

CHAPTER 9

GRADING AND EXCAVATING

Part 1

Erosion and Sediment Control

- §100. Title
- §101. Purpose
- §102. Activities Covered
- §103. Activities Requiring Permit
- §104. Application for Permit
- §105. Data Required for Permit
- §106. Special Requirements for Permit
- §107. Approval of Permit
- §108. Standards for Issuance of Permit
- §109. Enforcement
- §110. Costs of Inspection
- §111. Penalties

Part 1

Erosion and Sediment Control

§100. Title. This Part 1 shall be known and may be cited as the "Lower Oxford Township Erosion and Sediment Control Regulation." (Ord. 3/1/1978, 3/1/1978, §601)

§101. Purpose. The purpose of this Part 1 is to regulate the modification of the natural terrain, the alteration of drainage, the maintenance of artificial structures and surfaces, and to provide for certain erosion and sediment control measures within Lower Oxford Township to assure and safeguard health, safety, ecology and general welfare in Lower Oxford Township. (Ord. 3/1/1978, 3/1/1978, §602)

§102. Activities Covered.

1. Whenever the landscape or vegetation is to be disturbed, a plan showing how erosion and sediment shall be controlled is required.

2. As a minimum, a plan for the following will be required in all situations.

A. The amount of site alteration proposed.

B. Construction timing or sequence.

C. Erosion and sediment control practices (both temporary and permanent).

D. Operation and maintenance arrangements for the practices.

3. Whenever the landscape or vegetation is to be disturbed and the proposal involves an area less than one-half ($\frac{1}{2}$) an acre, a no fee permit shall be required.

(Ord. 3/1/1978, 3/1/1978, §603)

§103. Activities Requiring Permit.

1. It shall be unlawful for any person, firm or corporation to pave, fill, strip, grade or regrade any land in preparation for new construction including landfill within Lower Oxford Township without first securing a permit as hereunder provided.

2. It shall be unlawful for any person, firm or corporation to construct, erect or install any drainage dam, ditch, culvert, drain pipe, bridge or any other structure or obstruction affecting the drainage of any premises in Lower Oxford Township without first securing a permit as hereunder provided.

(Ord. 3/1/1978, 3/1/1987, §604; as amended by Ord. 1-93, 1/6/1993)

§104. Application for Permit

1. Any person, firm or corporation proposing to engage in an activity requiring a permit hereunder shall apply for a permit by written application on a form furnished by Lower Oxford Township.

2. Proof of application for permit shall be submitted to Lower Oxford Township Planning Commission simultaneously with preliminary plans to be considered for subdivision/development review.

3. The developer is encouraged to consult the general development plans and detailed plans of any unit of government that affect the tract to be developed and the area surrounding it before he submits a preliminary plan for review. He should also become acquainted with Chapter 27 of this Code and other ordinances which regulate the development of land in Lower Oxford Township.

4. A separate application shall be required for each grading permit. Three (3) copies of the proposed plan, including specifications and timing schedules shall be submitted with each application for a permit. One of the copies, at the discretion of Lower Oxford Board of Supervisors, shall be submitted to the Chester County Conservation District for comment and review.

5. The application for a permit shall be accompanied by a fee, as established by resolution of the Board of Supervisors. [Ord. 1-93]

6. All applicants for a permit involving an area greater than two (2) acres shall, before any permit is granted, post a bond or escrow account with Lower Oxford Township in the sum of at least one thousand (\$1,000.00) dollars (the exact sum to be determined by the Lower Oxford Engineer), with corporate surety to be approved by the Lower Oxford Township Solicitor, the conditions of which shall be a full and complete compliance with this Chapter and all terms of the permit. Requirement for bond shall be at the discretion of the Township Supervisors.

(Ord. 3/1/1978, 3/1/1978, §605; as amended by Ord. 1-93, 1/6/1993)

§105. Data Required for Permit. The application for a permit shall be accompanied by a plan of the property showing:

1. A boundary line survey of the site on which the work is to be performed.

2. Description of the features, existing and proposed, surrounding the site which are of importance to the proposed development.

3. Description of the general topographic (including drainage) and soil conditions on the site (available through the Chester County Conservation District).

4. Location and description of existing and future manmade features of importance to the proposed development (i.e., cuts and fills, buildings, roads, etc.)

5. Plans and specifications of soil erosion and sediment control measures in accordance with standards and specifications of the Chester County Conservation District.

6. A time schedule indicating the anticipated starting and completion dates of the development sequence and the time of exposure of each area prior to the completion of effective erosion and sediment control measures.

(Ord. 3/1/1978, 3/1/1978, §606)

§106. Special Requirements for Permit. In addition to the requirements of §105, and where deemed necessary by the Lower Oxford Township Engineer and the Lower Oxford Township Planning Commission, the applicant shall submit with the application a detailed drainage study prepared by a registered professional civil engineer or engineer qualified in hydrology.

1. The application for a permit shall be accompanied by a plan of the property showing the location of all present and proposed ditches, streams, pipes and other drainage structures, and proposed cuts and fills. In addition to showing present elevations and dimensions, and location and extent of all proposed grading and/or drainage, the plan shall clearly indicate all buildings, parking areas and driveways. Further, the plan shall indicate the present and proposed sources, storage and disposition of water being channeled through or across the premises, together with elevations, gradients and maximum flow rates. The application shall describe the work to be performed, the materials to be used and the manner or method of performance including provisions for protecting and maintaining existing drainage facilities whether on public or private property. The applicant shall supply data, supporting the plan, developed by a registered professional civil engineer or an engineer qualified in hydrology.

2. Calculations to determine runoff shall be based on the Soil-Cover Complex Method which is available from the U.S.D.A. Soil Conservation Service. The design criteria for storm drainage shall be based on the one hundred (100) year frequency twenty-four (24) hour duration rainfall. Other engineering methods are acceptable and when used shall include the following information:

A. The total drainage area or area of runoff;

B. The coefficient of surface runoff used. This coefficient of runoff shall be determined in the following manner:

(1) The coefficient of runoff used for all areas upstream of any drainage structure shall be computed on the basis of the projected land use shown on the latest revision of the "Future Land Use Plan" contained in the Lower Oxford Township comprehensive planning study.

C. Storm intensity to be used shall be based upon the one hundred (100) year frequency and the storm duration in the watershed under consideration. The minimum one (1) hour rainfall intensity used in computations shall be based upon a one (1) hour rainfall of 2.4 inches.

D. The time of concentration from point to point within a drainage system shall equal the storm duration to be used in determining the rainfall intensity in Subsection (C) of this §106.

E. The roughness coefficient of a conduit or swale.

F. Slope of conduit or swale.

G. Velocity of flow through conduit or swale.

3. The following provisions apply to the carrying and disposal of storm water runoff:

A. All drainage facilities shall be designed in the most practicable fashion to carry surface water in such a manner as to prevent erosion or overflow.

B. All regulations of the Chester County Conservation District and the Pennsylvania Department of Environmental Resources, as designated by the Pennsylvania Clean Streams Law, shall be complied with. These regulations shall include, but not be limited to the following:

(1) There shall be no increase in Storm Water Peak Discharge leaving the subject tract either during or after construction, during a storm of one hundred (100) year frequency.

(2) Storm water discharge outlet velocities from channels or storm sewer outfalls shall be in compliance with those found in Chapter 102 of the Clean Streams Law of Pennsylvania.

(3) Sediment retention shall be in accordance with the requirements of Chapter 102 of the Clean Streams Law of Pennsylvania or the Environmental Protection Handbook, published by the Chester County Conservation District.

(4) The applicant shall agree to apply for Erosion and Sedimentation Control Permits and/or Stream Encroachment Permits as required by the Pennsylvania Department of Environmental Resources.

C. The applicant shall agree to the granting and recording of easements for drainage facilities, including acceptance of the discharge of water on the property of others, provisions for maintenance of slopes, retention basins, and swales, and access for the maintenance of anti-erosion facilities.

4. If load-bearing fill is proposed, a soils investigation report shall be submitted which shall consist of test borings, laboratory testings and engineering analysis to correlate surface and subsurface conditions with the proposed grading plan. The results of the investigation shall be presented in a report by a Registered Professional Soils Engineer which shall include data regarding the nature, distribution and supporting ability of existing soils and rocks on the site, conclusions and recommendations to insure stable soil conditions and ground water control as applicable. Lower Oxford Township may require such supplement reports and data as it deems necessary. Recommendations included in such reports and approved by Lower Oxford Township shall be incorporated in the plan or specifications.

A. Fills toeing out on natural slopes steeper than four (4) horizontal to one (1) vertical shall not be made unless approved by Lower Oxford Township after receipt of a report, deemed acceptable by the Lower Oxford Township Engineer, by a Registered Professional Soils Engineer certifying that he has investigated the property, made soil tests and that in his opinion such steeper slopes will safely support the proposed fill.

(Ord. 3/1/1978, 3/1/1978, §607)

§107. Approval of Permit. Upon the submission of an application which conforms to the provisions of this Chapter 9, the appointed Township Official, after consultation with the Lower Oxford Township Engineer and Board of Supervisors, shall issued the necessary permit. (Ord. 3/1/1978, 3/1/1978, §608)

§108. Standards for Issuance of Permit.

1. Notwithstanding any provisions of this Chapter 9, or any condition of the permit, the permittee is responsible for the prevention of damage to other property, or personal injury, which may be affected by the activity requiring a permit.

2. No person, firm or corporation shall modify, fill, excavate, pave, grade or regrade land in any manner so close to a property line as to endanger or damage any adjoining street, sidewalk, alley, or any other public or private property without supporting and protecting such property from settling, cracking, erosion, sediment or other physical damage or personal injury which might result.

3. No person, firm or corporation shall deposit or place any debris or any other material whatsoever, or to cause such to be thrown or placed in any drainage ditch or drainage structure in such a manner as to obstruct free flow.

4. No person, firm or corporation shall deposit or place any debris, fill or buildings in a floodplain (as defined in the Flood Hazard Ordinance) without first making proper application for a Stream Encroachment Permit from the Pennsylvania Department of Environmental Resources. The Lower Oxford Township Supervisors, upon consulting with the Township Engineer, shall have the power to deny such permits if it is deemed not in the best interest of the health and welfare of the Township.

5. No person, firm or corporation shall fail to adequately maintain in good operating order any drainage facility on his premises. All drainage ditches, culverts, drain pipes and drainage structures shall be kept open and free flowing at all times.

6. The owner of any property on which any work has been done pursuant to a permit granted under this Chapter 9 shall continuously maintain and repair all graded surfaces and anti-erosion devices, retaining walls, drainage structures or means and other protective devices, plantings and ground cover, installed or completed.

7. All graded surfaces shall be seeded, sodded and/or planted or otherwise protected from erosion within fourteen (14) days, and shall be watered, tended and/or maintained until growth, in the case of vegetation, is well established. The disturbed area and duration of exposure shall be kept to a practical minimum.

8. All trees in area of extreme grade change shall be removed unless protected with suitable tree wells. However, extreme precautions shall be taken to prevent the unnecessary removal of trees.

9. When required, adequate provisions shall be made for dust control measures as are deemed acceptable by the Lower Oxford Township.

10. All plans and specifications accompanying applications for permits shall include provisions for both interim (temporary) and ultimate (permanent) erosion and sediment control.

11. The design, installation and maintenance of erosion and sediment control measures shall be accomplished in accordance with standards and specifications established by the Chester County Conservation District as adapted from standards and specifications of the Soil Conservation Service, United States Department of Agriculture.

A. Technical standards for the design and installation of erosion and sediment control measures are on file with the office of the Chester County Conservation District and other governmental agency offices.

B. Standards and specifications adopted for the purposes of this Chapter 9 and by the Chester County Conservation District include, but are not limited to the following basic conservation measures:

- (1) Temporary cover on critical areas.
- (2) Permanent grass and legume cover on critical areas on prepared seedbed.
- (3) Permanent grass and legume cover on critical areas on unprepared seedbed.
- (4) Sodding.
- (5) Mulching.
- (6) Temporary diversion.
- (7) Permanent diversion.
- (8) Grassed waterway or outlet.
- (9) Grade stabilization structure.
- (10) Debris basin.
- (11) Drain.
- (12) Drainage - main or lateral.

C. A quality control program is critical for fills, therefore, wherever fill material is to be used, each layer of compacted fill should be tested to determine its dry density as per ASTM D 1556. The density of each layer should not be less than ninety-five (95) percent of maximum dry density as determined by ASTM D 1557.

D. Inspection procedure shall follow the general procedure as stated in Section 10.

E. Compaction test reports shall be kept on file at the site and be subject to review at all times.

F. Degree of compaction required shall be determined by the Lower Oxford Township Engineer following the guidelines in Subsection (11)(C) of this §108.

G. Where the provisions of Subsection (11)(C) of this §108 are determined to be inapplicable, they may be waived by the Lower Oxford Township Engineer.

(Ord. 3/1/1978, 3/1/1978, §609)

§109. Enforcement.

1. Inspections.

A. All inspections shall be the responsibility of the Lower Oxford Township Engineer or, in his absence, a qualified person acceptable to the Lower Oxford Township Engineer.

B. Inspections will be carried out on a random basis (except as stated in Subsection (E) of this §109). However, a set of "as-built" plans shall be on file at the site and authenticated by a registered professional engineer. When it is deemed acceptable to the Lower Oxford Township Engineer and the Board of Supervisors, a designated qualified person may authenticate the "as-built" plans and will assume full responsibility for quality of work.

C. Any and all "as-built" plans shall be available on the site at all times and be subject to inspection and inquiry.

D. Engineering check notes shall accompany all "as-built" plans which involve structural or mechanical measures and shall serve as supporting evidence that structures meet design standards and specifications.

E. A final inspection shall be conducted by the Lower Oxford Township Engineer to certify compliance with Chapter 22. Satisfactory compliance with Chapter 22 shall be necessary before issuance of an occupancy permit.

(Ord. 3/1/1978, 3/1/1978, §610)

§110. Costs of Inspection. All applicants shall bear all costs of inspections required hereunder and shall deposit with the Lower Oxford Township Treasurer such sum as the Board of Supervisors shall determine, to guarantee payment of the costs of such inspections. The costs of inspections shall be at the rate charged by the Lower Oxford Township Engineer. (Ord. 3/1/1978, 3/1/1978, §611)

§111. Penalties. Any person, firm or corporation who shall violate any provision of this Part, upon conviction thereof in an action brought before a district justice in the manner provided for the enforcement of summary offenses under the Pennsylvania Rules of Criminal Procedure, shall be sentenced to pay a fine of not more than one thousand dollars (\$1,000.00) plus costs and, in default of payment of said fine and costs, to a term of imprisonment not to exceed ninety (90) days. Each day that a violation of this Part continues or each Section of this Part which shall be found to have been violated shall constitute a separate offense. (Ord. 3/1/1978, 3/1/1978, §613; as amended by Ord. 1-93, 1/6/1993; and by Ord. 2-98, 3/11/1998)

