PROPOSED

BOARD OF SUPERVISORS COUNTY OF STAFFORD STAFFORD, VIRGINIA

ORDINANCE

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, Stafford County Administration Center, Stafford, Virginia, on the day of , 2003:

.....

MEMBERS:

VOTE:

Jack R. Cavalier

Peter J. Fields

Robert C. Gibbons

Kandy A. Hilliard

Mark W. Osborn

Gary D. Pash

Gary F. Snellings

On motion of , seconded by , which carried by a vote of , the following was adopted:

AN ORDINANCE TO AMEND AND REORDAIN SECTION 28-62, CHESAPEAKE BAY PRESERVATION AREA OVERLAY DISTRICT, SECTION 28-25, DEFINITIONS OF THE ZONING ORDINANCE, AND SECTIONS 22-90 THROUGH 22-97 CHESAPEAKE BAY PRESERVATION AREA OVERLAY DISTRICT OF THE SUBDIVISION ORDINANCE

WHEREAS, the Board adopted Ordinance O90-91, Chesapeake Bay Preservation Area Overlay District, with an effective date of August 1, 1991; and

WHEREAS, the Board desires to amend Chapter 28 and Chapter 22 to incorporate regulations which revise the requirements of the Chesapeake Bay Preservation Act and subsequent regulations; and

WHEREAS, the Board has carefully considered the recommendation of the Planning Commission, staff and testimony at the public hearing; and

WHEREAS, the Board finds that public necessity, convenience, general welfare or good zoning practice requires adoption of such an ordinance;

NOW, THEREFORE, BE IT ORDAINED by the Stafford County Board of Supervisors on this the day of , 2003, that Sections 28-62, 28-25, and 22-90 through 22-97 of the Zoning and Subdivision Ordinances be and they hereby are amended and reordained as follows, with all other portions remaining the same:

Sec. 28-62. Chesapeake Bay Preservation Area Overlay Districts

(a) Purpose and intent

- (1) The purpose and intent of this section is to: This ordinance is enacted to implement the requirements of Section 15.2-2283 and 10.1-2100 et seq., of the Code of Virginia, the Chesapeake Bay Preservation Act. The purpose and intent of this section is to:
 - a Protect existing high quality state waters;
 - Restore state waters to a condition or quality that will permit all
 reasonable public uses and will support the propagation and growth of
 aquatic life, including game fish, which might reasonably be expected to
 inhabit them;
 - c. Safeguard the clean waters of the commonwealth from pollution;
 - d. Prevent increases in pollution;
 - e. Reduce existing pollution;
 - f. Protect and enhance the wise use of environmental resources through management of development;
 - g. Promote water resource conservation in order to provide for the health, safety, and welfare of the present and future citizens of Stafford County;
 - Prevent a net increase in nonpoint source pollution from new development;
 - Achieve a ten-percent reduction in nonpoint source pollution redevelopment;
 - j. Achieve a forty-percent reduction in nonpoint source pollution from agricultural uses.
- (2) The Chesapeake Bay Preservation Area Overlay District shall be in addition to and shall overlay all other zoning districts where it is they are applied so that any parcel of land lying in the district shall also lie in one or more of the other zoning districts provided for by this chapter.

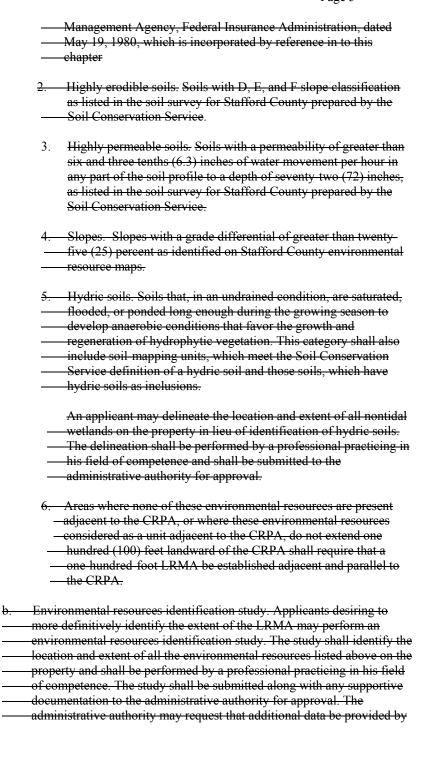
(b) Areas of applicability (district boundaries).

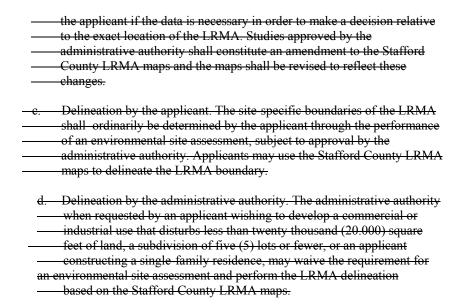
The Chesapeake Bay Preservation Area Overlay District shall apply to all appropriate land in Stafford County. The CRPA-and LRMA-maps show the general location of CRPAs and LRMAs and shall be consulted by persons contemplating activities in the county prior to engaging in a regulated activity. The CRPA and LRMA maps, as amended, together with all explanatory matter thereon, are hereby adopted by reference and declared to be part of this chapter.

- (1) Critical resource protection area (CRPA).
 - a. The CRPA shall include:
 - 1. Tidal wetlands.
 - Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams water bodies with perennial flow;
 - 3. Tidal shores;
 - 4. A one hundred-foot vegetated buffer area located adjacent to and landward of the components listed in subsections 1 through 3 above, and along both sides of any tributary stream water bodies with perennial flow.
 - b. Delineation by the applicant. The site specific boundaries of the CRPA shall ordinarily be determined by the applicant through the performance of an environmental site assessment, subject to approval by the administrative authority. Applicants may use the Stafford County CRPA maps to delineate the CRPA boundary. The CRPA wetlands designation graphic dated, May 21, 1991, developed by the Chesapeake Bay Local Assistance Department arid revised by the Stafford County Office of Planning, and the county's CRPA maps shall be used as a guide to the general location of CRPAs.. The site specific boundaries of the CRPA shall be delineated by the applicant through the performance of an Environmental Site Assessment that satisfies the requirements of Section 28-62 (h)(2) of this Code. The Stafford County CRPA maps may be used as a guide to the general location of CRPA's, however this does not relieve the applicant of the requirement of the site specific delineation of the CRPA. In addition, the administrative authority shall require that an applicant provide a site specific determination of whether water bodies with perennial flow occur onsite. This determination shall ordinarily be completed by the applicant. The Administrator may waive this requirement if during the review process it is determined that the determination is not necessary. The determination of perennial flow may be accomplished by the use of an approved scientifically valid method using field indicators of

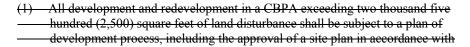
O03-07
Page 4
perennial flow. The applicant shall provide the information used for the determination to the administrator for review.

- c. Delineation by the administrative authority. The administrative authority when requested by an applicant wishing to develop a commercial or industrial use that disturbs less than twenty thousand (20,000) square feet of land, a subdivision of five (5) lots or fewer, or an applicant constructing a single family residence may waive the requirements for an environmental site assessment and perform the CRPA delineation based on the Stafford County CRPA maps. The administrator may perform a delineation when requested by an applicant wishing to construct a single-family residence. The administrator may use an approved site-specific method or the administrator may waive the requirement and complete the delineation based on all available local information. In addition, the administrator may waive the requirement for a site specific delineation if no evidence of possible CRPA features are identified through the evaluation of all available local information. This information includes topographic maps, soil surveys, and any other applicable mapping.
- d. Where conflict arises over delineation. When the applicant provides a site-specific delineation of the CRPA, the administrative authority will verify the accuracy of the boundary delineation. In determining the site-specific CRPA boundary the administrative authority may render adjustments to the applicant's boundary delineation. In the event the adjustment boundary delineation is contested by the applicant, the applicant may seek relief an exception or variance, in accordance with the provisions of this chapter.
- (2) Land/resource management area (LRMA).
- a. The land/resource management (LRMA) shall comprise that land where one of the environmental resources listed below is present and where these environmental resources considered as a unit are contiguous to the CRPA.
 - a. The land/resource management area (LRMA) shall include all areas of Stafford County not designated as a Critical Resource Protection Area (CRPA).
 - 1. Flood plain districts. Districts specifically designated pursuant to Article IV, section 28-57 (Flood Hazard Overlay District) of this chapter, as being inundated primarily by the one-hundred year flood, including areas identified as the floodway district (FW), the flood fringe district (FF), and the general floodplain district (FA). The basis for delineation for the flood plain district shall be the flood insurance study for Stafford County, Virginia, prepared by the Federal Emergency





- e. Where conflict arises over delineation. Where the applicant has provided a site specific delineation of the LRMA, the administrative authority will verify the accuracy of the boundary delineation. In determining the site specific LRMA boundary, the administrative authority may render adjustments to the applicant's boundary delineation. In the event the adjusted boundary delineation is contested by the applicant, the applicant may seek relief, in accordance with the provisions of this chapter.
- (c) Use regulations. Permitted uses, special permit uses, accessory uses, and special requirements shall be as established by the underlying zoning district, unless specifically modified by the requirements set forth herein.
- (d) Lot size. Lot size shall be subject to the requirements of the underlying zoning district(s) provided that any lot shall have sufficient buildable area outside the CRPA to accommodate an intended development, when such development is not otherwise allowed in the CRPA.
- **(e)** Conflict with other regulations. In any case where the requirements of this overlay district conflict with any other provision of this chapter or the Stafford County Code, whichever imposes the more stringent restrictions shall apply.
- (f) Required Conditions Development conditions



the provisions	s of this chapter,	or a subdivision	nlan in accor	dance with the
the provision.	or tins chapter,	or a subarvision	pian in accor	dance with the
- subdivision or	rdinance, or an er	rosion and sedin	nentation (E &	S) plan in
	rith the E&S cont		`	, 1

- (2) Development in CRPA's may be allowed only if it:
 - a. Is water-dependent; or
 - b. Constitutes redevelopment.

(1) <u>Land Development in Critical Resource Protection Areas may be allowed only</u> when permitted by the Administrator and if it is:

- (a.) water-dependent and satisfies the conditions of subdivision 1 of this subsection;
 - 1. A new or expanded water dependent facility may be allowed provided that the following criteria are met:
 - a. It does not conflict with the comprehensive plan;
 - b. It complies with the performance criteria set forth in Section (g) of this Article;
 - <u>c.</u> Any nonwater-dependent component is located outside of the CRPA; and
 - d. Access to the water dependent facility will be provided with the minimum disturbance necessary. Where practicable, a single point of access will be provided.
- (b.)constitutes redevelopment and satisfies the conditions of subdivision 1 of this subsection;
 - 1. Redevelopment on isolated redevelopment sites shall be permitted only if there is no increase in the amount of impervious cover and no further encroachment within the CRPA and it shall conform to Chapter 11 (Erosion and Sediment Control) of this Code, and Chapter 21.5 (Stormwater Management) of this Code.

(c.) is a new use subject to the provisions of Section 28-62.(g)(2) of this Article;

(d.) is a road or driveway crossing satisfying the conditions set forth in Subdivision 1 of this subsection;

- 1. Roads and driveways not exempt under Section 28-62.(j) and which, therefore, must comply with the provisions of this Article, may be constructed in or across CRPAs if each of the following conditions are met:
 - a. The Administrator makes a finding that there are no reasonable alternatives to aligning the road or drive in or across the CRPA;
 - b. The alignment and design of the road or driveway are optimized, consistent with other applicable requirements, to minimize encroachment in the CRPA and minimize adverse effects on water quality.
 - c. The design and construction of the road or driveway satisfy all applicable criteria of this Article;
 - d. The Administrator reviews the plan for the road or driveway proposed in or across the CRPA in coordination with the plan of development requirements as required under Section 28-62(h) or in accordance with the subdivision ordinance.

(e.) is a flood control or stormwater management facility satisfying the conditions set forth in Subdivision 1 of this subsection.

- 1. Flood control or stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of the watershed may be allowed in the CRPA provided that:
 - (a) the local government has conclusively established that the proposed location of the facility is the optimum location;
 - (b) the size of the facility is the minimum necessary to provide necessary flood control, stormwater treatment both;
 - (c) the facility must be identified in U.S. Army Corps of
 Engineers Permit Number 97-1212-45 or be consistent with a
 stormwater management program that has been approved by
 the Chesapeake Bay Local Assistance Board as a Phase One
 Modification;
 - (d) all applicable permits for construction in state or federal waters must be obtained from the appropriate state and federal agencies such as the U.S. Army Corps of Engineers.

the Virginia Marine Resources Commission, and the Virginia Department of Environmental Quality;

- (e) approval must be received from the local government prior to construction; and
- (f) routine maintenance is allowed to be performed on such facilities to assure that they continue to function as designed.
- It is not the intent of this subsection to allow a best management practice that collects and treats runoff from only an individual lot or some portion of the lot to be located in the CRPA.
- 3. Stormwater management facilities, that do not meet all of the above criteria, shall not be allowed in the CRPA unless a variance has been granted in accordance with the requirements of Section 28-62(1).
- (2). A water quality impact assessment as outlined in this chapter shall be required for any proposed land disturbance, development, or redevelopment within the CRPA.

(g) Performance standards General Performance criteria

- (1) General performance standards criteria for development in CBPAS.
 - a. Land disturbance shall be limited to the area necessary to provide for the desired proposed use or development.
 - 1. The limits of land disturbance, including limits of clearing or grading shall be strictly defined by the approved site plan, construction plan or individual site location plan for a parcel. The limits shall be clearly shown on all plans submitted and land disturbance shall not occur within five (5) feet of the dripline of any strand [stand] of trees to be preserved. The construction footprint shall not exceed the limits for such as designated by the zoning district of the lot or parcel.
 - Ingress and egress during construction shall be limited to approved access points.
 - b. Indigenous vegetation, which has a demonstrated ability to filter pollutants, shall be preserved consistent with the use or development being proposed.

 Indigenous vegetation shall be preserved to the maximum extent practicable consistent with the proposed use or development.

- Existing trees over two (2) inches diameter at breast height (DBH) outside the limits of land disturbance shall be preserved in accordance with the approved site plan, construction plan or individual site location plan for a parcel. Diseased trees or trees weakened by age, storm, fire, or other injury may be removed.
- 2. Clearing shall only be permitted for usual and customary activities associated with the permitted use.

 Site clearing for construction activities shall be allowed as approved by the Administrator through the plan of development review process outlined under Section 28-62(h) of this Article.

 Prior to clearing and grading, suitable protective barriers, like safety fencing, shall be erected 5 feet outside the dripline of any tree or around any stand of trees to be preserved. Protective barriers shall remain so erected throughout all phases of construction. The storage of equipment, materials, debris, or fill shall not be allowed within the area protected by the barrier.
- Land development shall minimize impervious cover to promote infiltration of stormwater into the ground consistent with the <u>proposed</u> use or development.
 - Parking areas proposed in the CRPA, the floodway district, the flood-fringe district or the floodplain district shall, to the greatest extent practical, use pervious materials, such as gravel or porous pavement.
 - 2. (Reserved.)
- (d) Notwithstanding any other provisions of this chapter or waivers or exemptions thereto, any land disturbing activity exceeding two thousand five hundred (2,500) square feet, including construction of all single-family houses, septic tanks, and drainfields, shall comply with the requirements of Chapter 11 of this Code.
- (e) All development and redevelopment in a CBPA exceeding two thousand five hundred (2,500) square feet of land disturbance shall be subject to a plan of development process, including the approval of a site plan in accordance with the provisions of this chapter, or a subdivision plan in accordance with the subdivision ordinance, or an erosion and sedimentation (E & S) plan in accordance with the E&S control ordinance.
- (f) All on-site sewage disposal systems not requiring a Virginia Pollution Discharge Elimination System (VPDES) permit shall be pumped out at least once every five (5) years, in accordance with the provisions of the state health code.
- (g) A reserve sewage disposal site with a capacity at least equal to that of the

primary sewage disposal site shall be provided, in accordance with the state health code. This requirement shall not apply to any lot or parcel recorded prior to October 1, 1989. If a parcel was platted on or before August 1, 1991, the parcel shall be required to provide the reserve sewage disposal site the greatest extent practical, as determined by the local health department. Building or construction of impervious surface shall be prohibited on the area of all sewage disposal sites or on an on-site sewage treatment system which operates under a permit issued by the appropriate state agency, until the structure is served by public sewer.

- (h) Prior to initiating grading or other on site activities on any portion of a lot or
 parcel on an approved final plat or site plan, all wetlands permits required by
 federal, state, and local laws and regulations shall be obtained.
- An approved plan of development and all federal and state wetlands permits are required prior to initiating clearing, grading, or other on-site activities on any portion of a lot or parcel. Evidence of above stated permits must be provided to the administrator upon request.
- (i) Land upon which agricultural activities are being conducted shall have a soil and water quality conservation plan. Such plan shall be based upon the Field Office Technical Guide of the U.S. Department of Agriculture Soil Conservation Service and accomplish water quality protection consistent with this chapter. Such a plan shall be approved by the local soil and water conservation district by January 1,1995.

Land upon which agricultural activities are being conducted shall undergo a soil and water quality conservation assessment. Such assessment shall evaluate the effectiveness of existing practices pertaining to soil erosion and sediment control, nutrient management and management of pesticides, and where necessary, results in a plan that outlines additional practices needed to ensure that water quality protection is accomplished consistent with this article.

- (8) Stormwater management facilities shall be permitted in the critical resource protection area if the facility meets the Chesapeake Bay Preservation Area Stormwater Management requirements of Chapter 11 of the County Code.
- (j) For any use or development, stormwater runoff shall be controlled by the use of water quality best management practices consistent with the water quality criteria of Chapter 21.5 (Stormwater Management) of this Code.
- (2) CRPA buffer area requirements.
 - To minimize the adverse effects of human activities on the other components of CRPAs, state waters, and aquatic life, a minimum one hundred-foot buffer area of vegetation that is effective in retarding runoff,

preventing erosion, and filtering nonpoint source pollution from runoff shall be retained if present and established where it does not exist for development.

- b. Agricultural buffer areas shall be established on or before the Fall 1992 growing season.
- c. When replanting is required to establish a buffer, a combination of trees, grass groundcover, and shrubs with a demonstrated ability to improve water quality shall meet the intent of the buffer area.
- d. The buffer area shall be located adjacent to and landward of other CRPA components and along both sides of any water body with perennial flow. The full buffer area shall be designated as the landward component of the CRPA, in accordance with Sections 62(b) and (h).
- d. The one hundred-foot forested buffer area shall be deemed to achieve a seventy five-percent reduction of sediments and a forty-percent reduction of nutrients. A combination of a buffer area not less than fifty (50) feet in width and appropriate best management practices located landward of the buffer area which collectively achieve water quality protection, pollutant removal, and water resource conservation at least the equivalent of the full one hundred foot buffer area may be employed in lieu of the one hundred foot buffer is approved by the administrative authority after consideration of the water quality impact assessment, in accordance with Chapter 22 of this Code.
- f. The CRPA buffer area shall be maintained pursuant to the following performance standards:
 - 1. Indigenous vegetation may be removed <u>subject to approval by the administrator</u>, only to provide for reasonable sight lines, access paths, general woodlot management, and best management practices including those that prevent upland erosion and concentrated flows of stormwater, as follows:
 - (a) Trees may be pruned or removed as necessary to provide for sight lines and vistas, provided that where removed, they shall be replaced with other vegetation that is equally effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff.
 - (b) Any pathways shall be designed and constructed so as to effectively control erosion

- (c) Dead, diseased, or dying trees or shrubbery may be removed at the discretion of the landowner; silvaculture thinning may be conducted based upon the best available technical information subject to approval by the administrator and pursuant to approved horticultural practices.
 - (d) For shoreline erosion control projects, trees and woody vegetation may be removed, necessary control techniques employed_and appropriate vegetation established to protect or stabilize the shoreline in accordance with the best available technical advice and applicable permit conditions or requirements.
- 2. When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded prior to October 1, 1989, the administrative authority may modify the width of the buffer area after consideration of the water quality impact assessment in accordance with this chapter and the following criteria:

Administrator may, through an administrative process permit encroachments into the buffer area after consideration of Sections 28-62.(h) and (i), and in accordance with the following criteria:

- (a) Encroachments into Modifications to the buffer areas shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities; and
- (b) Where practicable possible, an area equal to the area of encroachment into the buffer area shall be established elsewhere on the lot or parcel. in a way to maximize water quality protection and to mitigate the effects of the buffer encroachment; and

Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot or parcel.

(c) In no case shall the reduced portion of the buffer area be less than fifty (50) feet in width without obtaining variance approval in accordance with this chapter.

The encroachment shall not extend into the seaward 50

feet of the buffer area.

- When the application of the buffer area would result in the loss of buildable area on a lot or parcel recorded between October 1, 1989 and March 1, 2002 encroachments into the buffer area may be allowed through an administrative process in accordance with the following criteria:
 - a. The lot or parcel was created as a result of a legal process conducted in conformity with the local government's subdivision regulations;
 - <u>b.</u> Conditions or mitigation measures imposed through a previously accepted exception shall be met;
 - c. If the use of a Best Management Practice (BMP) was previously required, the BMP shall be evaluated to determine if it continues to function effectively and, if necessary, the BMP shall be reestablished or repaired and maintained as required; and
 - d. The criteria in subdivision (2) of this section must be met.
- 4. On agricultural lands, the agricultural buffer area shall be managed to prevent concentrated flows of surface water from breaching the buffer area and noxious weeds from invading the buffer area. The agricultural buffer area may be reduced as follows Agricultural activities may encroach into the buffer area as follows:
 - (a) To a minimum width of fifty (50) feet when the adjacent land is implementing a federal, state, or locally funded agricultural best management practices program, provided that the reduction of the reduced buffer area and the best management practices achieve water quality protection, pollutant removal, and water resource conservation at least the equivalent of the one hundred foot buffer area;
 - (a) Agricultural activities may encroach into the landward 50 feet of the 100-foot wide buffer area when at least one agricultural best management practice which, in the opinion of the local soil and water conservation district board, addresses the more predominant water quality issue on the adjacent land-erosion control or nutrient management-is being implemented on the adjacent land, provided that the combination of the undisturbed buffer

area and the best management practice achieves water quality protection, pollutant removal, and water resource conservation at least the equivalent of the 100-foot wide buffer area. If nutrient management is identified as the predominant water quality issue, a nutrient management plan, including soil tests, must be developed consistent with the Virginia Nutrient Training and Certification Requirements administered by the Virginia Department of Conservation and Recreation.

(b) To a minimum width of twenty five (25) feet when a soil and water quality conservation plan, as approved by the local soil and water conservation district, has been implemented on the adjacent land. Such plan shall be based upon the Field Office Technical Guide of the U.S. Department of Agriculture Soil Conservation Service and accomplish water quality protection consistent with this chapter.

Agricultural activities may encroach within the landward 75 feet of the 100 foot wide buffer when agricultural best management practices which address erosion control, nutrient management, and pest chemical control, are being implemented on the adjacent land. The erosion control practices must prevent erosion from exceeding the soil loss tolerance level, referred to as "T", as defined in the National Soil Survey Handbook of November, 1996 in the "Field Office Technical Guide" of the U.S. Department of Agriculture Natural Resource Conservation Service. nutrient management plan, including soil tests, must be developed, consistent with the Virginia Nutrient Management Training and Certification Requirements administered by the VA DCR. In conjunction with the remaining buffer area, this collection of BMP's shall be presumed to achieve water quality protection at least the equivalent of that provided by the 100 foot buffer area

- (c) The buffer area is not required for agricultural drainage ditches if the adjacent agricultural land has in place best management practices in accordance with a conservation plan approved by the local soil and water conservation district.
- (5) Where land uses such as agriculture or silviculture within the area of the buffer cease and the lands are proposed to be converted to other uses, the full 100-foot buffer shall be reestablished. In reestablishing the buffer, management measures shall be undertaken to provide woody vegetation that assures the buffer functions set forth in this chapter.

(h) Plan of development process.

(1) Required information. In addition to the requirements specified in Chapters 11 and 22 of the Stafford County Code, the plan of development process for CBPA's shall consist of the plans and studies identified below. These required plans and studies may be coordinated or combined, as deemed appropriate by the administrative authority. The administrative authority may determine that some of the following information is unnecessary due to the location, scope, or nature of the proposed development.

The following plans or studies shall be submitted, unless otherwise provided for:

- a. A <u>site</u> plan <u>of development</u> in accordance with the provisions of this chapter, <u>or Chapter 22 of this Code</u>;
- b. An environmental site assessment;
- c. A landscaping element;
- d. A stormwater management plan <u>in accordance with Chapter 21.5 of the</u> this Code.
- e. An erosion and sediment control plan in accordance with the provisions of Chapter 11 of this Code;
- f. Individual CRPA site location plan.
- (2) Environmental site assessment. An environmental site assessment shall be submitted in conjunction with a site plan any plan of development. The administrative authority, when requested by an applicant proposing development that would result in less than five thousand (5,000) square feet of disturbed land area, shall perform the environmental site assessment administrator may waive the requirement for an Environmental Site Assessment, in accordance with Section 28.62 (b)(1)(c).
 - a. The environmental site assessment shall be drawn to scale and clearly delineate the following environmental features:
 - 1. Tidal wetlands;
 - 2. Tidal shores;
 - Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams water bodies with perennial flow;

- 4. Tributary streams Water bodies with perennial flow as identified on the CRPA Maps;
- 5. A one hundred-foot buffer area located adjacent to and landward of the components listed in paragraphs 1 through 4 above.
- b. Wetlands delineations shall be performed consistent with the procedures specified by the U.S. Army Corps of Engineers.
- The environmental site assessment shall delineate the site-specific geographic extent of the CRPA.
- d. The environmental site assessment shall be drawn at the same scale as the site plan plan of development, and shall be certified as complete and accurate by professionals practicing in their field of competence.
- (3) Landscaping element. A landscaping element shall be included in conjunction with site plan approval. No clearing or grading of any lot or parcel shall be permitted without approved plans. Plans depicting landscaping elements shall be prepared or certified by design professionals practicing within their area of competence.
 - a. Contents of the landscaping element.
 - 1. The landscaping element shall be drawn to scale and generally show the location and description of existing and proposed plant material. Where there are groups of trees, stands may be outlined instead. Trees to be removed within the limits of clearing and grading shall be clearly delineated.
 - 2. Any required buffer area shall be clearly delineated and any plant material to be added to establish or supplement the buffer area, as required by this Chapter shall be shown.
 - 3. Within the buffer area, vegetation to be removed for sight lines, vistas, access paths, and best management practices, as provided for in this Chapter, shall be shown. Vegetation required by this Chapter to replace any existing vegetation within the buffer area shall also be shown.
 - 4. Vegetation to be removed for shoreline stabilization projects and any replacement vegetation required by this Chapter shall be shown.
 - 5. The landscaping element shall depict grade changes or other work adjacent to trees which would affect them adversely. Specifications shall be provided as to how grade, drainage, and aeration would be maintained around trees to be preserved.

6. The landscaping element shall include specifications for the protection of existing trees during clearing, grading, and all phases of construction.

b. Plant Specifications.

- All plant materials necessary to supplement the buffer area shall be installed according to standard planting practices and procedures.
- All supplementary or replacement plant materials shall be living and in a healthy condition. Plant materials shall conform to the standards of the most recent edition of the American Standard for Nursery Stock, published by the American Association of Nurserymen.
- 3. Where areas to be preserved within the CRPAs and mitigation areas, as designated on an approved site plan or individual site location plan for a parcel, are encroached, replacement of existing trees over six (6) inches DBH will be achieved at a ratio of three (3) planted trees to one removed. Replacement trees shall be a minimum three and one-half (3.5) inches DBH at the time of planting.

c. Maintenance.

- 1. The property owners shall be responsible for the maintenance and replacement of all vegetation as may be required by the provisions of this Chapter.
 - a. In buffer and/on mitigation areas, required by a site plan or individual site location plan, plant material shall be tended and maintained healthy growing conditions and free from refuse and debris. Diseased plant materials shall be replaced during the next planting season, as required by the provisions of this chapter.
- (4) Stormwater management plan. A stormwater management plan shall be submitted as part of the plan of development process required by this chapter and in conjunction with site-plan approval. The contents of the plan shall be in accordance with the requirements of Chapter 21.5 of this Code.
 - a. Contents of the plan. The stormwater management plan shall contain maps, charts, graphs, tables, photographs, narrative descriptions, explanations, and citations to supporting references as appropriate to communicate the information required by this chapter and the adopted Stafford County Chesapeake Bay Stormwater Management Calculation Procedure. At a minimum, the stormwater management plan must contain the following:

- 1. Location and design of all planned stormwater control devices;
- Procedures for implementing nonstructural stormwater control practices and techniques;
- Pre and post development nonpoint source pollutant loadings with supporting documentation of all utilized coefficients and calculations:
- 4. For facilities, verification of structural soundness, by a professional practicing within his area of competence.
- b. All engineering calculations most be performed in accordance with procedures outlined in the Virginia Stormwater Management Handbook. eurrent edition of the Local Assistance Manual, Virginia Erosion and Sediment Control Handbook, Virginia Department of Transportation Drainage Manual, or any other accepted engineering methods deemed appropriate by the administrative authority.
- e. The plan shall establish a long term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than Stafford County, then a maintenance agreement shall be executed between the responsible party and Stafford County.
- d. Stormwater management facilities meeting the Chesapeake Bay Preservation Area requirements in Chapter 11 of the County Code, proposed to be located in the CRPA shall submit a rationale to the County which evaluates alternative sites and justifies the location of the facility in the CRPA.
- (5) CRPA individual site location plan. A CRPA individual site location plan shall be required for all land disturbing activities located in the CRPA. This plan shall be submitted in conjunction with an application for a single-family residential building permit, grading permit or plan submitted in compliance with Chapter 11 of this Code. This requirement shall not apply to those lots associated with an approved site plan or subdivision plan that meets the requirements of this Chapter. The CRPA individual site location plan shall clearly delineate the CRPA and any proposed mitigation measures. The administrative authority shall review the CRPA individual site location plan and determine whether the encroachment is warranted The administrative authority may approve, modify on deny the plan.
- (6) Final site plans of development. Final site plans of development for all lands within CBPAs shall include the following additional information:

- a. The <u>site specific</u> delineation of the critical resource protection area boundary;
- b. The <u>site specific</u> delineation of required buffer areas of the CRPA;
- c. All wetlands permits required by law;
- d. A BM P maintenance agreement in accordance with approved county policy with Chapter 21.5 of this Code.
- (7) *Installation and security requirements.*
 - a. Where buffer areas, landscaping, stormwater management facilities or other specifications of an approved plan are required, no certificate of occupancy shall be issued until the installation of required plant materials or facilities is completed, in accordance with the approved site plan.
 - b. When the occupancy of a structure is desired prior to the completion of the required landscaping, stormwater management facilities, or other specifications of an approved plan, a certificate of occupancy may be issued only if the applicant provides to the administrative authority security in a form and amount which is in accordance with the Stafford County Security Policy.

(i) Water quality impact assessment.

- (1) Purpose and intent. The purpose of the water quality impact assessment is to:
 - (a) identify the impacts of proposed land disturbance, development, or redevelopment on water quality and lands within CBPAs;
 - (b) provide for administrative relief from the terms of this chapter when warranted and in accordance with the requirements contained herein; and
 - (c) specify mitigation which will address water quality protection.
- (2) Water quality impact assessment When required. A water quality impact assessment is required for:
 - (a) Any proposed <u>land disturbance</u>, development, <u>or redevelopment</u> within a CRPA, including any buffer area modification or encroachment reduction;
 - (b) Any <u>land disturbance</u>, development, <u>or redevelopment</u> in an LRMA as deemed necessary by the administrative authority due to the unique characteristics of the site or intensity of the proposed development. The administrative authority when requested by the applicant proposing to construct a single-family residence in the CRPA shall perform a water

quality impact assessment.

- (c) The water quality impact assessment shall not be required prior to submission of a site plan or application for a single-family residence building permit.
- (d)There shall be two (2) levels of water quality impact assessments: A minor assessment and a major assessment.
- (3) Minor water quality impact assessment. A minor water quality impact assessment pertains only to <u>land disturbance</u>, development, <u>or redevelopment</u> within CRPAs which causes no more than five thousand (5,000) square feet of land disturbance and requires any <u>modification or encroachment into the</u> landward fifty (50) feet of the one hundred-foot buffer area. A minor assessment must demonstrate through acceptable calculations that the remaining buffer and necessary best management practices will result in removal of no less than seventy-five (75) percent of sediments and forty (40) percent of nutrients from post development stormwater runoff. A minor assessment shall include a site drawing to scale which shows the following:
 - a. Location of the components of the CRPA, including the one hundred-foot buffer area;
 - Location and nature of the proposed encroachment into the buffer area, including: Type of paving material: area of clearing or grading; location of any structures, drives, or other impervious cover; and sewage disposal systems or reserve drainfield sites,
 - c. Type and location of proposed best management practices to mitigate the proposed encroachment.
 - d. <u>Location of existing vegetation onsite, including the number and type of trees and other vegetation to be removed in the buffer to accommodate the encroachment or modification.</u>
 - e. A revegetation plan that supplements the existing buffer vegetation in a manner that provides for pollutant removal, erosion, and runoff control.
- (4) Major water quality impact assessment. A major water quality impact assessment shall be required for any land disturbance, development, or redevelopment which exceeds five thousand (5,000) square feet of land disturbance within CRPAs and requires any modification or reduction encroachment into the landward fifty (50) feet of the one hundred-foot buffer area, or disturbs any portion of the seaward fifty-feet of the one hundred-foot buffer area or any other components of an CRPA, or is located in an LRMA and is deemed necessary by the administrative authority. The information required in this section shall be considered a minimum, unless the administrative authority determines that some of the elements are unnecessary

due to the scope and nature of the proposed use and development of land.

A water quality impact assessment shall not be required for commercial or industrial uses that disturb less than twenty thousand (20,000) square feet of land or individual single-family lots, located within the LRMA and outside the CRPA. The following elements shall be included in the preparation and submission of a major water duality assessment:

- a. All of the information required in a minor water quality impact statement, as specified in section 28-62(i)(3).
- b. A hydrogeological element which shall:
 - 1. Describe the existing topography, soils, hydrology and geology of the site and adjacent lands
 - 2. Describe the impacts of the proposed development on topography, soils, hydrology and geology on the site and adjacent lands.
 - 3. Indicate the following:
 - (a) Disturbance or destruction of wetlands in CRPAs and justification for such action.
 - (b) Disruptions or reductions in the supply of water to wetlands, streams, lakes, rivers or other water bodies;
 - (c) Disruptions to existing hydrology including wetland and stream circulation materials.
 - (d) Description of proposed fill material;
 - (e) Location of dredge material and location of dumping area for such material;
 - (f) Estimation of pre- and post-development pollutant loads in runoff;
 - (g) General location of and impacts on shellfish beds, Submerged aquatic vegetation, and fish spawning areas;
 - (g) Estimation of percent increase in impervious surface on site and types of surfacing materials used;
 - (h) Percent of site to be cleared for project;

- (i) Anticipated duration and phasing schedule of construction project;
- (j) Listing of all requisite permits from all applicable agencies necessary to develop project.
- (k) Descriptions of the proposed mitigation measures for the potential hydrogeological impacts. Potential mitigation measures may include, but are not limited to:
 - Proposed erosion and sediment control concepts.
 Concepts may include minimizing the extent of time
 cleared areas, perimeter controls, reduction of runoff
 velocities, measures to stabilize disturbed areas,
 schedule and personnel for site inspection;
 - 2. Proposed stormwater management system; and
 - 3. Minimizing excavation and fill.
- c. A landscape element for areaswithin CBPAs that:
 - 1. Identifies the general location of all significant plant material on site. Where there are groups of trees, stands may be outlined.
 - 2. Describes the impacts the development or use will have on the existing vegetation. Information should include:
 - (a) General limits of cleaning, based on all anticipated improvements, including buildings, drives, and utilities;
 - (b) Clear delineation of all trees which will be removed;
 - (c) General description of plant material to be disturbed or removed.
 - 3. Describes the potential measures for mitigation. Possible mitigation measures which may include, but are not limited to:
 - (a) Replanting schedule for vegetation removed for construction, including a list of possible planting materials to be used;
 - (b) Demonstration that the design of the plan will preserve to the greatest extent possible any significant vegetation on the site:
 - (c) Demonstration that indigenous plants are to be used to the greatest extent possible.

- d. A wastewater element, where applicable, that:
 - 1. Includes calculations and locations of anticipated drainfield or wastewater irrigation areas;
 - 2. Provides justification for sewer line locations in CBPAs, where applicable, and describes construction techniques and standards;
 - 3. Discusses any proposed on-site collection and treatment systems, their treatment levels, and impacts on receiving watercourses;
 - 4. Describes the potential impacts of the proposed wastewater systems, including the proposed mitigative measures for these impacts.
- e. Identification of the existing characteristics and conditions of sensitive lands including as components of CRPAs, as defined in this chapter.
- f. A general identification of the natural processes and ecological relationships inherent in the site, and an assessment of the impact of the proposed use and development of land on these processes and relationships.
- (5) Submission and review requirements.
 - a. Five (5) copies of all site drawings and other applicable information as required by subsections (c) and (d) above shall be submitted to the administrative authority for review.
 - b. All information required in this section shall be certified as complete and accurate by a professional practicing in his field of competence.
 - c. A major or minor water quality impact assessment shall be prepared and submitted to and reviewed by the administrative authority in conjunction with plan submission.
 - d. As part of any major water quality impact assessment submittal, the administrative authority may require review by the Chesapeake Bay Local Assistance Department (CBLAD). Upon receipt of a major water quality impact assessment, the administrative authority will determine if such review is warranted and may request CBLAD to review the assessment and respond with written comments. Comments by CBLAD will be incorporated into the final review by the administrative authority, provided that such comments are provided by CBLAD within ninety (90) days of the request.
- (6) Evaluation procedure.
 - a. Upon the completed review of a minor water quality impact assessment, the

administrative authority will determine if any proposed modification or reduction to the buffer area is consistent with the provisions of this chapter and make a finding based upon the follow criteria:

- 1. The justification for the proposed encroachment and the ability to place improvements elsewhere on the site to avoid disturbance of the buffer area;
- 2. Minimization of impervious surface;
- 3. The extent to which proposed best management practices achieve the requisite reductions in pollutant loading;
- 4. The extent which development proposal meets the purpose and intent of this chapter;
- 5. The cumulative impacts (degradation) on water quality of the proposed development, when considered in relation to other existing and proposed development in the vicinity.
- b. Upon the completed review of a major water quality impact assessment, the administrative authority will determine if the proposed development is consistent with the purpose and intent of this chapter and make a finding based upon the following criteria.
 - 1. Within any CRPA, the proposed development is water-dependent;
 - 2. The disturbance of any wetlands in CRPAs will be minimized;
 - 3. The development will not result in significant disruption of the hydrology of the site;
 - 4. The development will not result in significant degradation to aquatic vegetation or life;
 - 5. The development will not result in unnecessary destruction of plant materials on site;
 - 6. Proposed erosion and sediment control concepts are adequate to achieve the reductions in erosion and prevent off-site sedimentation;
 - 7. Proposed stormwater management concepts are adequate to control the stormwater runoff to achieve the required performance standard for pollutant control; to achieve water quality control in accordance with Chapter 21.5 of this Code;

- 8. Proposed revegetation of disturbed areas will provide adequate erosion and sediment control benefits;
- 9. The design and location of any proposed drainfield will be in accordance with the requirements of this chapter;
- The development. as proposed, is consistent with the purpose and intent of this chapter;
- 11. The cumulative impact of the proposed development, when considered in relation to other development in the vicinity, both existing and proposed, will not result in a significant degradation of water quality.
- c. The administrative authority shall require additional information where it is determined potential impacts have not been adequately addressed and may require additional mitigation measures based on the criteria listed above in subsections b. (1) and b(2).
- d. The administrative authority shall find the proposal to be inconsistent with the purpose and intent of this chapter when the impacts created by the proposal cannot be mitigated. Evaluation of the impacts will be made by the administrative authority based on the criteria listed above in subsections a. and b.

(j) Exemptions.

(j) Non-conforming uses and noncomplying structures.

- (1) The Administrator may permit the continued use, but not necessarily the expansion, of any structure in existence on May 21, 1991, the date of local program adoption. The Administrator may waive or modify the criteria of this part through an administrative review process for structures on legal nonconforming lots or parcels provided that:
 - (a) There will be no net increase in non-point source pollution load; and
 - (b) Any development or land disturbance exceeding an area of 2,500 square feet complies with all erosion and sediment control requirements.
 - (c) An application for a nonconforming use and/or waiver shall be made to and upon forms furnished by the administrator and shall include for the purpose of proper

enforcement of this section, the following information:

- (1.) Name and address of applicant and property owner
- (2.) <u>Legal description of property and type of proposed</u> use and development
- (3.) A sketch of the dimensions of the lot or parcel, location of buildings and proposed additions relative to the lot lines, and boundary of the CRPA.
- (4.) <u>Location and description of any existing private water</u> <u>supply or sewage system.</u>
- (d) A nonconforming use and development waiver shall become null and void twelve months from the date issued if no substantial work has commenced
- (e) An application for the expansion of a legal principal nonconforming structure may be approved by the Administrator through an administrative review process provided the following findings are made:
 - (1) The request for the waiver is the minimum necessary to afford relief
 - (2) Granting the waiver will not confer upon the applicant any specific privileges that are denied by this article to other property owners in similar situation
 - (3) The waiver is in harmony with the purpose and intent of this article and does not result in water quality degradation
 - (4) The waiver is not based on conditions or circumstances that are self created or self imposed
 - (5) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the waiver from causing a degradation of water quality
 - (6) Other findings as appropriate and required by Stafford County are met; and
 - (7) In no case shall this provision apply to accessory structures.

(2) This chapter shall not be construed to prevent the reconstruction of preexisting structures within CBPA areas occurring as a result of casualty loss unless otherwise restricted by other ordinances.

(k) Exemptions

- a. Construction, installation, operation, and maintenance of electric, gas, and telephone transmission lines, railroads, and roadways and their appurtenant structures designed in accordance with the Erosion and Sediment Control Law (section 10.1-560 et seq. of the Code of Virginia) or an erosion and sediment control plan approved by the Virginia Soil and Water Conservation Board will be deemed to constitute compliance with this overlay district.
- (1). Construction, installation, operation, and maintenance of electric, natural gas, fiber optic, telephone transmission lines, railroads and public roads and their appurtenant structures in accordance with (a) regulations promulgated pursuant to the Erosion and Sediment Control Law (§10.1-560 et seq of the Code of Virginia), and the Stormwater Management Act (§10.1-603.1 et seq of the Code of Virginia), (b) an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation, or (c) local water quality protection criteria at least as stringent as the above state requirements will be deemed to constitute compliance with this chapter. The exemption of public roads is further conditioned by the following:
 - (a) Optimization of the road alignment and design, consistent with other applicable requirements, to prevent or otherwise minimize (1) encroachment into the Critical Resource Protection Area and (2) adverse effects on water quality;
 - (b) All public roads shall be exempt from the requirements of this chapter as long as it is determined that there is no other reasonable alternative to locating the road in or through the CRPA and they meet the criteria listed above.
- (2). Exemptions for local utilities and other service lines. Construction, installation, and maintenance of water, sewer, and local natural gas lines, underground telecommunications lines, and cable television lines owned or permitted by a local government or regional service authority shall be exempt from these overlay district requirements provided that:
 - a. To the degree possible, the location of such utilities and facilities shall be outside CRPAs;
 - No more land shall be disturbed than is necessary to provide for the desired proposed utility or facility installation;

- All construction, installation, and maintenance of such utilities and facilities shall be in compliance with all applicable state and federal requirements and permits and designed and conducted in a manner that protects water quality; and
- d. Any land disturbance exceeding an area of two thousand five hundred (2,500) square feet complies with all Stafford County erosion and sediment control requirements.
- (3) Exemptions for silvaculture activities. Silvaculture activities are exempt from the requirements of this overlay district provided that silvaculture operations adhere to water quality protection procedures prescribed by the department of forestry in its "Best Management Practices Handbook for Forestry Operations."
- (3) Exemptions for silviculture activities. Silviculture activities are exempt from this chapter provided that silvicultural operations adhere to water quality protection procedures prescribed by the Virginia Department of Forestry in the January 1997 edition of "Virginia Forestry Best Management Practices for Water Quality". The Department of Forestry will oversee and document installation of best management practices and will monitor in-stream impacts of forestry operations in Chesapeake Bay Preservation Areas.
- (4) Exemptions in critical resource protection areas.. The following land disturbances in CRPAs shall be exempted from these overlay district requirements;
 - a. Water wells;
 - b. Passive recreation facilities such as boardwalks, trails. and pathways; and
 - Historic preservation and archaeological activities, provided that it is demonstrated that:
 - 1. Any required permits, except those to which this exemption specifically applies, have been issued;
 - The applicant submits sufficient and reasonable evidence to the administrative authority showing that the intended use will not deteriorate water quality;
 - 3. The intended use does not conflict with nearby planned or approved uses; and
 - 4. Any land disturbance exceeding an area of two thousand five

hundred (2.500) square feet shall comply with all Stafford County erosion and sediment control requirements

- (5) Exemptions for usual and customary activities in CBPA s . The following activities shall be exempted from these overlay district requirements:
 - a. Lawn maintenance, including grass cutting;
 - b. Home gardening;
 - c. General woodlot management;
 - d. Maintenance of lawfully permitted bulkheads, piers, riprap, and other shoreline stabilization structures;
 - e. Maintenance of drives, walks, and other access ways; and
 - f. Other similar activities

(I) Variances

- (1). A request for a variance to the requirements of Section 28-62(f) and (g)(2) shall be made in writing to the Board of Zoning Appeals. It shall identify the impacts of the proposed exception on water quality and on lands within the Critical Resource Protection Area through the performance of a water quality impact assessment which complies with the provisions of Section 28-62(i)
- (2). Stafford County shall notify the affected public of any such variance requests and shall consider these requests in a public hearing in accordance with §15.2-2204 of the Code of Virginia, except that only one hearing shall be required.
- (3). The Board of Zoning Appeals shall review the request for a variance and the water quality impact assessment and may grant the variance with such conditions and safeguards as deemed necessary to further the purpose and intent of this Article if the Board of Zoning Appeals finds:
 - (a) Granting the variance will not confer upon the application any special privileges denied by this Article to other property owners in the Overlay District;
 - (b) The variance request is not based on conditions or circumstances that are self-created or self-imposed, nor does the request arise from conditions or circumstances either permitted or non-conforming that are related to adjacent parcels;

- (c) The variance request is the minimum necessary to afford relief;
- (d) The variance request will be in harmony with the purpose and intent of the Overlay District, not injurious to the neighborhood or otherwise detrimental to the public welfare, and is not of substantial detriment to water quality; and
- (e) Reasonable and appropriate conditions are imposed which will prevent the variance request from causing a degradation of water quality.
- 4. If the Board of Zoning Appeals cannot make the required findings or denies the variance, the Board Of Zoning Appeals shall return the request for a variance together with the water quality impact assessment and the written findings and rationale for the decision to the applicant.
- 5. A request for a variance to the requirements of provisions of this Article other than Sections 28-62 (f) and (g)(2) shall be made in writing to the Administrator. The Administrator may grant these variances provided that:
 - a. Variances of the requirements are the minimum necessary to afford relief; and
 - <u>B.</u> Reasonable and appropriate conditions are placed upon any variance that is granted, as necessary, so that the purpose and intent of this Article is preserved.
 - c. Variances to the provisions of 28-62 (g) (1) may be granted provided that the findings noted under 28-62.(1)(3)(a-e) are made.
- (m) Penalties. In addition to the penalties identified in Article XVII of this chapter, for any land disturbing activity in a CRPA that occurs without an approved county plan or in violation of an approved county plan, the violator shall be subject to mitigation. Such mitigation shall be by replacement of all vegetation removed at a rate of two (2) plantings for every plant removed, unless the administrative authority determines that fewer plantings are required to meet the same pollutant removal levels that existed prior to the violation. All vegetation to be used for mitigation shall be approved by the administrative authority.

Sec. 28-25. Definitions of specific terms.

Lot Coverage. The impervious area of any lot or parcel including, but not limited to buildings, drives, parking areas, sidewalks, patios, decks, etc.

Critical Resource Protection Area (CRPA). That component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters. That component of the Chesapeake Bay Preservation Area comprised of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters.

Silvicultural activities. Forest management activities, including but not limited to the harvesting of timber, the construction of roads and trails for forest management purposes, and the preparation of property for reforestation that are conducted in accordance with the silvicultural best management practices and enforced by the state forester pursuant to § 10.1-1105 of the Code of Virginia and are located on property defined as real estate devoted to forest use under § 58.1-3230 of the Code of Virginia.

Non Tidal Wetlands. Those wetlands other than tidal wetlands, "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" as defined by the U.S. Environmental Protection Agency pursuant to Section 404 of the federal Clean Water Act, in C.F.R. 328.3b, dated November 13, 1986.

Tributary Stream. Any perennial stream that is so depicted on the most recent U.S. Geological Survey 7 and ½ minute topographic quadrangle map (scale 1:24,000).

Water dependent facility. A development of land that cannot exist outside of the Critical Resource Protection Area and must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to:

- (1) Ports
- (2) Intake and outfall structures of power plants, water treatment plants, wastewater treatment plants, and storm sewers
- (3) Marinas and other boat docking structures
- (4) Beaches and other public water oriented recreation areas
- (5) Fisheries or other marine resource facilities
- (6) Regional stormwater management facilities
- (7) Site specific stormwater management facilities serving an area greater than one hundred (100) acres in a specific watershed

Highly erodible soils. Soils (excluding vegetation) with an erodibility index (EI) from sheet and rill erosion equal to or greater than eight. The erodibility index for any soil is defined as the product of the formula RKLS/T, where K is the soil susceptability to water erosion in the

O03-07 Page 33

<u>surface layer;</u> R is the rainfall and runoff; LS is the combined effects of slope length and steepness; and T is the soil loss tolerance.

Highly permeable soils. Soils with a given potential to transmit water through the soil profile. Highly permeable soils are identified as any soil having a permeability of greater than six (6) inches of water movement per hour in any part of the soil profile to a depth of seventy-two (72) inches (permeability groups "rapid" and "very rapid") as found in the National Soil Survey Handbook of November 1996 in the Field Office Technical Guide of the U.S. Department of Agriculture Natural Resource Conservatio Service.

Public Road. A publicly owned road designed and constructed in accordance with water quality protection criteria at least as stringent as requirements applicable to the Virginia Department of Transportation, including regulations promulgated pursuant to the Erosion and Sediment Control Laws of Virginia and the Virginia Stormwater Management Act. This definition includes those roads where the Virginia Department of Transportation exercises direct supervision over the design and/or construction activities.

Substantial Alteration. The expansion or modification of a building or development that would result in a disturbance of land exceeding an area of 2,500 square feet in the Land Resource Management Area only.

DIVISION 5. CHESAPEAKE BAY PRESERVATION AREA OVERLAY DISTRICT

Sec. 22-90. Plan of development process.

(a) Required information. In addition to the requirements specified in Chapters 11 and 28 of the Stafford Code, the plan of development process for Chesapeake Bay Preservation Areas (CBPA's) as defined in section 28 2 of this Code shall consist of the plans and studies identified below. These required plans and studies may be coordinated or combined, as deemed appropriate by the administrative authority as defined in section 28 2 of this Code. The administrative authority may determine that some of the following information is unnecessary due to the location, scope, or nature of the proposed development. Certain technical terms used in this chapter may be defined in section 28 2 of this Code.

Any plan of development submitted for any proposed activity within the Chesapeake Bay Preservation Area must satisfy all of the requirements listed in Chapter 28 Section 62 of this Code.

Code.
The following plans or studies shall be submitted, unless otherwise provided for:
(1) A final plat in accordance with the provisions of this chapter;
(2) An environmental site assessment;
(3) A landscaping element;
(4) A stormwater management plan in accordance with Chapter 21.5 of this Code;
—(5) An erosion and sediment control plan in accordance with the provisions of Chapter 11 of
this Code.
-(6) Individual Critical Resource Protection Area (CRPA) site location plan.
-(b) Environmental site assessment. An environmental site assessment shall be submitted in conjunction with a preliminary subdivision plan.
-(1) The environmental site assessment shall be drawn to scale and clearly delineate the following environmental features:
a. Tidal wetlands; b. Tidal shores; c. Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow; d. Tributary streams as identified on the CRPA maps; Water bodies

<u>with perennial flow</u>
e. A one hundred foot buffer area located adjacent to and landward of
the components listed in paragraphs a. through d. above.
(2) Wetlands delineations shall be performed consistent with the procedures specified by the \overline{U} .
— S. Army Corps of Engineers.
(3) The environmental site assessment shall delineate the site specific geographic extent of the CRPA.
(4) The environmental site assessment shall be drawn at the same scale as the site plan, and shall
— be certified as complete and accurate by professionals practicing in their field of competence.
(c)Landscaping element. A landscaping element shall be included in conjunction with — Construction plan approval. No clearing or grading of any lot or parcel shall be permitted — without approved plans. Plans depicting landscaping elements shall be prepared or certified
— by design professionals practicing within their areas of competence.
(1) Contents.
a. The landscaping element shall be drawn to scale and generally show the location, and description of existing and proposed plant material. Where there are groups of trees, stands may be outlined instead. Trees to be removed to create a desired construction footprint shall be clearly delineated.
b. Any required buffer area shall be clearly delineated and any plant material to be added to establish or supplement the buffer area, as required by this chapter, shall be shown.
c. Within the buffer area, vegetation to be removed for sight lines, vistas, access paths and best management practices, as provided for in this chapter, shall be shown. Vegetation required by this chapter to replace any existing vegetation within the buffer area shall also be shown.
 d. Vegetation to be removed for shoreline stabilization projects and any replacement vegetation required by this chapter shall be shown.
e. The landscaping element shall depict grade changes or other work adjacent to trees which would affect them adversely. Specifications shall be provided as to how

grade, drainage, and aeration would be maintained around trees to be preserved.

f.	The landscaping element will include specifications for the protection of existing
trees	
	during clearing, grading, and all phases of construction.
(2) Pla	nt specifications.
- a.	All plant materials necessary to supplement the buffer area shall be installed
	according to standard planting practices and procedures.
b	All supplementary or replacement plant materials shall be living and in a healthy
	condition. Plant materials shall conform to the standards of the most recent 4
-	edition of the American Standard for Nursery Stock, published by the American
-	Association of Nurserymen.
с .	Where areas to be preserved within the CRPA's and mitigation areas, as desig-
	Where areas to be preserved within the CRPA's and mitigation areas, as designated on an approved construction plan, are encroached, replacement of existing
	trees over six (6) inches DBH will be achieved at a ratio of three (3) planted trees
	to one (1) removed. Replacement trees shall be a minimum three and one half
	(3.5) inches DBH at the time of planting.
(3) Ma	intenance.
-a.	The property owner shall be responsible for the maintenance and replacement of
	all vegetation as may be required by the provisions of this chapter.
_b.	In buffer and/or mitigation areas, required by an approved plan, plant material
	shall be tended and maintained in healthy growing condition and free from refuse
	and debris. Diseased plant materials shall be replaced during the next planting
	season, as required by the provisions of this chapter.
	,
-(d) Sto	rmwater management plan. A stormwater management plan shall be submitted as
part of t	he plan of development process required by this chapter and in conjunction with
construc	etion plan approval. The Stormwater Manangement Plan shall be in accordance with
the Stor	mwater Management requirements listed in Section 28-62 of this Code and Chapter
21.5 of	this Code.
(1)	Contents. The stormwater management plan shall contain maps, charts, graphs, ta-
	bles, photographs, narrative descriptions, explanations, and citations to supporting
	references as appropriate to communicate the information required by this chapter
	and the adopted Stafford County Chesapeake Bay Stormwater Management Calcu-
	lation Procedure. At a minimum, the stormwater management plan must contain the
	following:
	a. Location and design of all planned stormwater control devices;
1	b. Procedures for implementing nonstructural stormwater control practices and
	techniques;

c. Predevelopment and postdevelopment nonpoint source pollutant loadings with
 — supporting documentation of all utilized coefficients and calculations;
 e. For facilities, verification of structural soundness, by a professional practicing

within

- his area of competence;
- (2) Engineering calculations. All engineering calculations must be performed in accordance
 - -with procedures outlined in the current edition of the Local Assistance Manual, Virginia Erosion and Sediment Control Handbook, Virginia Department of Transportation Drainage Manual, or any other accepted engineering methods deemed appropriate by the administrative authority.
- (3) Inspection and maintenance schedule. The plan shall establish a long-term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than Stafford County, then a maintenance agreement shall be executed between the responsible party and Stafford County.

(e)Individual CRPA site location plan. A CRPA individual site location plan shall be required for all land disturbing activities located in the CRPA. This plan shall be submitted in conjunction with an application for a single family residential building permit, grading permit or plan submitted in compliance with Chapter 11 of this Code. This requirement shall not apply to those lots associated with an approved site plan or subdivision plan that meet the requirements of this chapter. The CRPA individual site location plan shall clearly delineate the CRPA and identify any encroachments into the CRPA and any proposed mitigation measures. The administrative authority shall review the CRPA individual site location plan and determine whether the encroachment is warranted. The administrative authority may approve, modify or deny the plan.

(f) Final plat.

- (1) Information required. Final plats for all lands within CBPA's shall include the following additional information:
 - a. The delineation of the Critical Resource Protection Area boundary;
 - b. The delineation of required buffer areas of the CRPA;
 - c. All wetlands permits required by law;
 - d. A BMP maintenance agreement in accordance with approved county policy.

(2)Installation and security requirements.

- a. Where buffer areas, landscaping, stormwater management facilities or other specifications of an approved plan are required, no certificate of occupancy shall be issued until the installation of required plant materials or facilities is completed, in accordance with the approved construction plan.
- b. When the occupancy of a structure is desired prior to the completion of the

- required landscaping, stormwater management facilities, or other specifications
 of an approved plan, a certificate of occupancy may be issued only if the
 applicant
- provides to the administrative authority security in a form and amount which is in
- accordance with the county security policy.
- (g) Water quality impact assessment.
- (1) Purpose and intent. The purpose of the water quality impact assessment is to (I) identify the impacts of proposed development on water quality and lands within CBPA's; (ii) provide for administrative relief from the terms of this chapter when warranted and in accordance with the requirements contained herein; and (iii) specify mitigation which will address water quality protection.
- (2) Water quality impact assessment required. A water quality impact assessment is required in
 - -accordance with Chapter 28 of this Code for (1) any proposed development within a CRPA.
 - including any buffer area modification or reduction; (ii) any development in a LRMA as
 - -deemed necessary by the administrative authority due to the unique characteristics of the site
 - or intensity of the proposed development. The water quality impact assessment shall not be
 - required prior to submission of construction plans. The water quality impact assessment shall
 - -be performed in accordance with the provisions stated in Chapter 28 of this Code.
 - Subdivisions of five (5) lots or fewer and family subdivisions, located within the LRMA and
 - outside of the CRPA shall be exempt from the requirement of a water quality impact
 - -assessment.

Sec. 22-91. Required information.

In addition to the requirements specified in Chapters 11 and 28 of the Stafford Code, the plan of development process for Chesapeake Bay Preservation Areas (CBPAS) as defined in Section 28.2 of this Code shall consist of the plans and studies identified below. These required plans and studies may be coordinated or combined, as deemed appropriate by the administrative authority as defined in Section 28.2 of this Code. The administrative authority may determine that some of the following information is unnecessary due to the location, scope, or nature of the proposed development. Certain technical terms used in this chapter may be defined in Section 28.2.

The following plans or studies shall be submitted, unless otherwise provided for:

(1) A final plat in accordance with the provisions of this chapter;
(2) An environmental site assessment;
(3) A landscaping element;
(4) A stormwater management plan;
(5) An erosion and sediment control plan in accordance with the provisions of Chapter 11 of this Code.
(6)Individual Critical Resource Protection Area (CRPA) site location plan.
Sec. 22.92. Environmental site assessment.
An environmental site assessment shall be submitted in conjunction with a preliminary subdivision plan.
(1) The environmental site assessment shall be drawn to scale and clearly delineate the following environmental features:
a. Tidal wetlands; b. Tidal shores; c. Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or tributary streams; d. Tributary streams as identified on the CRPA Maps; c. A one-hundred-foot buffer area located adjacent to and landward of the components listed in subsections a. through d. above.
(2) Wetlands delineations shall be performed consistent with the procedures specified by the U.S. Army Corps of Engineers.
(3) The environmental site assessment shall delineate the site specific geographic extent of the CRPA.
(4) The environmental site assessment shall be drawn at the same scale as the site plan, and shall be certified as complete and accurate by professionals

A landscape element shall be included in conjunction with construction plan

practicing in their field of competence.

Sec. 22-93. Landscaping element.

approval.

No clearing or grading of any lot or parcel shall be permitted without approved plans. Plans depicting landscaping elements shall be prepared or certified by design professionals practicing within their areas of competence.

(Contents of the landscaping element.	
	a. The landscaping element shall be drawn to scale and generally show location, arid description of existing and proposed plant material. Where	
vithin	are groups of trees, stands may be outlined instead. Trees to be rem	oved
VILIIII	— the limits of clearing and grading shall be clearly delineated.	
	 Any required buffer area shall be clearly delineated and any plant r to be 	naterial
	added to establish or supplement the buffer area, as required by this	s chapter
	c. Within the buffer area, vegetation to be removed for sight lines, v	i stas,
	paths, and best management practices, as provided for in this cha	pter,
.aaatati	shown. Vegetation required by this chapter to replace any existing	g
vegetati	within the buffer area shall also be shown.	
	 Vegetation to be removed for shoreline stabilization projects and an ment vegetation required by this chapter shall be shown. 	y replace-
	e. The landscaping element shall depict grade changes or other	aer worl
	adjacent to	
	trees which would affect them adversely. Specifications shall be	provide
	as	
	to how grade, drainage, and aeration would be maintained aroun	d trees to
	be	
	preserved.	
	f. The landscaping element will include specifications for the protect	
	existing trees during clearing, grading, and all phases of constructions.	uon.

(2) Plant specifications.

- a. All plant materials necessary to supplement the buffer area shall be installed the according to standard planting practices and procedures.
- b. All supplementary or replacement plant materials shall be living and in a healthy condition. Plant materials shall conform to the standards of the most recent edition of the American Standard for Nursery Stock, published by the American Association of Nurserymen.
- d. Where areas to be preserved within the CRPA's and mitigation areas, as designated on an approved construction plan, are encroached, replacement of

existing trees over six (6) inches DBH will be achieved at a ratio of three (3) planted trees to one removed. Replacement trees shall be a minimum three and one half inches DBH at the time of planting.

(3) Maintenance.

- a. The property owner shall be responsible for the maintenance and replacement of all vegetation as may be required by the provisions of this chapter.
- b. In buffer and/or mitigation areas, required by an approved plan, plant material shall be tended and maintained healthy growing condition and free from refuse and debris. Diseased plant materials shall be replaced during the next planting season, as required by the provisions of this chapter.

Sec. 22-94. Stormwater management plan.

A stormwater management plan shall be submitted as part of the plan of development process

required by this chapter and in conjunction with construction plan approval.

- (1) Contents of the plan. The stormwater management plan shall contain maps, charts, graphs, tables; photographs, narrative descriptions, explanations, and citations to supporting references as appropriate to communicate the information required by this chapter and the adopted Stafford County Chesapeake Bay Stormwater Management Calculation Procedure. At a minimum, the stormwater management plan must contain the following:
 - a. Location and design of all planned stormwater control devices;
 - Procedures for implementing nonstructural stormwater control practices and techniques;
- e. Predevelopment and postdevelopment nonpoint source pollutant loadings with supporting documentation of all utilized coefficients and calculations;
- d. For facilities, verification of structural soundness, by a professional practicing within

his area of competence.

- (2) Engineering calculations. All engineering calculations must be performed in accordance with procedures outlined in the current edition of the Local Assistance Manual, Virginia Erosion and Sediment Control Handbook, Virginia Department of Transportation Drainage Manual, or any other accepted engineering methods deemed appropriate by the administrative authority.
- (3) Inspection and maintenance schedule. The plan shall establish a long-term schedule for inspection and maintenance of stormwater management facilities that includes all maintenance requirements and persons responsible for performing maintenance. If the designated maintenance responsibility is with a party other than Stafford County, then a

— maintenance agreement shall be executed between the responsible party and Stafford County.

(4)Stormwater Management Facilities, meeting the Chesapeake Bay Preservation Area requirements in Chapter 11 of this Code, proposed to be located in the CRPA shall

- submit a rationale to the county which evaluates alternative sites and justifies the location
- the facility in the CRPA.

Sec. 22-95. Individual CRPA site location plan.

— A CRPA individual site location plan shall be required for all land disturbing activities e CRPA. This plan shall be submitted in conjunction with an application for a residential building permit, grading permit or plan submitted in compliance with Chapter 11 of this Code. This requirement shall not apply to those lots associated with an approved site plan or subdivision plan that meet the requirements of this chapter. The CRPA individual site location plan shall clearly delineate the CRPA and identify any encroachments into the CRPA and any proposed mitigation measures. The administrative authority shall review the CRPA individual site location plan and determine whether the encroachment is warranted. The Administrative Authority may approve, modify or deny the plan.

Sec. 22-96. Final plat.

- (a) Information Required. Final plats for all lands within CBPA's shall include the fol lowing additional information:
- -(1) The delineation of the Critical Resource Protection Area boundary;
- (2) The delineation of required buffer areas of the CRPA;
- (3) All wetlands permits required by law;
- (4) A BMP maintenance agreement in accordance with approved county policy.
- (b) *Installation and security requirements.*
- —(1) Where buffer areas, landscaping, stormwater management facilities or other specifications of an approved plan are required, no certificate of occupancy shall be issued until the installation of required plant materials or facilities is completed, in accordance with the approved construction plan.
 - (3) When the occupancy of a structure is desired prior to the completion of the required landscaping, stormwater management facilities, or other specifications of an approved plan, a certificate of occupancy may be issued only if the

applicant provides to the administrative authority security in a form and amount which is in accordance with the county security policy.

Sec. 22-97. Water quality impact assessment.

- (a) Purpose and intent. The purpose of the water quality impact assessment is to (i) identify the impacts of proposed development on water quality and lands within CBPA's; (ii) provide for administrative relief from the terms of this chapter when warranted and in accordance with the requirements contained herein; and (iii) specify mitigation which will address water quality protection.
 - (b) Water quality impact assessment required. A water quality impact assessment is required in accordance with Chapter 28 of this Code for (i) any proposed development within a CRPA, including any buffer area modification or reduction; (ii) any development in a LRMA as deemed necessary by the administrative authority due to the unique characteristics of the site or intensity of the proposed development. The water quality impact assessment shall not be required prior to submission of construction plans. The water quality impact assessment shall be
 - (c) performed in accordance with the provisions stated in Chapter 28 of this Code. Subdivisions of five (5) lots or fewer and family subdivisions, located within the LRMA and outside of the CRPA shall be exempt from the requirement of a water quality impact assessment.

Secs. 22-98—22-105. Reserved.

SC:JAH:slh