TOWN OF HERNDON, VIRGINIA
TOWN COUNCIL

ORDINANCE

APRIL 28, 2026

Ordinance- **to amend Chapter 78 (ZONING), ART. VI (Overlay Districts), by amending Section 78-60.4 (Chesapeake Bay Preservation Area Overlay (CBPAO)); and Article XVIII (Definitions), by amending Section 78-180 (Definitions), to update sections for conformance with the Virginia Administrative Code regarding changes to the Chesapeake Bay Preservation Act.**

BE IT ORDAINED by the Town Council of the Town of Herndon, Virginia that:

1. The following sections or provisions of Chapter 78, (ZONING) of the Herndon Town Code (2000) is amended and ordained as follows.

CHAPTER 78 (ZONING)

ARTICLE VI. – OVERLAY DISTRICTS -

Sec. 78-60.4. - Chesapeake Bay Preservation Area Overlay (CBPAO).

(a) *Purpose and intent*. The Chesapeake Bay Preservation Area (CBPAO) overlay district is established ~~under the authority provided in Code of Virginia, § 15.2-2280, and following, and~~ to implement the requirements of Code of Virginia, § 62.1-44.15:67 **– 62.1-44.15:79** ~~et seq., and to:~~ **and the Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations) (9 VAC 25-830-10 et seq.) promulgated thereunder.**

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(3) Restore ~~all other~~ state waters to a condition or quality that will permit all reasonable public uses and supports ~~the~~ propagation and growth of all aquatic life**,** ~~within a balanced ecosystem;~~ **including game fish, which might reasonably be expected to inhabit them;**

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(5) Prevent ~~increase of nonpoint pollution;~~ **further increase of water pollution;**

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(b) *Findings*. The following statements describe the significance of the Chesapeake Bay to the town:

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(2) ~~The Chesapeake Bay waters have been degraded significantly by many sources of pollution including nonpoint source pollution from land uses and development. The lands within the town are valuable in assisting the preservation of the bay. Some display intrinsic water quality value due to the ecological processes they perform and also display ecological benefits by providing water quality maintenance and flood and erosion control. Only with proper management can development and use occur without damage to Chesapeake Bay waters.~~ **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 as Chesapeake Bay Preservation Areas (CBPA), shall be developed in such manner as to protect the quality of water in the Bay.**

(3) ~~The lands designated by the town council as Chesapeake Bay Preservation Areas are those lands which, due to the degradation of bay waters and the passage of the Chesapeake Bay Preservation Act, need to be protected from destruction and damage through improper development and use practices to protect the quality of bay waters.~~ **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.**

(c) *Applicability*. The Chesapeake Bay Preservation Area Overlay district shall apply to all ~~land in Chesapeake Bay Preservation Areas (CBPAs,) which shall include land that meets the designation criteria in section 70-60.4(f) and shall therefore be subject to the provisions of section 78-60.4.~~ **lands designated as Chesapeake Bay Preservation Areas within**

the town. Such lands are designated as Chesapeake Preservation Areas and are depicted on the Chesapeake Bay Preservation Area Map.

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1. 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.

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(2) *Land disturbance of more than 5,000 square feet in RPA*. For land disturbance in the RPA that exceeds 5,000 square feet, the following requirements shall be met:

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c. ~~RPA boundary delineation studies shall be submitted on standard-size sheets of 243× 363 at a scale of 13 = 502 or larger;~~ ~~and~~ **Reserved.**

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(l) *General performance criteria for land disturbance in Chesapeake Bay Preservation Areas*. To attain the water quality objectives set forth in the statement of intent, uses, development, and redevelopment of land in CBPAs, (RMAs and RPAs) shall meet and maintain the performance criteria set forth in this section.

(3) *Indigenous vegetation*. Indigenous vegetation shall be preserved to the maximum extent practicable consistent with the proposed use(s) or development. To preserve indigenous vegetation to the maximum extent practicable consistent with the proposed use(s) or development:

a. Mature trees shall be protected during development and only removed where necessary, including to provide for the proposed use or development;

b. All trees located outside the area of land disturbance with a DBH of four inches or more shall be preserved; and

c. Clearing within the area of land disturbance shall be limited to that necessary to provide for the intended use of the property and all appurtenances, a single access during construction, positive site drainage, water quality BMPs, and the installation of utilities. Such clearing limits shall be subject to review and approval by the reviewing authority.

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(6) *Resiliency assessment required.* A resiliency assessment shall be required for any proposed land development during the plan of development or other project review process in the RPA.

~~(6)~~**(7)** *Evidence of required permits*. The developer shall provide evidence to the town, prior to commencing grading or other on-site land disturbing activities, that any wetlands or similar permit required by federal, Virginia or local laws or regulations have been properly obtained.

~~(7)~~**(8)** *Development in IDA*. If the development is located within the IDA:

a. Vegetation shall be provided to the extent possible to assist in re-establishing vegetation within a 100-foot wide buffer area along any streams on the site or adjacent to the site in order to maximize water quality protection, pollutant removal and water resource conservation.

b. The zoning administrator may waive the requirement for the re-establishment of vegetation within the RPA buffer within the IDA, in accordance with section 78-60.4(p), administrative waivers of requirements for CBPAs (RMAs and RPAs).

(m) *Additional development criteria for resource protection areas*. The following additional criteria shall apply to development in the RPA.

(1) *100-foot buffer*. Establishment of a 100-foot buffer area is required, and it shall be the landward component of the RPA as set forth in section 78-60.4(f)(1). Notwithstanding permitted uses, encroachments, and vegetation clearing, as set forth in this section,

the 100-foot buffer shall not be reduced in width. In addition, the following criteria apply:

a. To minimize the adverse effects of human activities on the other components of the RPA, state waters and aquatic life, this 100-foot wide buffer that is effective in retarding runoff, preventing erosion, and filtering nonpoint source pollution from runoff shall be retained if present, established where it does not exist, and adequately maintained thereafter. **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.** This 100-foot wide buffer is the same one referred to in (1) above; and

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c. The 100-foot RPA buffer may be encroached upon under the following circumstances:

1. If the requirements result in the loss of a buildable area for new homes or new principal structures on lots recorded before October 1, 1989, the zoning administrator may grant encroachments into the buffer area provided that:

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(c) Where practical, a vegetated area that maximizes water quality protection, mitigates the effects of the buffer encroachment, and equals the area of the buffer encroachment shall be established elsewhere on the lot. **Where established, such vegetated area shall include the planting of trees as appropriate to site conditions. Inclusion of native species in tree planting is preferred**; and

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(2) *Buffer area management*. To maintain the functional value of the buffer area, indigenous vegetation may be removed, if approved by the zoning administrator, to provide for reasonable sight lines, access paths, general woodlot management, and BMPs, including BMPs that prevent upland erosion and concentrated flows of stormwater, as follows:

a. **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, inclusion of native species in tree planting is preferred;

~~a.~~**b.** Trees may be pruned or ~~removed only~~**thinned** as necessary to provide for sight lines ~~and~~ **,** 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 sight 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 zoning administrator and be based on identified vantage points.

~~b.~~**c.** Any path shall be constructed and surfaced to control erosion effectively;

~~c.~~**d.** Dead, diseased or dying trees or shrubbery and noxious weeds may be removed and thinning of trees may be allowed pursuant to sound horticulture practice as prescribed by the town's community forester; and

~~d.~~**e.** For stream restoration projects, trees and woody vegetation may be removed, necessary control techniques employed, and appropriate vegetation established to protect or stabilize the stream in accordance with the best available technical advice and applicable permit conditions or requirements.

~~e.~~**f.** Use of fertilizers, herbicides or pesticides shall be minimized in the buffer area.

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(6) Adaptation measures proposed for location within the Resource Protection Area shall meet the following conditions:

a. 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.

b. An identified adaptation measure shall be selected from one of the following sources: Chesapeake Bay program approved BMP list, the Virginia Stormwater BMP Clearinghouse, the VRMC Tidal Wetlands Guidelines, or be a project that is eligible for funding by the Virginia Community Flood Preparedness Fund Grant.

1. Adaption measures should consist of trees, vegetation, stone or enhance existing natural elements.

c. 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.

d. 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.

e. The use of fill as a component of an adaptation measure may be permitted, provided it meets the following conditions:

1. The grading and slope by the use of fill shall be no greater than necessary based upon the project specifications and implemented in a manner that minimizes the impact of run-off.

(a) Slopes should be equal to or less than 10% to support water quality conditions, including infiltration.

(b) 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.

(c) Slopes greater 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.

2. 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:

(a) Provide documentation specifying the proposed depth, extent, and type of fill material proposed for use.

(b) 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 or permitting requirements for upland placement of dredge soil, if applicable.

(c) 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.

(d) Ensure that the fill area is vegetatively stabilized within seven (7) days.

3. The use of fill shall not exacerbate stormwater run-off, and lateral flow onto adjacent properties shall be controlled.

(a) Appropriate erosion and sediment control and stormwater management measures shall be incorporated into the design specifications, including the establishment of positive and proper drainage.

(b) If the adaptation measure triggers separate stormwaters management requirements, then these criteria should be considered in conjunction with those requirements.

(c) Larger scale adaptation measures may require the use of stormwater calculations to ensure these criteria are met.

(d) Any impacts on the management of stormwater upland of the Resource Protection Area created by the use of fill shall be mitigated, as necessary.

4. The use of fill for any adaptation measure shall not negatively impact septic systems and drainfields 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.

5. 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 the federal floodplain management regulations found in Title 44 CFR Part 60. The allowance of fill under these provisions does not negate those independent requirements.

f. The preservation of existing natural vegetation shall be maximized, including mature trees, and land disturbance consistent with design specifications shall be minimized.

g. 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.

h. Nothing in these provisions shall be construed to authorize approval or allowance of an adaptation measure in contravention of floodplain management requirements, including Sec. 78-60.2.

(7) Buffer requirements for Intensely Developed Areas.

Where the zoning 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 reestablishment of a buffer within an Intensely Developed Area, the zoning administrator shall encourage the planting of trees, including native species, as a component of such buffer reestablishment measure.

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(o) Resiliency assessment

(1) 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:

(a) 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:

1. For sea level rise, use the 2017 National Oceanographic and Atmospheric Administration (NOAA) Intermediate High scenario projection curve 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.

2. 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.

3. 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 of Section 78-60.2 (Floodplain Overlay). 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.

4. 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 zoning 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.

(b). A report that analyzes the result of the data and graphic research, and provides the following information:

1. Define the intended service life of the proposed structure(s).

2. Identification of any proposed impact directly from proposed impervious cover or structures in the RPA and the extent of such impact.

3. Identification of extent of impact on the current buffer area including impacts to existing vegetation from the landward movement of water and vegetative migration.

4. 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 78-60.4(n).

5. 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 Floodplain Overlay district.

(c). Apply the results of the resiliency assessment to the proposed development. The zoning administrator will review the [narrative report or form from(b)] 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.

1. In considering whether a requirement for project alteration or adaptation measure is appropriate, the zoning administrator will ensure that the proposed alteration or

adaptation measure is practical, achievable, and necessary to mitigate the identified impact.

2. 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.

3. 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 zoning administrator. Supplemental information may include additional sketches or plans, including plan and section views, building specifications, and other supporting materials.

4. Approval may be conditioned on the implementation of the proposed alterations, conditions, or adaptation measure.

5. 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.

(d). Identify conditions, alterations, or adaptation measures for the proposed development. 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:

1. Describe the proposed adaptation measure(s) for the site from one of the sources listed in Section 78-60.4(o)(1) 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.

2. Describe how the selected adaptation measure meets the requirement for being a nature-based solution.

3. Describe how the selected adaptation measure(s) comply with applicable regulatory or permitting requirements. Submit a water quality impact assessment pursuant to

Section 78-60.4(n) and a site plan pursuant to Article XV, 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, including photographs, and final inspection is required upon completion of installation.

(e) 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 78-60.4(n) for those projects disturbing less than 2,500-square feet.

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CHAPTER 78 (ZONING)

ARTICLE XVIII. – DEFINITIONS-

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Accessory structure. **Accessory structures include, but are not limited to, detached garages, gazebos, free-standing decks, storage buildings or tool sheds, accessory dwelling units, and similar forms of land development that are incidental and subordinate to the principal structure. In-ground pools, patios, terraces, tennis courts, synthetic turf, and other impermeable landings that do not permit infiltration to groundwater are considered accessory uses of land, not structures.**

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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.**

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

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Base flood elevation (BFE). ~~The Federal Emergency Management Agency designated 100-year water surface elevation.~~ **The elevation of surface water**

resulting from a flood that has a 1 percent chance of equaling or exceeding that level in any given year. The BFE is shown on the Flood Insurance Rate Map (FIRM).

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Best management practices or BMP. ~~Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices, including both structural and nonstructural practices, to prevent or reduce the pollution of surface waters and groundwater systems from the impacts of land-disturbing activities.~~ **A practice, or 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 goal**s.**

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Caliper. ~~A horticultural method of measuring the diameter of a tree trunk for the purpose of determining size. The caliper of the trunk is measured six inches above the ground for trees up to and including four inches in diameter, 12 inches above the ground for trees greater than four inches up to 12 inches in diameter, and at breast height (four and one-half feet) for trees greater than 12 inches in diameter.~~ **The diameter of a tree measured six (6) inches above existing grade.**

Canopy tree. A tree ~~which has an expected height at maturity greater than 30 feet and which produces significant shade because it has a crown that is oval, round, vase-shaped, or umbrella-shaped. See also "tree canopy."~~ **that typically reaches 35 feet in height or taller when mature.**

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Chesapeake Bay Preservation Area (CBPA). Any land designated by the town pursuant to **§ 9 VAC 25-830-70 to 110 of the Regulations and Section 62.1-44.15:74 of the Bay Act.** ~~part III of the Chesapeake Bay Preservation Area Designation and Management Regulations, § 9 VAC 10-20-10 et seq., and Code of Virginia § 10.1-2107.~~ A CBPA shall consist of the resource protection area (RPA) and the resource management area (RMA). The abbreviated "CBPA" and "CBPAO~~D~~" (Chesapeake Bay Preservation Area Overlay ~~district~~) shall be used interchangeably where the context does not indicate otherwise.

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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 inclusive of any land disturbed for the construction of such improvements.

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Critical root zone. ~~An underground area extending laterally in all four cardinal directions from the base of a tree's trunk to a distance typically 1½ times larger than the perimeter of the tree's drip-line.~~ **The area of soil surrounding a tree trunk where the minimum amount of roots considered essential for tree health are located. Critical root zone is generally defined as a radius of one foot per inch of trunk diameter at breast height (DBH).**

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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, as defined in this ordinance.**

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Dripline. **Outermost circumference of a tree's canopy.**

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

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Land disturbance or ~~*Ll*~~*and disturbing activity*. ~~Any land change which may result in soil erosion from water or wind or the movement of sediments into state waters or onto lands in the town including, but not limited to, clearing, grading, excavating, transporting and filling of land. The term shall not include:~~ **A man-made change to the land surface that may result in soil erosion or has the potential to change its runoff characteristics, including but not limited to construction activity such as clearing, grading, excavating, or filling of land. For land disturbance exemptions refer to Sec. 26-324.**

~~(1) Minor land disturbing activities such as home gardens and individual home landscaping, repairs and maintenance work of less than 2,500 square feet;~~

~~(2) Individual service connections;~~

~~(3) Installation, maintenance or repair of any underground public utility lines when such activity occurs in an existing hard-surfaced road, street or sidewalk, provided that such land disturbing activity is confined to the area of the road, street or sidewalk which is hard-surfaced;~~

~~(4) Septic tank lines or drainage fields unless included in an overall plan for land disturbing activity relating to construction of the building to be served by the septic tank system;~~

~~(5) Surface or deep mining;~~

~~(6) Exploration or drilling for oil and gas including the well site, roads, feederlines and off-site disposal areas;~~

~~(7) Tilling, planting or harvesting of agricultural, horticultural or forest crops or livestock feed-lot operations; including agricultural engineering operations as follows: the construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds not required to comply with the Dam Safety Act, Code of Virginia, § 10.1-604, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and land irrigation;~~

~~(8) Installation of fence and signposts or telephone and electric poles and other kinds of posts or poles;~~

~~(9) Emergency work to protect life, limb or property, and emergency repairs; provided, however, that if the land disturbing activity would have required an approved erosion and sediment control plan, if the activity were not an emergency, then the land area disturbed shall be shaped and stabilized in accordance with the requirements of the town; and~~

~~(10) Repair or rebuilding of the tracks, rights-of-way, bridges, communication facilities and other related structures and facilities of a railroad company.~~

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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.**

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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.**

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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.~~ **Pollution such as sediment, nitrogen, phosphorous, hydrocarbons, heavy metals, and toxics whose sources cannot be pinpointed but rather are washed from the land surface in a diffuse manner by stormwater.**

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Paved surface. Ground surface or structures above the ground covered with clay-fired bricks, concrete recast paver units (including but not limited to grasscrete), poured concrete, blacktop, or other asphaltic or rubber mixture which may include sand or gravel as an ingredient and which creates a hard surface. A graded surface or a surface covered with rolled stone or loose gravel is **an impervious surface, but** not a paved surface. See also "impervious surface."

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Public road. For purposes of the Chesapeake Bay preservation overlay district, public streets or public rights-of-way in the town and publicly owned roads designed and constructed in accordance with water quality protection criteria at least as stringent as requirements applicable to the Virginia Department of Transportation, including regulations promulgated pursuant to ~~(i) the Erosion and Sediment Control Law (Code of Virginia, § 10.1-560 et seq.) and (ii) the Virginia Stormwater Management Act (Code of Virginia, § 10.1-603.1 et seq.)~~ **the Virginia Erosion and Stormwater Management Act (Va. Code §62.1-44.15:24 et seq.**

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Resource management area (RMA). ~~Lands that if improperly used or developed, have the potential for causing significant water quality degradation or for diminishing the functional value of the resource protection area. RMA is further described in Herndon Town Code section 78-60.4, Chesapeake Bay overlay district.~~ **That component of the 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 the Chesapeake Bay Preservation Area ~~CBPA~~ comprised of lands adjacent to water bodies with perennial flow that have an intrinsic water quality value due to the ecological and biological process they perform or are sensitive to impacts which may result in significant degradation to the quality of state waters. The elements of an RPA are set out in Herndon Town Code section 78-60.4.

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Understory tree. A tree that ~~has an expected height at maturity no greater than 30 feet~~ **typically reaches 12 to 35 feet in height when mature.**

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Water body with perennial flow. ~~A body of water flowing in a natural or open man-made channel year-round, except during periods of drought. The term "water body with perennial flow" includes perennial streams, estuaries and tidal embayments. A perennial stream means any stream that is both perennial and so depicted on the map of Chesapeake Bay Preservation Areas, adopted by the town council. Lakes and ponds that form the source of a perennial stream, or through which the perennial stream flows, are part of the perennial stream. The width of the perennial stream may be measured from either (i) top-of-bank to top-of-bank on the opposite side of the stream of (ii) from Ordinary High-Water Mark (OHWM) to the OHWM on the opposite side of the stream, as defined by 33 CFR Part 328.3(e), as determined by the zoning administrator. Ponds or lakes are to be measured from the limits of the normal water level. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow.~~ **A body of water that flows in a natural or manmade channel year-round during a year of normal precipitation. This includes, but is not limited to streams, estuaries, and tidal embayments, and may include drainage ditches or channels constructed in wetlands or from former natural drainageways, which convey perennial flow. Lakes and ponds, into, out of, or through which a perennial stream flows are part of the perennial stream. Generally, the water table is located above the streambed for most of the year and groundwater is the primary source for stream flow.**

2. This ordinance shall be effective on and after its adoption.