

## General Requirements

- A. A person making application for subdivision plan approval for an area of land of 40,000 square feet or greater shall:
- (1) Submit to the Department a forest stand delineation and a forest conservation plan for the lot for parcel on which the development is located; and
  - (2) Use methods approved by the Department to protect retained forests and trees during construction or,
  - (3) On properties and portions of planned development areas with a Forest Stand Delineation and Forest Conservation Plan until first application is made for Town project, a site plan, a grading permit or sediment control approval, whichever comes first, provided that:
    - (a) The subdivision plan proposes to create no more than one additional buildable lot; and
    - (b) Forest Conservation Plan requirements may be deferred for no more than one subdivision plan on the parent parcel; and
    - (c) A note be included on the final plat which states that all parcels must satisfy requirements of Forest Conservation at the time application is made for a Town project, site plan, grading permit or sediment control approval and that the parcels are not eligible for the Single Lot Exemption.
- B. A person making application for any other regulated activity shall:
- (1) Submit to the department a Forest Stand Delineation and a Forest Conservation Plan for the lot or parcel on which the development is located; and
  - (2) Use methods approved by the Department to protect retained forests and trees during construction.

## Forest Stand Delineation

### Criteria

- C. A Forest Stand Delineation shall be submitted prior to or simultaneously with a preliminary subdivision plan, a subdivision of five lots or less, site plan, or County project plan, but shall be submitted prior to submission of a grading permit or sediment control application.
- D. A Forest Stand Delineation shall be submitted prior to or simultaneously with a Preliminary Forest Conservation Plan or Final Forest Conservation Plan, as applicable.
- E. The delineation shall be prepared and signed by a licensed forester, licensed landscape architect, or a qualified professional
- F. The Forest Stand Delineation is to be used in the development review process for determining the most suitable and appropriate sites for forest conservation and shall contain the following information:
- (1) A topographic map delineating intermittent and perennial streams, slopes over 15 percent and steep slopes over 25 percent.

- (2) A soils map delineating soils with structural limitations, hydric soils, or soils with a soil K value greater than 0.35 on slopes of 15 percent or more;
- (3) Forest stand maps indicating species, location, and size of trees and showing dominant and codominant forest types in conformance with the standards for stand delineations;
- (4) Location of 100-year floodplains, existing conservation easements, Resource Protection Zone areas, tidal and non-tidal wetlands, habitat areas, and Natural Heritage Areas.
- (5) Location of existing structures and the historic significance of the structures on the subject tract or adjacent tracts.
- (6) Other information the Department determines is necessary

G. A simplified delineation may be submitted:

- (1) When less than 40,000 square feet of forest cover is disturbed during a construction activity; or
- (2) For areas under a preexisting long term protective agreement or an approved Forest Conservation Plan; or
- (3) For forest stands designated as priority one forest retention areas and which are to remain undisturbed in their entirety; or
- (4) For tracts subject to a site plan or grading permit application wherein development of the tract requires clearing and grading of 95% or more of the tract; and
- (5) When approved by the Department.

H. The Department shall consider a Simplified Forest Stand Delineation complete if it includes:

- (1) A map showing existing forest cover and the location of specimen or champion trees as verified by field inspection;
- (2) A descriptive narrative of the applicable forest stands which addresses the informational categories (to be defined)

I. An approved Forest Stand Delineation may remain in effect for a period not longer than 5 years.

J. Time for Submittal Review Period

- (1) Within 30 calendar days after receipt of the Forest Stand Delineation, the Department shall notify the applicant whether the Forest Stand Delineation is complete and correct.
- (2) If the Department fails to notify the applicant within 30 days, the delineation shall be treated as complete and correct.
- (3) The Department may require further information or provide for an additional 15 calendar days under extenuating circumstances.

Forest Conservation Plan

General Provisions.

- A. In developing a forest conservation plan, the applicant shall give priority to techniques for retaining existing forest on the site.
- B. If existing forest on the site subject to a forest conservation plan cannot be retained, the applicant shall demonstrate to the satisfaction of the Department:
  - (1) How techniques for forest retention have been exhausted;
  - (2) Why the priority forests and priority areas specified cannot be left in an undisturbed condition;
  - (3) If priority forests and priority areas cannot be left undisturbed, the sequence for afforestation or reforestation will be followed
  - (4) Where on the site in priority areas afforestation or reforestation will occur in compliance with Hopkinton conservation requirements
- C. The applicant shall demonstrate to the satisfaction of the Department that the requirements for afforestation or reforestation onsite or offsite cannot be reasonably accomplished if the applicant proposes to make a payment into the local forest conservation fund instead of afforestation or reforestation.
- D. Wetlands. A regulated activity within the net tract area that occurs wholly or partly in areas regulated as Wetlands is subject to both the non-tidal wetlands regulatory requirements and the requirements of this subtitle, subject to the following:
  - (1) Any area of forest in the net tract area, including forest in Wetlands that is retained shall be counted towards forest conservation requirements under this subtitle.
  - (2) For the purpose of calculating reforestation mitigation under this subtitle, a forested wetland permitted to be cut or cleared and required to be mitigated shall be shown on the forest conservation plan and subtracted on an acre for acre basis from the total amount of forest to be cut or cleared as part of a regulated activity.
  - (3) Wetlands shall be considered to be priority areas for retention and replacement.

Preliminary Forest Conservation Plan.

- A. A Preliminary Forest Conservation Plan shall be prepared and signed by a licensed forester, a licensed landscape architect, or a qualified professional
- B. Except for subdivisions of five lots or less, for minor development projects, and projects where a simplified delineation applies on a tract, a Preliminary Forest Conservation Plan shall:
  - (1) Be submitted with a preliminary plan of subdivision, County project plan, or site plan, and prior to the submission of a grading permit or sediment control application;
  - (2) Include the Forest Stand Delineation for the site;
  - (3) Include a table that lists the proposed values of the following, in square feet:
    - (a) Net tract area;
    - (b) Area of forest on site within net tract area;
    - (c) Area of forest proposed to be cleared;

- (d) Area of forest conservation required; and
  - (e) Area of forest conservation that the applicant proposed to provide, including both onsite and offsite areas;
- (4) Include a clear graphic indication of the forest conservation provided on the site drawn to scale, showing: location of existing forest cover, limits of the net tract area, areas of proposed forest clearing, areas where retention of existing forest or afforestation or reforestation is proposed;
  - (5) Include an explanation of how the provisions have been met;
  - (6) Show the proposed limits of disturbance;
  - (7) Preliminary subdivision plans using open space for off-site forest conservation easements must first be approved by the Planning Commission as part of the preliminary plan process.
- C. The review of the preliminary forest conservation plan shall be concurrent with the review of a site plan, Town project plan, or preliminary subdivision plan.
  - D. During the different stages of the review process, the Preliminary Forest Conservation Plan may be modified provided the Department approves of the changes.

The Final Forest Conservation Plan.

- A. A Final Forest Conservation Plan shall be prepared and signed by a licensed forester, a licensed landscape architect, or a qualified professional.
  - B. A Final Forest Conservation Plan shall:
    - (1) Include the submitted or approved Forest Stand Delineation, as applicable, and the approved Preliminary Forest Conservation Plan, or the information required for a Preliminary Forest Conservation Plan when a Preliminary Forest Conservation Plan is not required;
      - (2) Be submitted with the following:
        - (a) Construction or improvement plan drawings prior to or simultaneously with submission of a final subdivision plan;
        - (b) With an application for a site plan, after the approval of the Preliminary Forest Conservation Plan, if applicable;
        - (c) With an application for a grading permit, after approval of the Preliminary Forest Conservation Plan, if applicable;
        - (d) With an application for sediment control approval, after approval of the Preliminary Forest Conservation Plan if applicable;
        - (e) For a Town project, prior to the commencement of any clearing or construction on the site, if (a) through (d) do not apply;
    - (3) Show proposed locations and types of protective devices to be used during construction activities to protect trees and forests designated for conservation;

- (4) Include a proposed construction timetable showing the sequence of forest conservation procedures.
- (5) Show proposed stockpile areas;
- (6) Submit a narrative
- (7) In the case of afforestation or reforestation, include an afforestation or reforestation plan, with a timetable and description of needed site and soil preparation, species, size, and spacing to be used;
- (8) Incorporate a binding 2-year maintenance agreement that details how the areas designated for afforestation or reforestation will be maintained to ensure protection and satisfactory establishment, including:
  - (a) Watering; and
  - (b) A reinforcement planting provision if survival rates fall below required standards;
- (9) Incorporate a long-term binding protective agreement that:
  - (a) Provides protection for areas of forest conservation, including areas of afforestation, reforestation, and retention;
  - (b) Limits uses in areas of forest conservation to those uses that are designated and consistent with forest conservation, including recreational activities and forest management practices that are used to preserve forest; and
  - (c) Incorporates conservation easements, deed restrictions, covenants, and other agreements as required; and
- (10) Include the information required on a forest stand delineation; and
- (11) Include a tie down method for the easement, i.e. metes and bounds or distances and angles.
- (12) Other information the Department determines is necessary to implement this plan

C. Review Period.

- (1) Within 45 calendar days after receipt of the Final Forest Conservation Plan, the Department shall notify the applicant whether the Forest Conservation Plan is complete and approved.
- (2) If the Department fails to notify the applicant within 45 calendar days, the plan shall be treated as complete and approved.
- (3) The Department may require further information or extend the deadline for an additional 15 calendar days under extenuating circumstances.
- (4) At the request of the applicant, the Department may extend the deadline under extenuating circumstances.

D. The Department's review of a Final Forest Conservation Plan shall be concurrent with the review of construction or improvement plan drawings a site plan, a grading permit application, a sediment control application associated with the project, or a final plat for a project associated with the project, whichever shall first occur.

- E. The Department may revoke an approved Forest Conservation Plan and assess a penalty if it finds that:
- (1) A provision of the plan has been violated;
  - (2) Approval of the plan was obtained through fraud, misrepresentation, a false or misleading statement, or omission of a relevant or material fact; or
  - (3) Changes in the development or in the condition of the site necessitate preparation of a new or amended plan.
- F. The Department may issue a stop work order against a person who violates a provision of this a or a regulation, order, approved Forest Conservation Plan, or Maintenance Agreement.
- G. Before revoking approval of a Forest Conservation Plan, the Department shall notify the violator in writing and provide an opportunity for an informal administrative review hearing.

#### Afforestation and Retention

A person making application after the effective date of this Ordinance for sub division, County project approval, a grading permit, or sediment control approval for an area of land of 40,000 square feet or greater:

- H. Shall conduct afforestation on the lot or parcel in accordance with the following:
- (1) A tract having less than 20 percent of the net tract area in forest cover shall be afforested up to at least 20 percent of the net tract area for the following land use categories:
    - (a) Agriculture and resource areas; and
    - (b) Medium density residential areas;
  - (2) A tract with less than 15 percent of its net tract area in forest cover shall be afforested up to at least 15 percent of the net tract area for the following land use categories:
    - (a) Institutional development areas;
    - (b) High density residential areas;
    - (c) Mixed use and planned unit development areas; and
    - (d) Commercial and industrial areas.
- I. Shall comply with the following when cutting or clearing forest cover that is currently below the afforestation percentages :
- (1) The required afforestation level shall be determined by the amount of forest existing before cutting or clearing begins; and
  - (2) Forest cut or cleared below the required afforestation level shall be reforested or afforested at a 2 to 1 ratio and added to the amount of afforestation necessary to reach the minimum required afforestation level, as determined by the amount of forest existing before cutting or clearing began.

The following trees, shrubs, plants, and specific areas shall be considered priority for retention and protection and shall be left in an undisturbed condition unless the applicant has demonstrated, to the satisfaction of the Department, that all reasonable efforts have been made to protect them and the plan cannot be reasonably altered:

- J. Trees, shrubs, and plants located in sensitive areas including the Resource Protection Zone, 100-year floodplain, intermittent and perennial streams and their forest management buffers, steep slopes exceeding 25% and steep slopes exceeding 15% with soils having a K value greater than 0.35, Wetlands and critical habitat areas;
- K. Contiguous forest that connects the largest undeveloped or most vegetated tracts of land within and adjacent to the site;
- L. Trees, shrubs, or plants determined to be rare, threatened, or endangered under the Federal Endangered Species Act
- M. Trees that:
  - (1) Are part of a historic site;
  - (2) Are associated with a historic structure; or
  - (3) Have been designated by the State or the Department as a national, State, or county champion tree; and
- N. Any tree having a diameter measured at 4.5 feet above the ground of:
  - (1) 30 inches or more; or
  - (2) 75 percent or more of the diameter, measured at 4.5 feet above the ground, of the current State champion tree of that species

Reforestation

Forest Conservation Threshold.

- O. There is a forest conservation threshold established for all land use categories. The forest conservation threshold means the percentage of the net tract area at which the reforestation requirement changes from a ratio of 1/4 acre planted for every acre removed above the threshold to a ratio of 2 acres planted for every acre removed below the threshold.
- P. After every reasonable effort to minimize the cutting or clearing of trees and other woody plants has been exhausted in the development of a subdivision or site plan, grading and sediment control activities and development of the forest conservation plan, the forest conservation plan shall provide for reforestation, or payment into the forest conservation fund, according to the formula set forth in this Article and consistent with Section -9 of this Article and the following forest conservation thresholds for the applicable land use category:

Category of Use Threshold Percentage

(1)	Agricultural and resource areas	50 percent
(2)	Medium density residential areas	25 percent
(3)	Institutional development areas	20 percent
(4)	High density residential areas	20 percent

- (5) Mixed use and planned unit development areas 15 percent
- (6) Commercial and industrial use areas 15 percent

Q. Calculations.

- (1) For all existing forest cover measured to the nearest 1/10th acre cleared on the net tract area above the applicable forest conservation threshold, the area of forest removed shall be reforested at a ratio of 1/4 acre planted for every acre removed.
- (2) Each acre of forest retained on the net tract area above the applicable forest conservation threshold shall be credited against the total number of acres required to be reforested under paragraph (1) of this subsection. The calculation of the credit shall be according to the Department.
- (3) For all existing forest cover measured to the nearest 1/10th acre cleared on the net tract area below the applicable forest conservation threshold, the area of forest removed shall be reforested at a ratio of 2 acres planted for every 1 acre removed below the threshold.
- (4) Forest retained on site but not subject to long term protective agreements shall be considered as forest removed for the purpose of determining reforestation or afforestation requirements.

*Requirements for Afforestation, Reforestation and Forest Retention*

Sequence for onsite and offsite Afforestation, Reforestation and Retention

R. After techniques for retaining existing forest on the site have been exhausted, the alternative methods for afforestation, reforestation and offsite retention, as determined by the Department, in order of most to least preferred, is as follows:

- (1) Onsite afforestation or reforestation, if economically feasible, using transplanted nursery stock that is greater than 1.5 inches diameter measured at 4.5 feet above the ground;
- (2) Onsite afforestation or reforestation, using whip and seedling stock;
- (3) Onsite landscaping of areas under an approved landscaping plan which establishes a forest that is at least 35 feet wide and covers 10,000 square feet or more of area;
- (4) For projects located within the Development areas, acquisition of offsite protective easements for existing forested areas not currently protected, afforestation and reforestation, in order of the most to least preferred with the given ratios:
  - (a) Located within the watershed as the development project is located and within the Development District. Area obtained to meet this criteria shall be retained at a 2:1 ratio or planted at a 1:1 ratio.
  - (b) Located within the Development area but not in the same watershed as the project. Area obtained to meet this criteria shall be retained at a 2:1 ratio or planted at a 1:1 ratio.
  - (c) Located within the same watershed as the development project is located, and outside the Development District. Area obtained to meet this criteria shall be retained at a 3:1 ratio or planted at a 2:1 ratio.

- (d) Located outside the Development area and not within the same watershed. Area obtained to meet this criteria shall be retained at a 4:1 ratio or planted at a 3:1 ratio.
- (5) For projects located in the Development area, methods for afforestation and reforestation planting requirements in order of most to least preferred are as follows:
- (a) Offsite afforestation or reforestation in areas described as a priority of this Article, using transplanted or nursery stock that is greater than 1.5 inches diameter measured at 4.5 feet above the ground;
  - (b) Offsite afforestation or reforestation in areas described as a priority in Subsection C of this Article, using whip and seedling stock;
  - (c) Offsite afforestation or reforestation in areas described as a priority in this Article, using natural regeneration;
  - (d) Offsite afforestation or reforestation in areas not specified as a priority in this Article, using transplanted or nursery stock that is greater than 1.5 inches diameter measured at 4.5 feet above the ground;
  - (e) Offsite afforestation or reforestation in areas not specified as a priority in this Article, using whip and seedling stock;
  - (f) Onsite afforestation or reforestation in areas not specified as a priority in this Article, using natural regeneration;
  - (g) Offsite afforestation or reforestation in areas not specified as a priority in this Article, using natural regeneration;
  - (h) Onsite afforestation or reforestation using street trees, based on a mature canopy coverage.
- S. A sequence other than the one described in Section A of this Article may be used for a specific project, if necessary, to achieve the objectives of the county land use plan or county land use policies, or to take advantage of opportunities to consolidate forest conservation efforts.
- T. The following shall be considered a priority for afforestation and reforestation:
- (1) Establish or enhance forest buffers adjacent to intermittent and perennial streams to widths of at least 50 feet;
  - (2) Establish or enhance non forested areas on 100-year floodplains, when appropriate;
  - (3) Establish or increase existing forested corridors to connect existing forests within or adjacent to the site and where practical, forested corridors should be a minimum of 300 feet in width to facilitate wildlife movement;
  - (4) Establish or enhance forest buffers adjacent to critical habitats where appropriate;
  - (5) Establish plantings to stabilize slopes of 25 percent or greater and slopes of 15 percent or greater with a soil K value greater than 0.35, including the slopes of ravines or other natural depressions;
  - (6) Establish or enhance forest plantings on marginal agricultural areas, where appropriate.
  - (7) Establish buffers adjacent to areas of differing land use when appropriate, or adjacent

to highways or utility rights-of-way;

(8) Establish forest areas adjacent to existing forests to increase the overall area of contiguous forest cover, when appropriate.

U. A person required to conduct afforestation or reforestation under this Article shall accomplish it within 1 year or two growing seasons, whichever is a greater time period, following development project completion.

Submission Requirements for Offsite Afforestation, Reforestation and Retention Areas

V. The offsite area has a Forest Stand Delineation approved by the Department.

W. The Final Forest Conservation Plan for the project is submitted for Department approval.

X. A final plat showing each offsite area for long-term protection is submitted for Department approval.

Y. The appropriate long-term binding protective agreement is submitted for approval by the Department.

Z. Other information the Department determines is necessary to implement this Ordinance is provided.

Short Term and Long Term Forest Management and Protection

Binding Protective Agreements.

A. A person retaining forest or conducting afforestation or reforestation pursuant to an approved forest conservation plan shall comply with the requirements.

B. The County may require an endowment to cover the monitoring and enforcement costs of long term protective agreements. Endowment funds shall be deposited into a separate account for the sole use of monitoring and enforcing long term protective agreements and conservation easements.

C. Approved final site plans, grading plans, and subdivision plans shall indicate those areas subject to long term protective agreements of conservation easements.

Payment Instead of Afforestation and Reforestation

Forest Conservation Fund.

A. Town of Hopkinton shall establish a forest conservation fund.

B. If a person demonstrates to the satisfaction of the Department that requirements for reforestation or afforestation onsite or offsite cannot be reasonably accomplished, the person shall contribute money, at a rate of 25 cents per square foot of the area of required planting, into the Town forest conservation fund.

C. Money contributed instead of afforestation or reforestation shall be paid prior to approval of a Forest Conservation Plan.

D. The county shall accomplish the reforestation or afforestation for which the money is deposited within 10 years after receipt of the money.

E. Money contributed may remain in the account for a period of up to 10 years. At the end of that time, any part that has not been used to meet the afforestation or reforestation requirements shall be returned to the person who provided the money.

F. Money deposited in the local forest conservation fund:

- (1) May be spent on the costs directly related to reforestation and afforestation, including site identification, acquisition, and preparation;
- (2) Shall be deposited in a separate forest conservation fund; and
- (3) May not revert to the general fund.

G. Sites for Afforestation or Reforestation Using Fund Money.

- (1) The reforestation or afforestation requirement shall occur in the district and watershed in which the project is located.
- (2) If the reforestation or afforestation cannot be reasonably accomplished in the district and watershed in which the project is located, then the reforestation or afforestation shall occur in the watershed in which the project is located but in a different district.

Recommended Tree Species List.

Tree species used for afforestation or reforestation shall be selected from a list of approved species established by the Department Environmental Management.

Financial Security for Afforestation and Reforestation.

Bonding.

- A. A person required to conduct afforestation or reforestation shall furnish financial security in the form of a bond, an irrevocable letter of credit, or other security approved by the Department. The surety shall:
  - (1) Assure that the afforestation, reforestation, and the associated maintenance agreement are conducted and maintained in accordance with the approved forest conservation plan;
  - (2) Be in an amount equal to the estimated cost, as determined by the Department, of afforestation and reforestation; and
  - (3) Be in a form and of a content approved by the Department.
- B. If, after two growing seasons, the plantings associated with the afforestation or reforestation meet or exceed the standards determined by the Department the amount of the cash bond, letter of credit, surety bond, or other security shall be returned or released.
- C. The Forest Conservation Program may incorporate the financial security

Recertification and Revisions to Approved Plans

Changes to an Approved Forest Stand Delineation

- A. With the appropriate review and inspection fees, if applicable, the Department shall review for approval any revisions to an approved Forest Stand Delineation.

Changes to an Approved Final Forest Conservation Plan

- A. The applicant shall provide a written request to the Planner containing the following information:

- (1) The reason for the revision, and
  - (2) The location of the easement to be released, and
  - (3) A better than equal retention area proposed location
- B. The Planner shall review the request and notify the applicant by letter to either:
- (1) Deny the request with an explanation, or
  - (2) Approve the request and notify the applicant of the additional items needed to complete the revision, which include the following:
    - (a) Fees
    - (b) Final Forest Conservation Plan and narrative
    - (c) Release of the approved long-term protection
    - (d) Implementation of the revised long-term protection
    - (e) Record plat
    - (f) Other information the department determines is necessary to implement this Ordinance.

Standards for Protecting Trees from Construction Activities

Protection Devices.

- A. Before cutting, clearing, grading, or construction begins on a site for which a Forest Conservation Plan is required the applicant shall demonstrate to the Department that protective devices have been established.

Variances

Procedure.

- A. A person may request a variance by submitting an application for a variance to the Planner.
- B. The Planner or designee is authorized to grant variances from the strict application of these regulations where the strict application of these regulations or amendments would result in peculiar and unusual practical difficulties to, or hardship upon, a property owner.
- C. An applicant for a variance shall:
  - (1) Describe the special conditions peculiar to the property which would cause the unusual practical difficulties or unwarranted hardship;
  - (2) Describe how enforcement of these rules will deprive the applicant of rights commonly enjoyed by others in similar areas;
  - (3) Verify that the granting of the variance will not confer on the applicant a special

privilege that would be denied to other applicants;

- (4) Verify that the variance request is not based on conditions or circumstances which are the result of actions by the applicant;
  - (5) Verify that the request does not arise from a condition relating to land or building use, either permitted or nonconforming, on a neighboring property; and
  - (6) Verify that the granting of a variance will not adversely affect water quality.
- D. The Planner or designee shall make written findings that the applicant has met the requirements before the granting a variance.
- E. Notice of a request for a variance shall be given by the applicant to the Planning Department 15 days of receipt of a request for a variance.

## Penalties

### Enforcement

- A. Noncompliance Contribution Rates.
- (1) A person found to be in noncompliance the Forest Conservation Plan, or the associated 2-year Maintenance Agreement, shall be assessed by the Department the required contribution of 30 cents per square foot of the area found to be in noncompliance with required forest conservation.
  - (2) Money collected shall be deposited in a separate account in the forest conservation fund as required and may be used by the Department for purposes related to implementing and enforcement.
- B. Violation
- (1) In addition to the provision, a person who violates a regulation or order adopted or issued is liable for a civil monetary penalty not to exceed \$1,000, which may be recovered in a civil action brought by the Department.
  - (2) Each day a violation continues is a separate violation.
- C. The Department may seek an injunction requiring the person to cease violation and take corrective action to restore or reforest an area.
- D. The Department may revoke an approved Forest Conservation Plan for cause, including violation of conditions of the plan, obtaining a plan approval by misrepresentation, failing to disclose a relevant or material fact, or change in conditions. The Department shall notify the violator in writing and provide an opportunity for a hearing.
- E. The Department may issue a stop work order against any person who violates any provision of this subtitle or any regulation, order, approved plan, or Management Agreement.