

**Article 3.P:**

**CB-O, Chesapeake Bay Preservation Overlay District**

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**Sec. 100. Title.**

This ordinance shall be known as the Chesapeake Bay Preservation Area Ordinance (Ordinance) of the Town of Smithfield, Virginia.

**Sec. 101. Findings of fact.**

The Chesapeake Bay and its tributaries constitute one of the most important and productive estuarine systems in the world, providing economic and social benefits to the citizens of the Town of Smithfield and the Commonwealth of Virginia. The health of the Bay and its tributaries is vital to maintaining the Town of Smithfield's economy, natural resources, and the welfare of its citizens.

The waters of the Chesapeake Bay watershed have been degraded significantly by numerous sources of pollution, including nonpoint source pollution from land development. These waters are worthy of protection from further degradation. Certain lands adjacent to shorelines, and river and stream banks have an intrinsic water quality value due to the ecological and biological processes they perform. With proper management, they offer significant ecological benefits by providing water quality maintenance, wildlife habitat, and pollution control, as well as flood and shoreline erosion control. These lands, designated by the Town of Smithfield as Chesapeake Bay Preservation Areas (CBPA), shall be developed in such manner as to protect the quality of water in the Bay.

**Sec. 102. Purpose and intent.**

(A) This Ordinance is adopted to implement the requirements and stated purposes of The Chesapeake Bay Preservation Act (Bay Act) (Va. Code §§ 62.1-44.15:67 -62.1-44.15:79) and the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations) (9 VAC 25-830-10 et seq.) promulgated thereunder.

The intent of the Town Council and the purpose of this Ordinance are to:

- 1) protect existing high quality state waters;
- 2) prevent any further increase in water pollution; and
- 3) restore state waters to a condition or quality that will permit all reasonable public uses and will support the propagation and growth of all aquatic life, including game fish, which might reasonably be expected to inhabit them.

The performance standards established by this Ordinance provide the means to minimize the potential for erosion and sedimentation, reduce land application of nutrients and toxins, and maximize rainwater infiltration. Indigenous ground cover, especially woody vegetation, is effective in holding soil in place and preventing site erosion. Existing riparian buffers and other vegetation filter stormwater runoff. By minimizing impervious cover, rainwater infiltration is enhanced, and stormwater runoff is reduced.

(B) The designation of any area as a Chesapeake Bay Preservation Area shall be in addition to, and not in lieu of, the zoning district classification of these areas, and shall be subject to all applicable provisions of this Ordinance, the Town of Smithfield Zoning Ordinance, Subdivision Ordinance, and other applicable ordinances.

**Sec. 103. Definitions.**

The following words and terms used in this Ordinance shall have the following meanings unless the context clearly indicates otherwise.

**Accessory structures or uses.** Any structure located on a lot or parcel not identified as a principal structure as defined herein. Accessory structures include, but are not limited to, detached garages, gazebos, free-standing decks, storage buildings or tool sheds, guest houses, and similar forms of development that are incidental and subordinate to the principal structure. Accessory uses include, but are not limited to, in-ground pools, patios, terraces, tennis courts, synthetic turf, and other impermeable landings that do not permit infiltration to groundwater. Any modification or expansion to an accessory use must be reviewed and approved using a formal exception process unless proposed within a locally designated Intensely Developed Area.

**Adaptation measure.** A project, practice, or approach to mitigate or address an impact of climate change including sea-level rise, storm surge, and flooding including increased or recurrent flooding.

**Agricultural lands.** Those lands used for the planting and harvesting of crops or plant growth of any kind in the open, pasture, horticulture, dairy farming, floriculture, or the raising of poultry and/or livestock.

**Applicant.** Any person submitting any application required or permitted pursuant to any of the provisions of this Ordinance, and any person on whose behalf such an application is submitted.

**Best management practice.** A practice, or a combination of practices, determined by a state or designated area-wide planning agency to be the most effective practicable means of preventing or reducing the amount of pollution generated by nonpoint sources to a level compatible with water quality goals.

**Best management practice, structural.** A best management practice that requires the design and certification of a licensed design professional.

**Buffer area.** An area of natural or established vegetation managed to protect other components of the Resource Protection Area listed under subsection 104(B)(1)-(3) of this Ordinance from significant degradation due to land disturbance.

**Caliper.** The diameter of a tree measured six (6) inches above existing grade.

**Canopy tree.** A tree that typically reaches 35 feet in height or taller when mature.

**Channelward:** in the direction of the channel or waterway.

**Chesapeake Bay Preservation Area (CBPA).** Any land designated as such on the Chesapeake Bay Preservation Area Map adopted by the Town Council, subject to confirmation by the Town of Smithfield Zoning Administrator on a site-specific basis. A Chesapeake Bay Preservation Area shall consist of a Resource Protection Area and a Resource Management Area.

**Town of Smithfield Administrator.** The Community Development and Planning Director, administrator or such other person or persons as they may designate (zoning administrator, Bay Act coordinator, etc.) to perform the duties, or to exercise the authority, of the Town of Smithfield Administrator pursuant to the provisions of this Ordinance.

**Construction footprint.** The area of all impervious cover created by development or redevelopment of land, including, but not limited to, buildings, roads, driveways, parking areas and sidewalks, and any other land disturbed for the construction of such improvements.

**Critical root zone.** The area encompassing all of the roots extending to the dripline of a tree.

**Daylighted stream.** A stream that had been previously diverted into an underground drainage system, has been redirected into an above ground channel using natural channel design concepts as defined in Va. Code§ 62.1-44.15:51, and where the adjacent lands would meet the criteria for being designated as a Resource Protection Area (RPA) as defined within this Ordinance.

**Development.** The construction, substantial alteration, or installation of any improvement (including residential, commercial, industrial, institutional, recreation, transportation, or utility facilities or structures) upon a parcel of land, or any land disturbance associated therewith.

**Diameter at breast height (DBH).** The diameter of a tree measured at a point four and one-half (4-1/2) feet above the existing grade, or the natural surface or contour of a site.

*Dripline.* An imaginary perpendicular line extending downward from the outermost tips of the branches of a tree to the ground.

*Fill.* Material such as sand, soil, gravel, or crushed stone which is placed in an area, often to adjust elevation or create land contouring.

*Freeboard.* An additional amount of height above the Base Flood Elevation used as a factor of safety (e.g., 2 feet above the Base Flood) in determining the level at which a structure's lowest floor must be elevated or floodproofed to be in accordance with state or community floodplain management regulations.

*Floodplain.* All lands that would be inundated by flood water because of a storm event of a 100-year return interval.

*Highly erodible soils.* Those soils (excluding vegetation) with an erodibility index (EI) from sheet and rill erosion equal to or greater than eight (8). The erodibility index for any soil is defined as the product of the formula  $RKLS/T$ , where  $K$  is the soil susceptibility to water erosion in the surface layer;  $R$  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 potential to transmit water through the soil profile. Highly permeable soils are identified as any soil having a permeability equal to or greater than six inches of water movement per hour in any part of the soil profile to a depth of 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 Resources Conservation Service.

*Impervious cover.* A surface composed of any material which significantly impedes or prevents natural infiltration of water into the soil, including, but not limited to, roofs, buildings, streets, parking areas, and other structures and the components thereof, concrete, asphalt, or compacted gravel surface.

*Infill.* Utilization of vacant land in previously developed areas.

*Intensely Developed Areas (IDA).* Those areas of existing development and infill sites where development is concentrated and little of the natural environment remained as of September 1990 and which is so designated on the map of Chesapeake Bay Preservation Areas adopted by the Town Council pursuant to Section 104 (D) of this Ordinance.

*Land disturbance or land disturbing activity.* Any man-made change to the land surface that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting, and filling of land. The term shall not include minor activities such as home gardening, individual home landscaping and home maintenance.

*Limit of Moderate Wave Action (LiMWA).* The LiMWA is an informational line that can be found on flood maps for some coastal areas. On a flood map, it is shown as a black line with black arrows that point to areas where wave heights are between one and one-half (1.5) and three (3) feet. It also marks the inland limit of the Coastal Zone A.

*Living Shoreline.* A shoreline management practice that: provides erosion control and water quality benefits; protects, restores, or enhances natural shoreline habitat; and maintains coastal processes through the strategic placement of plants, stone, sand fill, and other structural and organic materials. When practicable, a living shoreline may enhance coastal resilience and attenuation of wave energy and storm surge. Pursuant to Va. Code §28.2-104.1, living shorelines are recognized as the preferred alternative for stabilizing shorelines in the Commonwealth. Only living shorelines shall be permitted for shoreline management unless the best available science shows that such approaches are not suitable.

*Mature tree.* A canopy tree with a diameter at breast height (DBH) of 12 inches or greater or an understory tree with a DBH of four (4) inches or greater.

*Nature-based solution.* An approach that reduces the impacts of sea-level rise, flooding, and storm events through the use of environmental processes and natural systems.

*Nonpoint source pollution.* Pollution consisting of constituents such as sediment, nutrients, and organic and toxic substances from diffuse sources, such as runoff from agriculture and urban land development and use.

*Nontidal 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 33 CFR 328.3b.

*Noxious weeds.* As defined in Va. Code §3.2-800, any living plant, or part thereof, declared by the Board of Agriculture and Consumer Services through regulations to be detrimental to crops, surface waters, including lakes, or other desirable plants, livestock, land, or other property, or to be injurious to public health, the environment, or the economy, except when in-state production of such living plant, or part thereof, is commercially viable or such living plant is commercially propagated in Virginia. Including, but not limited to plants such as Johnson grass, kudzu, and multiflora rose.

*Other structural and organic materials.* Materials or features that provide added protection or stability for the natural shoreline habitat components of a living shoreline that attenuate wave energy and do not interfere with natural coastal processes or the natural continuity of the land-water interface. They may be composed of a variety of natural or man-made materials, including rock, concrete, or vegetation-based fiber such as coir logs, oyster shells, and geotextiles; however, structural features shall be free from contaminants, including structural metal such as rebar, and shall be adequately secured to prevent full or partial dislodging or detachment due to wave action or other natural forces as per Va. Code § 28.2-104.1. This term is referenced in the definition for Living Shoreline.

*Person.* An individual, fiduciary, corporation, firm, partnership, association, organization, or any other entity or combination thereof.

*Plan of development.* For the purposes of this Ordinance, plan of development means any process for site plan review in local zoning and land development regulations designed to ensure compliance with Va. Code § 62.1-44.15:74 and with this Ordinance, prior to issuance of a building permit.

*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 (VDOT), including regulations promulgated pursuant to (i) the Erosion and Sediment Control Law (Va. Code § 10.1-560 et seq.), and (ii) the Virginia Stormwater Management Act (Va. Code § 10.1-603.1 et seq.). This definition includes those roads where VDOT exercises direct supervision over the design or construction activities, or both, and cases where secondary roads are constructed or maintained, or both, by the Town of Smithfield in accordance with the Town of Smithfield Design Standards, the Zoning Ordinance, and Subdivision Ordinance.

*Redevelopment.* The process of developing land that is or has been previously developed.

*Resilience.* The capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, health, the economy, and the environment.

*Resource Management Area (RMA).* That component of a Chesapeake Bay Preservation Area not classified as a Resource Protection Area. Resource Management Areas include land types which, if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of a Resource Protection Area. Resource Management Areas shall be provided contiguous to the entire inland boundary of the Resource Protection Area.

*Resource Protection Area (RPA).* That component of a Chesapeake Bay Preservation Area comprised of lands adjacent to water bodies with perennial flow which 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

developed and enforced by the State Forester pursuant to Va. Code § 10.1-1105 and are located on property defined as real estate devoted to forest use under Va. Code § 58.1-3230.

*Special flood hazard area (SFHA).* The land in the flood plain subject to a one (1) percent or greater chance of flooding in any given year. The area may be designated as Zone A on the flood hazard boundary map. Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE, or V after detailed ratemaking has been completed or publication of the flood insurance rate map.

*Storm surge.* The resulting temporary rise in sea level due to the action of wind stress on the water surface and low atmospheric pressure created during storms which can cause coastal flooding. Surge is the difference from expected tide level. Storm tide is the total water level.

*Subdivision.* The division of any parcel of land into two (2) or more lots or parcels. The term shall include all changes in lot lines, the creation of new lots involving any division of an existing lot or lots and, if a new street is involved in such division, any division of a parcel of land. When appropriate to the context, the term shall also include the process of subdividing and the territory subdivided.

*Substantial alteration.* The expansion or modification of a building or development that would result in a disturbance of land exceeding an area of two thousand five hundred (2,500) square feet in the Resource Management Protection Area only.

*Tidal shore.* Land contiguous to a tidal body of water between the mean low water and mean high water levels.

*Tidal wetlands.* Vegetated and nonvegetated wetlands as defined in Va. Code § 28.2-1300.

*Understory tree.* A tree that typically reaches 12 to 35 feet in height when mature.

*Use.* An activity on the land other than development including agriculture, horticulture, and silviculture.

*Water-dependent facility.* A development of land which cannot exist outside of a Resource Protection Area, and which must be located on the shoreline by reason of the intrinsic nature of its operation. These facilities include, but are not limited to, ports, the intake and outfall structures of power plants, water treatment plants, sewage treatment plants, storm sewers, marinas and other boat docking structures, beaches and other public water-oriented recreation areas, fisheries, or other marine resources facilities.

#### **Sec. 104. Areas of applicability.**

- (A) The Chesapeake Bay Preservation Area Ordinance shall apply to all lands which are designated as Chesapeake Bay Preservation Areas within the Town of Smithfield. Such lands are designated as Chesapeake Bay Preservation Areas and are depicted on the Chesapeake Bay Preservation Area Map adopted September 1990 and amended thereafter.
- (B) Resource Protection Areas shall include the following components:
  - (1) Tidal wetlands.
  - (2) Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow.
  - (3) Tidal shores.
  - (4) Other sensitive lands at or near the shoreline that provide for the removal, reduction, or assimilation of sediments, nutrients, and potentially harmful or toxic substances in runoff.
  - (5) A buffer area not less than 100 feet in width located adjacent to and landward of the components listed in subdivisions one (1) through four (4) above of this subsection, and along both sides of any water body with perennial flow. The full buffer area shall be designated as the landward component of the Resource Protection Area notwithstanding the presence of permitted uses, encroachments, and permitted vegetation clearing in compliance with Section 106, general performance standards and 107 RPA development criteria, through compliance with Section 113 waivers and exceptions of this Ordinance.

- (C) Resource Management Areas shall consist of all lands within Chesapeake Bay Preservation Areas which are not designated as Resource Protection Areas. These lands, if improperly used or developed, have a potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Area.
- (D) Intensely Developed Areas are an overlay to the Resource Protection Area that serve as redevelopment areas in which development was concentrated and where little of the natural environment remained at the time of initial adoption of the CBPA. Development within IDAs shall comply with the requirements of the redevelopment performance standards of this Ordinance.
- (E) Designation of the Chesapeake Bay Preservation Area boundaries shall not be subject to modification unless based upon reliable, site-specific information as provided for in Section 105 of this Ordinance.

**Sec. 105. Interpretation of Chesapeake Bay Preservation Area boundaries.**

- (A) The Chesapeake Bay Preservation Area Map adopted by the Town Council shall be used for planning purposes as a guide to the general location of Chesapeake Bay Preservation Areas.
- (B) The Town of Smithfield Administrator shall, on all properties located within a designated Chesapeake Bay Preservation Area where land disturbance, development, or redevelopment is proposed and as part of the plan of development review process pursuant to Section 110 of this Ordinance or during the review of a water quality impact assessment pursuant to Section 108 of this Ordinance, ensure or confirm that:
  - (1) A reliable site-specific evaluation of Chesapeake Bay Preservation Area boundaries is conducted to determine whether water bodies on or adjacent to the development site have perennial flow, and
  - (2) That Resource Protection Area boundaries are adjusted, as necessary, on the site based upon the site-specific evaluation.
- (C) Perennial flow determinations for site-specific evaluations shall be performed using one of the protocols acceptable to the Virginia Department of Environmental Quality as referred to in the document adopted by the Commonwealth of Virginia entitled *Determinations of Water Bodies with Perennial Flow Guidance on the Chesapeake Bay Preservation Area Designation and Management Regulations*. For nontidal wetlands connected by surface flow and contiguous to perennial streams, the *Eastern Mountains and Piedmont Regional Supplement to the 1987 USACOE Wetlands Delineation Manual* and the *Resource Protection Areas: Nontidal Wetlands Guidance on the Chesapeake Bay Preservation Area Designation and Management Regulations* adopted by the Commonwealth of Virginia, should be consulted.
- (D) A site-specific evaluation must be performed and certified as complete and accurate by a qualified professional. To be qualified, a professional must: (i) work or be certified in a related field such as stream ecology, hydrology, or hydrogeology; (ii) have secondary education, post-secondary education, or technical training in a related field such as stream ecology, hydrology, or hydrogeology; and (iii) have field experience performing or substantially assisting with the performance of a site-specific evaluation using the protocol employed. As an alternative, the Town of Smithfield Administrator may, at their sole discretion, conduct a site-specific evaluation using a professional qualified pursuant to this subsection for any purpose.
- (E) When a delineation of a Chesapeake Bay Preservation Area, or any component thereof, has been approved or established by the Town of Smithfield Administrator, the Chesapeake Bay Preservation Area Map shall be amended by the Town of Smithfield to reflect such delineation.
- (F) The resolution of conflicting district boundaries when the adjusted boundary delineation has been contested by the applicant, shall be in accordance with the provisions of Section 114.

**Sec. 106. General performance standards.**

The general performance standards set forth in this Section are intended to prevent a net increase in nonpoint source pollution from new development and development on previously developed land where the runoff was treated by a water quality protection best management practice. Except as otherwise provided

herein, the following standards shall apply to all development and redevelopment in both Resource Protection Areas and Resource Management Areas of the Chesapeake Bay Preservation Area:

- (A) Land disturbance shall be limited to the area necessary to provide for the proposed use or development. The limits of land disturbance, including clearing, grading, or filling shall be strictly defined by the construction footprint as shown on the approved plan of development.
- (1) Clearing shall be allowed only to provide for necessary access, site drainage, water quality best management practices, and/or the installation of utilities and primary and reserve drainfield sites as detailed on a Virginia Department of Health sewage disposal construction permit. The limits of land disturbance shall be clearly shown on all plans submitted and physically marked on the site.
  - (2) Ingress and egress during construction shall be limited to one access point, unless otherwise approved by the Town of Smithfield Administrator.
- (B) Existing indigenous vegetation shall be preserved to the maximum extent practicable consistent with the use or development proposed and in accordance with the Virginia Stormwater Management Handbook.
- (1) Mature trees shall be protected during development and only removed where necessary, including to provide for the proposed use or development.
  - (2) Existing trees over six (6) inches diameter at breast height (DBH) shall be preserved outside the construction footprint.
  - (3) Diseased trees or trees weakened by age, storm, fire, or other injury may be removed when approved by the Town of Smithfield Administrator. Other woody vegetation on site shall also be preserved outside the approved construction footprint. When a diseased tree or tree weakened by age, storm, fire, or other injury is to be removed, tree restoration should occur according to the Vegetation Replacement Rates table in Appendix D of the *Riparian Buffer Modification & Mitigation Manual (Buffer Manual)* 2003, prepared by the Chesapeake Bay Local Assistance Division of the Department of Conservation and Recreation and as may be amended by the Commonwealth of Virginia. Native species shall be preferred for all replacement plantings.
  - (4) Prior to clearing and grading, suitable protective barriers consistent with the Town of Smithfield design specifications, zoning ordinance, and subdivision ordinance, current editions, and including safety fencing, signs, or such other material as may be required by the Town of Smithfield Administrator, shall be erected to protect the critical root zone for any tree or stand of trees to be preserved on the site, as well as to protect the critical root zone of trees on adjacent properties that extend onto the site.
  - (5) A waiver may be granted to allow reasonable access to the site and work area, with specific conditions to be established by the Town of Smithfield Administrator. 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.
- (C) Land development shall minimize impervious cover to promote infiltration of stormwater into the ground consistent with the use or development. During the design phase of development, use of the following means of minimizing impervious cover are encouraged:
- (1) Placement of parking areas under multiple-family, office, or commercial buildings.
  - (2) Use of shared parking where possible in mixed use developments.
  - (3) Construction of no more than the minimum number of parking spaces required by the Town of Smithfield Zoning Ordinance.
  - (4) Use of modular grid pavers on private property and in low-traffic zones.
  - (5) Use of low impact development, better site design, and/or cluster development land development planning techniques in lieu of conventional design as set forth in the Town of Smithfield Zoning Ordinance.

- (D) Any development or redevelopment involving land disturbance of 2,500 square feet or more shall be accomplished through a plan of development review process as set forth in Section 110 of this Ordinance, and other such requirements set forth in Town of Smithfield ordinances.
- (E) Any land disturbing activity, as defined in Va. Code § 62.1-44.15:51, exceeding an area of 2,500 square feet, including, but not limited to, construction of all single-family homes, septic tanks, and drain fields, shall comply with the requirements of the Town of Smithfield Erosion and Sediment Control Ordinance. Enforcement for noncompliance with the erosion and sediment control requirements referenced in these criteria shall be conducted under the provisions of the Erosion and Sediment Control Law and attendant regulations.
- (F) Any Chesapeake Bay Preservation Act land-disturbing activity as defined in Va. Code § 62.1-44.15:24 shall comply with the requirements of the Virginia Stormwater Management Handbook and with the requirements of 9 VAC 25-870-51 and 9 VAC 25-870-103, the Stormwater Management Program Regulation.
- (G) All on-site sewage treatment systems not requiring a Virginia Pollutant Discharge Elimination System (VPDES) permit shall be pumped out at least once every five (5) years, provided that:
- (1) Subject to conditions established by the Western Tidewater Health District of the Virginia Department of Health (VDH), the owners of such systems may, in lieu of pumping out such systems every five (5) years, have a plastic filter installed and maintained in the outflow pipe from the septic tank to filter solid material from the effluent while sustaining adequate flow to the drainfield to permit normal use of the septic system. Such a filter shall satisfy standards established in the Sewage Handling and Disposal Regulations (12 VAC 5-610) administered by VDH; and
  - (2) In lieu of requiring proof of septic tank pump out every five (5) years, the Town of Smithfield may allow owners of on-site sewage treatment systems to submit documentation every five (5) years, certified by an operator or onsite soil evaluator licensed or certified under Chapter 23 (§ 54.1-2300 et seq.) of Title 54.1 of the Code of Virginia as being qualified to operate, maintain, or design onsite sewage systems, that the septic system has been inspected, is functioning properly, and that – as of the date of inspection – pump-out of the effluent was not deemed necessary.
  - (3) For new construction not served by public sewer or other system requiring a VPDES permit, a reserve sewage disposal site with a capacity at least equal to that of the primary sewage disposal site shall be provided. This requirement shall not apply to any lot or parcel recorded prior to October 1, 1989, if such lot or parcel is not sufficient in capacity to accommodate a reserve sewage disposal site, as determined by the Western Tidewater Health District. Building or construction of any impervious cover shall be prohibited on the area of all sewage disposal sites, including reserve sewage disposal sites, until the property is served by public sewer or an on-site sewage treatment system operating under a VPDES permit. All sewage disposal site records shall be administered to provide adequate notice and enforcement. As an alternative to the reserve sewage disposal site, the owners of such systems may install an alternative drainfield system meeting the following conditions:
    - (a) Each of the two (2) alternating drain fields in the system shall have at a minimum, an area not less than fifty (50) percent of the area that would otherwise be required if a single primary drainfield were constructed.
    - (b) An area equal to fifty (50) percent of the area that would otherwise be required for the primary drainfield site shall be reserved for subsurface absorption systems that utilize a flow diversion device, to provide for future replacement or repair to meet the requirements for a sewage disposal system. Expansion of the primary system shall require an expansion of the reserve system.
    - (c) The two (2) alternating drain fields shall be connected by a diversion valve, approved by the Western Tidewater Health District, located in the pipe between the septic tank and the distribution boxes. The diversion valve shall be used to alternate the direction of effluent flow to one (1) drainfield or the other at a time. Diversion valves shall not be used for the following types of treatment systems:

1. Sand mounds.
  2. Low pressure distribution systems.
  3. Repair situations when installation of a valve is not feasible.
  4. Any other approved system for which the use of a valve would adversely affect the design of the system, as determined by the Western Tidewater Health District.
- (d) The diversion valve shall be a three-port, two-way valve of approved materials (i.e., resistant to sewage, leak-proof and designed so that the effluent from the tank can be directed to flow into either one (1) of the two (2) distribution boxes).
- (e) There shall be a conduit from the top of the valve to the ground surface with an appropriate cover to be level with or above the ground surface.
- (f) The valve shall not be located in driveways, recreational courts, parking lots, or beneath sheds or other structures.
- (g) In lieu of a diversion valve, any device that can be designed and constructed to direct the flow of effluent from the tank into either one (1) of the two (2) distribution boxes may be approved if plans are submitted to the Western Tidewater Health District and determined to be satisfactory.
- (h) Owners shall alternate using the drain fields every 12 months to permit the yearly resting of half of the absorption system.
- (i) The Town of Smithfield Administrator shall ensure that the owners are notified annually of the requirement to switch the valve to the opposite drainfield.
- (H) Prior to the authorization and initiation of grading or other on-site activities, all wetlands permits required by law shall be obtained and evidence of such submitted by the applicant to the Town of Smithfield Administrator.
- (I) Agricultural lands shall have a soil and water quality conservation assessment conducted that evaluates 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 Ordinance.
- (1) Recommendations for additional conservation practices need address only those conservation issues applicable to the tract or field being assessed. Any soil and water quality conservation practices recommended as a result of such an assessment and are subsequently implemented with financial assistance from federal or state cost-share programs must be designed consistent with cost-share practice standards set forth in the January 1999 *Field Office Technical Guide* of the U.S. Department of Agriculture Natural Resource Conservation Service or the June 2000 edition of the *Virginia Agricultural Best Management Practices (BMP) Manual* of the Virginia Department of Conservation and Recreation, respectively, and accomplish water quality protection consistent with this Ordinance. Unless otherwise specified in this Section, general performance standards pertaining to the various agricultural conservation practices being assessed shall be as follows:
- (a) For erosion and sediment control recommendations, the goal shall be, where feasible, to 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. However, in no case shall erosion exceed the soil loss consistent with an Alternative Conservation System as defined in the *Field Office Technical Guide* of the U.S. Department of Agriculture Natural Resource Conservation Service.
- (b) For nutrient management, whenever nutrient management plans are developed, the operator or landowner must provide soil test information, consistent with the Virginia Nutrient Management Training and Certification Regulations (4 VAC 50-85).

- (c) For pest chemical control, referrals shall be made to the local cooperative extension agent or an Integrated Pest Management Specialist of the Virginia Cooperative Extension Service. Recommendations shall include copies of applicable information from the "Virginia Pest Management Guide", or other Extension materials related to pest control.
- (2) A higher priority shall be placed on conducting assessments of agricultural fields and tracts adjacent to Resource Protection Areas. However, if the landowner or operator of such a tract also has Resource Management Area fields or tracts in his operation, the assessment for that landowner or operator may be conducted for all fields or tracts in the operation. When such an expanded assessment is completed, priority must return to Resource Protection Area fields and tracts.
- (3) The findings and recommendations of such assessments and any resulting soil and water quality conservation plans will be submitted to the local Soil and Water Conservation District Board, which will be the plan-approving authority.

**Sec. 107. Development criteria for Resource Protection Areas.**

- (A) In addition to the general performance standards of Section 106 of this Ordinance, the following standards shall apply to all use, land disturbance, development, or redevelopment proposed within the Resource Protection Area:
  - (1) Land development may be allowed in the Resource Protection Area subject to approval by the Town of Smithfield Administrator only if such development (i) is water dependent; (ii) constitutes redevelopment; (iii) is a new use established pursuant to subsection 107(C) of this Ordinance; (iv) is a road or driveway crossing; or (v) is a flood control or stormwater management facility. In addition, the following conditions shall apply:
    - (a) A Water Quality Impact Assessment, as set forth in Section 108 of this Ordinance, shall be required for any proposed land disturbance in the RPA.
    - (b) A resiliency assessment as set forth in Section 109 of this Ordinance shall be required for any proposed land development during the plan of development or other project review process in the RPA.
    - (c) A new or expanded water-dependent facility may be allowed, provided that the following criteria are met:
      - 1. Such facility does not conflict with the comprehensive plan.
      - 2. Any non-water dependent component of such facility is located outside of the Resource Protection Area. Restaurants, parking areas, in-ground pools, patios, and indoor or outdoor dry dock boat storage facilities are accessory to the water-dependent use. As they are not considered water-dependent facilities, they must be reviewed through the formal exception process
      - 3. Access to such facility will be provided with the minimum land disturbance necessary. Where practicable, a single point of access will be provided.
  - (d) Redevelopment outside of designated Intensely Developed Areas shall be permitted in the Resource Protection Area only if (i) there is no increase in the amount of imperious cover; (ii) no further encroachment within the Resource Protection Area; and (iii) such redevelopment conforms to applicable erosion and sediment control criteria and stormwater management criteria set forth in the Town of Smithfield Erosion and Sediment Control Ordinance, as well as all applicable stormwater management requirements of other state and federal agencies.
  - (e) Roads and driveways not otherwise exempt from the provisions of this Ordinance, as per subsection 112(A) of this Ordinance, may be constructed in or across Resource Protection Areas provided each of the following conditions is met:
    - 1. The Town of Smithfield Administrator finds that there are no reasonable alternatives to aligning the road or driveway in or across the Resource Protection Area.

2. The alignment and design of the road or driveway are optimized, consistent with other requirements, to minimize encroachment into the Resource Protection Area and adverse effects on water quality.
    - a. Driveways may be constructed of asphalt, concrete, pavers, bricks, gravel, etc. The imperviousness of each material will be based on current industry standards. Pervious concrete, asphalt, and pavers may be used but must meet Virginia Stormwater Management Act and Regulations and stormwater specifications for infiltration, must be designed by a professional engineer and supported with a geo-technical report.
    - b. Driveways may be no wider than 10-feet unless a greater width is required pursuant to some other standard adopted by the Town Council (e.g., emergency access requirements for long private lanes).
    - c. The parking pad for a one or two-car garage may be no larger than 22-feet in width by 18- feet in length.
    - d. A single 10-foot by 17-foot turn-around with ten-foot turning radius may be allowed.
    - e. Additional parking and a turn-around area may be allowed using completely pervious and vegetated turf reinforcements such as grass pavers installed as per manufacturer specifications.
  3. The design and construction of the road or driveway satisfy all applicable criteria of this Ordinance, including submission of a water quality impact assessment.
  4. The Town of Smithfield Administrator reviews the plan for the road or driveway proposed in or across the Resource Protection Area in coordination with Town of Smithfield site plan, subdivision, and other applicable plan of development reviews.
- (f) Flood control and stormwater management facilities that drain or treat water from multiple development projects or from a significant portion of a watershed may be allowed in Resource Protection Areas, provided that:
1. Such facilities are allowed and constructed in accordance with the Virginia Stormwater Management Act and Regulations.
  2. The Town of Smithfield Administrator conclusively establishes that the location of the facility within the Resource Protection Area is the optimum location.
  3. The size of the facility is the minimum necessary to provide necessary flood control or stormwater treatment, or both.
  4. The facility is consistent with a comprehensive stormwater management plan developed and approved in accordance with 9 VAC 25-875-660 of the Virginia Stormwater Management Program (VSMP) regulations.
  5. All applicable State and Federal permits are obtained from the appropriate federal and state agencies having jurisdiction, such as the U.S. Army Corps of Engineers, the Department of Environmental Quality, and the Virginia Marine Resources Commission.
  6. Approval is received from the Town of Smithfield Administrator prior to construction.
  7. Routine maintenance is performed on such facilities to assure that they continue to function as designed.
- It is not the intent of this subdivision to allow a best management practice that collects and treats runoff from an individual lot or portion thereof to be located within a Resource Protection Area.
- (B) Buffer area requirements. The 100-foot-wide buffer area shall be the landward component of the Resource Protection Area, as set forth in subsection 104(B) of this Ordinance. Notwithstanding the existence of permitted uses, encroachments, and vegetation clearing, as set forth in this subsection, the buffer area shall not be considered reduced in width. To minimize the adverse effects of human

activities on the other components of the Resource Protection Area, state waters, and aquatic life, a 100-foot-wide 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. The planting of trees shall be incorporated into the re-establishment of the 100-foot buffer, as appropriate to site conditions, and in such a manner as to maximize the buffer function. The inclusion of native species in tree planting is preferred.

- (1) The 100-foot-wide buffer area shall be deemed to achieve a 75 percent reduction of sediments and a 40 percent reduction of nutrients.
- (2) Where land uses such as agriculture or silviculture within the area of the buffer area cease and the property is proposed to be converted to other land uses, then a minimum 100-foot-wide buffer shall be reestablished with woody vegetation. The planting of trees shall be incorporated into the reestablishment of the 100-foot buffer, as appropriate to site conditions and in such a manner to maximize the buffer function. Inclusion of native species in tree planting is preferred.
  - (a) A comprehensive planting plan for the entire buffer area that will ensure the survivability of vegetation and viability of the newly established buffer shall be submitted and approved by the Town of Smithfield Administrator prior to approval of a new land use or development plan (including subdivision) for the property.
  - (b) The comprehensive planting plan should provide for the planting of a standard buffer adjacent to all impacted RPA features and along all water bodies with perennial flow on the site. The planting plan should also provide for management measures such as proper monitoring and maintenance of the installed woody vegetation that assures the buffer functions set forth in this Ordinance.
  - (c) If, prior to plan of development approval, the Town of Smithfield Administrator determines that the 100-foot buffer is adequately vegetated and meets the pollutant removal criteria listed within this subsection, replanting additional vegetation may not be necessary. In these cases, the full 100-foot RPA buffer should be allowed to naturally regenerate, and no land disturbing activities should be permitted within this area.
  - (d) The *Buffer Manual* should be consulted to determine the best methods for planting the 100-foot buffer in such a way as to meet the pollutant removal criteria listed within this subsection.

(C) Permitted encroachments into the buffer area.

- (1) When the application of the buffer area would result in the loss of an adequate buildable area, as determined by the Town of Smithfield Administrator, on a lot or parcel legally recorded prior to October 1, 1989, the Town of Smithfield Administrator, after approval through the formal exception review process, can permit an encroachment into the buffer area as set forth in Section 113 of this Ordinance and with the following criteria:
  - (a) Encroachments into the buffer area shall be the minimum necessary to achieve a reasonable buildable area for a principal structure and necessary utilities. For the purposes of this subsection, reasonable buildable area shall mean that area reasonably necessary for a principal structure and necessary utilities with compatible bulk and scale to those in the surrounding neighborhood or area. Detached accessory structures shall not be eligible for encroachment authorizations.
  - (b) Where practicable, a vegetated area that will maximize water quality protection, mitigate the effects of the buffer area encroachment, and is equal to the area of encroachment into the buffer area shall be established elsewhere on the lot or parcel. Where established, such vegetated area shall include the planting of trees as appropriate to site conditions. The inclusion of native species in tree planting is preferred.
  - (c) Encroachments into the buffer area may not extend into the seaward fifty (50) feet of the buffer area.
  - (d) Encroachments into the buffer area processed through a formal exception process shall be subject to the findings required by Section 113 of this Ordinance.

(2) When the application of the buffer area would result in the loss of a buildable area on a lot or parcel recorded between October 1, 1989, and March 1, 2002, the Town of Smithfield Administrator may permit an encroachment into the buffer area after approval is granted through the formal exception process in accordance with Section 113 of this Ordinance, and in accordance with the following criteria:

- (a) The lot or parcel was created through a legal process conducted in conformity with the Subdivision Ordinance.
- (b) Conditions or mitigation measures imposed through a previously approved waiver or 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.
- (d) The criteria in subsection 107(C)(1)(a) of this Ordinance shall be met.

(D) Permitted modifications of the buffer area.

(1) To maintain the functional value of the buffer area, existing vegetation may be removed subject to approval by the Town of Smithfield Administrator. Such removal shall only be allowed to provide for reasonable sight lines, access paths, general woodlot management, BMPs (including those that prevent upland erosion and concentrated flows of stormwater), shoreline erosion control projects, or adaptation measures. Such buffer modifications shall be permitted under the following conditions, and consistent with the requirements of this Ordinance:

- (a) In general, where the removal of trees within the buffer area is proposed, mature trees shall be preserved and trimmed or pruned in lieu of removal as site conditions permit and removal should be limited to the fewest number of trees feasible. Where tree planting for mitigation, conservation landscaping, or for buffer reestablishment is proposed, the inclusion of native species in tree planting is preferred.
- (b) Trees may be pruned or thinned as necessary to provide for sight lines, vistas, and access paths, 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.
  1. When trees are proposed for removal to provide for site lines, vistas, and access paths they shall be replaced with trees as appropriate to site conditions and in such a manner as to maximize the buffer function and to protect the quality of state waters. The boundaries of this area shall be determined in a manner acceptable to the Town of Smithfield Administrator and be based on identified vantage points and the portion of the shoreline to be viewed.
  2. Trees may not be removed where reasonable sight lines, vistas, or access paths can be created by the pruning of trees alone. Pruning shall be performed in accordance with best available technical advice. Trees may not be pruned or removed within any RPA component listed in subsection 104(B)(1) through (3) of this Ordinance or a perennial stream.
  3. A written request for a determination by the Town of Smithfield Administrator that the proposed removal of vegetation from the RPA buffer is in accordance with the requirements of this subsection is required. Such request shall include a plan showing the following: (i) the vantage points for the sight lines, vistas, and access paths (ii) the portion of the shoreline to be viewed or accessed, (iii) the area in which trees are to be pruned or removed, (iv) the location of all trees six (6) inches or greater in diameter at breast height or as required by the Town of Smithfield Administrator, and (v) the location of the trees to be removed or pruned. The request shall also indicate the type, location and number of replacement vegetation proposed.

4. Trees may not be pruned or removed from the buffer area until a written determination is obtained from the Town of Smithfield Administrator that the proposed activity is in accordance with the requirements of this Ordinance.
  1. Any path shall be constructed and surfaced to effectively control erosion. Paths serving individual residential lots shall be no more than four (4) feet in width except as necessary for handicapped access.
- (c) Noxious weeds and dead, diseased, or dying trees or shrubbery may be removed 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. Vegetation may not be removed from any RPA component listed in subsection 104(B)(1) through (3) of this Ordinance or within a perennial stream.
1. All dead or diseased trees must be field checked by Town of Smithfield Administrator prior to their removal.
  2. When questions arise concerning the health of the trees proposed to be removed, the property owner shall be responsible for providing documentation from a certified landscape professional as to the health and viability of the trees. Such documentation shall be subject to review and approval of the Town of Smithfield Administrator.
  3. No land disturbance in the buffer area may occur or result from the removal of dead or diseased trees or noxious weeds.
  4. Dead or diseased trees must be replaced with 1-inch DBH minimum caliper trees at a 1:1 rate or with 15-inch minimum height shrubs at a 3:1 rate, absent conditions that suggest a higher or lower replacement ratio.
  5. Removal of noxious weeds is permitted in the buffer area provided they are replaced with vegetation equally adapted for the growing environment.
  6. Replacement vegetation should be protected by a surety bond and is subject to inspection one year after planting to ensure survival.
  7. For removal of trees larger than six (6) inches DBH, a buffer management permit is required.
    - a. The buffer management permit application shall be reviewed by the Town of Smithfield Administrator prior to removal of the tree(s). Upon approval of the permit, the property owner may remove the tree(s) specified in the permit.
    - b. Tree restoration shall be required within six (6) months of removal. A subsequent inspection for the replanting of tree(s) shall be performed by the Town of Smithfield Administrator. If in the opinion of the Town of Smithfield Administrator, the replanting requirements may lead to further future structural damage to the principal building, the replanting requirement may be modified.
    - c. Site clearing shall be allowed only to provide necessary access, positive site drainage, water quality BMPs, and the installation of utilities, as approved by the Town of Smithfield Administrator through the plan of development review process outlined under Section 110 of this Ordinance. Prior to clearing or grading, suitable protective barriers, such as safety fencing, shall be erected five (5) feet outside of the dripline of any tree or stand of trees to be preserved. These protective barriers shall remain throughout all phases of construction. The storage of equipment, materials, debris, or fill shall not be allowed within the area protected by the barrier.
    - d. A buffer management violation penalty of \$1,000 per tree removed without an approved woodlot management permit shall be assessed. Violators must still meet the provisions of this Ordinance to include designated tree replacement requirements. Property owners, contractors, and any other individuals associated with the removal of a tree without a buffer management permit approved by the Town of Smithfield

Administrator are subject to this penalty, or subject to the criminal provisions of the Town of Smithfield Zoning Ordinance.

- (d) For shoreline erosion control projects, trees and woody vegetation within the footprint of the shoreline erosion control project 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.
1. The removal of mature trees for the installation and maintenance of proposed shoreline erosion control projects shall only be permitted as necessary and consistent with the best available technical advice, approved project plans, and applicable permit conditions or requirements.
  2. Where vegetation is proposed for removal within the buffer area as part of a shoreline erosion control project, a water quality impact assessment with vegetative mitigation equal to the area of encroachment is required. Trees shall be incorporated, as appropriate to the site conditions and the project specifications. In addition, vegetation in the form of a mixture of grasses, sedges, flowers, and shrubs can be used by property owners to provide natural stabilization of shorelines. Inclusion of native species is preferred.
  3. Existing trees, proposed plantings, and clearing limits must be shown on the Joint Permit Application and/or Water Quality Impact Assessment.
  4. Shoreline erosion control within the RPA shall be consistent with the Wetlands Act (Chapter 13 Title 28.2), the Virginia Marine Resources Commission (VMRC) *Tidal Wetlands Guidelines* which provide for "minimum standards for the protection and conservation of wetlands," and "ensure protection of shorelines and sensitive coastal habitat from sea level rise and coastal hazard."
    - a. Installation of living shorelines is the required adaptation measure for stabilizing tidal shorelines unless the best available science indicates that such approaches are not suitable for the site on which the practice is being considered, as determined by the Virginia Marine Resources Commission. Such projects should be coordinated to address the requirements of the VMRC *Tidal Wetlands Guidelines* current at the time of application submission in conjunction with the requirements of this Ordinance.
    - b. Approval from the VMRC is also required for adaptation measures proposing the use of sea walls, riprap, groins, or other structural means of stabilization within tidal wetlands. Such projects shall demonstrate to the satisfaction of the Town of Smithfield Administrator that vegetative techniques cannot be effectively utilized and shall incorporate elements of living shoreline approaches into permitted projects to the maximum extent possible.
    - c. If a hardened shoreline structure is allowed, the applicant shall be required to incorporate elements of living shoreline approaches into permitted projects, to the maximum extent possible.
- (e) Adaptation measures proposed for location within the Resource Protection Area, shall meet the following conditions:
1. The selected adaptation measure shall be a nature-based solution that uses environmental processes, natural systems, or natural features identified as being appropriate for existing site conditions.
  2. An identified adaptation measure shall be selected from one of the following sources: Chesapeake Bay program approved BMP list, the Virginia Stormwater Management Handbook, the VMRC Tidal Wetlands Guidelines, or be a project that is eligible for funding by the Virginia Community Flood Preparedness Fund Grant.
    - a. Adaptation measures should consist of trees, vegetation, stone or enhance existing natural elements.

3. Adaptation measures approved for use in the RPA shall be designed, installed, and maintained in accordance with the applicable specifications for the selected adaptation measure.
4. Adaptation measures should be placed channelward of the proposed development whenever possible and should maximize the preservation of mature trees and other natural vegetation to minimize adverse impacts to the RPA and to maximize water quality benefits.
5. The use of fill as a component of an adaptation measure may be permitted, provided it meets the following conditions:
  - a. The grading and slope created by the use of fill shall be no greater than necessary based upon the project specifications and implemented in a manner that minimize the impact of run-off.
    - i. Slopes should be equal to or less than 10% to support water quality conditions, including infiltration.
    - ii. Slopes less than or equal to 5% or that convey sheet flow of velocities less than one and one-half (1.5) feet/second are preferred, to reduce runoff and tidal wave energies.
    - iii. Slopes greater or different than the above may be necessary based upon certain site conditions and adaptation measure specifications. In such instances, submittal of additional calculations and engineering plans, and assessments of the impacts of the use of fill on existing vegetation, wetland migration and water movement, both landward and channelward, in support of the proposed slope shall be required.
  - b. Fill shall have the necessary biogeochemical characteristics, including sufficient organic content, to support the growth of vegetation and adequate permeability to allow infiltration consistent with project specifications. The applicant shall:
    - i. Provide documentation specifying the proposed depth, extent, and type of fill material proposed for use.
    - ii. Provide documentation that the proposed soils are compliant with the requirements governing the use of lightly contaminated soil consistent with the Virginia Solid Waste Management Regulations (9 VAC 20-81 et seq.) or permitting requirements for upland placement of dredge soil, if applicable.
    - iii. Provide documentation that the newly placed fill is revegetated with multi-strata vegetation inclusive of canopy and understory trees, shrubs, and ground cover consistent with the guidance found in the *Buffer Manual*. Inclusion of native species is encouraged.
    - iv. Ensure that the fill area is vegetatively stabilized within seven (7) days.
  - c. The use of fill shall not exacerbate stormwater run-off, and lateral flow onto adjacent properties shall be controlled.
    - i. Appropriate erosion and sediment control and stormwater management measures shall be incorporated into the design specifications, including the establishment of positive and proper drainage.
    - ii. If the adaptation measure triggers separate stormwater management requirements, then these criteria should be considered in conjunction with those requirements.
    - iii. Larger scale adaptation measures may require the use of stormwater calculations to ensure these criteria are met.
    - iv. Any impacts on the management of stormwater upland of the Resource Protection Area created by the use of fill shall be mitigated, as necessary.

- d. The use of fill for an adaptation measure shall not negatively impact septic systems and drain fields located within the RPA. Where present, the proximity of the adaptation measure using fill should be considered such that the fill will not interfere with the proper function or maintenance of either of these features.
  - e. The use of fill shall be consistent with any applicable local, state, or federal floodplain requirements. The applicant shall provide documentation to verify that proposed adaptation measures do not conflict with any constraints or requirements of floodplain management or flood control provision, including federal floodplain management regulations found in Title 40 CFR Part 60. The allowance of fill under these provisions does not negate those independent requirements.
  - f. The placement of fill allowed by either the Living Shoreline Group 1 or Group 2 general permits to establish appropriate elevations to support required vegetation shall be consistent with the fill requirements of this subsection, in that a change in slope or land elevation may not alter water flow in contravention with the fill requirements of this subsection.
- 6. The preservation of existing natural vegetation shall be maximized, including mature trees, and land disturbance consistent with design specifications shall be minimized.
  - 7. Adaptation measures shall comply with all federal, state and local requirements, including any required permits and conditions such as the need for a Water Quality Impact Assessment.
  - 8. Nothing in these provisions shall be construed to authorize approval or allowance of an adaptation measure in contravention of floodplain management requirements, including Article 3.O.
- (2) On agricultural lands, the agricultural buffer area shall be managed to prevent concentrated flows of surface water from breaching the buffer area, and appropriate measures may be taken to prevent noxious weeds from invading the buffer area. Agricultural activities may encroach into the buffer area as follows:
- (a) Agricultural activities may encroach into the landward 50 feet of the 100-foot-wide buffer area if at least one (1) agricultural best management practice is being implemented on the adjacent land and such best management practice, which in the opinion of the Local soil and water conservation district board, addresses the predominant water quality issue (either erosion control or nutrient management). In such cases, the combination of the undisturbed buffer area and the best management practice(s) shall achieve water quality protection, pollutant removal, and water resource conservation at least the equivalent of the minimum 100-foot buffer area. If nutrient management is identified as the predominant water quality issue, a nutrient management plan, including soil tests, shall be developed consistent with the Virginia Nutrient Management Training and Certification Regulations (4 VAC 50-85) administered by the Virginia Department of Conservation and Recreation.
  - (b) Agricultural activities may encroach within the landward 75 feet of the 100-foot-wide buffer area 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. A nutrient management plan, including soil tests, shall be developed, consistent with the Virginia Nutrient Management Training and Certification Regulations (4 VAC 50-85) administered by the Virginia Department of Conservation and Recreation. In conjunction with the remaining undisturbed portion of the buffer area, this collection of best management practices shall be presumed to achieve water quality protection at least the equivalent of that provided by the minimum 100-foot buffer area.

- (c) The buffer area shall not be required to be designated adjacent to agricultural drainage ditches if at least one (1) 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 (either erosion control or nutrient management) is being implemented on the adjacent land.
- (d) If specific problems are identified pertaining to agricultural activities that are causing pollution of the nearby water body with perennial flow or violate performance standards pertaining to the vegetated buffer area, the Town of Smithfield Administrator, in cooperation with soil and water conservation district, shall recommend a compliance schedule to the landowner and require the problems to be corrected consistent with that schedule. This schedule shall expedite environmental protection while considering the seasons and other temporal considerations so that the probability for successfully implementing the corrective measures is greatest.
- (e) In cases where the landowner or the landowner's agent or operator has refused assistance from the local soil and water conservation district in complying with or documenting compliance with the agricultural requirements of this Ordinance, the district shall report the noncompliance to the Town of Smithfield Administrator. The Town of Smithfield Administrator shall require the landowner to correct the problems within a specified period not to exceed 18 months from their initial notification of the deficiencies to the landowner. The local government, in cooperation with the district, shall recommend a compliance schedule to the landowner. This schedule shall expedite environmental protection while considering the seasons and other temporal considerations so that the probability for successfully implementing the corrective measures is greatest.

(E) Buffer requirements for Intensely Developed Areas.

- (1) Where the Town of Smithfield Administrator has determined that buffers are to be established, they shall be designed in accordance with the standards established in the *Buffer Manual*. When considering the re-establishment of a buffer within an Intensely Developed Area, the Town of Smithfield Administrator shall encourage the planting of trees, including native species, as a component of such buffer reestablishment measure.

(F) *Buffer mitigation standards.* The following standards shall apply in cases in which buffer mitigation is required pursuant to the provisions of this Ordinance due to land disturbance, development, or redevelopment within a Resource Protection Area:

- (1) For new impervious cover:
  - (a) Buffer restoration of an area equal to two (2) times the proposed impervious cover in the Resource Protection Area shall be provided. The Town of Smithfield Administrator or Town of Smithfield Planning Commission shall allow a lesser area of buffer restoration if the property owner demonstrates that site conditions or structural treatment methods are such that a lesser buffer restoration area will adequately protect water quality.
  - (b) In-ground pool water surface, decks, pavers, and gravel driveways shall be considered impervious cover for buffer restoration calculations.
  - (c) In accordance with the *Buffer Manual*, for the buffer to function as intended, it shall contain the full complement of vegetation that includes canopy trees, understory trees, shrubs, and ground cover, whether the ground cover is vegetation, leaf litter, or mulch. The composition of the buffer restoration area shall be per Appendix D, Table A of the *Buffer Manual*.
  - (d) Salt- and flood-tolerant plant species shall be planted below the five-foot contour to ensure greater survival of the plantings, where appropriate.
  - (e) Trees shall not be planted within 15 feet of the shoreline where such planting would result in marsh shading or interference with the integrity of shoreline structures.
  - (f) Buffer restoration shall be located in the Resource Protection Area, including in areas occupied by turf or where impervious cover is removed. To the extent possible, such restoration shall be

located in the 50-foot seaward portion of the buffer area. The Town of Smithfield Administrator may require a site evaluation to determine the location and extent of vegetation needed to meet this requirement where specific site conditions warrant, including, but not limited to, the presence of steep slopes and existing vegetation recommended for buffers in Appendix D, Table A of the *Buffer Manual*.

- (g) All trees, plants, and groundcover, required as buffer restoration shall be maintained and not removed or allowed to revert to turf.
- (2) For shoreline erosion control projects, mitigation for land disturbance and/or the removal of vegetation within the RPA shall be in accordance with Appendix D, Table A of the *Buffer Manual*; provided that trees shall not be planted within 15 feet of the shoreline where such planting would result in marsh shading or interference with the integrity of existing or proposed shoreline structures.
- (3) For buffer area establishment or restoration, vegetation shall consist of a mix of canopy trees, understory trees, shrubs, and groundcovers that achieve the buffer functions set forth in subsection 107(B) of this Ordinance. The density of plants, the type of plant materials, and planting techniques shall be as specified in Appendix D, Table A of the *Buffer Manual*.
  - (a) Groundcover (non-woody) plants and grass augment necessary woody planting materials and are not to be used in lieu of trees and shrubs.
  - (b) Foundation plantings, within five (5) feet of a structure are not counted towards restoration and replacement requirements.
  - (c) The use of native plants is strongly encouraged, and invasive species are discouraged.
  - (d) A buffer establishment or restoration plan and narrative shall include the following information, at a minimum:
    - 1. Property owners' contact information including name, mailing address, email address, and phone number.
    - 2. Subject property address, property lines, and location of physical improvements or structures such as houses, sheds, pools, patios, decks, driveways, etc.
    - 3. The type, number, and location of trees greater than 3-inches DBH within the "seaward" 50-feet of the buffer area and trees greater than six (6)-inches DBH in the "landward" 50-feet of the RPA buffer.
    - 4. Type, number, and location of mature trees within the RPA buffer.
    - 5. Proposed planting schedule, to include the type, number, and location of replacement trees and shrubs.
    - 6. Location, limits, and depth of proposed fill.
    - 7. Designation of trees to remain and trees to be removed.
    - 8. Proposed tree protection measures.
    - 9. Appropriate erosion control measures.
    - 10. Expected date of completion.
    - 11. A GIS map or a current physical survey may be used as a base map for the plan.
    - 12. The plan and narrative must have sufficient information for staff inspection.

#### **Sec. 108. Water quality impact assessment.**

- (A) The purpose of a water quality impact assessment is to: (i) identify the potentially adverse impacts of proposed development on water quality and lands within Chesapeake Bay Preservation Areas consistent with the goals and objectives of this Ordinance; (ii) ensure that, where use, development or

redevelopment takes place within Chesapeake Bay Preservation Areas, it will be located on those portions of a site and in a manner that will be least disruptive to the natural functions of Resource Protection Areas and other sensitive lands; and (iii) specify means to avoid, minimize or mitigate the impacts of development for water quality protection.

- (B) A water quality impact assessment must demonstrate that the undisturbed buffer area, enhanced by vegetative plantings and any other best management practices will result in the removal of no less than 75 percent of sediments and 40 percent of nutrients from post-development stormwater runoff and will retard runoff, prevent erosion, and filter non-point source pollution equivalent to an undisturbed 100-foot buffer area.
- (C) A water quality impact assessment shall be required for any proposed land disturbance, development or redevelopment within a Resource Protection Area consistent with this Section, and for any other development in Chesapeake Bay Preservation Areas that may warrant such assessment because of the unique characteristics of the site or intensity of the proposed use or development.
- (D) A water quality impact assessment shall include the following information:
- (1) A narrative that describes the nature of the proposed RPA encroachment, provides justification for the proposed impacts to the RPA, and addresses the findings required in subsection 113 (A) of this Ordinance.
    - (a) An analysis of the anticipated reduction in buffer function due to the proposed land development, its impact on the buffer area, proposed mitigation or adaptation measures, and the anticipated effect of the proposed project on water quality.
    - (b) A description of the extent and nature of any proposed disturbance or disruption of wetlands.
    - (c) Impacts of the proposed development on topography, soils, surface and groundwater hydrology on the site and adjacent lands.
    - (d) Source location and description of proposed excavation and fill material.
    - (e) For any water-dependent activity, the location of, and potential adverse impacts upon, shellfish beds, submerged aquatic vegetation, and fish spawning and nursery areas.
    - (f) A statement of any anticipated future land disturbance within the RPA.
    - (g) All federal, state, and local permits required for the development of the site.
  - (2) A site drawing to scale which depicts the following:
    - (a) Delineation of the RPA components, including the 100-foot buffer area and the location of any water body with perennial flow, and the RMA boundary, if necessary.
    - (b) Existing topography, soils information (including depth to groundwater and infiltration rate), where appropriate, surface and groundwater hydrology, wetlands and, if necessary, drainage patterns from adjacent lands.
    - (c) Location and nature of the proposed encroachment into the buffer area, including limits of clearing or grading and the area of land disturbance; location of any structures, driveways, or other impervious cover; type(s) of paving material(s); area of proposed impervious cover; and location of proposed utilities, including sewage disposal systems or reserve drainfield sites.
    - (d) Location and area (in square feet) of existing impervious cover.
    - (e) Existing vegetation, including the number and type of trees and other vegetation to be removed in the RPA to accommodate the proposed buffer encroachment or modification.
    - (f) Proposed vegetative mitigation plan equal to the area of land disturbance within the existing buffer area.
    - (g) Type and location of proposed additional best management practices that may be necessary to mitigate for the proposed encroachment.

- (h) Type and location of proposed adaptation measures necessary to address the impacts of storm surge, sea level rise, and flooding.

**Sec. 109. Resiliency assessment.**

- (A) Submittal of a resiliency assessment that considers the potential impacts of sea level rise, storm surge, and flooding on buffer function in light of a proposed RPA encroachment is required during the review of a plan of development or other review process. Such an assessment is to be based upon the RPA as delineated at the time of the proposed land development and is required in addition to all other requirements of this and other local ordinances. At a minimum the resiliency assessment should contain the following information:
- (1) *A scaled drawing or aerial image* of the proposed project that includes the RPA boundary, required setbacks, existing topography, and a graphic depiction of the anticipated impacts of sea level rise, flooding, and storm surge on the parcel and the proposed project, based upon a review of approved models and forecasts, to include the following:
- (a) For sea level rise, use the 2017 National Oceanographic and Atmospheric Administration (NOAA) Intermediate-High scenario projection curve [or any subsequently updated version thereof on the project site. Sea level rise data can be accessed on the AdaptVA website, maintained by the Virginia Institute of Marine Science (VIMS). When determining potential sea-level rise impacts, the applicant should use the model to identify both the extent of anticipated inland migration, as well as the water depth.
- (b) For storm surge, use the most up to date NOAA hydrodynamic Sea, Lake, and Overland Surges Hurricanes (SLOSH) model on the project site. Storm surge data can be accessed on the AdaptVA website.
- (c) For flooding, use the most up to date Special Flood Hazard Area and the Limit of Moderate Wave Action (LiMWA) model on the project site according to the Virginia Flood Risk Information System (VFRIS) model in conjunction with the requirements and application of the [local] floodplain management ordinance. VFRIS includes the Flood Insurance Rate Maps, flood insurance studies, and associated models produced by the Federal Emergency Management Agency, and is available on the Virginia Department of Conservation and Recreation (DCR) website. When identifying flooding impacts, the applicant may rely on existing use and application of the relevant Special Flood Hazard Area. This data is also accessible on the AdaptVA website.
- (d) The anticipated impacts shall be based upon a thirty (30) year timeframe, unless the applicant demonstrates that the lifespan of the project proposed for development is less than thirty (30) years based upon the information in 2(b) as approved by the Town of Smithfield Administrator. Where a lifespan of less than 30 years is proposed, the applicant shall provide documentation of proposed building materials, anticipated quality of construction, design specifications, and other materials or information in support of a predicted lifespan of less than 30 years for the project.
- (2) A narrative report that analyzes the results of the data and graphic research, and provides the following information:
- (a) Define the intended service life of the proposed structure(s).
- (b) Identification of any proposed impact directly from proposed impervious cover or structures in the RPA and the extent of such impact.
- (c) Identification of extent of impact on the current buffer area including impacts to existing vegetation from the landward movement of water and vegetative migration.
- (d) Describe the extent to which anticipated impacts can be or have been mitigated by altering the location design, size, or orientation of proposed structures or impervious cover, by preserving and/or supplementing existing buffer areas as provided for in Section 108 of this Ordinance,

- and/or by considering other limiting site conditions including required setbacks and parcel size, and/or by proposing an adaptation measure in accordance with the provisions of Section 108.
- (e) Identification of the utilization of existing local programs that already take potential impacts into account through the building permit or site design review processes, such as freeboard requirements enacted through the [local floodplain ordinance].
- (3) The Town of Smithfield Administrator will review the narrative report from (2) along with the water quality impact assessment and determine whether the anticipated impacts necessitate an alteration or conditions to the proposed project or implementation of an adaptation measure for approval.
- (a) In considering whether a requirement for project alteration or adaptation measure is appropriate, the Town of Smithfield Administrator will ensure that the proposed alteration or adaptation measure is practical, achievable, and necessary to mitigate the identified impact.
- (b) Where possible, consideration will be given to modifying the proposed development size or location, such that the extent of land disturbance or impervious cover can be reduced to avoid or minimize the area or areas of the parcel that the assessment indicates will be impacted.
- (c) If the resiliency assessment reveals that impacts on the parcel can be addressed by structural design or siting alterations, then supplemental information on the potential alterations shall be provided for consideration by the Town of Smithfield Administrator. Supplemental information may include additional sketches or plans, including plan and section views, building specifications, and other supporting materials.
- (d) Approval may be conditioned on the implementation of the proposed alterations, conditions, or adaptation measure.
- (e) The resiliency assessment may also indicate that no alterations, conditions, or adaptation measures are required, in which case the applicant may proceed through the remainder of the approval process.
- (4) Should an impact from sea-level rise, storm surge, or flooding be identified that exceeds available design alterations, approval of the proposed project should then be conditioned with the requirement for an adaptation measure and the following information provided:
- (a) Describe the proposed adaptation measure(s) for the site as selected from one of the sources listed in subsection 109(A) of this Ordinance and submit documentation of the proposed adaptation measure and its suitability for use on the site, such as design specifications, construction methods and materials that will provide shoreline stabilization until vegetation is established, and a proposed maintenance plan.
- (b) Describe how the selected adaptation measure meets the requirement for being a nature-based solution.
- (c) Describe how the selected adaptation measure(s) comply with applicable regulatory or permitting requirements. Submit a water quality impact assessment pursuant to Section 108 of this Ordinance and a site plan pursuant to Section 110 of this Ordinance detailing the proposed placement of the adaptation measure, existing and proposed topography and vegetation, proposed limits of clearing and grading, and mitigation for the area of land disturbance within the RPA. Additionally, provide documentation of as-built documentation of the final design and installation, including photographs, and final inspection is required upon completion of installation.
- (5) The resiliency assessment may be submitted as a standalone document as part of the plan of development process or it may be submitted as part of a water quality impact assessment pursuant to Section 108 of this Ordinance for those projects disturbing less than 2,500 square feet.

**Sec. 110. Plan of development process.**

- (A) Any development or redevelopment in the Chesapeake Bay Preservation Area shall be accomplished through a plan of development process consistent with Va. Code §15.2-2286(8). Approval shall be

rendered for a plan prior to commencement of any land-disturbing activity on site or the issuance of any building permit. Plans and information required under this subsection may be coordinated or combined as deemed appropriate by the Town of Smithfield Administrator. All information required in this subsection shall be drawn to the same scale as the preliminary site plan or final subdivision plat and certified as complete and accurate by persons duly licensed by the Commonwealth of Virginia to practice as such. Any applicant, or potential applicant, may confer with such departments and other agencies of the Town of Smithfield as may be appropriate concerning a general development or redevelopment proposal before submission of an application. Such a conference shall not be construed as an application for approval of such a proposal.

(B) Except as otherwise provided herein, the plan of development process for any development or redevelopment in a CBPA, shall consist of the plans and information identified below:

- (1) A site plan or a subdivision plat which meets the requirements of the Site Plan Ordinance or Subdivision Ordinance, and which includes the following information:
  - (a) RPA boundaries as identified during the site-specific CBPA determination conducted pursuant to Section 105 of this Ordinance, and the location of the following environmental features:
    1. Tidal wetlands.
    2. Tidal shores.
    3. Nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow, the location and extent of which shall be determined in accordance with the procedures specified in the *United States Corps of Engineers' Wetland Delineation Manual, Technical Report Y-87-1*, January 1987, Final Report, the *Regional Supplement to the Army Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* (Version 2.0) ERDC/EL TR 10-20, and the *Regional Supplement to the Army Corps of Engineers Wetland Delineation Manual: Eastern Mountains and Piedmont Region* (Version 2.0) ERDC/EL TR 12-9.
    4. A buffer area not less than 100-feet in width and located adjacent to and landward of the components listed above and along both sides of any water body with perennial flow.
  - (b) Evidence of the site specific CBPA boundary determination, inclusive of perennial flow determinations and wetland delineation studies, as appropriate to the site conditions.
  - (c) Limits of land disturbance and all areas of clearing, grading, access ways and staging areas and the total area of land disturbance, as well as total area of land disturbance proposed within the RPA.
  - (d) Location of all approved existing and proposed septic tanks and drainfield areas, including reserve areas, and the location of all existing and proposed wells and utilities.
  - (e) A statement that excavation material and debris from construction shall be disposed of in a lawful manner.
  - (f) Existing and proposed impervious cover and the total amount of impervious cover proposed for the site, as well as total amount of impervious cover proposed within the RPA.
  - (g) Evidence that all applicable wetland permits required by law have been obtained prior to authorization of grading or other on-site activities shall be provided.
  - (h) Additional information shall be requested, and reasonable and appropriate conditions shall be imposed by the Town of Smithfield Administrator, if necessary, to preserve the purpose and intent of this Ordinance.
- (2) A water quality impact assessment, according to Section 108 of this Ordinance.
- (3) A resiliency assessment, according to Section 109 of this Ordinance.
- (4) A landscape plan that delineates or complies with the following:

- (a) The location, size, and description of existing and proposed plant material. All existing canopy trees and understory trees on the site of six (6) inches or greater diameter at breast height shall be shown. Where there are groups of trees, stands of trees may be outlined, except for mature trees, which shall be individually identified. The location and specific number of mature trees, canopy trees, and understory trees to be preserved on the project site shall be indicated on the plan. Mature trees, canopy trees, and understory trees and other vegetation to be disturbed or removed to create a desired construction footprint shall be clearly identified. Mature trees shall be protected during development and only removed where necessary, including to provide for the proposed use or development.
- (b) A description of the proposed measures for mitigation shall include (i) a replanting schedule for trees and other vegetation removed for construction, including a list of plants and trees to be used for mitigation; (ii) a demonstration that the design of the plan will preserve mature trees, canopy trees, and understory trees and other vegetation on the site and will provide maximum erosion control and overland flow benefits from such vegetation; (iii) a demonstration that existing plants are to be used to the greatest extent possible; and (iv) a demonstration that where the planting of new trees or vegetation is required, native species will be used to the greatest extent possible. If no mitigation or planting is required, existing trees may be delineated as required above on the site plan or subdivision plat.
- (c) A delineation of any required buffer area and any plant material to be added to establish or supplement the buffer area. Trees should be used for mitigation and supplementation of the buffer area to the extent practicable and as appropriate to the site conditions and project specifications. Where possible use of native species is preferred.
- (d) Within the buffer area, identification of the trees to be removed for sight lines, vistas, access paths, best management practices, and shoreline stabilization projects, as applicable, and the location, type, and size of replacement trees and vegetation proposed for mitigation. Mature trees shall be preserved and trimmed or pruned in lieu of removal as site conditions permit. Any removal of mature trees should be limited to the fewest number of trees feasible. When mature trees are removed to provide for site lines and vistas, access paths or BMPs, they shall be replaced with trees as appropriate to site conditions. The location, type and size of replacement trees and other vegetation proposed for mitigation for the removal of trees from the buffer area shall be shown on the landscape plan.
- (e) A depiction of grade changes or other work adjacent to trees which would adversely affect them. Specifications shall be provided as to how grade, drainage, and aeration would be maintained around trees to be preserved. Specifications shall also be provided for the protection of existing trees and vegetation during site work and construction.
- (f) A description of the limits of clearing of existing vegetation, based on all anticipated improvements, including buildings, drives, and utilities.
- (g) All supplementary or replacement plant materials shall be 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 Nursery and Landscape Association, and shall be installed according to standard planting practices and procedures.
- (i) Where areas to be preserved are encroached upon, replacement of existing trees and other vegetation shall be achieved at a ratio of three (3) trees planted to one (1) tree greater than six (6) inches diameter at breast height removed, or by such other measures as in the judgment of the Town of Smithfield Administrator will adequately compensate for the removal of such trees and other vegetation. Replacement trees shall be a minimum two (2) to two and one-half (2½) inches caliper at the time of planting.
- (j) Location of signage along the RPA boundary to alert property owners of the environmentally sensitive areas and to protect the RPA from secondary impacts following the completion of construction activities. Signage shall be subject to the following provisions:

1. Signs must be located on property lines at and along the intersection of the landward edge of the RPA buffer and spaced at intervals not exceeding 100-feet.
  2. Where possible, the signs will be mounted to a tree larger than three (3) inches in DBH. Where it is not possible to mount the sign to the tree, a treated 4 x 4 or a metal signpost must be used. The post must be buried at least 24 inches. The signs must be mounted between four (4) and six (6) feet above the ground surface.
- (5) An erosion and sediment control plan meeting the requirements of the provisions of the Town of Smithfield Erosion and Sediment Control Ordinance.
- (6) A stormwater management plan containing maps, charts, graphs, tables, photographs, narrative descriptions, explanations, and supporting references shall be submitted in accordance with the requirements of the Virginia Stormwater Management Regulations. At a minimum, the stormwater management plan shall contain the following:
- (a) Location and design of all planned stormwater control devices.
  - (b) Procedures for implementing nonstructural stormwater control practices and techniques.
  - (c) A long-term schedule for inspection and maintenance of stormwater management consistent with the Virginia Stormwater Management Handbook.
  - (d) A maintenance agreement as deemed necessary and appropriate by the Town of Smithfield Administrator to ensure proper maintenance of best management practices in order to continue their functions.
  - (e) Predevelopment and post development nonpoint source pollutant loadings with supporting documentation of all utilized coefficients and calculations as outlined in the Virginia Stormwater Management Handbook.
  - (f) For stormwater management facilities, verification of structural soundness, which shall be certified by a professional engineer. All engineering calculations shall be performed in accordance with the current edition of the Virginia Stormwater Management Handbook.
  - (g) Such additional elements that are required to be contained in a stormwater management plan for Chesapeake Bay land disturbing activities by the Virginia Stormwater Management Handbook.
  - (h) A description of any proposed structural stormwater management solutions and the extent to which lateral movement of stormwater to neighboring parcels is a concern, and the extent to which it has been addressed by proposed mitigation measures and/or adaptation measures.

(D) *Performance and bonding requirements.*

- (1) No approved plans required by this Section shall be released until the applicant provides performance bonds or other form of surety acceptable to the Town of Smithfield Attorney, provided, however, that 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 building permit and certificate of occupancy may be issued if the applicant provides to the Town of Smithfield Administrator a form of surety satisfactory to the Town of Smithfield Attorney in an amount equal to the estimated cost of construction, related materials, and installation costs of the required landscaping or other specifications and maintenance costs for any required stormwater management facilities.
- (2) All required landscaping shall be installed as approved by the end of the first planting season following issuance of a certificate of occupancy. Landscaping must survive or be replaced by the end of the second planting season, or the surety shall be forfeited to the treasury of the Town of Smithfield.
- (3) All required stormwater management facilities or other specifications shall be installed and approved within 18 months of project commencement. Should the applicant fail, after proper notice, to initiate, complete or maintain appropriate actions required by the approved plan, the surety may

be forfeited to the treasury of the Town of Smithfield, which may also collect from the applicant the amount by which the reasonable cost of required actions exceeds the amount of the surety held.

- (4) After all required actions of the approved plan have been completed, the applicant shall submit to the Town of Smithfield Administrator a written request for a final inspection. If the requirements of the approved plan have been completed, such unexpended or unobligated portion of the surety held shall be refunded to the applicant or terminated within sixty 60 days following the receipt of the applicant's request for final inspection.
- (5) Prior to the issuance of any grading, building or other permit for activities involving site development activities, the applicant shall furnish to the Town of Smithfield Administrator a reasonable performance bond, cash escrow, letter of credit or other legal surety, or any combination thereof acceptable to the Town of Smithfield Attorney, to ensure that measures may be taken by the Town of Smithfield, at the applicant's expense, should the applicant fail, after proper notice, within the time specified, to initiate or maintain appropriate conservation action which may be required of them as a result of the approved site development.

### **Sec. 111. Nonconforming buildings and structures.**

- (A) The Town of Smithfield Administrator may permit the continued use, but not necessarily the expansion, of any structure in existence prior to 1998 or which exists at the time of any amendment to this Section. The Town of Smithfield Administrator may waive or modify the criteria of this Section for structures on legal nonconforming lots or parcels, provided that:
  - (1) There will be no net increase in nonpoint source pollutant load.
  - (2) Any development or land disturbance exceeding 2,500 square feet complies with all erosion and sediment control requirements.
- (B) Additions and modifications to existing legal principal structures may be processed through an administrative review of the application by the Town of Smithfield Administrator and shall be subject to the findings required by subsection 113(A) of this Ordinance. Such findings are to be made by the Town of Smithfield Administrator, but without the requirement for a public hearing. This provision shall not apply to accessory structures, as defined by Section 103 of this Ordinance, which are not permitted uses within the Resource Protection Area and require submittal to the formal exception process.
- (C) A nonconforming use and development waiver shall become null and void 12 months from the date of issuance if the Town of Smithfield Administrator documents that no substantial work has commenced. The Town of Smithfield Administrator shall notify the permittee of the revocation of the waiver in writing.
- (D) Reconstruction or restoration of any nonconforming building or structure destroyed or damaged by reason of casualty loss shall be allowed, provided that the area encompassed by such building or structure, as reconstructed or restored, is not extended or enlarged and is subject to the requirements of this Ordinance and other Town of Smithfield ordinances.

### **Sec. 112. Exemptions.**

- (A) *Exemptions for public utilities, railroads, and public roads, and facilities.*

- (1) Construction, installation, operation and maintenance of electric, natural gas, fiber optic, and telephone transmission lines, railroads, public roads and their appurtenant structures are deemed to comply with this Ordinance provided such activities are performed in accordance with (i) regulations promulgated pursuant to the Erosion and Sediment Control Law (Va. Code § 62.1-44.15:51 et seq.) and the Stormwater Management Act (Va. Code § 62.1-44.15:24 et seq.); (ii) an erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Environmental Quality or the locality, as required; or (iii) local water quality criteria at least as stringent as the state requirements. Exemptions for public roads shall also be subject to the following conditions:

- (a) The road alignment and design are optimized and consistent with other applicable requirements to prevent or otherwise minimize (i) encroachments into Resource Protection Areas and (ii) adverse effects on water quality.
  - (b) Such appurtenant structures shall include, but are not limited to, bridges, guard rails, lighting and traffic-control devices, fences, and berms.
  - (2) Construction, installation and maintenance of water, sewer, underground cable and telecommunications lines and natural gas lines owned or permitted by the Town of Smithfield, or a regional service authority, shall be exempt from this Ordinance provided that:
    - (a) To the degree practicable, the location of such utilities and facilities shall be outside RPAs.
    - (b) No more land shall be disturbed than is necessary to provide for the proposed installation.
    - (c) All construction, installation, and maintenance of such utilities and facilities shall comply with all applicable state and federal requirements and permits and shall be designed and constructed in a manner that protects water quality.
    - (d) Any land disturbance exceeding an area of two 2,500 square feet complies with all requirements of the Erosion and Sediment Control Ordinance.
- (B) *Exemptions in Resource Protection Areas.* Land disturbances in RPAs associated with water wells, passive recreation facilities such as boardwalks, trails and pathways, and historic preservation and archaeological activities shall be exempt from the criteria of this Ordinance provided that the following are demonstrated to the satisfaction of the Town of Smithfield Administrator:
- (1) Any required permits, except those to which this exemption specifically applies, shall have been issued.
  - (2) Sufficient and reasonable proof is submitted to the Town of Smithfield Administrator that the intended activity will not deteriorate water quality.
  - (3) Any land disturbance exceeding an area of 2,500 square feet shall comply with the Erosion and Sediment Control Ordinance.
- (C) *Exemptions for silvicultural activities.* Silvicultural activities located within designated CBPAs shall be exempt from the requirements of this Ordinance provided that silvicultural operations adhere to water quality protection procedures prescribed by the Virginia Department of Forestry in the Fifth Edition (March 2011) of *Virginia's Forestry Best Management Practices for Water Quality Technical Manual*. The Virginia Department of Forestry will oversee and document the installation of best management practices and will monitor in-stream impacts of forestry operations in CBPAs.
- (1) The exemption of silvicultural activities only applies to those operations that install and properly implement all necessary forestry best management practices. Failure to properly install or maintain any of the forestry BMPs within the RPA would automatically eliminate the silvicultural exemption status under this Section and may subject the property owner to penalties for violations under Section 115 of this Ordinance and possible enforcement actions from the Virginia Department of Forestry.
  - (2) Silviculture entails the continued production of trees, wood, or wood products and any related actions that occur during the management of the land for these purposes. Silviculture does not include clearing a site in preparation for future development nor does it involve the removal of stumps for any reason. If the Town of Smithfield Administrator determines that the intended use of the site is not silvicultural in nature, all exemptions from this Ordinance are null and void and the project would have to comply with all requirements of this Ordinance. This may include preserving the full 100-foot RPA buffer or replanting it in woody vegetation, if necessary, and full compliance with all erosion and sediment control requirements if more than 2,500 square feet of land has been disturbed.
- (D) *Exemptions for living shorelines.* A living shoreline, as defined by Va. Code § 28.2-104.1 may be exempt from additional performance criteria requirements of Section 107, including a water quality impact assessment in Section 108, provided the project minimizes land disturbance, maintains or

establishes a vegetative buffer inland of the living shoreline, complies with the fill conditions in subsection 107(E)(1)(f) of this Ordinance, and receives approval from the VMRC or the local wetlands board, as applicable.

**Sec. 113. Waivers and exceptions.**

- (A) *General requirements.* Applications for waivers and exceptions from the requirements of Section 106, general performance standards, and 107, development standards for RPAs, shall be made in writing and filed with the Town of Smithfield Administrator. Such applications shall identify any potential impacts of the proposed waiver or exception on water quality and on lands within the RPA through the performance of a water quality impact assessment, pursuant to Section 108 of this Ordinance, and shall examine the impacts of sea level rise, storm surge, and flooding on the project through the performance of a resiliency assessment, pursuant to Section 109. Each application for a waiver and exception shall be approved, denied, or approved with conditions according to the review process outlined in the following subsections. No application for a waiver or exception to sections 106 and 107 of this Ordinance shall be granted under this Section without meeting the following findings:
- (1) The requested waiver or exception to the criteria is the minimum necessary to afford relief.
  - (2) Granting the waiver or exception will not confer upon the applicant any special privileges that are denied by this Ordinance to other property owners who are subject to its provisions and who are similarly situated.
  - (3) The waiver or exception is in harmony with the purpose and intent of this Ordinance and is not of substantial detriment to water quality.
  - (4) The waiver or exception request is not based upon conditions or circumstances that are self-created or self-imposed.
  - (5) Reasonable and appropriate conditions are imposed, as warranted, that will prevent the allowed activity from causing a degradation of water quality.
  - (6) Other findings, as appropriate to the Town of Smithfield Administrator are met.
- (B) *Administrative waivers.* The Town of Smithfield Administrator shall approve, deny, or approve with conditions an application requesting an administrative waiver following the review of a complete application, as defined under subsection 113(A) of this Ordinance. No such application shall be accepted by the Town of Smithfield Administrator unless accompanied by a nonrefundable fee as determined by Town Council.
- (1) The Town of Smithfield Administrator may establish such review policies as they deem expedient in implementing the intent of this Ordinance. In approving an application, the Town of Smithfield Administrator shall, if warranted, include reasonable and appropriate conditions that will prevent the degradation of water quality.
  - (2) No administrative waiver or exception shall be granted to Section 106 of this Ordinance, general performance standards, unless the Town of Smithfield Administrator makes the findings required in subsection 113(A) of this Ordinance.
  - (3) Administrative waivers to provisions within sections of this Ordinance other than 106 or 107 may be granted, provided that:
    - (a) Waivers to the criteria shall be the minimum necessary to afford relief.
    - (b) Reasonable and appropriate conditions upon any waiver granted shall be imposed, as necessary, so that the purpose and intent of this Ordinance is preserved.
- (C) *Formal exceptions.* Exceptions from the criteria of Section 107 of this Ordinance, development criteria for Resource Protection Areas, require public notice and a public hearing before the Planning Commission. Complete applications for an exception shall be submitted to the Town of Smithfield Administrator for review and evaluation prior to being forwarded to the Planning Commission for

consideration. No such application for an exception shall be accepted by the Town of Smithfield Administrator unless accompanied by a nonrefundable fee as determined by Town Council.

- (1) The Town of Smithfield Administrator shall review complete applications for an exception to the requirements of Section 107 of this Ordinance, including the water quality impact assessment and resiliency assessment, and provide the Planning Commission and the applicant with copies of the submitted materials, an evaluation of the required findings and potential impacts of the proposed exception, and such other information as may aid the Planning Commission in considering the application no less than five (5) days prior to the scheduled hearing.
  - (2) Not later than 60 days after the receipt of a complete application, the Planning Commission shall hold a public hearing on such application. Notice of the time and place of the hearing shall be published twice in a newspaper published or having general circulation in the Town of Smithfield, with the first notice appearing no more than 28 days before and the second notice appearing no less than seven days before the date of the meeting referenced in the notice.
  - (3) The Zoning Administrator shall notify, by first class mail, all property owners adjacent to the subject property and each waterfront property owner across the waterway from the subject property, if the water body is less than 500-feet wide, of the public hearing at least five (5) days prior to the hearing.
  - (4) The Planning Commission may make, alter and rescind rules for its procedures not inconsistent with the provisions of this Ordinance; provided, however, that a quorum shall be not less than a majority of the members of the Planning Commission, and provided further, that the concurring vote of a majority of the members of the Planning Commission present and voting shall be required to grant any exception.
  - (5) The Planning Commission shall approve, deny, or approve with conditions an application requesting an exception to the requirements of Section 107 following the review of a complete application and a determination that the proposed project meets the findings required by subsection 113(A) above.
- (D) No application for relief from sections 106 or 107 of this Ordinance shall be considered complete where a resiliency assessment, as outlined in Section 109 of this Ordinance has not occurred or the proposed adaptation measure allows for the use of fill in a Resource Protection Area in contravention to the requirements of subsection 107(E)(1)(f)5 of this Ordinance.

#### **Sec. 114. Appeals.**

- (A) Any order, determination or decision made by the Town of Smithfield Administrator or any administrative officer in the administration or enforcement of this Ordinance, including any decision on an application for an administrative waiver or a formal exception, may be appealed by any person aggrieved by the decision to the Planning Commission by application filed with the Town Manager within 10 days from the date of such order, determination or decision. Such application shall state with particularity the grounds of such appeal. Any application failing to do so shall be rejected by the Town Manager. The filing of an appeal shall not stay any proceedings in furtherance of the action appealed from.
- (B) The fees and notice requirements for appeals under subsection (A) hereof shall be as set forth in Section 113 of this Ordinance.
- (C) Any party aggrieved of a decision of the Town Council may, within 30 days of the date of such decision, petition the circuit court to review such decision. The procedure in such cases shall be as provided in Va. Code § 15.2-2314, as amended.
- (D) The circuit court may affirm, reverse, or modify any decision of the Town Council, and may impose any reasonable conditions in its judgment, provided, however, that no decision of the Town Council shall be disturbed unless the court shall find:
  - (1) The decision appealed from was based upon the erroneous application of the criteria set forth in subsection 113 (A) of this Ordinance or was based upon grounds other than those set forth therein.

- (2) There was no substantial evidence upon which the Town Council could have made all findings required by subsection 113 (A) of this Ordinance.
- (3) The decision of the Town Council was plainly wrong.
- (4) The Town Council failed to impose reasonable and appropriate conditions intended to prevent the variance from causing or contributing to a degradation of water quality.

**Sec. 115. Violations; penalties.**

- (A) Without limiting the remedies which may be pursued under this Ordinance, any person who (i) violates any provision of this Ordinance or (ii) who violates, fails, neglects, or refuses to obey any notice, order, rule, regulation, variance, exception, or permit condition authorized under this Ordinance shall, upon such finding by the circuit court, be assessed a civil penalty not to exceed five thousand dollars (\$5,000.00) for each day of violation. Such penalties may, at the discretion of the court assessing them, be directed to be paid into the treasury of the Town of Smithfield for the purpose of abating environmental damage to or restoring Chesapeake Bay Preservation Areas within the Town of Smithfield, in such a manner as the court may direct by order, except that in the event the Town of Smithfield or its agent is the violator, the court shall direct the penalty to be paid into the treasury of the Commonwealth.
- (B) Without limiting the remedies which may be pursued under this Ordinance, and with the consent of any person who has violated any provision of this Ordinance, or who has violated, failed, neglected, or refused to obey any notice, order, rule, regulation, variance, exception, or permit condition authorized under this Ordinance, the Town Council may provide for the issuance of an order against such person for the one-time payment of civil charges for each violation in specific sums, not to exceed ten thousand dollars (\$10,000.00) for each violation. Such civil charges shall be paid into the treasury of the Town of Smithfield for the purpose of abating environmental damage or restoring Chesapeake Bay Preservation Areas in the Town of Smithfield, except that in the event the Town of Smithfield or its agent is the violator, the civil charges shall be paid into the treasury of the Commonwealth. Civil charges shall be in lieu of any appropriate civil penalty that could be imposed under subsection 115(A) of this subsection. Civil charges may be in addition to the cost of any restoration required by the Town Council.
- (C) In addition to, and not in lieu of, the penalties prescribed in subsections (A) and (B) hereof, the Town of Smithfield may apply to the circuit court for an injunction against the continuing violation of any of the provisions of this Ordinance and may seek any other remedy authorized by law.
- (D) Upon notice from the Town of Smithfield Administrator that any activity is being conducted in violation of any of the provisions of this Ordinance, such activity shall immediately be stopped. An order to stop work shall be in writing and shall state the nature of the violation and the conditions under which the activity may be resumed. No such order shall be effective until it shall have been tendered to the owner of the property upon which the activity is conducted or his agent or to any person conducting such activity. Any person who shall continue an activity ordered to be stopped, except as directed in the stop-work order, shall be guilty of a violation of this Ordinance.

**Sec. 116. Severability.**

The provisions of this Ordinance shall be deemed to be severable, and if any of the provisions hereof are adjudged to be invalid or unenforceable, the remaining portions of this ordinance shall remain in full force and effect and their validity shall remain unimpaired.

**Sec. 117. Vested rights.**

The provisions of this Ordinance shall not affect the vested rights of any person under existing law.

**Sec. 118. Enforcement.**

This Ordinance shall be enforced by the Town of Smithfield Administrator, who shall exercise all authority of police officers in the performance of their duties. Such authority shall include, without limitation,

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the authority to issue summonses directing the appearance before a court of competent jurisdiction of any person alleged to have violated any of the provisions of this Ordinance.

**Sec. 119. Effective date.**

This Ordinance shall become effective on the 2<sup>nd</sup> day of October, 2024.