

1. Purpose

The purpose of this section is to eliminate or reduce the adverse effects of soil erosion and sedimentation on the environment, public welfare/health, and municipal facilities. These adverse effects may be the result of managed construction and other activities including but not limited to earth alteration, excavation, removal of vegetation and general construction activities.

2. Definitions

AGRICULTURE - The normal maintenance or improvement of land in agricultural or aquacultural use as defined by the Massachusetts Wetlands Protection Act and its implementing regulations

CLEARING-Any activity that removes the vegetative surface cover

DRAINAGE WAY-Any channel that conveys surface runoff throughout the site

DBH- Diameter at Breast Height- The measuring point for the diameter of a tree, which shall be 4.5' above ground level.

EROSION CONTROL-A measure that prevents erosion

EROSION AND SEDIMENT CONTROL PLAN-A set of plans prepared by or under the direction of a licensed professional engineer, certified professional in erosion and sediment control, or other appropriately licensed and experienced professional, indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction

GRADING-Excavation or fill of material, including the resulting conditions thereof

OWNER - a person with a legal or equitable interest in property

PERIMETER CONTROL—A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to an on-site sediment trap or basin

PHASING—Clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next

PROTECTED TREE—Any tree 8 inches or greater in diameter, as measured at DBH.

SEDIMENT CONTROL—Measures that prevent eroded sediment from leaving the site or entering off-site drainage structures

SITE—A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation

STABILIZATION—The use of practices that prevent exposed soil from eroding

START OF CONSTRUCTION—The first land-disturbing activity associated with a development, including but not limited to land preparation such as clearing, **tree removal**, grading and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages

TREE REMOVAL—The removal of any tree 8" DBH or greater down to ground level including the entire stem and crown. If more than 80% of the stem and crown are removed it shall be deemed a removal for the purposes of this bylaw.

VEGETATION—All living woody and herbaceous plants growing in a particular place taken as a whole.

WATERCOURSE—Any body of water, including, but not limited to, lakes, ponds, rivers, streams, and bodies of water

WATERWAY—A channel that directs surface runoff to a watercourse or to the public storm drain

3. Jurisdiction

No person shall excavate, cut, grade or perform any land-disturbing activities of significance, **including tree removal, clearing, grubbing, and stripping,** without an approved Erosion and Sediment Control Plan. Activities of significance are those which meet or exceed the following thresholds:

- a. Any change of existing grade of more than 2500 sq. ft. or 25% of the lot whichever is smaller.
- b. Removal of existing vegetation of more than 2500 sq. ft. or 25% of the lot whichever is smaller
- c. Storage of more than 100 cubic yards of excavate or fill.
- d. **Removal of protected tree(s) 32" DBH or greater, either in the aggregate or a single tree.**

Activities which are exempt from the requirement of an approved Erosion and Sediment Control Plan are as follows:

- a. Emergency activities for the protection of life, property, or natural resources
- b. Existing permitted nursery and agricultural operations
- c. **Pruning undertaken on trees in accordance with the ANSI 300 Pruning Standard, as amended**

4. Erosion and Sediment Control Plan

- a. Activities which require the change of existing grade or removal of existing vegetation on any parcel of less than 20,000 sq. ft. or storage of excavate or fill between 100 and 1300 cubic yards shall be deemed a project of minor significance and will require that the following information to be included on the Erosion and Sediment Control Plan:

- 1) Name, address and telephone number of owner, civil engineer and person responsible for implementation of the plan
- 2) Property lines.
- 3) Location of all existing and proposed building and impervious surfaces.

- 4) Location of all existing and proposed stormwater utilities, including structures, pipes, swales and detention basins.
 - 5) All trees 8" DBH or greater in diameter shall be identified on the plan showing the location of the trunk, a notation of the DBH and species, and the approximate edge of the canopy drawn to scale. All protected trees that are proposed to be removed and all protected trees that are proposed to be saved should be identified on the plan.
 - 6) Erosion and sediment control provisions to minimize on-site erosion and prevent off-site sediment transport, including provisions to preserve topsoil and limit disturbance.
 - 7) Design details for both temporary and permanent erosion control structures.
 - 8) The Department of Public Works may require any additional information or data deemed appropriate and/or may impose such conditions thereto as may be deemed necessary to ensure compliance with the provisions of Chapter 52, the Manual of Standards, or the preservation of public health and safety.
- b. Activities which require, 1.) the change of existing grade or removal of existing vegetation on more than 20,000 sq. ft. or 2.) storage of excavate or fill in excess of 1300 c.y. shall be deemed a project of significant impact and will require that the Erosion and Sediment Control Plan include all of the information required of projects of minor significance plus the following additional information:
- 1) An attached vicinity map showing the location of the site in relationship to the surrounding area's watercourses, water bodies and other significant geographic features, and roads and other significant structures.
 - 2) Suitable contours for the existing and proposed topography.
 - ~~3) A clear and definite delineation of any areas of vegetation or trees. Note all vegetation that is~~

~~to be removed and all vegetation that is to be saved.~~

- 3) All trees 8" DBH or greater in diameter shall be identified on the plan with the location of the trunk, a notation of the DBH and species, and the approximate edge of the canopy drawn to scale. All protected trees that are proposed to be removed and all protected trees that are proposed to be saved should be identified on the plan.
- 4) A clear and definite delineation of any wetlands, natural or artificial water storage detention areas, and drainage ditches on the site.
- 5) A sequence of construction of the development site, including stripping and clearing; protective measures for the trees to remain, rough grading; construction of utilities; infrastructure, and buildings; and final grading and landscaping. Sequencing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, and establishment of permanent vegetation.

5. Performance Standards

A construction project shall be considered in conformance with this section if soils or other eroded matter has been prevented from being deposited onto adjacent properties, rights-of-ways, public storm drainage system, or wetland or watercourse. The design, testing, installation, and maintenance of erosion and sediment control operations and facilities shall adhere to the standards and specifications contained in the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas dated March 1997 or the latest edition thereof.

6. Review and Approval

An Erosion and Sediment Control review is triggered by a building permit application or other activity that falls within the jurisdiction described in paragraphs 3 and 4 above. Applicants are referred by the permit

issuing agency to the Engineering Division of the Department of Public Works to conduct the Erosion and Sediment Control review. Activities that fall within the jurisdiction described in paragraphs 3 and 4 above that do not require a permit from any Town department are not exempt from this provision. In this situation, the applicant must seek Erosion and Sediment Control review directly from the Department of Public Works.

The Department of Public Works will review each Erosion and Sediment Control Plan to determine its conformance with the provisions of this section. Within 30 calendar days after receiving an application, the Department of Public Works shall, in writing:

- a. Approve the plan as submitted.
- b. Approve the plan subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
- c. Disapprove the plan, indicating the reason(s) and procedure for submitting a revised application and/or submission.

Failure of the Department of Public Works to act on an original or revised plan within 30 calendar days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by agreement between the applicant and the Department of Public Works. Pending preparation and approval of a revised plan, development activities shall be allowed to proceed in accordance with conditions established by the Department of Public Works.

7. Inspections

The Commissioner of Public Works, or designated agent shall make inspections as hereinafter required and either shall approve that portion of the work completed or shall notify the owner or person responsible for the implementation of the plan wherein the work fails to comply with the Erosion and Sediment Control Plan as approved. Plans for grading,

stripping, excavating, tree removal as well as protective measures for the trees to remain, and filling work bearing the stamp of approval of the Department of Public Works shall be maintained at the site during the progress of the work. To obtain inspections, the permittee shall notify the Department of Public Works at least two working days before the following:

- a. Installation of sediment and erosion control measures¹
- b. Start of construction, removal of protected trees, or site clearing
- c. Completion of site clearing
- d. Completion of rough grading
- e. Close of the construction season
- f. Completion of final landscaping

The person responsible for implementation of the plan shall make regular inspections of all control measures in accordance with the inspection schedule outlined on the approved Erosion and Sediment Control Plan(s). The purpose of such inspections will be to determine the overall effectiveness of the control plan and the need for additional control measures. All inspections shall be documented in written form and submitted to the Department of Public Works at the time interval specified in the approved permit.

The Commissioner of Public Works or its designated agent shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed as noted above.

8. Enforcement

Suspension of Construction or Site Alteration Activity—In the event that the activity at a site violates the conditions as stated or shown on the approved Erosion and Sediment Control Plan in such a manner as to adversely affect the environment, public welfare/health and municipal facilities, then the Commissioner of Public Works may suspend work

¹Only Notification required on minor projects.

until the violation is corrected. Corrective actions may include, but will not be limited to, regrading, installation of additional erosion controls, replacement of vegetation, or other remedial actions as determined by the Commissioner of Public Works.