Montgomery Planning Board Regulation on

FOREST CONSERVATION – TREES

Issued by:  Montgomery County Planning Board
Regulation No.
COMCOR No. 22A.00.01

Authority:  Montgomery County Code, Chapter 22A-26
Council Review:  Method (2) under Code Section 2A-15

Effective Date:  XXXXXX
Comment Deadline:  XXXXXXX

Summary:  These regulations contain administrative requirements related to the review and processing of Natural Resource Inventories, Forest Stand Delineations, Exemptions from Submitting a Forest Conservation Plan, and Forest Conservation Plans that are acted upon by the Planning Board or the Planning Director under Chapter 22A.

Staff Contact:  Kristin Taddei, Planner Coordinator
Development Applications and Regulatory Coordination Division
Kristin.Taddei@montgomeryplanning.org

Address:  8787 Georgia Avenue
Silver Spring, MD  20910

Background:  These regulations clarify and further develop administrative procedures to implement the submittal of applications under Chapter 22A of the County Code. This regulation amends the Forest Conservation Regulations that were adopted by the Planning Board in 2001, and approved by the County Council under Method 2 procedures.
CHAPTER 22A. FOREST CONSERVATION – TREES REGULATIONS

22A.00.01.01 Purpose

(a) Purpose. These regulations identify the steps that an applicant must take to comply with Chapter 22A of the County Code. These regulations were adopted by the Planning Board and approved as regulations by the County Council under Chapter 22A.

22A.00.01.02 Authority

In accordance with Chapter 22A, sometimes referred to in these regulations as the “Forest Conservation Law,” the following Planning Board Regulations shall pertain to all development applications, mandatory referrals, conditional uses, sediment control permits, or park development applications.

22A.00.01.03 Definitions

1) “Afforestation” means the creation, on a tract that is not presently in forest cover, of a biological community dominated by trees and other woody plant (including plant communities, the understory, and forest floor), which is at least 10,000 square feet in area and 50 feet wide, and containing at least 100 trees per acre, with at least 50 of those trees having the potential of growing to a 2 inch or greater diameter at 4.5 feet above the ground within 7 years. In some instances, afforestation includes creation of tree cover by landscaping areas under an approved landscaping plan.

2) “Afforestation threshold” means the afforestation required for a site per Sections 22A-12(a), (d), and (f) of the Forest Conservation Law.

3) “Applicant” means the person who is applying for a subdivision, sketch plan, site plan, sediment control permit, project plan, special exception/conditional use, mandatory referral, or Park development plan.

4) “Break-even point” means an exact level of forest retention that precludes the need for reforestation.

5) “Category I Conservation Easement” means a restriction on the land to permanently protect existing forest, planted forest, or forested or unforested environmental buffers.
“Category II Conservation Easement” means a restriction on the land that permanently protects large trees, landscape areas, and any tree planted outside of forest that receives forest conservation plan credit.

“Champion tree” means the largest tree of its species within the United States, the State, county or municipality, as appropriate.

“Conservation easement” means a restriction on the land and the natural features on this land. This easement must be shown on the record plat, if applicable, and its terms and conditions are recorded in the county’s land records. If no plat is required, the easement is recorded in the County’s land records only.

“Conservation threshold” means a specific percentage of a tract which is used in determining reforestation requirements per Sections 22A-12(a) and (f) of the Forest Conservation Law.

“Critical habitat area” means a critical habitat for an endangered species and its surrounding protection area. A critical habitat area:

(a) is likely to contribute to the long-term survival of the species;
(b) is likely to be occupied by the species for the foreseeable future; and
(c) constitutes habitat of the species which is considered critical under the Annotated Code of Maryland Natural Resources Article.

“Critical habitat for endangered species” means a habitat occupied by an endangered species as determined or listed under the Annotated Code of Maryland Natural Resources Article.

“Critical root zone” means the zone in which the roots of a tree are located, as defined in the latest version of the Trees Technical Manual. It is also the area around a tree which should be undisturbed unless protection measures are provided to protect the long-term viability of the tree.

“Development application” means an application made to the Planning Board, Board of Appeals, Department of Permitting Services, or the Planning Director for approval of a regulated activity.

“Declaration of intent” means a signed and notarized statement by a landowner that the cutting of trees on the landowner’s property:

(a) is for purposes exempted under Chapter 22A of the Montgomery County Code; and
(b) will not circumvent the requirements of the Chapter.

“Development program” means a sequence of construction events and timing for submittal of the major forest conservation program elements.

“Development project” means grading or construction activities occurring on a specific tract. This includes redevelopment projects.

“Environmental buffer” means perennial, intermittent, or ephemeral streams/channels and their associated buffers; wetlands and their associated buffers; and, hydraulically connected steep slopes according to the latest version of Guidelines for the Environmental Management of Development in Montgomery County, Maryland (MNCPPC), or an appropriate master plan; and floodplains.
18) “Ephemeral channel/stream” means a channel defined as ephemeral per the latest version of the *Guidelines for Environmental Management of Development in Montgomery County, Maryland* (MNCPPC).

19) “Extenuating circumstances” means conditions requiring extension of a set time limit to process an application, render a decision, or conduct a public hearing.

20) “Field survey” means a field investigation of the environmental characteristics of a site, including existing forest.

21) “Flood, One Hundred-Year” means a flood which has a 1 percent statistical probability of being equaled or exceeded in any given year. Unless otherwise stated, this calculation is based on the contributing watershed under existing zoning.

22) “Floodplain, One Hundred-Year” means the area along or adjacent to a stream or body of water, except tidal waters, that is capable of storing or conveying floodwaters during a 100-year frequency storm event, or 100-year flood, based on ultimate development of the watershed under existing zoning. “Forest clearing” means the cutting or destruction of any trees or understory which are part of an existing forest even if the resulting community continues to meet the definition of forest, except if it is done as part of an approved management plan or timber harvest permit. Forest loss will be based on a measure of the aerial extent of forest cover which includes the outer perimeter of individual trees.

23) “Forest conservation plan” means a plan which outlines the strategies and specific plan proposed for retaining, protecting, and reforesting or afforesting areas on a site.

24) “Forest conservation worksheet” means a step-by-step form for determining compliance with the requirements of the forest conservation law.

25) “Forest management plan” means a plan establishing conservation and management practices for a landowner after assessment of the resource values of forested properties. This plan is approved by the MD Department of Natural Resources forester assigned to the county after coordination with the county, and by the Planning Director if located within a conservation easement.

26) “Forest mitigation bank plan” means a plan that property owner submits to document the acreage of forest mitigation bank credits and shows the credits based on the amount of existing forest permanently protected, forest planted and protected, and a planting plan.

27) “Forest mitigation bank credits” means the credits available for sale at a forest mitigation bank, where 1 acre of mitigation bank credit equals 2 acres of existing forest or 1 acre of planted forest.

28) “Forest retention” means the forest shown on a forest conservation plan that will be saved, counted as forest retained on the worksheet, and included in a long-term protective agreement.

29) “Forest stand delineation” means the evaluation of existing vegetation in relation to the natural resources on a site proposed for development or land disturbing activity.

30) “Growing season” means a period of consecutive frost-free days as stated in the current soil survey for the county. In an average year, a period commencing on April 1st and ending on October 31st.
32) “Intermittent stream” means a stream defined as intermittent in the latest version of the *Guidelines for Environmental Management of Development in Montgomery County, Maryland* (MNCPPC).

33) “Landscaping credit” means areas shown on a forest conservation plan, that are not forest, but will be receive credit toward a site’s reforestation or afforestation requirements. The forest conservation plan must show the dimensions and details for tree planting and landscaping areas. Any planting for landscaping credit to meet the forest conservation plan requirements must use native plants.

34) “Limits of disturbance” means a clearly designated area within which land disturbance may occur.

35) “Maintenance and management agreement” means the short-term management agreement associated with a forest conservation plan, and may include the control of non-native and invasive plants.

36) “Major amendment to a Forest Conservation Plan” means an amendment that results in more than a total of 5,000 square feet of additional forest clearing and/or the removal of any conservation easement.

37) “Minor amendment to a Forest Conservation Plan” means an amendment that does not result in more than a total of 5,000 square feet of additional forest clearing or the removal of any conservation easement.

38) “Native” means a plant or animal species whose geographic range during precolonial time included the Piedmont of Maryland. Information on native plants can be found in *Woody Plant of Maryland* (Brown and Brown, 1972) and *Herbaceous Plants of Maryland* (Brown and Brown, 1984), as well as other literature sources.

39) “Natural regeneration” means the natural establishment of native trees and other native vegetation.

40) “Natural resources inventory” means the collection and presentation of environmental information for a property according to the guidelines specified in these regulations and in the latest version of *Guidelines for Environmental Management of Development in Montgomery County, Maryland* (MNCPPC) and the *Tree Technical Manual* (MNCPPC).

41) “Offsite” means outside the limits of the areas encompassed by a tract.

42) “Onsite” means within the limits of an area encompassed by a tract.

43) “Perennial stream” means a stream defined as perennial in the latest version of *Guidelines for Environmental Management of Development in Montgomery County, Maryland* (MNCPPC).

44) “Planting plan” means a plan showing how areas to be reforested or afforested will be planted.

45) “Priority planting area” means areas in which planting must occur unless those areas are not present.

46) “Priority retention area” means areas, identified in Section 22A-12(b) of the Forest Conservation Law that are ranked as the highest priority for retention as part of a forest conservation plan.
47) “Qualified professional” mean a Maryland licensed forester, Maryland licensed landscape architect, or other qualified professional approved by the State.

48) “Regulated activity” means any of the following activities:
   (a) Subdivision;
   (b) Site plan;
   (c) Project plan;
   (d) Sketch plan;
   (e) Special exception/conditional use on a tract of land greater than 40,000 square feet;
   (f) Clearing of more than 5,000 square feet of forest;
   (g) Park Development project on a tract of land greater than 40,000 square feet;
   (h) An activity that requires a sediment control permit on a tract of land, individually or cumulatively that are greater than 40,000 square feet; or
   (i) Mandatory referral on a tract of land greater than 40,000 square feet.

49) “Retention area” means forested areas, tree stands and the critical root zone of individual trees that will be retained on a site.

50) “Selective clearing” means the careful and planned removal of trees, shrubs, and plants using specific standards and protection measures under an approved forest conservation plan.

51) “Specimen tree” means a tree that is particularly impressive or unusual example of a species due to its size, shape, age, or any other trait that epitomizes the character of the species as further described in the most recent version of the Trees Technical Manual.

52) “Stream buffer” means a strip of land contiguous with and parallel to the bank of a perennial or intermittent stream, the width of which must be determined according to the latest version of Guidelines for Environmental Management of Development in Montgomery County, Maryland (MNCPPC).

53) “Subdivision” means the definition of subdivision in Chapter 50 of the Montgomery County Code.

54) “Tract” means:
   (a) The property, or adjacent properties, subject to a development application, the boundaries of which are described by deed or record plat; or
   (b) The length and width of the right-of-way or the limits of disturbance, whichever is greater, for a linear project.

55) “Tree save area” means an area designating trees, or stands of trees outside existing forest cover which are to be retained.

56) “Tree save plan” means a plan approved by the Planning Board, or Planning Director, under Chapter 22A or Chapter 50 of County Code which covers individual trees or stands of trees to be saved as part of, or instead of a forest conservation plan.
22A.00.01.05 Application

A. Except as provided in Sections 22A-5, 22A-6, 22A-7, 22A-8, 22A-9 and the Variance provisions in Section 22A-21 of the Forest Conservation Law, these regulations apply to the following plans or regulated activities:

(1) a development plan approved or amended under Division 59-D-1 of Chapter 59 of the County Code that was in effect prior to October 30, 2014;
(2) a project plan approved or amended under Division 59-D-1 of Chapter 59 of the County Code that was in effect prior to October 30, 2014;
(3) a preliminary plan of subdivision, administrative subdivision, or minor subdivision approved by the Planning Board, or Planning Director, under Chapter 50 of the County Code;
(4) a site plan approved or amended under Division 59-D-3 of Chapter 59 of the County Code that was in effect prior to October 30, 2014;
(5) a site plan approved or amendment under Section 59.7.3.4 of Chapter 59 of the County code;
(6) a sketch plan approved under Section 59.7.3.3 of Chapter 59 of the County Code;a sediment control permit required under Chapter 19 of the County Code;
(7) clearing or grading conducted on two or more platted contiguous lots that collectively total 40,000 square feet or larger that are graded at the same time and where sediment control is required under Chapter 19 of the County Code.
(8) a special exception approved under Article 59-G of Chapter 59 of the County Code that was in effect prior to October 30, 2014;
(9) a conditional use approved under Section 59.7.3.1 of Chapter 59 of the County Code;
(10) a mandatory referral; and
(11) a park development plan.

B. The general procedure for meeting the requirements of Chapter 22A for these plans is:

(1) Preparation by a qualified professional, of a natural resources inventory which may include a forest stand delineation, as described in Section 22A.00.01.06 and in the latest versions of Guidelines for Environmental Management of Development in Montgomery County, Maryland (MNCPPC) and the Trees Technical Manual (MNCPPC). To be reviewed and approved by the Planning Director.

(2) Identification by a qualified professional, of forest and tree retention areas per subsection 22A-12(b) of the Forest Conservation Law, Sections 22A.00.01.06 and 22A.00.01.07, and the criteria for areas to be cleared in the Trees Technical Manual.

(3) Preparation by a qualified professional, of forest conservation plan to be approved by Planning Board or Planning Director. As applicable, which includes:
(a) lot lines, building, and proposed infrastructure, located to maximize retention areas and avoid environmentally sensitive areas such as environmental buffers and protected habitats wherever practical;
(b) areas of existing forest, areas of forest to be removed, and areas of forest to be retained;
(c) afforestation and reforestation areas and planting plan, as required;
(d) appropriate protection and maintenance measures; and
(e) a timetable for construction and planting.

22A.00.01.06 Natural Resource Inventory and Forest Sand Delineation (NRI/FSD) Requirements

A. A Natural Resource Inventory (NRI) application must be considered complete if it contains a complete analysis of existing natural resources and man-made features on a property which is verified by field survey and contains the following information to cover the development site and first 100 feet of adjoining land around the perimeter or the width of adjoining properties, whichever is less:

1. property boundaries;
2. topography at a minimum scale of 1” = 200’ with contour intervals not more than 5 feet (larger scale may be required by the Planning Director on a case-by-case basis, if necessary to determine the accuracy of the plan);
3. slopes 25% and greater, and slopes between 15% and 25% that are associated with erodible soils;
4. perennial and intermittent streams and stream buffers per the latest version of the Guidelines for Environmental Management of Development in Montgomery County, Maryland (MNCPPC);
5. ephemeral channels/streams and buffers for those locations where such buffers are required per the latest version of the Guidelines for Environmental Management of Development in Montgomery County, Maryland (MNCPPC) or appropriate master plan;
6. Existing one-hundred year floodplains and associated 25’ building restriction lines;
7. wetlands and their buffers per the latest version of the Guidelines for Environmental Management of Development in Montgomery County, Maryland (MNCPPC);
8. soils and geologic conditions including, soil type, structural limitations, soils that are hydric or have hydric inclusions, erodible soils per the list in Appendix C of the Guidelines for Environmental Management in Montgomery County, Maryland (MNCPPC), and known serpentinite soils in Montgomery County;
(9) rare, threatened or endangered plants or animals observed in the field; critical habitat areas observed or documented by the Maryland Department of Natural Resources;
(10) aerial extent of forest and tree cover which includes the outside perimeter of the canopy of individual trees;
(11) champion trees and trees that have a diameter at 4.5 feet above the ground (DBH) that is 75% or more of the diameter of the current state champion for that species;
(12) Trees that are specimens for their species;
(13) a table that identifies individual trees that have a diameter at 4.5 feet above the ground (DBH) of 24” or greater by size and species and the health of those trees;
(14) cultural features and historic sites;
(15) a site vicinity map at 1” =2000’ which shows the location of the site within a square mile and indicates major roads; and
(16) a table containing acreage of wetland, 100-year floodplains, stream buffers, and environmental buffers.
(17) A completed NRI/FSD application form, fee schedule worksheet, and review fee.

B. A Forest Stand Delineation (FSD) application must be considered complete if it contains a detailed summary of existing forest and trees on a tract, or forest stand delineation which is verified by field survey and contains the following information to cover the development site and first 100 feet of adjoining land around the perimeter or the width of adjoining properties, whichever is less:
   (1) forest stands and field verified boundaries;
   (2) a description of each stand including:
      (a) acreage;
      (b) dominant and codominant tree species;
      (c) size class by species;
         (d) percent canopy closure;
         (e) number of canopy layers (vertical structure);
      (f) percent of forest floor covered by herbaceous plants (native species), downed woody material, and alien or invasive species;
      (g) a stand condition narrative for each stand including, priority for retention, information on condition classes, structure, function, retention potential, transplant and regenerative potential, and comments on evidence of past management; and specimen trees by size and species;
   (3) champion trees and trees that have a diameter at 4.5 feet above the ground (DBH) that is 75% or more of the diameter of the current state champion for that species;
   (4) a table that identifies individual trees that have a diameter at 4.5 feet above the ground (DBH) of 24” or greater by size and species and the health of those trees;
C. A simplified forest stand delineation may be used per subsection 22A-10(b)(2) of the Forest Conservation Law. The simplified plan must also include:
   (1) forest stands as determined by dominant species types and priority for retention;
   (2) stand condition narrative as described in subsection B(2);

D. When necessary the items described in A and B, or A and C, above must be combined into one plan drawing and is called a Natural Resources Inventory/Forest Stand Delineation

E. The Natural Resources Inventory and Forest Stand Delineation must be prepared by a qualified professional; and must exhibit a stamp or certification of the preparer. The Natural Resources Inventory/Forest Stand Delineation must be used to determine areas of forest to be saved or planted.

22A.00.01.07 Priorities for Retention

A. The following areas are considered the highest priority retention areas for protection and must be left in an undisturbed condition unless the Planning Director or Planning Board find that the provisions of subsection 22A-12(b)(1) of the Forest Conservation Law, have been met and the development proposal cannot reasonably be altered:
   
   (1) trees, shrubs and other plants located in sensitive areas including environmental buffers, slopes over 25 percent (not man-made), erodible soils on slopes of 15% or more, and critical habitats;
   (2) a contiguous forest that connects the largest undeveloped or most vegetated tracts of land within and adjacent to the site;
   (3) trees, shrubs, or plants identified on the list of rare, threatened, or endangered species;
   (4) a forest area which has been designated as priority for retention in master plans or functional plans, or in the absence of such plans, a forest which exhibits all of the
following characteristics as further described in the most recent version of the Trees Technical Manual:
(a) high structural and species diversity;
(b) few alien or invasive species present;
(c) very good overall stand health; and
(d) high potential to provide a significant amount of habitat for forest interior dwelling plant, animal, and bird species; and
(5) an individual tree, and its critical root zone, with one or more of the following characteristics:
(a) a tree that is part of a historic site or associated with a historic structure;
(b) a tree designated as a national, state, or County champion tree;
(c) a tree having a diameter, measured at 4.5 feet above the ground, of 75 percent or more of the diameter of the designated state or County champion tree;
(d) trees which have a diameter, measured at 4.5 feet above the ground with a diameter of 30 inches or greater; and
(e) a tree which is a specimen of a species.

B. The following areas are not subject to the retention provision in subsection 22A-12(b)(1) of the Forest Conservation Law, but should be given consideration for preservation where feasible:
(1) a forested area which provides corridor 300 feet or more of primarily native vegetation between two larger forested tracts;
(2) a forested stream buffer up to 300 feet on either side of a stream channel;
(3) trees which act as a buffer between incompatible land uses and between dwelling and roads;
(4) a forest stand, or portions of a stand, with food forest structural diversity; and
(5) an individual tree with a diameter, measure at 4.5 feet above the ground, of 24” or greater which will significantly enhance the site through preservation.

22A.00.01.08 General Forest Conservation Plan Provisions

A. In developing a forest conservation plan, the applicant must give priority to techniques for maximizing retention of existing forest on the site. The forest conservation law specifies percentages of all forested sites which, at a minimum, should be preserved. Applicants should strive to maximize forest retention whenever practical.

B. If existing forest on the site subject to a forest conservation plan cannot be retained, the applicant must demonstrate, to the satisfaction of the Planning Board or Planning Director, as applicable:
(1) How techniques for retention have been exhausted;
C. Wetlands. A regulated activity within the net tract area that occurs wholly or partly in areas regulated as nontidal wetlands under Environment Article, Title 9, Annotated Code of Maryland, is subjected to the reforestation requirements of both the nontidal wetlands regulations and this subtitle, subject to the following:

(1) Forested nontidal wetlands which are retained, must be counted toward the forest conservation requirements of this subtitle;

(2) Forested wetlands which are permitted to be cleared must be replaced as required under the provisions of Environment Article, Title 9, Annotated Code of Maryland;

(3) Clearing within forested wetlands must be shown on the forest conservation plan; and Wetlands are priority retention areas.

D. Retention Areas.

(1) Forest retention areas must be at least 10,000 square feet in size and 50 feet wide, or be a part of a larger forest area which extends off-site and is protected.

(2) Individual trees described as highest priority for retention in subsection 22A.00.01.07A may receive retention credit equal to the area of their critical root zone protected when at least two thirds of the entire critical root zone is permanently protected by an easement.

(3) Individual trees which are not the highest priority for retention and tree stands less than 10,000 square feet and 50 feet wide may be credited toward afforestation and reforestation requirements as part of landscaping credit.

(4) Retention area boundaries must be determined by a measure of the aerial extent of remaining forest cover which includes the outer perimeter of the canopy of individual trees, or the critical root zones that are protected, whichever is greater.

E. Afforestation and Reforestation

(1) Afforestation and reforestation areas must be at least 10,000 square feet in size and 50 feet wide, or be adjacent to an existing forest area (either on-site or off-site) which is protected.

(2) The following must be considered as highest priority planting areas for forest conservation plans with required afforestation and reforestation:
   (a) environmental buffers;
(b) establish or enhance forest in buffers adjacent to ephemeral streams, when such streams are required to have buffers as recommended in an applicable Master Plan or in the latest version of the Guidelines for Environmental Management for Development in Montgomery County, Maryland (MNCPPC).

(c) establish or enhance forested areas on 100-year floodplains, when appropriate;

(d) establish or increase existing forested corridors to connect existing forest within or adjacent to the site. Where practical forested corridors should be a minimum of 300 feet in width to facilitate wildlife movement;

(e) establish or enhance forest buffers adjacent to critical habitats where appropriate;

(f) establish planting to stabilize natural slopes of 25% or greater and 15% or greater with erodible soils including slopes of ravines or other natural depressions;

(g) establish buffers adjacent to areas of differing land use where appropriate, or adjacent to highways or utility right-of-way’s;

(h) establish forest areas adjacent to existing forests to increase the overall area of contiguous forest cover, when appropriate; and

(i) non-forested wetlands are priority planting areas; however, these areas may be left in their existing condition when appropriate.

(3) Planting plans for afforestation and reforestation must include the following:

(a) a minimum of 5 native tree species (unless the site is to be actively managed under an approved forest management plan) and 2 species of native understory shrubs;

(b) appropriate site preparation, protection and/or maintenance measures as described in the latest version of the Trees Technical Manual; and

(c) a stocking rate for trees and shrubs and survival requirements, as shown in the following chart:

<table>
<thead>
<tr>
<th>Size</th>
<th>Number Required (per acre)</th>
<th>Approximate Spacing (feet on center)</th>
<th>Survival Requirements (at the end of the 2nd growing season)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TREES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>¾” to 1” caliper; B&amp;B or container grown (minimum 5 gal.)</td>
<td>200</td>
<td>12’ to 15’</td>
<td>75% or 150 per acre(4)</td>
</tr>
<tr>
<td>1 ½” to 2” caliper; B&amp;B or container grown (minimum 15 gal.)</td>
<td>100</td>
<td>15’ to 20’</td>
<td>100% or 100 per acre(5)</td>
</tr>
</tbody>
</table>
SHRUBS

<table>
<thead>
<tr>
<th>Height</th>
<th>Number</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>18” to 24” height;</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>container grown</td>
<td>(6)</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
1. In certain circumstances, any combination of the above mentioned stocking options may be appropriate strategies to fulfill the requirements of an approved Forest Conservation Plan. Instances where the use of combination planting may be appropriate are described in the Trees Technical Manual. Use of alternative stocking will be evaluated, along with necessary protection and maintenance measures, on a case-by-case basis by the Planning Board.
2. Spacing does not imply that trees or shrubs must be planted in a grid pattern although it may be necessary for mowing to control invasive vegetation or otherwise reduce competition for the planted tree.
3. If the tree survival at the end of the maintenance period falls below the survival requirements, reinforcement planting up to that amount will be required. If tree survival falls below 50% of the total trees planted, extension of the maintenance period will be required in addition to reinforcement planting. Natural regeneration may be counted toward survival requirements, in addition to the required planting, on a case-by-case basis as determined by the Planning Director.
4. Surviving tree must be at least 1” caliper to receive full credit toward survival requirements. Reinforcement planting must be 1” trees. All trees to be accepted must be healthy and have the main leader intact with no deer browse.
5. Surviving tree must be at least 2” caliper to receive full credit toward survival requirements. Reinforcement planting must be 2” trees. All trees to be accepted must be healthy and have the main leader intact with no deer browse.
6. Shrubs should be evenly distributed over the planting area and among the trees. On a case-by-case basis, shrubs may be substituted with native trees particularly when there is evidence of deer predation or high incidence of non-native and invasive plants and materials.

F. Tree Save Plans.
   1. Development applications on tracts which impact significant, specimen or champion trees, including those on adjoining properties, are required to submit a tree save plan.
   2. Preserving specimen or champion trees, and stands of trees which are valuable for compatibility reasons, must be included in these plans. If the loss of these trees is shown to be unavoidable, replacement must be required.
   3. The replacement ratio must be determined in the following manner:
      a. Specimen and champion trees must be replaced by a planting plan which may be required to include planting or transplanting of large trees;
      b. Significant tree stands must be replaced to replace the function of the stand; for instance, trees which provided screening must be replaced in sufficient kind and number to perform the same function.
   4. The tree save plans must identify methods to preserve and protect on-site or off-site trees along the limits of disturbance regardless of tree size.

G. Credit Toward Afforestation and Reforestation for Landscaping and Tree Save
   1. The Planning Board or Planning Director, as applicable, must find that all opportunities for establishing forest have been incorporated into on-site afforestation and reforestation plans before any credit for landscaping or tree save area is applied.
(2) Trees receiving credit towards forest conservation requirements must not also be credited towards landscaping requirements.

(3) Newly planted landscape trees, within landscape areas must be 3” minimum caliper stock to be counted toward requirements.

(4) Newly planted trees outside of forest, or designated landscape areas, must be 3” minimum caliper stock to be counted toward requirements.

(5) Street trees planted within a public right-of-way or along private streets/roads will not receive any credit toward the requirements.

(6) Afforestation areas may be established as tree cover if the Planning Board or Planning Director, as applicable, find that tree cover is appropriate. Instances where it may be appropriate to satisfy afforestation requirements using tree cover include:
   (i) developments in urban areas;
   (ii) redevelopments;
   (iii) high-density residential developments;
   (iv) commercial and industrial developments;
   (v) high density mixed-use developments; and
   (vi) some institutional areas.

(7) Landscaping, retention of tree stands, and retention of individual trees may be credited toward a sites’ reforestation requirements as follows:
   (a) landscaping areas or retained tree stands which are at least 2,500 square feet in size and 35 feet wide may receive full credit for their area;
   (b) landscaping areas and retained tree stands which are less than 2,500 square feet in size or 35 feet wide may receive one quarter credit for their area;
   (c) individual landscape trees may receive one quarter credit for the projected area of their canopy at 20 years;
   (d) individual non-priority trees which are retained may receive one quarter credit for the protected area of their critical root zone when at least two thirds of the entire critical root zone is protected; and
   (e) the total credit from these areas must not exceed twenty percent of the overall reforestation requirement for a site.

(8) Landscaping, retention of tree stand, and retention of individual trees may be credited toward a sites’ afforestation requirements as follows:
   (a) sites with tree cover requirements per subsection (3):
      (i) landscaping areas or retained tree stands of any size may receive full credit for their area;
      (ii) individual landscape trees which are retained may receive full credit for the protected area of canopy at 20-years; and
      (iii) individual trees, or tree stands, which are retained may receive full credit for the protected area of their critical root zone when at least two thirds of the entire critical root zone is permanently protected by an easement;
sites with forest cover requirements:

(i) landscaping areas or retained tree stands which are at least 2,500 square feet in size and 35 feet wide may receive full credit for their area;

(ii) landscaping areas or retained tree stands which are at least 2,500 square feet in size or less than 35 feet wide may receive one quarter credit for their area;

(iii) individual non-priority landscape trees may receive one quarter credit for the projected area of their canopy at 20-years;

(iv) individual trees which are retained may receive one quarter credit for the protected area of their critical root zone when at least two third of the entire critical root zone is protected; and

(v) the total credit from these areas must not exceed twenty percent of the overall afforestation requirement for a site.

22A.00.01.09 Forest Conservation Plan Requirements

A. Preliminary Forest Conservation Plans.

(1) Development applications that need more than one approval must submit a preliminary forest conservation plan in conjunction with the first approval. The plan may be based on conceptual analysis if the basic parameters are met and any assumptions are realistic.

(2) A preliminary forest conservation plan must contain the following:

(a) the shape and dimension of lots, showing locations of any existing structures and improvements, including paved areas;

(b) locations and dimension of all existing and proposed rights-of-way, setback, easements, stockpile areas, and stormwater management facilities (road and utility rights-of-way which will not be improved as parts of the development application must be identified);

(c) location of building restriction lines and areas to be conserved including environmental buffers;

(d) conceptual locations of proposed structures and improvements, drainage systems, and sediment control measures;

(e) preliminary limits of disturbance of the natural terrain, and location of forest and tree retention areas, including acreage, with appropriate justification and proposed long-term protection methods (a conceptual grading plan and/or a more detailed tree survey may be required to determine the feasibility of proposed retention areas);

(f) proposed locations of afforestation and reforestation areas, including acreage, and mitigation trees, if required;

(g) a table containing the following information:
(i) acreage of tract;
(ii) acreage of the tract remaining part of an agricultural use;
(iii) acreage of road and utility rights-of-way which will not be improved as part of the development application;
(iv) acreage of total existing forest;
(v) acreage of forest in priority retention areas;
(vi) acreage of forest not in priority retention areas;
(vii) acreage of total forest retention in priority retention areas;
(viii) acreage of total forest retention not in priority retention areas
(ix) acreage of total forest cleared in priority retention areas;
(x) acreage of forest cleared not in priority retention areas;
(xi) land use category and conservation and afforestation thresholds from subsection 22A-12(a) of the Forest Conservation Law;
(xii) acreage of forest retained, cleared, and planted within wetlands;
(xiii) acreage of forest retained, cleared, and planted within 100-year floodplains;
(xiv) acreage of forest retained, cleared, and planted within stream buffers;
(xv) total acreage of forest retained, cleared, and planted within priority planting areas; and
(xvi) linear feet average width of stream buffer provided; and
(h) a forest conservation worksheet showing calculation of forest conservation requirements.

B. Final Forest Conservation Plans
(1) A final forest conservation plan must be based on final site grading, if known, and must be submitted in conjunction with the final approval needed as part of a development application. However, if the development project requires the approval of one development application, the final forest conservation plan must be submitted with that development application and in conjunction with the preliminary forest conservation plan.
(2) In addition to the items listed in subsection A(2)(a-c), (f), (g) and (h) a final forest conservation plan must include:
   (a) conceptual or final grading plans which include building locations and footprint, retaining walls, road and parking layout, sidewalks and pathways, and location of recreation facilities;
   (b) a limits of disturbance line which reflects the limits of all clearing and grading on the tract, and the proposed location of sediment and erosion control devices and staging areas;
   (c) a survey of trees with a diameter of 24 inches and greater at 4.5 feet above the ground (or trees of other sizes if requested by Planning Department staff to determine the feasibility of proposed retention areas), within 50’ on either side of
the limits of disturbance, with critical root zones delineated, and with the distance from the tree face to the limits of disturbance shown on the plan or in an associated table.

(d) retention areas including forest, tree stands and other individual trees to be saved including acreage;

(e) an afforestation and/or reforestation planting plan, if required, which contains:
   (i) location and acreage of areas to be planted;
   (ii) an analysis of the suitability of the site for planting and a description of necessary methods;
   (iii) a list of target tree and shrub species, chosen based on analysis of site conditions which can be used for site planting;
   (iv) a plant materials table including size of plants to be installed and quantities;
   (v) planting and inspection schedule which is tied to the construction sequence for the project;
   (vi) a maintenance plan which includes provision for necessary watering, control of competing vegetation, protection from disease, pest, and mechanical injury, removal of protective measures such as deer caging, and reinforcement planting if plant survival falls below the requirements of subsection 22A.00.01.08E(3)(c); and
   (vii) a maintenance and management agreement; and

(f) permanent protection area boundaries and long-term protection agreement, where appropriate, and building restrictions lines;

(g) a protection plan which shows:
   (i) location of temporary protection devices which must be installed if clearing, grading, or construction occurs within 50 feet of a retention area boundary;
   (ii) stockpile areas and borrow pits;
   (iii) specifications and details for the protection device;
   (iv) a narrative of stress reduction or other measures which are needed for specific trees;
   (v) a field inspection schedule pursuant to Section 22A.00.01.10;
   (vi) location of permanent protection devices; an arborist report that shows the methods to be utilized to protect any tree, 24” dbh and greater, when the critical root zone is impacted; and
   (vii) An arborist report may be required, on a case-by-case basis, for trees less than 24” dbh, when the critical root zone is impacted.

(h) identification of how the off-site planting requirements will be met either by making a fee in lieu payment, by acquiring mitigation credits from an approved forest mitigation bank, or by planting offsite;
(i) If off-site planting is going to occur, the forest conservation plan must include the items listed in subsection (e) plus a map of the proposed planting site showing location, soils, and environmental features which are priority planting areas as stated in subsection 22A.00.01.08E(2).

C. Noticing Requirements for Forest Conservation Plans.
   (1) Applicants that require approval of a forest conservation plan must follow the noticing requirements identified in Chapter 50/59.00.01.04.

22A.00.01.10 Inspections

A. The Planning Department must conduct field inspections of a site subject to an approved forest conservation plan as follows:
   (1) after the limits of disturbance have been staked and flagged, but before any clearing or grading begins (the purpose of the meeting should be to field verify the limits of clearing specified on the approved plan, authorize necessary adjustments, and to authorize necessary stress reduction measures and installation of protection devices);
   (2) after necessary stress reduction measures have been completed and the protection measures have been installed, but before any clearing or grading begins (the purpose of the meeting should be to field verify that both measures have been done correctly and to authorize clearing and grading);
   (3) after completion of all construction activities to determine the level of compliance with the approved plan;
   (4) before the start of any required reforestation planting (the purpose of the meeting should be to determine whether necessary pre-planting measures have been completed and authorize any necessary adjustments to the planting specification);
   (5) after required reforestation and afforestation planting has been completed to verify that the planting is acceptable and to begin the required maintenance and management period;
   (6) Two years after reforestation and afforestation have been completed, to determine survival and assess necessary maintenance activities for the remaining duration of the maintenance and management period; and
   (7) At the end of the maintenance and management period to determine the level of compliance with provisions of the planting plan and, if appropriate, authorize release of any financial security.

B. The applicant must:
   a. Request these inspections at the designated points.
   b. Submit to the Planning Department semi-annual reports and photographs showing compliance with the provisions of the forest conservation plan by October 31st and April 30th of each year for the duration of the maintenance and management period.
C. The Planning Department is authorized to conduct field inspections at any time other than those identified in Section 22A.00.01.10.A.

D. For sites without any planting requirements the final inspection is for the Planning Department to authorize removal of any tree protection measure. For sites with planting requirements, the final inspection occurs at the end of the maintenance and management period.

22A.00.01.11 Exemptions from Submitting a Forest Conservation Plan

A. A request for exemption from forest conservation plan requirements per Sections 22A-5, 22A-6, and 22A-7 of the Forest Conservation Law must be in writing to the Planning Director.

B. The following information must be provided as part of an exemption request:
   (1) An application form;
   (2) A written request detailing how the exemption applies to the proposed plan;
   (3) A Natural Resources Inventory, or Natural Resources Inventory/Forest Stand Delineation if forest is proposed to be removed, prepared per Section 22.00.01.06 and the guidelines in the latest version of Guidelines for Environmental Management of Development in Montgomery County, Maryland (MNCPPC);
   (4) an original copy of a declaration of intent, if required, signed by the applicant named on the development or sediment control application; and
   (5) other appropriate information which supports the exemption request including a copy of the proposed plan for development, if applicable.

C. A waiver from the requirement to provide a Natural Resources Inventory with an exemption request may be granted for:
   (1) single lot exemptions per subsection 22A-5(a) of the Forest Conservation Law if information is submitted, and the Planning Director affirms, that a natural resource inventory is not necessary but the information does show existing and proposed topography and forest boundaries;
   (2) agricultural exemptions per subsection 22A-5(b) of the Forest Conservation law if a diagram is submitted with the exemption request showing existing and future forest boundaries;
   (3) commercial logging and timber harvesting exemptions per subsection 22A-5(d) of the Forest Conservation law if a diagram is submitted with the exemption request showing existing and future forest boundaries, environmental buffers, harvest areas, and haul roads; and
   (4) applications for other exemptions, if the site being developed does not contain any forest, specimen or significant trees, existing conservation easements, or environmentally sensitive features, and a plan showing existing features and topography is submitted with the exemption request.
D. The Planning Director may require a person requesting an exemption from submitting a forest conservation plan to submit a tree save plan in conjunction with the exemption request.

E. The Planning Board, or Planning Director, may require a person failing to file an exemption request per section 22A-4 of the Forest Conservation Law, or found in noncompliance with an exemption or a declaration of intent to:
   (1) Submit a Forest Conservation Plan and meet the requirements in the Forest Conservation Law for a regulated activity;
   (2) Pay a noncompliance fee;
   (3) Be subject to other enforcement actions appropriate under Article III of the Forest Conservation Law; and/or
   (4) Submit a request to be exempt from submitting a forest conservation plan.

F. In its determination of appropriate enforcement action, the Planning Board may consider whether failure to file an exemption by a person required to file is a violation of this subtitle.

G. A confirmed exemption that has not started any authorized land disturbance within 5 years from the date of confirmation automatically expires without notice.

22A.00.01.12 Declaration of Intent

A. A declaration of intent is an affirmation by an applicant that a property is subject to the following activities and limitations and therefore is eligible for an exemption from the Forest Conservation Plan. A declaration of intent is required for the following exemptions from submitting a forest conservation plan;
   (1) An activity conducted on an existing single lot that is required to construct a dwelling house or accessory structure intended for the use of the owner, if the activity complies with subsection 22A-5(a) of the Forest Conservation Law;
   (2) An agricultural activity that complies with subsection 22A-5(b) of the Forest Conservation Law;
   (3) A commercial logging and timber harvesting operation that complies with subsection 22A-5(d) of the Forest Conservation Law;
   (4) A real estate transfer subject to subsection 22A-5(m) of the Forest Conservation Law.
   (5) A minor subdivision that complies with subsection 22A-5(n) of the Forest Conservation Law;
   (6) An activity involving the demolition of an existing structure that complies with subsection 22A-5(x) of the Forest Conservation Law.

B. The declaration of intent must provide Planning Department staff with access to the property to verify compliance with the declaration.

C. The declaration of intent is in effect for 5 years after the date defined in the declaration of intent.
D. The filing of a declaration of intent does not preclude another exempted activity on the property subject to a declaration of intent, if the activity:
   (1) Does not conflict with the purpose of any existing declaration of intent; and
   (2) Complies with the applicable requirements for an exempted activity.

E. If a regulated activity on the area covered by the declaration of intent occurs within 5 years of the effective date of the declaration of intent:
   (1) the exemption immediately terminates without any action by the Planning Board;
   (2) the Planning Director may require approval of a Forest Conservation Plan for the property; and
   (3) the Planning Director, or Planning Board may take other enforcement actions, including those listed under Section 22A-17(a) of Article III of the Forest Conservation Law.

F. An applicant may apply for a regulated activity on the area of the property not covered under the declaration of intent if the requirements of Section 22A-5 are satisfied.

22A.00.01.13 Amendment to Forest Conservation Plan and Exemptions from Submitting a Forest Conservation Plan

A. Forest Conservation Plan Amendments.
   (1) Minor amendments which do not result in more than a total of 5,000 square feet of additional forest clearing may be approved by the Planning Director on a case by case basis. These minor amendments may include field modifications and substituting one area of forest, for retention of another of equal or greater size and value.
   (2) Major amendments which entails:
      (a) more than a total of 5,000 square feet of additional forest clearing must be approved by Planning Board or Planning Director (depending on who approved the original plan), or
      (b) Removal of any conservation easement must be approved by the Planning Board.

B. Exemptions from Submitting a Forest Conservation Plan
   (1) A request to amend an exemption from submitting a forest conservation plan must be submitted to and approved by the Planning Director.

22A.00.01.14 Forest Conservation Maintenance and Management Agreements

A. Maintenance Agreements.
   (1) A person required to conduct afforestation or reforestation under this regulation and the Forest Conservation Law must include in the forest conservation plan a binding maintenance
agreement for a minimum length of 5 years unless reduced pursuant to Section 22A-12(g)(h)(1) of the Forest Conservation Law. The binding maintenance agreement for forest conservation plans within Special Protection Areas must have a minimum length of 5 years and cannot be reduced.

(2) The maintenance agreement must be submitted and approved by the Planning Director before the start of any land disturbing activities.

(3) The maintenance agreement must detail how the areas designated for afforestation or reforestation will be maintained to ensure protection and satisfactory establishment of forest.

(4) The “obligee,” or person required to conduct the afforestation or reforestation must present evidence of a legal right to implement the proposed maintenance agreement on a selected property by providing:
   (a) an executed deed conveying title to a selected property to the obligee;
   (b) an executed conservation easement agreement;
   (c) written evidence of the landowner’s consent to the use of a selected property;
   (d) a fully executed option agreement, long-term lease agreement, or contact of sale for a selected property; or
   (e) other written evidence of a possessory or ownership interest in a selected property.

(5) The Planning Director must be a signatory to the maintenance agreement, or must be designated a third-party beneficiary of the agreement.

(6) The maintenance agreement must provide Planning Department staff with access to the property to verify compliance with the Forest Conservation Law.

(7) If the plantings have not met the survival requirements established in section 22A.00.01.08 or required control of non-native and invasive vegetation, reinforcement plantings and/or additional non-native invasive control will be required, and the maintenance period may be extended.

B. Bonding.

(1) Financial security must be provided per subsection 22A-12(i) of the Forest Conservation Law.

(2) Financial security must be provided before authorization is granted to begin any clearing, grading, demolition, or land disturbing activities. The value of the financial security must equal the in-lieu fee applicable at the time of land disturbance, or be based on a cost estimate, approved by the Planning Director, for implementing the planting and maintenance of trees and shrubs (including mitigation trees) and control of non-native and invasive plants.

(3) The financial security must be in force until all measure for reforestation, afforestation, and maintenance requirements have been met to the satisfaction of the Planning Director.

(4) A surety bond or other alternative form of security must not be canceled by the surety, bank or other issuing entity unless both of the following conditions are satisfied:
(a) the surety notifies the Planning Director and the applicant of its intent to cancel the bond, in writing, by registered mail, not less than 90 days before cancellation; and 
(b) at least 45 days before the cancellation date indicated in the notice, the applicant files a commitment from a surety, bank, or other issuing entity to provide a substitute security which must take effect on the cancellation date indicated in the notice.

(5) Release of part of the financial security may be authorized by the Planning Department enforcement and monitoring staff after planting has been done. Any remaining financial security must be at least 50 percent, or greater, than the in-lieu fee that was in effect at the time of the first land disturbance.

(6) An applicant must request an inspection of the planted areas by Planning Department enforcement and monitoring staff immediately after planting is complete.

(7) Planning Department enforcement and monitoring staff must determine whether a partial release should occur, after planting has occurred, and how much, based on the following factors:
   (a) evidence of deer browse on existing trees and forest;
   (b) adherence to the planting plan;
   (c) condition of the planted material;
   (d) time of year when the planting has occurred and whether or not watering will occur;
   (e) size of planting stock; and
   (f) provisions of the protection and maintenance plan, including required control of non-native invasive vegetation.

(8) Planning staff must release the financial security if the applicant requests a final inspection and the Planning staff determines that survival requirements have been met at the end of the maintenance period.

22A.00.01.15 Long-Term Protective Agreements

An applicant must have in effect at all times, approved long-term protective measures as provided in subsection 22A-12(h)(2) of the Forest Conservation Law, to retain as forest, all land forested, afforested, or reforested and all unforested lands left in an undisturbed condition per section 22A-12(b) of the Forest Conservation Law and limit the uses of those areas which are consistent with forest conservation.

(1) Long-term protective measures may include, but are not limited to:
   (a) Conservation easements or covenants;
   (b) Deed restrictions; and
   (c) Dedication to M-NCPPC Parks as a conservation area.

(2) A forest management plan may be included as part of a long-term protective agreement if the Planning Director finds it is consistent with County forest conservation objectives.
The *Trees Technical Manual* is a guidance document, adopted by the Planning Board, which provides further clarification of the requirements of Chapter 22A of the Montgomery County Code and these regulations.