~Prior to issuance of a Letter of Final Determination by FEMA, the use of~~ P~~p~~reliminary *flood* hazard data ~~is permitted~~ may be used where the preliminary *base flood elevations* or *floodway* areas exceed the *base flood elevations* and/or designated *floodway* widths in existing Federal Emergency Management Agency *flood* hazard data ~~provided by FEMA~~.

(c) Such preliminary data may be subject to change and/or appealed to ~~FEMA~~the *Federal Emergency Management Agency*.

(2) After a Letter of Final Determination is issued by the *Federal Emergency Management Agency*, the preliminary *flood* hazard data shall be used and shall replace the earlier *Federal Emergency Management Agency flood* hazard data for administering these regulations.

~~(3)~~

ARTICLE II REQUIREMENTS IN ALL FLOOD HAZARD AREAS

~~70-12.~~70-13. Application of Requirements

The ~~general~~ requirements of this section apply to all *development* proposed within ~~all~~ *special flood hazard areas* identified in Section ~~1.5~~70-12, *Flood Insurance Rate Map* Use and Interpretation.

~~70-13.~~70-14. Subdivision ~~Proposals~~ and Development ~~Proposals~~

A. In all *flood zones*, subdivision and development proposals shall:

(1) ~~Subdivision proposals and *development* proposals shall~~ Bb~~b~~e designed ~~consistent with the need~~ to minimize *flood* damage to *structures* and the utilities serving them. ~~and are subject to all applicable standards in these regulations.~~

~~(2) Subdivision proposals and *development* proposals shall have utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.~~

~~(3)~~(2) ~~Subdivision proposals and *development* proposals shall~~ H~~h~~ave adequate drainage paths provided to reduce ~~exposure to~~ flood hazards and to guide floodwaters around and away from proposed *structure*s and utilities~~s~~.

~~(4)~~(3) ~~Subdivision proposals and *development* proposals containing at~~[J8] ~~least 5 lots or at least 5 acres, whichever is the lesser, that are~~If wholly or partially in *flood* hazard areas where *base flood elevation* data are not shown on the *Flood Insurance Rate Maps*, ~~provided by the Floodplain Administrator or available from other sources, shall~~ be supported by determinations of *base flood elevations* as required in paragraph (C) of Section ~~3.5~~70-12, *Flood Insurance Rate Map* Use and Interpretation. ~~of these regulations.~~

~~(5) Subdivision access roads shall have the driving surface at or above the *base flood elevation*.~~

B. In *special flood hazard areas* of *nontidal waters*, proposed subdivisions shall ~~*of the State*~~[J9]:

(1) P~~Subdivision proposals shall be laid out such that~~ lace proposed *building* pads ~~are located~~ outside of the *special flood hazard area* ~~and any portion of platted lots that include land areas that are below the *base flood elevation* shall be used for other purposes, deed restricted, or otherwise protected to preserve it as open space~~.

~~(1)~~(2) Preserve and dedicate the *flood* hazard area to natural buffer areas, open space, recreation, and similar compatible uses by deed restriction, restrictive covenants, or donation to a land trust. Steep slopes and forested areas adjacent to *watercourses* shall be given high priority for preservation.

(3) Place the driving surface of new, public s~~S~~ubdivision access roads ~~shall have the driving surface~~ at or above the *base flood elevation*.

C. Proposed subdivision in tidal water *special flood hazard areas* shall locate new lots on the highest natural land available before lower elevation lots are platted to the maximum extent possible. Clustering *development* outside of the *floodplain* and preserving the low-lying land and forested areas in natural vegetation should be pursued to the maximum extent possible.

~~70-14.~~70-15. ~~Protection of~~ Water Supply and Sanitary Sewage System Protection~~s~~

A. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems.

B. New and replacement sanitary sewerage systems shall be designed to minimize or eliminate floodwater infiltration ~~of floodwaters into~~ into systems and discharges from systems into floodwaters.

C. On-site waste disposal systems shall be designed and located to avoid floodwater infiltration impairment ~~to or contamination from them during conditions of~~ and contaminated discharges during *flooding*.

~~70-15.~~70-16. Building~~s~~ and Structure~~s~~ Protection

New ~~buildings and~~ *structures* ~~(including the placement and replacement of *manufactured homes*)~~ and *substantial improvement* of existing *structures* ~~(including *manufactured homes*[J10])~~ ~~that are~~ located, in whole or in part, in a~~ny~~ *special flood hazard area* shall:

A. Be designed (or modified) and constructed to safely ~~support~~ withstand *flood* loads reaching the *flood protection elevation* or the elevation required by the *building code*, whichever is greater~~.~~. Structures shall adhere to building code standards to ensure that t~~T~~he construction shall provide a complete load path ~~capable of~~ transferring all loads from their ~~from their point of~~ origin through ~~the load-resisting elements~~ to the foundation. *Structures* and their foundations shall be designed, connected and anchored to resist flotation, collapse or ~~permanent~~ lateral movement due to flood-induced structural loads and stresses.~~, including hydrodynamic and hydrostatic loads and the effects of buoyancy, from *flooding* equal to the *flood protection elevation* or the elevation required by these regulations or the *building code*, whichever is higher.~~

B. Be constructed by methods and practices that minimize *flood* damage, as specified in the *building code*.

C. Use *flood damage-resistant materials* below the elevation of the *lowest floor* required in Section ~~5.4(A) or Section 5.5(A)~~70-28, Residential Structures, or 70-29, Nonresidential Structures (for A Zones), or Section ~~6.3(B)~~70-34, Residential and Nonresidential Structures (for V Zones and *Coastal A Zones*).

D. ~~Have~~ Locate electrical systems, equipment and components, and mechanical, heating, ventilating, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment ~~located~~ at or above the *lowest floor* elevation ~~of the *lowest floor*~~ required in Section ~~5.4(A)~~ 70-28, Residential Structures, or 70-29, Nonresidential Structures~~or Section 5.5(A)~~ (A Zones), or Section ~~6.3(B)~~70-34, Residential and Nonresidential Structures (V Zones and *Coastal A Zones*). Electrical wiring ~~systems are~~ is permitted ~~to be located~~ below the *lowest floor* elevation ~~of the *lowest floor*~~ provided ~~they~~ it conforms to the *building code's* wet location provisions ~~of the electrical part of the *building code* for wet locations~~. ~~If replaced as part of a *substantial improvement*, electrical systems, equipment and components, and~~

~~heating, ventilation, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment shall meet the requirements of this section.~~

~~E.~~ Locate new ~~As~~[J11] ~~an alternative to paragraph (D), electrical systems, equipment and components, and heating, ventilating, air conditioning, and plumbing appliances, plumbing fixtures, duct systems, and other service equipment are permitted to be located below the elevation of the *lowest floor* provided they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to that elevation.~~

~~F.~~E. ~~Have the~~ electric panelboards ~~elevated at~~ least three (3) feet above the ~~*BFE*~~*base flood elevation*.~~.~~

~~G. If located in flood hazard areas (A Zones) that are not identified as *Coastal A Zones* and *coastal high hazard areas* (V Zones), comply with the specific requirements of Section 5.0.~~

~~H.~~F. If located in *Coastal A Zone*, comply with the specific requirements of:

(1) ~~Section~~ Article IV~~6.0~~ for ~~(~~ *new construction* and placement of new *manufactured homes*); or

(2) ~~Section 5.0 (~~Article V for *substantial improvements* (including repair of *substantial damage*) and replacement of *manufactured homes*~~)~~.

~~I. If located in *coastal high hazard areas* (V Zones), comply with the specific requirements of Section 6.0.~~

~~J.~~G. Comply with the requirements of the most restrictive designation if ~~located on a~~the site occupies ~~that has~~ more than one *flood zone* designation (A Zone, designated *floodway*, *Coastal A Zone*, V Zone).

~~70-16.~~70-17. ~~of Fill~~ Fill Placement[J12]

A. Disposal of fill of any type, including but not limited to ~~earthen~~ soils, rock, rubble, construction debris, woody debris, and trash, shall not be permitted in *special flood hazard areas*.

B. ~~Fill shall not be placed I~~in *Coastal A Zones* or *coastal high hazard areas* (V Zones) ~~except as provided in Section 6.2~~:~~.~~

(1) Fill placement for the purpose of elevating *buildings* is prohibited.

(2) Minor grading, and the placement of minor quantities of fill, not to exceed 50 cubic yards, shall be permitted for landscaping and drainage purposes under and around *building*s and for support of parking ~~surfaces~~surfaces, pool decks, patios and walkways.

~~(1)~~(3) Grading and the use of fill shall be minimized to the greatest extent possible.

C. Fill ~~proposed to be~~ placed to raise the ground level to elevate *structures* in *flood* hazard areas (A Zones) that are not *Coastal A Zones* or *coastal high hazard areas* (V Zones) shall comply with the *floodways* requirements in Section ~~5.3(A), Section 5.3(B), and Section 5.3(C) and~~ 70-26(A) and (B), and shall: ~~the limitations of Section 5.4(B~~[J13]~~).~~

(1) Consist of soil or rock only.

(2) Extend laterally from the *building* footprint to provide for adequate access; the Floodplain Administrator may seek advice from the State Fire Marshal's Office and/or the local fire services agency;

(3) Comply with *building code* requirements and be placed and compacted to provide stability under *flooding* conditions and to resist erosion, scour, and settling;

(4) Be sloped no steeper than one (1) vertical to two (2) horizontal, unless approved otherwise by the Floodplain Administrator;

(5) Be protected from erosion associated with expected velocities during the *base flood*. Unless approved by the Floodplain Administrator, fill slopes shall be vegetated if expected velocity is less than five feet per second, and protected by other means certified by a licensed engineer if expected velocity is five feet per second or more; and

(6) Be designed to have adequate drainage and no increase in flows to adjacent properties.

D. In tidal *special flood hazard areas*, if proposed fill will raise a parcel of land or a *structure* above the *base flood elevation*, the permit applicant must obtain a *Letter of Map Revision Based on Fill (LOMR-F)* from the *Federal Emergency Management Agency*. Submittal requirements and fees shall be the applicant's responsibility~~:~~.

~~B.~~

E. ~~T~~In *special flood hazard areas* of *nontidal waters*, for proposed *development* that includes fill, a hydraulically-equivalent excavation volume is required. Excavations shall be designed to drain freely.

~~70-17.~~70-18. Historic Structures

~~[SELECT ONE ALTERNATIVE]~~

~~[Alternative: "by variance" method] Repair, alteration, addition, rehabilitation, or other improvement of historic structures that does not conform with the requirements of this ordinance shall be permitted only by variance. Evidence submitted for consideration of the variance shall include a determination that the proposed work will not preclude the structure's continued eligibility or designation as a historic structure.~~

~~*[Alternative: "by definition" method]* R~~*Historic structure* repair, alteration, addition, rehabilitation, or other improvement ~~of *historic structures* shall be subject to the requirements of these regulations if the proposed work is determined to be a *substantial improvement*, unless~~ exempt from the requirements of this chapter, provided that [J14]~~a determination is made that~~ the proposed work will not preclude the *structure*'s continued designation as a *historic structure*. The Floodplain Administrator may require documentation of a *structure*'s continued eligibility ~~and~~ for designation as a *historic structure*.

~~70-18.~~70-19. Manufactured Homes

A. New *manufactured homes* shall not be placed or installed, and existing *manufactured homes* shall not be replaced or substantially improved, including repair after *substantial damage*, in *floodways* or *coastal high hazard areas* (V Zones[J15]).

~~A.~~B. In Coastal A areas, new *manufactured homes* are prohibited. Existing *manufactured homes* may be replaced, repaired, or *substantially improved*, including repair after *substantial damage*.

~~B. For the purpose of these regulations, the *lowest floor* of a *manufactured home* is the bottom of the lowest horizontal supporting member (longitudinal chassis frame beam[J16]).~~

C. In other *special flood hazard areas*, new or replacement *manufactured homes* are permitted, and *manufactured homes* may be *substantially improved*, subject to all requirements of this chapter.

~~C.~~D. ~~New *manufactured homes* located outside of *floodways* and *coastal high hazard areas* (V Zones), replacement *manufactured homes* in any flood hazard areas, and *substantial improvement* (including repair of *substantial damage*) of existing *manufactured homes* in all flood hazard area, shall~~Where permitted, *manufactured homes* that are new, replaced or *substantially improved* (including repair after *substantial damage*) shall:

(1) Be elevated on a permanent, reinforced foundation in accordance with ~~Section 5.0 or Section 6.0~~ Article IV or V~~, as applicable to the *flood zone*~~;

(2) Be installed in accordance with the *building code* and manufacturer's anchor and tie-down requirements ~~of the *building code* or the manufacturer's~~ and ~~written~~ installation instructions and specifications; and

(3) Have any *enclosures below the lowest floor* of the elevated *manufactured home*, ~~if any,~~ including ~~enclosures~~ those that are surrounded by rigid skirting or other material attached to the frame or foundation, ~~that~~ comply with ~~the requirements of Section 5.0 or Section 6.0~~Article IV or V~~, as applicable to the *flood zone*~~.

E. Owners of *manufactured home* parks or subdivisions that are partially or fully within a *special flood hazard area* must file an evacuation plan with the local emergency management agency.

~~D.~~F. New *manufactured home* parks or subdivisions in nontidal *floodplains* shall be designed and provided with an access road elevated above the *base flood elevation*. [J17]

~~[Note: See "Protecting Manufactured Homes from Floods and Other Hazards: A Multi-Hazard Foundation and Installation Guide" (FEMA P-85).]~~

~~70-19.~~70-20. Recreational Vehicle Protection~~s~~

A. *Recreational vehicles* shall:

~~A. Meet the requirements for *manufactured homes* in Section 4.7; or~~[J18]

(1) Be fully licensed and ready for highway use in accordance with B below; or

(2) Be on a site for less than ~~180~~ seven consecutive days[J19] subject to an approved Use Certificate in accordance with Section 190-100 and 190-119 of the Talbot County Zoning, Subdivision and Land Development Ordinance.~~.~~

B. 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.

~~70-20.~~70-21. Critical and Essential Facilities Protection

A. New *critical and essential facilities* shall be located outside *coastal high hazard areas* (V Zones).

B. If located in *special flood hazard areas* other than *coastal high hazard areas*, they shall be elevated to the higher of elevation required by these regulations plus one ~~(1)~~ foot, the elevation required by the *building code*, or the elevation of the 0.2 percent ~~chance~~ probability (500-year) *flood*.

~~70-21.~~70-22. Temporary Structures and Temporary Storage Protection

A. ~~In addition to the application requirements of Section 3.5, applications for the placement or erection of *temporary structures* and the temporary storage of any goods, materials, and equipment, shall specify the duration of the temporary use. *Temporary structures* and~~

~~temporary storage in *floodways* shall meet the limitations of Section 5.3(A) of these regulations. In addition:~~An application for a *temporary structure* or for temporary storage of any goods, material and equipment shall specify its duration.

~~A.~~B. *Temporary structures* and temporary storage in *floodways* shall meet the requirements of Section 70-26(A).

~~B.~~C. *Temporary structures* shall:

(1) Be designed and constructed to prevent flotation, collapse or lateral movement resulting from the base flood's hydrodynamic loads and hydrostatic loads ~~during conditions of the *base flood*~~;

(2) Have electric service installed in compliance with the electric code; and

(3) Comply with all other requirements of the applicable ~~applicable~~ federal, state and local permit authorities.

~~C.~~D. Temporary storage shall not include *hazardous materials*.

~~70-22.~~70-23. Gas or Liquid Storage Tanks Protection

A. Underground tanks in *special flood hazard areas* shall be anchored to prevent, during the *base flood,* flotation, collapse or lateral movement resulting from hydrostatic loads, including the effects of buoyancy~~, during conditions of the *base flood*~~.

B. Above-ground tanks in *special flood hazard areas* shall be anchored to a supporting structure and elevated to or above the ~~*base flood*~~*flood protection elevation*, or shall be anchored or otherwise designed and constructed to prevent, during the *base flood,* flotation, collapse, or lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.~~, during conditions of the *base flood*.~~

C. In *special flood hazard areas*, tank inlets, fill openings, outlets and vents shall be:

(1) At or above the *base flood elevation* or fitted with covers designed to prevent the ~~inflow of~~ floodwater inflow or tank content outflow ~~of the contents of the tanks~~ during conditions of the *base flood*; and

(2) Anchored to prevent, during the *base flood,* lateral movement resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy~~, during conditions of the *base flood*~~.

~~70-23.~~70-24. Functionally Dependent Uses Protection

~~Applications for~~ F~~f~~*unctionally dependent uses* must ~~that do not~~ conform to ~~the requirements of~~ these regulations; otherwise they shall be approved only by *variances* issued pursuant to ~~Section 7.0~~Article VI. If approved, *functionally dependent uses* shall be protected by methods that minimize *flood* damage during the *base flood*, including measures to allow floodwaters to enter and exit, use of *flood damage-resistant materials*, and elevation of electric service and equipment to the extent practical ~~given the use of the building~~.

ARTICLE III REQUIREMENTS IN FLOOD HAZARD AREAS OF NONTIDAL WATERS[J20]

~~70-24.~~70-25. ~~Flood Protection Setbacks~~Buffers[J21] along Non-Tidal Waters

Buffers shall be maintained along the banks of all *non-tidal waters* in accordance with the Zoning, Subdivision and Land Development Ordinance, Section 190-123, Buffers – Streams and Non-Tidal Wetlands – Non- Critical Area.

~~Within areas defined by *flood protection setbacks* along *nontidal waters of the State*:~~

~~A. No new buildings, *structures*, or other *development* shall be permitted unless the applicant demonstrates that the site cannot be developed without such encroachment into the *flood protection setback* and the encroachment is the minimum necessary after consideration of varying other siting standards such as side, front, and back lot line setbacks.~~

~~B. Disturbance of natural vegetation shall be minimized and any disturbance allowed shall be vegetatively stabilized.~~

~~C. Public works and temporary construction may be permitted.~~

~~70-25.~~70-26. Development that Affects Flood-Carrying Capacity of Nontidal Waters ~~of the State~~

A. Development in Designated Floodways

~~For~~[J22] ~~proposed *development* that will encroach into a designated *floodway*, Section 3.5(A)(7) requires the applicant to submit an evaluation of alternatives to such encroachment, including different uses of the site or the portion of the site within the *floodway*, and minimization of such encroachment. This requirement does not apply to fences that do not block the flow of floodwaters or trap debris.~~

Floodways shall be preserved to carry the *base flood* discharge. New *development* shall be located outside the *floodway* unless there is no practical alternative on site to *development* in the *floodway*. Proposed *development* in a *designated floodway* may be permitted only if:

~~(1)~~ T~~:~~

(1) ~~T~~he applicant has been issued a permit by *Maryland Department of the Environment*; and

~~(1)~~ T

(2) he permit application submitted to the Floodplain Administrator includes an evaluation of alternatives to such encroachment, including other site uses and/or use of other portions of the site, and options to minimize the encroachment; and,

~~(2)~~

(3) The applicant has developed *hydrologic and hydraulic engineering analyses* and technical data prepared by a *licensed* ~~professional~~ engineer that reflect~~ing~~ such changes and:

~~(a)~~

(a) ~~and the analyses, which shall be submitted to the Floodplain Administrator, demonstrate~~Document that the proposed activity will not result in any increase in the *base flood elevation*; or

~~(b)~~ Document that

(b) ~~If the analyses demonstrate that~~ the proposed activities will result in an increase in the *base flood elevation*, and the applicant has obtained a *Conditional Letter of Map Revision* or *Letter of Map Revision* from ~~FEMA~~the *Federal Emergency Management Agency* approving the increase in *base flood elevation*. Submittal requirements and fees shall be the applicant's responsibility ~~of the applicant~~.

(4) Fences, e.g. two-wire fences that do not block the water flow or trap debris, may be permitted without a *Maryland Department of the Environment* permit, an alternatives evaluation or an engineering analysis.

~~(c)~~

~~Development that Includes the Placement of Fill in Nontidal Waters of the State~~

~~For proposed *development* that includes the placement of fill in *nontidal waters of the State*, other than *development* that is subject to paragraph (D), a hydraulically equivalent volume of excavation is required. Such excavations shall be designed to drain freely.~~

B. Development in Areas with Base Flood Elevations without ~~but No~~ Designated Floodways

~~For~~ ~~*D*~~*development* in *special flood hazard areas* of *nontidal waters* ~~*of the state*~~ with *base flood elevations* and without ~~but no~~ designated *floodways* may be permitted only if the following conditions are met:

(1) The applicant has received a permit from *Maryland Department of the Environment*.

(2) The ~~applicant shall~~permit application submitted to the Floodplain Administrator includes ~~develop~~ *hydrologic and hydraulic engineering analyses* and technical data reflecting the proposed activity;

~~(1)~~(3) ~~and shall submit such technical data to the Floodplain Administrator as required in Section 3. 5(A)(6).~~ The analyses ~~shall be~~ in paragraph (2) above are ~~prepared by a *licensed* professional engineer~~ in a format required by ~~FEMA~~the *Federal Emergency Management Agency* for a *Conditional Letter of Map Revision* or *Letter of Map Revision*. Submittal requirements and fees shall be the applicant's responsibility ~~of the applicant~~; and,~~.~~

~~(2)~~(4) The ~~proposed *development* may be permitted if the applicant has received a permit by MDE and if the~~ analyses demonstrate that the proposed development's cumulative effect ~~of the proposed *development*~~, when combined with all other existing and potential flood hazard area encroachments, will not increase the *base flood elevation* more than one~~1.0~~ foot at any point.

C. Construction of Roads, Bridges, Culverts, Dams and In-Stream Ponds

~~Construction of~~ R~~r~~oad,~~s,~~ bridge~~s~~, culvert~~s~~, dam~~s~~, and in-stream pond~~s~~ construction in *nontidal waters* ~~*of the state*~~ shall ~~not be approved unless they~~ comply with this section. T~~ and t~~he applicant must ~~has~~ receive~~d~~ a permit from ~~MDE~~the *Maryland Department of the Environment*.

D. Watercourse Alteration ~~**of a Watercourse**~~

For ~~any~~ proposed *development* that involves *watercourse alteration* ~~*of a watercourse*~~ not subject to paragraph (B~~C~~), unless waived by *Maryland Department of the Environment*, the applicant shall develop *hydrologic and hydraulic engineering analyses* and technical data reflecting such changes, including the *floodway* analysis required in Section ~~3.5~~70-26(A), Development in Designated *Floodways*, and submit this ~~such technical~~ data to the Floodplain Administrator and to ~~FEMA~~the *Federal Emergency Management Agency*. The analyses shall be prepared ~~by a *licensed* professional engineer~~ in a format required by ~~*Maryland Department of the Environment* and by FEMA~~the *Federal Emergency Management Agency* for a *Conditional Letter of Map Revision* or *Letter of Map Revision*. Submittal requirements and fees shall be the responsibility of the applicant.

Watercourse a~~A~~lteration ~~of a watercourse~~ may be permitted ~~only~~ upon the applicant's submission~~, by the applicant,~~ of the following:

(1) A description of the extent of the proposed ~~to which the~~ *watercourse* alteration or relocation~~will be altered or~~

~~(1) relocated;~~

(2) A ~~certification by a~~ *licensed* ~~professional~~ engineer's certification that the *watercourse's* flood-carrying capacity ~~of the *watercourse*~~ will not be ~~diminished~~decreased;

(3) Evidence that adjacent communities, the U.S. Army Corps of Engineers, and *Maryland Department of the Environment* have been notified of the proposal, and evidence that such notifications have been submitted to ~~FEMA~~the *Federal Emergency Management Agency*; and

(4) Evidence that the applicant shall be responsible for ~~providing the necessary~~ maintenance of ~~for~~ the altered or relocated portion of the *watercourse* so that the *flood*-~~-~~carrying capacity will not be diminished. The Floodplain Administrator may require the applicant to enter into an agreement with Talbot County specifying the maintenance responsibilities; if an agreement is required, the permit shall be conditioned to require that the agreement be recorded on the property's deed ~~of the property~~ which shall be binding on future owners.

ARTICLE IV ~~REQUIREMENTS IN~~ FLOOD HAZARD REQUIREMENTS IN AREAS (A ZONES) ~~THAT~~ OTHER THAN ~~ARE NOT~~ COASTAL HIGH HAZARD AREAS (V ZONES) ~~OR~~ AND COASTAL A ZONES

~~70-26.~~70-27. General Requirements

~~In addition to the general requirements of Section 4.0, t~~This section's ~~e~~requirements ~~of this section~~ shall:

A. Apply in *special flood hazard areas* that are not identified as *coastal high hazard areas* (V Zones) and *Coastal A Zones*. These *flood* hazard areas, referred to collectively as "A Zones," include *special flood hazard areas* along *nontidal waters* ~~*of the state*~~, landward of *coastal high hazard areas* (V Zones), and landward of *Coastal A Zones* (if delineated).

B. Apply to all *development*, *new construction*, and *substantial improvements* (including repair of *substantial damage*)~~, and placement, replacement, and *substantial improvement* (including repair of *substantial damage*) of *manufactured homes*~~[J23].

~~70-27.~~70-28. Residential Structures and Residential Portions of Mixed Use Structures

New residential *structures* and residential portions of mixed use *structures*, and *substantial improvement* ~~(including repair of *substantial damage*)~~ of existing residential *structures* and residential portions of mixed use *structures*, shall comply with ~~the applicable requirements of Section 4.0 and~~ Article II and this section. See also Section ~~5.6~~70-30, Lateral Additions. ~~for requirements for horizontal additions.~~

A. Elevation Requirements

(1) *Lowest floors* shall be elevated to or above the *flood protection elevation*.

(2) In *areas of shallow flooding* (Zone AO), the *lowest floor* (including *basement*) shall be elevated at least as high above the *highest adjacent grade* as the *flood* depth number specified in feet on the ~~*FIRM*~~*Flood Insurance Rate Maps* plus two (2) feet, or at least four (4) feet if a *flood* depth number is not specified.

(3) *Enclosures below the lowest floor* shall meet the requirements of paragraph 70-28 (B~~C~~), Enclosures below the Lowest Floor.~~.~~

~~B. Limitations on Use of Fill to Elevate Structures~~[J24]

~~Unless otherwise restricted by these regulations, especially by the limitations in Section 5.3(A), Section 5.3(B), and Section 5.3(C), fill placed for the purpose of raising the ground level to support a building or *structure* shall:~~

~~(1) Consist of earthen soil or rock materials only.~~

~~(2) Extend laterally from the building footprint to provide for adequate access as a function of use; the Floodplain Administrator may seek advice from the State Fire Marshal's Office and/or the local fire services agency;~~

~~(3) Comply with the requirements of the *building code* and be placed and compacted to provide for stability under conditions of rising and falling floodwaters and resistance to erosion, scour, and settling;~~

~~(4) Be sloped no steeper than one (1) vertical to two (2) horizontal, unless approved by the Floodplain Administrator;~~

~~(5) Be protected from erosion associated with expected velocities during the occurrence of the *base flood*; unless approved by the Floodplain Administrator, fill slopes shall be protected by vegetation if the expected velocity is less than five feet per second, and by other means if the expected velocity is five feet per second or more; and~~

~~(6) Be designed with provisions for adequate drainage and no adverse effect on adjacent properties.~~

B. Enclosures Below the Lowest Floor

~~C.~~ *Enclosures below the lowest floor* shall:

(1) Be used solely for vehicle parking ~~of vehicles~~, *building* access, crawl/underfloor spaces, or limited storage.

(2) Be constructed using *flood damage-resistant materials*.

(3) Be provided with *flood openings* which shall meet the following criteria: ~~[Note: See NFIP Technical Bulletin #1, "Openings in Foundation Walls and Walls of Enclosures Below Elevated Buildings."]~~

(a) 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 enclosures shall each have at least two *flood openings* on exterior walls.

~~(b) 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[J25].~~

~~(c)~~(b) ~~The bottom of~~ E~~e~~ach *flood opening* bottom shall be one~~1~~ foot or less above the higher of the interior floor or grade, or the exterior grade, immediately below the opening.

~~(d)~~(c) Any louvers, screens or other covers for ~~the~~ *flood openings* shall allow ~~the~~ automatic flow of floodwaters into and out of the enclosed area.

~~(e)~~(d) If installed in doors, *flood openings* that meet requirements of paragraphs (a) through (d) above~~,~~ are acceptable; however, doors without ~~installed~~ incorporated *flood openings* do not meet this section's~~e~~ requirements ~~of this section~~.

~~70-28.~~70-29. Nonresidential Structures and Nonresidential Portions of Mixed Use Structures

New nonresidential *structures* and nonresidential portions of mixed use *structures*, and *substantial improvement* ~~(including repair of *substantial damage*)~~ of ~~existing~~ nonresidential *structures* and nonresidential portions of mixed use *structures*, shall comply with ~~the applicable~~

~~requirements of Section 4.0 and the requirements of~~ Article II and this section. See also Section ~~5.6~~70-30, Lateral Additions. ~~for requirements for horizontal additions.~~

A. Elevation Requirements

Elevated *structures* shall:

(1) Have the *lowest floor* (including *basement*) elevated to or above the *flood protection elevation*; or

(2) In *areas of shallow flooding* (Zone AO), have the *lowest floor* (including *basement*) elevated at least as high above the *highest adjacent grade* as the *Flood Insurance Rate Map flood* depth number ~~specified in feet on the *FIRM*~~ plus two (2) feet, or at least four (4) feet if a *flood* depth number is not specified; and

(3) Have *enclosures below the lowest floor*, if any, that comply with ~~the requirements of~~ Section 70-28(B)~~5.4(C)~~, Enclosures Below the Lowest Floor; or

(4) If proposed to be elevated on fill, meet the limitations ~~on fill~~ in Section ~~5.4(B)~~70-17, Fill Placement.

B. Floodproofing Requirements

(1) *Floodproofing* of new nonresidential *buildings* is not allowed in n~~Is not allowed in *n*~~*ontidal waters* ~~*of the state*~~ (COMAR 26.17.04.11(B)(7))~~.~~ and ~~Is not allowed in~~ *Coastal A Zones*.

(2) *Floodproofing* is permitted for *substantial improvement* of nonresidential *buildings* in ~~Is allowed in *n*~~*ontidal waters* ~~*of the state*~~ *and* ~~.Is allowed in~~ *Coastal A Zones*.

(3) If *floodproofing* is proposed, *structures* shall:

(a) Be designed to be dry *floodproofed* such that the ~~building or~~ *structure* is watertight with walls and floors substantially impermeable ~~to the passage of~~ water to the level of the *flood protection elevation* ~~plus 1.0 foot~~[J26], or

(b) If located in an *area of shallow flooding* (Zone AO), be dry *floodproofed* at least as high above the *highest adjacent grade* as the *flood* depth number specified on the ~~*FIRM*~~*Flood Insurance Rate Maps* plus three (3) feet, or at least five (5) feet if a *flood* depth number is not specified; and

(c) Have structural components capable of resisting hydrostatic and hydrodynamic loads and buoyancy effects ~~of buoyancy~~;

(d) Have *floodproofing* measures that are designed ~~taking into consideration the~~ to consider ~~nature of~~ flood-related hazards characteristics; frequency, depth and duration of *flooding*; rate of rise and fall of floodwater; soil characteristics; flood-borne debris; at least 12 hours of *flood* warning time from a credible source; and time necessary to implement any human intervention measures ~~that require human intervention~~;

(e) Have at least one door above the applicable *flood* elevation that allows human ingress and egress during *flooding* conditions ~~of *flooding*~~;

(f) Have an operations and maintenance plan ~~that is~~ filed with local emergency management officials ~~and that~~ specifying~~ies~~ the owner/occupant's responsibilities to monitor *flood* potential; the location of ~~any~~ shields, doors, closures, tools, or other goods ~~that are~~ required for implementation; maintenance of such goods; methods of installation; and periodic inspection; and

(g) Be certified with a Floodproofing Certificate by a *licensed designer* ~~professional engineer or *licensed* architect, through execution of a *Floodproofing Certificate*~~ stating that the design and construction methods ~~of construction~~meet ~~the~~ this section's requirements~~of this section~~. The *Floodproofing Certificate* shall be submitted with the construction ~~drawings~~documents ~~as required in Section 3.5(A)(13)~~.

~~70-29.~~70-30. ~~Horizontal~~ Lateral Additions

A. Any ~~horizontal~~ lateral addition proposed for a ~~building or~~ *structure* that was constructed after ~~the date specified in Section 1.1~~ June 11, 1985 shall comply with ~~the applicable requirements of Section 4.0 and t~~Article II and this section.

B. In *nontidal waters* ~~*of the state* that are subject to the regulatory authority of MDE,~~ all ~~horizontal~~ lateral additions shall comply with ~~the applicable requirements of Section 4.0 and~~ Article II and this section and:

(1) If the addition is structurally connected to the *base building*, the requirements of paragraph (C) below apply.

(2) If the addition has an independent foundation and is not structurally connected to the *base building*; and the common wall with the *base building* is modified by ~~no more than a doorway~~ only one doorway per story, with a width not exceeding 36 inches;~~,~~ the *base building* is not required to be brought into compliance.

C. For ~~horizontal~~ lateral additions that are structurally connected to the *base building*:

(1) If the addition combined with other proposed *base building* repairs, alterations, or modifications ~~of the *base building*~~ constitutes *substantial improvement*, the *base building*

and the addition shall comply with ~~the applicable requirements of Section 4.0 and~~ Article II and this section.

(2) If the addition constitutes *substantial improvement*, the *base building* and the addition shall comply with ~~all of the applicable requirements of Section 4.0 and~~ Article II and this section.

D. For ~~horizontal~~ lateral additions with independent foundations that are not structurally connected to the *base building* and the common wall with the *base building* is modified by ~~no more than a doorway~~ only one doorway per story, with a width not exceeding 36 inches, the *base building* is not required to be brought into compliance.

~~70-30.~~70-31. Accessory Structures

A. *Accessory structures* shall be ~~limited to~~ no ~~more~~ larger than ~~[INSERT SIZE]~~900 square feet in floor area ~~and [INSERT VALUE] in value~~.

B. *Accessory structures* shall comply with the elevation requirements and other requirements of Section ~~5.4~~70-28, Residential Structures, or the *floodproofing* requirements of ~~Section 5.5(B)~~70-29, Nonresidential Structures, or shall:

(1) Be useable only for parking of vehicles or limited storage of household or yard goods, and not including installation of mechanical equipment;

(2) Be constructed with *flood damage-resistant materials* below the *base flood elevation*;

(3) Offer ~~Be constructed and placed to offer~~ the minimum resistance to ~~the~~ floodwater flow ~~of floodwaters~~;

(4) Be anchored to prevent flotation;

(5) Have electrical service and mechanical equipment elevated ~~to or~~ above the *base flood elevation*; and

(6) Have *flood openings* that meet the requirements of Section ~~5.4(C)~~70-28.B, Residential Structures.

C. For[J27] *accessory structures* 300 square feet or larger (footprint) that are below the *base flood elevation*, a *Declaration of Land Restriction (Nonconversion Agreement)* shall be recorded on the property deed before a *Use and Occupancy Permit* is issued.

ARTICLE V ~~REQUIREMENTS IN~~ COASTAL HIGH HAZARD AREA~~S~~ (V ZONE~~S~~) AND COASTAL A ZONE~~S~~ REQUIREMENTS

~~70-31.~~70-32. General Requirements

~~In addition to the general requirements of Section 4.0,~~ T~~t~~he requirements of this section shall:

A. Apply in flood hazard areas ~~that are~~ identified as *coastal high hazard areas* (V Zones) and *Coastal A Zones* ~~(if delineated)~~.

B. Apply to all *development*, *new construction*, and *substantial improvements* (including repair of *substantial damage*)~~, and placement, replacement, and *substantial improvement* (including repair of *substantial damage*) of *manufactured homes*~~.

Exception: In *Coastal A Zones*, the requirements of ~~Section 5.0~~ Article IV shall apply to *substantial improvements* (including repair of *substantial damage*)~~, and *substantial improvement* of *manufactured homes* (including repair of *substantial damage*) and replacement *manufactured homes*~~.

~~[Note: See Coastal Construction Manual (FEMA 55).]~~

~~70-32.~~70-33. Structure Location and Site Preparation

A. ~~The~~ Fill placement ~~of structural fill~~ for the purpose of elevating *building*s is prohibited.

B. *Building*s shall be located landward of the reach of mean high tide.

C. ~~Minor grading, and the placement of minor quantities of fill, shall be permitted for landscaping and for drainage purposes under and around buildings and for support of parking slabs, pool decks, patios and walkways.~~ Use of fill shall comply with Section 70-17, Fill Placement[J28].

~~D. Site preparations shall not alter sand dunes unless an engineering analysis demonstrates that the potential for flood damage is not increased.~~

~~70-33.~~70-34. Residential and Non~~r~~residential Structures

New *structures* and *substantial improvement* (including repair of *substantial damage*) of existing *structures* shall comply with this section and Article II~~of Section 4.0 and the requirements of this section~~.

A. Design Certification

The application shall include a certification prepared by a *licensed designer* that the design and construction methods meet the requirements of paragraphs B, C and D below, and the *building code*.

~~A.~~**B.** Foundations

(1) *Structures* shall be supported on pilings or columns and shall be adequately anchored to such pilings or columns. Pilings shall have adequate soil penetrations to resist the combined wave and wind loads (lateral and uplift). Water loading values used shall be those associated with the *base flood*. Wind loading values shall be those required by applicable *building codes*. Pile embedment design shall include ~~consideration~~ the effects of decreased resistance capacity from soil scouring. ~~caused by scour of soil strata surrounding the piling.~~

(2) Slabs, pools, pool decks and walkways shall be located and constructed to be structurally independent of *structures* and their foundations to prevent transfer of *flood* loads to the *structures* during conditions of *flooding*, scour, or erosion from wave-velocity flow conditions, and shall be designed to minimize debris impacts to adjacent properties and public infrastructure.

~~B.~~**C.** Elevation Requirements

(1) The bottom of the lowest horizontal structural member that supports the *lowest floor* shall be ~~located at or~~ above the *flood protection elevation*.

(2) *Basement* floors ~~that are~~ below grade on all sides are prohibited.

(3) The space below an elevated *building* shall either be *free-of-obstruction* or, if enclosed by walls, shall meet the requirements of paragraph (D) below. ~~[Note: See NFIP Technical Bulletin #5, "Free-of-Obstruction Requirements."]~~

~~**C.** Certification of Design~~

~~As required in Section 3.5(A)(13), the applicant shall include in the application a certification prepared by a *licensed* professional engineer or a *licensed* architect that the design and methods of construction to be used meet the requirements of paragraph (A), paragraph (B), paragraph (D), and the *building code*.~~

D. Enclosures Below the Lowest Floor

(1) *Enclosures below the lowest floor* shall be used solely for vehicle parking~~of vehicles~~, *building* access or limited storage.

(2) *Enclosures below the lowest floor* shall be less than ~~299~~ 300 square feet in area (exterior measurement to outside of finish materials). [J29]

(3) Walls and partitions are permitted below the elevated floor, provided that such walls and partitions are designed to break away under *flood* loads and are not part of the structural

support of the ~~building or~~ *structure*. ~~[Note: See NFIP Technical Bulletin #9, "Design and Construction Guidance for Breakaway Walls."]~~

(4) No electrical, mechanical or plumbing system components shall be below the *lowest floor* except where necessary for connection to off-site utilities. Electrical, mechanical, and plumbing system components shall not be mounted on or penetrate through walls that are designed to break away under flood loads.

(5) Walls intended to break away under *flood* loads shall be constructed with insect screening or open lattice, or shall be designed to break away or collapse without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. Such walls, framing and connections shall have a design ~~safe~~ loading resistance of not less than 10 pounds per square foot and no more than 20 pounds per square foot; or

(6) Where wind loading values of the *building code* exceed 20 pounds per square foot, the applicant shall submit a *licensed designer's* certification ~~prepared and sealed by a *licensed* professional engineer or *licensed* architect~~ that:

(a) The walls and partitions below the *lowest floor* will function as break away walls. ~~have been designed to collapse from a water load less than that which would occur during the *base flood*.~~

(b) The elevated portion of the *building* and supporting foundation system have been designed to withstand the effects of wind and *flood* loads ~~acting~~ simultaneously acting on all *building* components (structural and nonstructural). Water loading values used shall be those associated with the *base flood*; wind loading values used shall be those required by the *building code*.

(c) In *Coastal A Zones*, ~~in addition to the requirements of this section,~~ walls below the *lowest floor* shall have *flood openings* that meet the requirements of Section ~~5.4(C)(3)~~70-28, Residential Structures, paragraph B(3).

~~70-34.~~70-35. ~~Horizontal~~ Lateral Additions ~~to Structures~~

A. All ~~horizontal~~lateral additions proposed for a ~~building or~~ *structure* that was constructed after ~~the date specified in Section 1.1~~ June 11, 1985, shall comply with Article II and this ~~the applicable requirements of Section 4.0 and this~~ section.

B. For ~~horizontal~~ lateral additions, whether structurally connected or not structurally connected, to the *base building*:

(1) If the addition combined with other proposed repairs, alterations, or modifications of the *base building* constitutes *substantial improvement*, the *base building* and the addition shall comply with the ~~Section 4.0 and~~ Article II and this section.

(2) If the addition constitutes *substantial improvement*, the *base building* and the addition shall comply with ~~all of~~Section ~~4.0~~Article II and this section. [Note: The *base building* is required to comply; otherwise it is an obstruction that does not comply with the *free-of-obstruction* requirement that applies to the elevated addition~~,~~ per~~see~~ Section ~~6.3~~70-34, Residential and Nonresidential Structures, paragraph ~~(~~B~~)~~(3)].

~~70-35.~~70-36. Accessory Structures

A. *Accessory structures* shall be ~~limited to no more than [INSERT SIZE]~~no larger than 900 square feet in floor area ~~and [INSERT VALUE] in value~~.

B. *Accessory structures* shall comply with the elevation requirements and other requirements of Section ~~6.3~~70-34, Residential and Nonresidential Structures, or, if not elevated, shall:

(1) Be useable only for vehicle parking ~~of vehicles~~ or limited storage of household or yard goods, and not including installation of mechanical equipment;

(2) Be constructed with *flood damage-resistant materials* below the *base flood elevation*;

(3) ~~Be constructed and placed to~~ O~~o~~ffer the minimum resistance to ~~the~~ floodwater flow ~~of floodwaters~~;

(4) Be anchored to prevent flotation;

(5) Have electrical service and mechanical equipment elevated ~~to or~~ above the *base flood elevation*; and

(6) If larger than 100 square feet in size, ~~have~~ walls shall ~~that~~ meet the requirements of Section ~~6.3(D)~~70-34, Residential and Nonresidential Structures, paragraphs D(3) through (6)~~, as applicable for the *flood zone*~~; and if located in *Coastal A Zones*, walls shall have *flood openings* that meet the requirements of Section ~~5.4(C)~~70-28, Residential Structures, paragraph.B(3).

C. For *accessory structures* 300 square feet or larger (footprint) that are below the *base flood elevation*, a *Declaration of Land Restriction (Nonconversion Agreement)* shall be recorded on the property deed before a *Use and Occupancy Permit* is issued

70-37. Other Structures and Development

Note: NFIP Technical Bulletin #5, "*Free-of-Obstruction Requirements*," provides helpful guidance in applying these requirements.

~~[Note: See NFIP Technical Bulletin #5, "Free-of-Obstruction Requirements."]~~

A. Decks and Patios

In addition to ~~the~~ all other requirements of the *building code*, ~~or the residential code,~~ decks and patios shall be located, designed, and constructed ~~in compliance~~ to comply with the following:

(1) A deck ~~that is~~ structurally attached to a ~~building or~~ *structure* shall have its ~~the bottom of the~~ lowest horizontal structural member ~~at or~~ above the *flood protection elevation*. ~~and~~ A~~a~~ny supporting members that extend below the ~~*design*~~ *flood protection elevation* shall comply with the foundation requirements ~~that~~ applicable ~~apply~~ to the ~~building or~~ *structure*.~~,~~ The *structure*~~*which*~~ shall be designed to accommodate any increased loads ~~resulting~~ caused by ~~from~~ the ~~attached~~ deck.

(2) A deck or patio ~~that is~~ located below the *flood protection elevation* shall be structurally independent from *structures* and their foundation systems, and shall be designed and constructed either to remain intact and in place during *base flood* conditions or to break apart into small pieces that will not cause structural damage to adjacent elevated *structures*.

(3) A deck or patio ~~that has a~~with vertical thickness of more than 12 inches or ~~that is~~ constructed with more than the minimum ~~amount of~~ fill ~~that is~~ necessary for site drainage shall provide ~~not be approved unless~~ an analysis by a *licensed designer* demonstrating~~es~~ no harmful diversion of floodwaters or wave run-up and wave reflection that would increase damage to ~~adjacent~~ elevated *structures*.

(4) A deck or patio may be approved without analysis of the impact on diversion of floodwaters, wave run-up or wave reflection, provided that the deck or patio:~~that~~

(a) ~~h~~Has a vertical thickness of 12 inches or less; and, ~~and that~~

(b) ~~i~~Is at natural grade or on fill material that is similar to ~~and compatible with~~ local soils; and,

~~(4)~~(c) ~~and is~~ Uses fill in the minimum amount necessary for site drainage ~~may be approved without requiring analysis of the impact on diversion of floodwaters or wave runup and wave reflection~~.

B. Other Development

Other *development* activities shall be permitted only if located outside the footprint of, and not structurally attached to, *structures*.~~,~~ The permit application for such development must provide ~~and only if~~ an analysis ~~demonstrates~~ performed by a *licensed designer* demonstrating no harmful diversion of floodwaters or wave run-up and wave reflection onto adjacent elevated *structures*. Other *development* includes but is not limited to:

(1) Bulkheads, seawalls, retaining walls, revetments, and similar erosion control structures;

(2) Solid fences, privacy walls, and fences prone to trapping debris, unless designed and constructed to fail under *base flood* conditions; and

(3) Mounded septic systems.

ARTICLE VI ADMINISTRATIVE APPEALS AND VARIANCES

70-38. Administrative Appeals

Persons aggrieved by a final order or decision of the Floodplain Administrator may file an administrative appeal with the Board of Appeals in accord with Chapter 20 of the Talbot County Code.

~~70-36.~~70-39. General Provisions for Variances

A. The ~~[BODY DESIGNATED TO HEAR VARIANCES]~~Talbot County Board of Appeals shall have the power to consider and authorize or deny *variances* from ~~the~~ the strict application of these regulation's requirements ~~of these regulations~~. A *variance* shall be approved only if it is ~~determined to~~ not ~~be~~ contrary to the public interest and where, owing to a lot or parcel's special conditions ~~of the lot or parcel~~, a literal enforcement of the provisions of these regulations, an unnecessary hardship would result.

B. Upon consideration of these regulation's purposes ~~of these regulations~~, the individual circumstances, and ~~the~~ this section's considerations and limitations ~~of this section~~, the ~~[DESIGNATED BODY]~~ Board of Appeals may attach such conditions to *variances* as it deems necessary to further these regulation's purposes ~~of these regulations~~.

C. The ~~[DESIGNATED BODY]~~Board of Appeals shall notify, in writing, any applicant to whom a *variance* is granted to construct or substantially improve a *structure* with its *lowest floor* below the elevation required by these regulations that the *variance* is to the *floodplain* management requirements of these regulations only, and that the cost of federal *flood* insurance will be commensurate with the increased risk, with rates up to $25 per $100 of insurance coverage.

D. A record of all *variance* actions, including justification for issuance shall be maintained pursuant to Section 70-11, Duties and Responsibilities of the Floodplain Administrator, paragraph 3.2(K) of these regulations.

70-37.70-40. Variance Applications for a Variance

A. *The owner of property, or the owner's authorized agent, for which a variance is sought shall submit an application for a variance to the Floodplain Administrator.* *Variance* applications shall be submitted in accordance with the procedures in Section 70-43, Application Procedures, and Chapter 20 of the Talbot County Code.

B. At a minimum, the application shall contain the following information: name, address, and telephone number of the applicant and property owner; legal description of the property; parcel map; description of the existing use; description of the proposed use; site map showing the location of flood hazard areas, designated *floodway* boundaries, *flood zones*, *base flood elevations*, and *flood protection setbacks*; description of the *variance* sought; and reason for the *variance* request. *Variance* applications shall specifically address each of the considerations in Section 7.3.

C.B. If the *variance* application seeks is for a *variance* to allow the *lowest floor* (A Zones) or bottom of the lowest horizontal structural member (V Zones and *Coastal A Zones*) of a building or *structure* below the applicable minimum elevation required by these regulations, the application shall include a statement signed by the owner that, if granted, the *variance* conditions of the *variance* shall be recorded on the property's deed of the property.

D. VarianceIf the application is for a *variance* for a *historic structure* pursuant to Section 4.6 of these regulations, the application shall contain documentation that the proposed work does not preclude the *structure*'s continued eligibility and designation as a *historic structure*. The documentation shall be obtained from a source that is authorized to make such determinations (see definition of "Historic Structure").

70-38.70-41. Considerations for Variances

The Floodplain Administrator shall request comments on *variance* applications from the *Maryland Department of the Environment* (NFIP State Coordinator) and shall provide such comments to the [DESIGNATED BODY]Board of Appeals any other comments received.

In considering *variance* applications, the [DESIGNATED BODY]Board of Appeals shall review the evidence provided consider and make findings of fact on all evaluations, all relevant factors, requirements specified in other sections of these regulations, and the following factors and other factors that the Board finds relevant.:

A. Impact on neighboring properties from storm-driven debris.The danger that materials may be swept onto other lands to the injury of others.

B. Potential increased erosion effects. ~~The danger to life and property due to *flooding* or erosion damage.~~

C. Impact of potential flood damage on ~~The susceptibility of~~ the proposed *development* and its contents (if applicable) ~~to *flood* damage~~ and the ~~effect of such damage on the individual~~ owner.

D. Impact on community services. ~~The importance of the services to the *community* provided by the proposed *development*.~~

E. Potential to locate the development in a less threatened position on the site.~~The availability of alternative locations for the proposed use which are not subject to, or are subject to less, *flooding* or erosion damage.~~

F. For waterfront development, whether the proposed development ~~The necessity to the facility of a waterfront location, where applicable, or if the facility~~ is a *functionally dependent use*.

G. ~~The c~~Compatibility of the proposed use with existing and anticipated *development*.

H. ~~The~~ R~~r~~elationship ~~of the proposed use~~ to the comprehensive plan ~~for that area~~.

I. Property access during flooding ~~The safety of access to the property in times of flood~~ for passenger vehicles and emergency vehicles.

J. Floodwater~~The expected~~ heights, velocity, duration, rate of rise, and sediment transport ~~of the floodwaters~~ and the effects of wave action, if applicable, expected at the site.

K. ~~The costs of providing~~ Impacts on government services and infrastructure during and after *flood* conditions~~, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges~~.

L. ~~The C~~comments and testimony provided by the *Maryland Department of the Environment* and other parties, if any is received. ~~(NFIP State Coordinator).~~

~~70-39.~~70-42. Variance Limitations ~~for Granting Variances~~

The ~~[DESIGNATED BODY]~~Board of Appeals ~~shall make an affirmative decision on~~may approve a *variance* request only upon:

A. A showing of good and sufficient cause.

B. A determination that failure to grant the *variance* would result in exceptional hardship due to the property's physical characteristics ~~of the property~~. Increased cost or inconvenience of

meeting these regulation's requirements ~~of these regulations~~ does not constitute an exceptional hardship to the applicant.

C. A determination that the granting of a *variance* for *development* within any designated *floodway*, or *flood* hazard area with *base flood elevations* but no designated *floodway*, will not result in increased *flood* heights beyond that which is allowed in these regulations.

D. A determination that the granting of a *variance* will not result in additional threats to public safety; extraordinary public expense, nuisances, fraud or victimization of the public, or conflict with existing local laws.

E. A determination that the *structure* or other *development* is protected by methods to minimize *flood* damages.

F. A determination that the *variance* is the minimum necessary to afford relief, considering the *flood* hazard.

ARTICLE VII ADMINISTRATION AND ENFORCEMENT

~~70-40. Compliance Required~~[J30]

~~A. No building, *structure* or *development* shall hereafter be located, erected, constructed, reconstructed, improved, repaired, extended, converted, enlarged or altered without full compliance with these regulations and all other applicable regulations.~~

~~B. Failure to obtain a permit shall be a *violation* of these regulations and shall be subject to penalties in accordance with Section 8.3.~~

~~C. Permits issued on the basis of plans and applications approved by the Floodplain Administrator authorize only the specific activities set forth in such approved plans and applications or amendments thereto. Use, arrangement, or construction of such specific activities that are contrary to that authorization shall be deemed a *violation* of these regulations.~~

~~70-41. Permits Required and Expiration~~[J31]

~~A. It~~[J32] ~~shall be unlawful for any *person* to begin any *development* or construction which is wholly within, partially within, or in contact with any flood hazard area established in Section 1.5, including but not limited to: filling; grading; construction of new *structures*; the *substantial improvement* of buildings or *structures*, including repair of *substantial damage*; placement or replacement of *manufactured homes*, including *substantial improvement* or repair of *substantial damage* of *manufactured homes*; erecting or installing a *temporary structure*, or *alteration of a watercourse*, until a permit is obtained from COMMUNITY~~

~~NAME]. No such permit shall be issued until the requirements of these regulations have been met.~~

~~B. In[J33] addition to the permits required in paragraph (A), applicants for permits in *nontidal waters of the State* are advised to contact MDE. Unless waived by MDE, pursuant to Code of Maryland Regulations 26.17.04, Construction on Nontidal Waters and Floodplains, MDE regulates the "100-year frequency floodplain of free-flowing waters," also referred to as *nontidal waters of the State*. To determine the 100-year frequency floodplain, hydrologic calculations are based on the ultimate *development* of the watershed, assuming existing zoning. The resulting flood hazard areas delineated using the results of such calculations may be different than the *special flood hazard areas* established in Section 1.5 of these regulations.~~

~~C. A[J34] permit is valid provided the actual start of work is within 180 days of the date of permit issuance. Requests for extensions shall be submitted in writing with a justifiable cause demonstrated. The Floodplain Administrator may grant, in writing, one or more extensions of time, for periods not more than 90 days each and provided there has been no amendment or revision to the basis for establishing special flood hazard areas and BFEs set forth in Section 70-12.~~

~~70-42. Application Required~~

70-43. Application Procedures

A. Permit and *variance* applications shall be made by the property owner or the owner's authorized agent (hereafter the applicant).

B. Application forms and submittals

(1) The Floodplain Administrator shall publish permit and *variance* application forms and a checklist of required information.

(2) The Floodplain Administrator may request additional information for an application if necessary to ensure compliance with these regulations.

(3) Applications must be accompanied by required fees in accord with the fee schedule established by the County Council.

C. The Floodplain Administrator shall review an application for *development* in *special flood hazard areas* or *variances* to determine its completeness. The applicant shall be notified of incompleteness or additional required information within 15 days of the application's receipt. The applicant shall be notified in writing, specifying the deficiencies, listing additional required information, and stating that no further action on the application will be taken until the additional material is received by the Floodplain Administrator.

~~70-43.~~70-44. Special Flood Hazard Area Permit Requirements

A. Application Contents

Applications for *special flood hazard area development* shall include the following information, and all items on the checklist provided by the Floodplain Administrator:

~~(1)~~

(1) Site plans drawn to scale showing the nature, location, dimensions, and existing and proposed topography of the ~~area in question~~proposed development site, and the location of existing and proposed *structures*, excavation, filling, storage of materials, drainage facilities, and other proposed activities.

~~(1)~~ Pre-disturbance grade e

(2) ~~E~~levation ~~of the existing natural ground~~ where *structures* are ~~proposed,~~proposed referenced to the datum on the ~~*FIRM*~~*Flood Insurance Rate Maps*.

~~(2)~~

(3) ~~Delineation of~~ *Special flood hazard areas*, designated *floodway* boundaries, *flood zones*, *base flood elevations*, and *flood protection setbacks*.

~~*(3) Base flood elevations shall be used to delineate the boundary of flood hazard areas and such delineations shall prevail over the boundary of SFHAs shown on FIRMs*~~[J35]~~.~~

~~*(4) Where floodways are not delineated or base flood elevations are not shown on the FIRMs, the Floodplain Administrator has the authority to require the applicant to use information provided by the Floodplain Administrator, information that is available from Federal, State, or other sources, or to determine such information using accepted engineering practices or methods approved by the Floodplain Administrator*~~[J36]~~.~~ ~~*[Note: See "Managing Floodplain Development in Approximate Zone A Areas: A Guide for Obtaining and Developing Base (100-Year) Flood Elevations" (FEMA 265).]*~~

(4) ~~*Determination of the B*~~*base flood elevations*~~, for development proposals and subdivision proposals, each with at least 5 lots or at least 5 acres, whichever is the lesser~~, for subdivisions plans and major *site plans,* in *special flood hazard areas* where *base flood elevations* are not shown on the ~~*FIRM*~~*Flood Insurance Rate Maps*~~; if hydrologic and hydraulic engineering analyses are submitted, such analyses shall be performed in accordance with the requirements and specifications of MDE and FEMA~~[J37].

~~(5)~~

~~(6) *Hydrologic*[J38] *and hydraulic engineering analyses* for proposals in *special flood hazard areas* where FEMA has provided *base flood elevations* but has not delineated a *floodway*; such analyses shall demonstrate that the cumulative effect of proposed *development*, when combined with all other existing and anticipated *development* will not increase the water surface elevation of the *base flood* by more than one foot or a lower increase if required by MDE.~~

~~For encroachments in floodways, an evaluation of alternatives to such encroachments, including different uses of the site or portion of the site within the floodway, and minimization of such encroachment~~[J39]~~.~~

~~If fill is proposed to be placed for a purpose other than to elevate structures, the applicant shall indicate the intended purpose for the fill~~[J40]~~.~~

~~(2)~~(5) For proposed ~~*buildings and*~~ *structures*, including *substantial improvement* and repair of *substantial damage*, and placement and replacement of *manufactured homes*~~,~~ ~~including substantial improvement and repair of substantial damage~~:

(a) ~~The~~ P~~p~~roposed ~~elevation of the~~ *lowest floor* elevation, including the *basement*, referenced to the ~~datum on the *FIRM*~~*Flood Insurance Rate Maps' datum*, and a signed *Elevation Certificate Submission Agreement* ~~*to Submit an Elevation Certificate*~~.

(b) The signed *Declaration of Land Restriction (Nonconversion Agreement)* that shall be recorded on the property deed ~~prior to issuance of the Certificate *of Occupancy*,~~ if the application includes an *enclosure below the lowest floor*, including any ~~or a~~ crawl/underfloor space ~~that is~~ more than four (4) feet in height.

(c) A ~~written evaluation of a~~lternative methods considered to elevate *structures* and *manufactured homes*, if the location is in *nontidal waters* ~~*of the state*~~ and the fill is proposed to achieve the elevation required in Section ~~5.4(A)~~70-28, Residential Structures or Section 70-~~5.5(A)~~29, Nonresidential Structures.

~~(3)~~(6) For *accessory structures* ~~that are~~300 square feet or larger in area (footprint) that are below the *base flood elevation*, a *Declaration of Land Restriction (Nonconversion Agreement)* shall be recorded on the property deed prior to issuance of the ~~Certificate of~~ *Use and Occupancy Permit*.

~~(4) For *temporary structures* and temporary storage, specification of the duration of the temporary~~[J41] ~~use.~~

~~(5)~~(7) For proposed work on existing ~~buildings,~~ *structures*~~, and *manufactured homes*~~, including any improvement, addition, repairs, alterations, rehabilitation, or reconstruction, sufficient information to determine if the work constitutes *substantial improvement* or repair of *substantial damage*, including but not limited to:

(a) If the existing ~~building or~~ *structure* was constructed after ~~[DATE OF REGULAR PROGRAM ENTRY]~~June 11, 1985, evidence that the work will not ~~alter any aspect of the building or *structure* that was required for~~affect the structure's compliance with the *floodplain* management requirements in effect at the time the ~~building or~~ *structure* was permitted.

(b) ~~If the proposed work is a horizontal~~ For lateral additions, a description of the addition and whether it will be ~~independently supported or~~ structurally connected to the *base building* and the nature of all ~~other~~ modifications to the *base building*, ~~if any~~ as necessary to apply the requirements of Section 70-30, Lateral Additions and 70-35, Lateral Additions.~~.~~

(c) Market value d~~D~~ocumentation of the ~~*market value* of the building or~~ *structure* before the improvement or, if the work is repair of damage, before the damage occurred.

(d) Documentation of the actual cash value of all proposed work, including the actual cash value of all work necessary to repair and restore damage to the before-damaged condition, regardless of the amount of proposed work~~that will be performed~~. The value of work performed by the owner or volunteers shall be valued at market labor rates; the value of donated or discounted materials shall be valued at market rates.

~~(d)~~(e) In *floodways* and *coastal high-hazard areas*, permits shall be tracked by property location to determine if the cumulative value of improvements within any twelve month period constitutes *substantial improvement*.

~~(6)~~(8) Certifications and/or technical analyses prepared or conducted by a *licensed designer*~~professional engineer or *licensed* architect~~, as appropriate, including:

(a) The determination of the *base flood elevations* or *hydrologic and hydraulic engineering analyses* prepared by a *licensed* ~~professional~~ engineer that are required by the Floodplain Administrator or are required by these regulations~~ in: Section 4.2 for certain subdivisions and *development*; Section 5.3(A) for *development* in designated *floodways*; Section 5.3(C) for *development* in flood hazard areas with *base flood elevations* but no designated *floodways*; and Section 5.3(E) for deliberate alteration or relocation of *watercourses*~~.

(b) The *Floodproofing Certificate* for floodproofed nonresidential *structures* ~~hat are *floodproofed* as required in Section 5.5(B)~~in accord with Section 70-29.B, Floodproofing Requirements.

(c) Certification that engineered *flood openings* are designed to meet the minimum requirements~~ of Section 5.4(C)(3) to automatically equalize hydrostatic flood forces~~.

(d) Certification that the proposed elevation, structural design, specifications and plans, and ~~the~~ construction methods ~~of construction to be used~~ for *structures* in *coastal high hazard areas* (V Zones) and *Coastal A Zones*, are in accordance with accepted standards of practice and meet the requirements of this Chapter ~~Section 6.3(C)~~.

~~(7)~~(9) For nonresidential *structures* ~~that are~~ proposed with *floodproofing*, an operations and maintenance plan as specified in Section 70-29~~Section 5.5(B)(3).~~, Nonresidential Structures.

(10) Other material and information requested by the Floodplain Administrator and necessary to determine conformance with these regulations.

B. **New Technical Data**

(1) The applicant may seek a *Letter of Map Change* by submitting new technical data to ~~FEMA~~the *Federal Emergency Management Agency*, such as ~~base~~ maps, topography, and engineering analyses to support revision of *floodplain* and *floodway* boundaries and/or *base flood elevations*. Such submissions shall be prepared in a format acceptable to ~~FEMA~~the *Federal Emergency Management Agency* and any fees shall be the sole responsibility of the applicant. A copy of the submittal shall be attached to the application for a permit.

(2) If the applicant submits new technical data to support any change in *floodplain* and designated *floodway* boundaries and/or *base flood elevations* but has not sought a *Letter of Map Change* from ~~FEMA~~the *Federal Emergency Management Agency*, the applicant shall submit such data to ~~FEMA~~the *Federal Emergency Management Agency* as soon as practicable, but not later than six months after the date such information becomes available. Such submissions shall be prepared in a format acceptable to ~~FEMA~~the *Federal Emergency Management Agency* and any fees shall be the sole responsibility of the applicant.

C. Applicants[J42] for permits in *nontidal waters* must contact the *Maryland Department of the Environment*. Unless waived by *Maryland Department of the Environment*, per the Code of Maryland Regulations 26.17.04, Construction in Nontidal Waters and Floodplains, the *Maryland Department of the Environment* regulates the "100-year frequency floodplain of free-flowing waters." To determine the 100-year frequency *floodplain*, calculations must be based on the ultimate *development* of the watershed, assuming existing zoning. The resulting flood hazard areas subject to state regulation may be different than the *special flood hazard areas* established in Section 70-12, *Flood Insurance Rate Map* Use and Interpretation.

~~70-44.~~70-45. Permit Application Review ~~of Application~~

The Floodplain Administrator shall:

~~A. Review applications for *development* in *special flood hazard areas* to determine the completeness of information submitted. The applicant shall be notified of incompleteness or additional information that is required to support the application.~~

~~B.~~A. Notify applicants that permits from ~~MDE and the U.S. Army Corps of Engineers, and~~ other state and federal authorities may be required.

~~C.~~B. Review all permit applications to assure that all necessary permits have been received from the federal, state or local governmental agencies from which prior approval is required. The applicant shall be responsible for obtaining such permits, including permits issued by:

(1) The U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act;

(2) *Maryland Department of the Environment* pursuant to COMAR 26.23 (Nontidal Wetlands) and Section 401 of the Clean Water Act;

(3) *Maryland Department of the Environment* for construction on *nontidal waters* ~~*of the state*~~ pursuant to COMAR 26.17.04; and

(4) *Maryland Department of the Environment* pursuant to COMAR 26.24 (Tidal Wetlands).

C. Review applications for compliance with these regulations after information required in ~~Section 3.5 of~~ these regulations or identified in the Floodplain Administrator's checklist and required by the Floodplain Administrator has been received.

D. Approve permits if the proposed *development* conforms to this Chapter's requirements and all other applicable local codes and chapters. If applicable, the Floodplain Administrator shall note on the permit the proper elevation to which the *structure's* or addition's *lowest floor* must be elevated.

70-46. Permit Revisions and Expiration; Monitoring of Construction

~~70-45. Inspections~~

A. A permit is valid provided the actual *start of construction* is within 180 days of permit issuance.

B. Requests for extensions shall be in writing and shall include a justifiable cause for delay. The Floodplain Administrator may grant, in writing, one or more extensions of time, for periods not more than 90 days each, provided there has been no revision to the basis for establishing

base flood elevations and *special flood hazard areas* set forth in Section 70-12, *Flood Insurance Rate Map* Use and Interpretation.

C. Work shall be completed within 540 calendar days of the permit issuance date unless the permit specifies a longer period or a written extension is granted.

D. If a permit expires, no *development* shall proceed until a new permit application is submitted and approved.

E. After permit issuance, no changes shall be made to any of the plans, specifications or other documents without advance written approval of the Floodplain Administrator. A copy of the permit or other verification must be displayed at the construction site during construction activity.

~~A.~~F. The Floodplain Administrator shall make periodic inspections of *development* permitted in *special flood hazard areas*, at appropriate times throughout the period of construction in order to monitor compliance. Such inspections may include:

(1) Stake-out inspection, to determine location on the site relative to the flood hazard area and designated *floodway*.

(2) Foundation inspection, ~~upon~~ after placement of the *lowest floor* and prior to further vertical construction, to collect information or certification of the actual elevation of the *lowest floor*.

(3) Inspection of *enclosures below the lowest floor*, including crawl/underfloor spaces~~, to determine compliance with applicable provisions~~.

(4) Utility inspection, ~~upon~~ after installation of specified equipment and appliances, to determine ~~appropriate~~ their location with respect to the *base flood elevation*.

(5) Final inspection prior to issuance of the ~~Certificate of~~ *Use and Occupancy Permit*.

~~70-46.~~70-47. Submissions Required Prior to Final Inspection

~~Pursuant to the *Agreement to Submit an Elevation Certificate* submitted with the application as required in Section 3.5(A)(9), the permittee shall have an *Elevation Certificate* prepared and submitted prior to final inspection and issuance of a Certificate of Occupancy for elevated *structures* and *manufactured homes*, including new *structures* and *manufactured homes*, substantially improved *structures* and *manufactured homes*, and additions to *structures* and *manufactured homes*.~~

A. Pursuant to the *Elevation Certificate Submission Agreement* submitted with an application for a *structure* that must be elevated, the applicant shall have an *Elevation Certificate* prepared

and submitted upon placement of the *lowest floor* and prior to further vertical construction; and also prior to final inspection and issuance of a *Use and Occupancy Permit*. The *Elevation Certificate* shall be prepared by a *licensed* engineer or *licensed* surveyor. When used to document *building* height above grade in *special flood hazard areas* for which *base flood elevation* data are not available, the *Elevation Certificate* shall be completed in accordance with *Federal Emergency Management Agency* instructions.

~~A.~~B. Where applicable, the *Declaration of Land Restriction (Nonconversion Agreement)* shall be recorded on the property deed prior to issuance of the *Use and Occupancy Permit.*

~~70-47.~~70-48. Enforcement~~Notice of Violation and Stop Work Order~~

A. Notice of *Violation* and Stop Work Order

If the Floodplain Administrator determines that there has been a *violation* of these regulations, the information shall be forwarded to the Chief Code Compliance Officer for disposition in accordance with Chapter 58 of the Talbot County Code. The Chief Code Compliance Officer shall give written notice of such *violation* to the owner, the owner's authorized agent, and the *person* responsible for such violation, and may issue a written stop work order. The notice of *violation* shall be an Administrative Abatement Order as established in Chapter 58. The Administrative Abatement Order shall as a minimum:~~If the Floodplain Administrator determines that there has been a *violation* of any provision of these regulations, the Floodplain Administrator shall give notice of such *violation* to the owner, the owner's authorized agent, and the *person* responsible for such *violation*, and may issue a stop work order. The notice of *violation* or stop work order shall be in writing and shall:~~

(1) ~~Include a~~ List ~~of~~ the *violations*, referring to the section or sections of these regulations that have been violated;

(2) Order remedial compliance action ~~which, if taken, will effect compliance with the provisions of these regulations~~;

~~(1)~~

(3) Specify a reasonable period of time to correct the *violation*;

~~(2)~~

(4) Advise the recipients of the right to appeal; and

~~(3)~~

(5) Be served in person; or

~~(4)~~

~~(5)~~(6) Be posted in a conspicuous place in or on the property and sent by registered or certified mail to the last known mailing address, residence, or place of business of the recipients.

~~B.~~

~~C.~~B. *Violations* and Penalties

Violations of these regulations or failure to comply with the requirements of these regulations or any conditions attached to a permit or *variance* shall constitute a misdemeanor and a civil infraction. ~~Any *person* responsible for a *violation* shall comply with the notice of *violation* or stop work order. Failure to comply shall be [INSERT PENALTIES ESTABLISHED BY THE COMMUNITY].~~

(1) A fine may be imposed by the Chief Code Compliance Officer for the violation. Each day a *violation* continues shall be considered a separate offense.

(2) The fine does not excuse the *violation*. The *violation* must be corrected prior to any further work progressing on the project.

~~(1)~~(3) Nothing herein ~~contained~~ shall prevent Talbot County from taking such other lawful action as is necessary to prevent or remedy ~~any~~ *violation*s.

~~D.~~C. ~~Notification of~~ *Maryland Department of the Environment* Notification

The *Maryland Department of the Environment* shall be notified by the ~~Floodplain Administrator~~ Chief Code Compliance Officer within 30 days after issuance of a notice or citation for any *violation* which requires a fine or court appearance. New or renewal federal *flood* insurance may be denied to any *structure* remaining in violation of this chapter. The *violation* may also violate state law, may be subject to separate action, and may incur a separate penalty.

~~SECTION 9.0 SUBSEQUENT AMENDMENTS AND EFFECTIVE DATE~~

~~70-48. Subsequent Amendments~~[J43]

~~All ordinances or parts of ordinances that are inconsistent with the provisions of this ordinance are hereby repealed to the extent of such inconsistency. 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 the approval of the Federal Emergency Management Agency and the Maryland Department of the Environment.~~

~~**70-49. Effective Date**~~

~~ADOPTED this _____ day of _____, 20___ and to be effective on the _____ day of _____, 20___.~~

~~Signed: Date:~~

~~_____ _____~~

~~[NAME]~~
~~[CHAIR OF COMMISSION/COUNCIL]~~

~~_____ _____~~

~~[NAME]~~

~~_____ _____~~

~~[NAME]~~

~~_____ _____~~

~~[NAME]~~

~~_____ _____~~

~~[NAME]~~

ARTICLE VIII DEFINITIONS

Unless specifically defined below, words or phrases used in these regulations shall be interpreted to have the meaning they have in common usage and to give these regulations the most reasonable application.

Accessory Structure: A ~~building or~~ *structure* on the same lot with, and of a nature customarily incidental and subordinate to, the principal *structure*. ~~For the purposes of these regulations, an accessory structure shall be used solely for parking of vehicles and limited storage.~~

~~**Agreement to Submit an Elevation Certificate:** A form on which the applicant for a permit to construct a building or *structure*, to construct certain horizontal additions, to place or replace a *manufactured home*, to substantially improve a building, *structure*, or *manufactured home*, agrees to have an *Elevation Certificate* prepared by a *licensed* professional engineer or *licensed* professional surveyor, as specified by the Floodplain Administrator, and to submit the certificate:~~

~~A. Upon placement of the *lowest floor* and prior to further vertical construction; and~~

~~B. Prior to the final inspection and issuance of the Certificate of Occupancy.~~

Area of Shallow Flooding: A designated Zone AO on the *Flood Insurance Rate Map* with a ~~1~~one-percent annual chance or greater of *flooding* to an average *flood* depth of one to three feet where a clearly defined channel does not exist, where the path of *flooding* is unpredictable, and where velocity flow may be evident; such *flooding* is characterized by ponding or sheet flow.

Base Building: The *building* to which an addition is being added. This term is used in provisions relating to additions.

Base Flood: The *flood* having a one-percent ~~chance~~ probability of being equaled or exceeded in any given year; the base *flood* also is referred to as the one~~1~~-percent annual chance (100-year) *flood*.

Base Flood Elevation: The water surface elevation of the *base flood* in relation to the datum specified on the *community*'s *Flood Insurance Rate Map*. In *areas of shallow flooding*, the base flood elevation is the highest adjacent natural grade elevation plus the flood depth number specified in feet on the *Flood Insurance Rate Map*, or at least four (4) feet if the depth number is not specified.

Basement: Any area of a *building* ~~of the building having~~with its floor subgrade (below ground level) on all sides.

Building: Anything that is built or constructed, requires a fixed location on the ground, and has walls and a roof.

Building Code(s): The ~~The effective~~ Maryland Building Performance Standards (COMAR 05.02.07), including the International B~~b~~uilding C~~c~~ode, International R~~r~~esidential ~~c~~Code, International Energy Conservation Code and International E~~e~~xisting B~~b~~uilding C~~c~~ode; also the effective Talbot County plumbing, electrical, mechanical and fuel gas codes; and other applicable Talbot County building codes.~~.~~

Coastal A Zone: An area within a *special flood hazard area*, landward of a *coastal high hazard area* (V Zone) or landward of a shoreline without a mapped *coastal high hazard area*, in which the principal source(s) of *flooding* are astronomical tides and storm surges, and in which, during *base flood* conditions, the potential exists for breaking waves with heights greater than or equal to 1.5 feet. The inland limit of the Coastal A Zone may be delineated on ~~*FIRMs*~~*Flood Insurance Rate Maps* as the "Limit of Moderate Wave Action."

Coastal High Hazard Area: An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms. *Coastal high hazard areas* also are referred to as "V Zones" and are designated on ~~*FIRMs*~~ *Flood Insurance Rate Maps* as zones VE or V1-30.

Community: A political subdivision of the State of Maryland (county, city or town) that has authority to adopt and enforce floodplain management regulations within its jurisdictional boundaries.

Critical and Essential Facilities: ~~Buildings and other s~~*Structures* that are intended to remain operational in the event of extreme environmental ~~loading from~~ flooding, wind, snow or earthquakes. [Note: See Maryland Building Performance Standards, Sec. 1602 and Table 1604.5.]

~~Critical and essential facilities~~They typically include hospitals, fire stations, police stations, critical record storage ~~of critical records~~, facilities that handle or store *hazardous* materials, and similar facilities.

Declaration of Land Restriction (Nonconversion Agreement): A form signed by the owner ~~to~~ agree~~ing~~ not to convert or modify in any manner that is inconsistent with the permit's terms ~~of the permit~~ and these regulations, ~~certain~~ for *enclosures below the lowest floor* of elevated *building*s and certain *accessory structures*. ~~The form requires the owner to record it~~This agreement must be recorded on the property deed ~~to inform future owners of the restrictions~~.

Development: Any manmade change to improved or unimproved real estate, including but not limited to construction or placement of a ~~buildings or other~~ *structure*~~s~~, substantial improvement of structures, ~~placement of *manufactured homes*, mining,~~ dredging, filling, grading, paving, clearing, dumping, excavation, extraction, or drilling ~~operations~~ or storage of equipment or materials. Development includes subdivision of land.

Elevation Certificate: FEMA Form 81-31, on which surveyed elevations and other data pertinent to a property and a building are identified to certify as-built elevation of structures above mean sea level. ~~and which shall be completed by a *licensed* professional land surveyor or a *licensed* professional engineer, as specified by the Floodplain Administrator. When used to document the height above grade of buildings in *special flood hazard areas* for which *base flood elevation* data are not available, the Elevation Certificate shall be completed in accordance with the instructions issued by FEMA. [Note: FEMA Form 81-31 and instructions are available online at http://www.fema.gov/library/viewRecord.do?id=1383.]~~

Elevation Certificate Submission Agreement: A form on which the applicant for a permit to construct a *building* or *structure*, to construct certain lateral additions, to place or replace a *manufactured home*, to substantially improve a *building*, *structure*, or *manufactured home*, agrees to have an *Elevation Certificate* prepared by a *licensed* engineer or *licensed* surveyor and to submit the certificate as required by this Chapter.

Enclosure Below the Lowest Floor: An unfinished or *flood*-resistant enclosure that is located below an elevated *building*, is surrounded by walls on all sides, and is usable solely for parking of vehicles, *building* access or storage, in an area other than a *basement* area~~, provided that such enclosure is built in accordance with the applicable design requirements specified in these regulations~~. Also see "Lowest Floor."

Federal Emergency Management Agency (FEMA): The federal agency with the overall responsibility for administering the *National Flood Insurance Program*.

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

A. The overflow of inland or tidal waters, and/or

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

Flood Damage-Resistant Materials: ~~Any~~ C~~c~~onstruction material ~~that is~~ capable of withstanding direct and prolonged contact with floodwaters without sustaining ~~any~~ more than cosmetic damage~~that requires more than cosmetic repair~~. ~~[Note: See NFIP Technical Bulletin #2, "Flood Damage-Resistant Materials Requirements."]~~

Flood Insurance Rate Map (FIRM): An official map on which the *Federal Emergency Management Agency* has delineated *special flood hazard areas* to indicate the magnitude and nature of *flo*od hazards, to designate applicable *flood zones*, and to delineate *floodway*s, if applicable. FIRMs that have been prepared in digital format or converted to digital format are referred to as ~~D~~digital FIRMs (DFIRM).

Flood Insurance Study (FIS): The official report from the *Federal Emergency Management Agency* ~~has~~ providing~~d~~ *flood* profiles, *floodway* information, and the water surface elevations.

Flood Opening: A flood opening (non-engineered) is an opening that is used to meet the prescriptive requirement of one~~1~~ square inch of net open area for every square foot of enclosed area. An engineered flood opening is an opening that is designed and certified by a *licensed designer* ~~professional engineer or *licensed* architect~~ as meeting certain performance characteristics, including providing automatic entry and exit of floodwaters.~~:~~ T~~t~~he certification ~~requirement~~ may be ~~satisfied by an individual certification or issuance of~~ by a *licensed* engineer or by an Evaluation Report ~~by~~ from the ~~ICC~~International Code Council Evaluation Service, Inc., a subsidiary of the International Code Council, Inc. ~~[Note: See NFIP Technical Bulletin #1, "Openings in Foundation Walls and Walls of Enclosures."]~~

Flood Protection Elevation: The *base flood elevation* plus two (2) feet of *freeboard*. ~~Freeboard is a factor of safety that compensates for uncertainty in factors that could contribute to *flood* heights greater than the height calculated for a selected size *flood* and *floodway* conditions, such as wave action, obstructed bridge openings, debris and ice jams, climate change, and the hydrologic effect of urbanization in a watershed.~~

~~**Flood Protection Setback:** A distance measured perpendicular to the top of bank of a *watercourse* that delineates an area to be left undisturbed to minimize future *flood* damage and to recognize the potential for bank erosion. Along *nontidal waters of the State*, the flood protection setback is:~~

~~A. 100 feet, if the *watercourse* has *special flood hazard areas* shown on the *FIRM*, except where the setback extends beyond the boundary of the flood hazard area; or~~

~~B. 50 feet, if the *watercourse* does not have *special flood hazard areas* shown on the *FIRM*.~~

Flood Zone: A designation for areas that are shown on *Flood Insurance Rate Maps*:

A. **Zone A:** *Special flood hazard areas* subject to inundation by the *base flood* or one~~1~~-percent annual ~~chance~~ probability (100-year) *flood*; *base flood elevations* are not determined.

B. **Zone AE and Zone A1-30:** *Special flood hazard areas* subject to inundation by the ~~1~~one-percent annual ~~chance~~ probability (100-year) *flood*; *base flood elevations* are determined; *floodways* may or may not be determined. In areas subject to tidal *flooding*, the Limit of Moderate Wave Action, also known as the *Coastal A Zone*, ~~may or may not be~~ is delineated.

C. **Zone AH and Zone AO:** *Areas of shallow flooding*, with *flood* depths of ~~1 to 3~~ one to three feet (usually areas of ponding or sheet flow on sloping terrain), with or without ~~*BFEs*~~ *base flood elevations* or designated *flood* depths.

D. **Zone B and Zone X (shaded):** Areas subject to inundation by the 0.2-percent annual chance (500-year) *flood*; areas subject to the one~~1~~-percent annual ~~chance~~ probability (100-year) *flood* with average depths of less than one~~1~~ foot or with contributing drainage area less than one~~1~~ square mile; and areas protected from the *base flood* by levees.

E. **Zone C and Zone X (unshaded):** Areas outside of Zones designated A, AE, A1-30, AO, VE, V1-30, B, and X (shaded).

F. **Zone VE and Zone V1-30:** *Special flood hazard areas* subject to inundation by the one~~1~~-percent annual ~~chance~~ probability (formerly the 100-year) *flood* and subject to high velocity wave action (also see *coastal high hazard area*).

Floodplain: Any land area susceptible to being inundated by water from any source (see definition of "Flood" or "Flooding").

Floodproofing or Floodproofed: Any combination of structural and nonstructural additions, changes, or adjustments to ~~buildings or~~ *structures* which reduce or eliminate *flood* damage to real estate or improved real property, water and sanitary facilities, *structures* and their contents, such that the ~~buildings or~~ *structures* are watertight with walls substantially impermeable to ~~the~~water passage ~~of water~~ and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

Floodproofing Certificate: FEMA Form 81-65 that is to be completed, signed and sealed by a *licensed designer* ~~professional engineer or *licensed* architect~~ to certify that the design of *floodproofing* and proposed methods of construction are in accordance with the applicable requirements of Section 70-29, Nonresidential Structures. ~~5.5(B) of these regulations. [Note: FEMA Form 81-65 is available online at http://www.fema.gov/library/viewRecord.do?id=1600.]~~

Floodway: ~~The~~ A watercourse channel ~~of a river or other *watercourse*~~ and the adjacent land areas that must be reserved in order to pass the *base flood* discharge ~~such that the cumulative increase in the water surface elevation of the *base flood* discharge is no more than a designated height~~ without cumulatively increasing the water surface elevation more than one foot. When shown on a ~~*FIRM*~~ *Flood Insurance Rate Map*, the floodway is referred to as the "designated floodway."

Freeboard: An additional elevation that provides a safety factor for uncertainties in that could contribute to *flood* heights greater than the *base flood* height.

Free-of-Obstruction: ~~A term that describes~~A condition of open foundations (pilings, columns, or piers) that are without attached elements or foundation components that would obstruct the free passage of floodwaters and waves beneath *structures* ~~that are elevated on such~~ and through the foundations. ~~[Note: See NFIP Technical Bulletin #5, "Free-of-Obstruction Requirements."]~~

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

Hazardous Material: Any substance, including oil or its by-products, that:

A. Conveys toxic, lethal, or other injurious effects or which causes sub-lethal harmful alterations to plant, animal, or aquatic life;

B. May be injurious to human beings;

C. Persists in the environment; and

D. Any matter identified as a "hazardous waste" by the Environmental Protection Agency or a "controlled hazardous substance" by the Maryland Department of the Environment.

Highest Adjacent Grade: The highest natural elevation of the ground surface, prior to construction, next to the proposed foundation of a *structure*.

Historic Structure: Any *structure* that is:

A. Individually listed in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listings on the National Register of Historic Places;

B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the registered historic district's historical significance ~~of a registered historic district~~ or a district preliminarily determined by the Secretary to qualify as a registered historic district;

C. Individually listed on the Maryland Inventory of Historic Properties maintained by the Maryland Historical Trust; or

D. Individually listed on the inventory of historic places maintained by Talbot County ~~whose~~ if the County's historic preservation program is ~~has been~~ certified by the Maryland Historical Trust or the Secretary of the Interior.

Hydrologic and Hydraulic Engineering Analyses: Analyses performed by a *licensed* ~~professional~~ engineer, in accordance with standard engineering practices ~~that are~~ accepted by the *Maryland Department of the Environment* ~~(Nontidal Wetlands & Waterways)~~ and ~~FEMA~~the *Federal Emergency Management Agency*, used to determine the *base flood*, other frequency floods, *flood* elevations, *floodway* information and boundaries, and *flood* profiles.

Letter of Map Change (LOMC): ~~A Letter of Map Change is a~~An official ~~FEMA~~*Federal Emergency Management Agency* determination, by letter, that amends or revises an effective *Flood Insurance Rate Map* or *Flood Insurance Study*. Letters of Map Change include:

A. Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated *special flood hazard area*. A LOMA amends the current effective *Flood Insurance Rate Map* and establishes that a specific property or *structure* is not located in a *special flood hazard area*.

B. Letter of Map Revision (LOMR): A revision based on technical data that may show changes to *flood zones*, *flood* elevations, *floodplain* and *floodway* delineations, and planimetric features. A Letter of Map Revision Based on Fill (LOMR-F) is a determination that a *structure* or parcel of land has been elevated by fill above the *base flood elevation* and is, therefore, no longer exposed to *flooding* associated with the *base flood*. In order to qualify for this determination, the fill must have been permitted and placed in accordance with the *community*'s *floodplain* management regulations.

C. Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed *flood* protection project or other project complies with the minimum ~~NFIP~~ National Flood Insurance Program requirements for such projects with respect to delineation of *special flood hazard areas*. A CLOMR does not revise the effective *Flood Insurance Rate Map* or *Flood Insurance Study*; upon submission and approval of certified as-built documentation, a Letter of Map Revision may be issued by ~~FEMA~~the *Federal Emergency Management Agency*, to revise the effective ~~*FIRM*~~*Flood Insurance Rate Maps*.

Licensed: ~~As used in these regulations, licensed refers to p~~Professionals ~~who are~~ authorized to practice in the State of Maryland by issuance of licenses by the Maryland Board of Architects, Maryland Board of Professional Engineers, Maryland Board of Professional Land Surveyors, and the Maryland Real Estate Appraisers and Home Inspectors Commission.

Licensed Designer: A *licensed* professional engineer or a *licensed* architect.

Lowest Floor: The lowest floor of the lowest enclosed area (including *basement*) of a *structure*; the floor of an *enclosure below the lowest floor* is not the lowest floor provided the enclosure is constructed in accordance with these regulations. The lowest floor of a *manufactured home* is the bottom of the lowest horizontal supporting member (longitudinal chassis frame beam).

Manufactured Home: A *structure*, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term manufactured home does not include a *recreational vehicle*.

Market Value: The price at which a property will change hands between a willing buyer and a willing seller, neither party being under compulsion to buy or sell and both having reasonable knowledge of relevant facts. For ~~the purposes of~~ these regulations, ~~the~~ a *building*'s market value ~~of a building~~ is determined by a *licensed* real estate appraiser or the *building*'s (improvement's) most recent, full phased-in assessment value ~~of the building (improvement)~~ determined by the Maryland Department of Assessments and Taxation.

Maryland Department of the Environment (MDE): A principal department of the State of Maryland that is charged with, among other responsibilities, the coordination of the National Flood Insurance Program in Maryland (NFIP State Coordinator) and the administration of regulatory programs for *development* and construction that occur within the *waters of the state*, including nontidal wetlands, *nontidal waters* and *floodplains*, and state and private tidal wetlands (Tidal Wetlands). Unless otherwise specified, "MDE" refers to the Department's Wetlands and Waterways Program.

National Flood Insurance Program (NFIP): The program authorized by the U.S. Congress in 42 U.S.C. §§4001 - 4129. The NFIP makes *flood* insurance coverage available in communities that agree to adopt and enforce minimum regulatory requirements for *development* in areas prone to *flooding* (see definition of "Special Flood Hazard Area").

New Construction: *Structures*, including additions and improvements, and the placement of *manufactured homes*, for which the *start of construction* commenced on or after ~~[INITIAL FIRM EFFECTIVE DATE], the initial effective date of the Talbot County *Flood Insurance Rate Map*,~~June 11, 1985, the initial effective date of the Talbot County Floodplain Management Ordinance, including any subsequent improvements, alterations, modifications, and additions to such *structures*.

NFIP State Coordinator: See Maryland Department of the Environment.

Nontidal Waters~~of the State~~: See "Waters of the State." As used in these regulations, "nontidal waters ~~of the state~~" refers to any stream or body of water within the state that is subject to state regulation, including the "100-year frequency *floodplain* of free-flowing waters." COMAR 26.17.04 states that "the landward boundaries of any tidal waters shall be deemed coterminous with the wetlands boundary maps adopted pursuant to Environment Article, §16-301, Annotated Code of Maryland." Therefore, the boundary between the State's tidal and nontidal waters ~~of the state~~ is the tidal wetlands boundary.

Person: An individual or group of individuals, corporation, partnership, association, or any other entity, including state and local governments and agencies.

Recreational Vehicle: A vehicle that is built on a single chassis, 400 square feet or less when measured at the largest horizontal projection, designed to be self-propelled or permanently towable by a light duty truck, and designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

Site Plan: A plan showing the proposed *development* of a lot or parcel. A site plan shows existing and proposed natural features, *structures*, *building* footprints and elevations, road rights-of-way, paved areas, access, walkways, vegetative cover, landscaping, screening, and stormwater management. There are two types of site plans, major and minor, with different submittal requirements and review processes as established in the Zoning, Subdivision and Land Development Ordinance, Chapter 190 of the Talbot County Code.

Special Flood Hazard Area (SFHA): The land in the *floodplain* subject to a one-percent or greater ~~chance~~ probability of *flooding* in a~~ny given~~ year. Special flood hazard areas are designated by the *Federal Emergency Management Agency* in *Flood Insurance Studies* and on *Flood Insurance Rate Maps* as Zones A, AE, AH, AO, A1-30, and A99, and Zones VE and V1-30. The term includes areas shown on other flood maps that are identified in Section ~~1.5~~70-12, Flood Insurance Rate Map Use and Interpretation.

Start of Construction: The date the *building* permit was issued, provided the actual start of construction, repair, ~~reconstruction, rehabilitation, addition placement,~~ or other improvement was within 180 days of the permit date. The actual start means either the first ~~placement of~~ permanent construction ~~of a *structure* on a site~~, such as ~~the pouring~~placement of slab, ~~or~~ footings, ~~the installation of~~ piles, or ~~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~~ or installation ~~on the property~~ of *accessory structures*, such as garages or sheds not occupied as dwelling units or not part of the main *structure*. For *substantial improvements*, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a *building*, whether or not that alteration affects the external dimensions of the *building*.

Structure: That which is built or constructed; specifically, a walled and roofed *building*. This term includes~~, including a~~ gas or liquid storage tanks that ~~is~~ are principally above ground, as well as ~~a~~ *manufactured homes*.

Substantial Damage: Damage of any origin sustained by a ~~building or~~ *structure* whereby the cost of restoring the ~~building or~~ *structure* to its before damaged condition would equal or exceed 50 percent of the *structure's market value* ~~of the building or *structure*~~ before the damage occurred. Also used as "substantially damaged" *structures*.

~~[SELECT ONE ALTERNATIVE DEFINITION]~~

> ~~*[Alternative: for "variance method" of handling substantial improvement of historic structures; see Section 4.6]* **Substantial Improvement:** Any reconstruction, rehabilitation, addition, or other improvement of a building or *structure*, the cost of which equals or exceeds 50 percent of the *market value* of the building or *structure* before the *start of construction* of the improvement. The term includes *structures* which have incurred *substantial damage*, regardless of the actual repair work performed. The term does not, however, include any project for improvement of a building or *structure* to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official prior to the submission of an application for a permit and which are the minimum necessary to assure safe living conditions.~~
>
> ~~*[Alternative: for "definition method" of handling substantial improvement of historic structures, see Section 4.6.]*~~

Substantial Improvement: Any reconstruction, rehabilitation, addition, or other improvement of a ~~building or~~ *structure*, the cost of which equals or exceeds 50 percent of the *structure's market value* ~~of the building or *structure*~~ before the improvement's *start of construction*~~of the improvement~~. The term includes any repair or reconstruction of *structures* which have incurred *substantial damage*, regardless of the actual cost of the repair work performed. In floodways and coastal high hazard areas, substantial improvement has occurred if the cumulative value of improvements to the *structure* within any twelve month period equals or exceeds 50 percent of the *structure's market value* before the *start of construction* of the first improvement. The term does not, however, include either:

A. Any project for improvement of a ~~building or~~ *structure* to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official prior to submission of an application for a permit and which are the minimum necessary to assure safe living conditions; or

B. Any alteration of a *historic structure* provided that the alteration will not preclude the *structure*'s continued designation as a *historic structure*.

Temporary Structure: A *structure* installed, used, or erected for a period of less than 180 days.

Use and Occupancy Permit: A permit to legally occupy or use a *building* for the intended purpose.

Variance: A grant of relief from the strict application of one or more requirements of these regulations.

Violation: Any construction or *development* in a *special flood hazard area* that is being performed without an issued permit. The failure of ~~a building, *structure*, or other~~ *development* for which a permit is issued to comply with these regulations and the conditions of the issued permit. ~~A building, *structure*, or other *d*~~*D*evelopment without the required design certifications, the *Elevation Certificate*, or other evidence of compliance required is presumed to be a *violation* until such time as the required documentation is provided.

Watercourse: The channel, including channel banks and bed, of *nontidal waters*~~*of the state*~~.

Watercourse Alteration ~~of a Watercourse~~: ~~For the purpose of these regulations, alteration of a watercourse~~ I~~i~~ncludes, but is not limited to widening, deepening or relocating the channel, including excavation or filling of the channel. Watercourse a~~A~~lteration ~~of a watercourse~~ does not include construction of a road, bridge, culvert, dam, or in-stream pond unless the channel is proposed to be realigned or relocated as part of such construction.

Waters of the State: [See Environment Article, Title 5, Subtitle 1, Annotated Code of Maryland.] Waters of the state include:

A. Both surface and underground waters within the boundaries of the state subject to its jurisdiction;

B. That portion of the Atlantic Ocean within the boundaries of the state;

C. The Chesapeake Bay and its tributaries;

D. All ponds, lakes, rivers, streams, public ditches, tax ditches, and public drainage systems within the state, other than those designed and used to collect, convey, or dispose of sanitary sewage; and

E. The *floodplain* of free-flowing waters determined by Maryland Department of the Environment on the basis of the 100-year *flood* frequency.