

ORDINANCE NO. 217

BOROUGH OF AVONDALE
CHESTER COUNTY, PENNSYLVANIA

AN ORDINANCE REGULATING GRADING OF LAND, MODIFICATION OF NATURAL TERRAIN, ALTERATION OF DRAINAGE, MAINTENANCE OF STRUCTURES, ARTIFICIAL SURFACES AND DRAINAGE PATTERNS, CONTROL OF DRAINAGE AND SOIL EROSION; REQUIRING GRADING PERMITS AND PROVIDING FOR ENFORCEMENT AND PENALTIES FOR VIOLATIONS.

The Council of the Borough of Avondale ("Borough"), Chester County, Pennsylvania, hereby ORDAINS that the following regulations shall be effective immediately:

Section 1. Short Title.

This Ordinance shall be known and may be cited as the "Borough of Avondale Grading Ordinance."

Section 2. Purpose.

The purpose of this Ordinance is to regulate the modification of the natural terrain, the alteration of drainage or drainage patterns, and the maintenance of artificial structures and surfaces and to require certain grading, erosion and sedimentation control measures to protect and promote public health, safety and general welfare and to protect property and the ecology.

Section 3. Activities Requiring a Permit.

A. It shall be unlawful to do any of the following, within the Borough, without first applying for and being issued a permit ("Permit") as provided by this Ordinance:

1. pave, fill, cut, strip, grade, regrade or alter any land, clear or harvest trees or build any structure or expand a structure to cover an additional or different area;
2. disturb, modify, block, divert, redirect or affect the natural overland or subsurface flow of any water course, stormwater or any stormwater management inlet, basin, pipe or facility; and
3. construct, erect, install or change any dam, basin, berm, swale, ditch, water course, culvert, drainpipe, bridge or any other structure or obstruction affecting drainage or the flow or bank of any water course.

Section 4. Application Procedure.

A. A Permit shall be issued only pursuant to a written application ("Application") to the Borough on a form furnished by the Borough.

B. The Application shall be accompanied by a plan or series of plans (the "Plans"), prepared and sealed by a Professional Engineer, Professional Land Surveyor, Registered Landscape Architect or Registered Architect having proficiency in grading, drainage, erosion and sedimentation control. Plans accompanying the Application shall show the following information:

1. The metes and bounds and area of the property.
2. The location of all existing and proposed swales, berms, ditches, streams, pipes, culverts, structures and stormwater management facilities on the property.
3. Existing and proposed contours, showing the spot elevations and dimensions necessary to determine the extent of all proposed grading and drainage. Invert as well as rim, grate or top of wall elevations shall be included for all drainage structures, swales and facilities as well as all sanitary sewer facilities that may be affected by the proposed work and/or additional or changed stormwater flows.
4. Plans shall also clearly indicate the location of all existing and proposed structures, buildings, parking areas, driveways, roads and impervious ground cover.
5. Plans shall be drawn at a scale of no less than 1"= 50' with both existing and proposed contours being indicated at 2'-0" contour intervals. However, Plans submitted for review pursuant to the Avondale Borough Subdivision and Land Development Ordinance, Ordinance 171, as amended ("Subdivision Ordinance") shall comply with the Subdivision Ordinance's drafting standards for preliminary plans. For properties with relatively flat slopes, 1'-0" contour intervals with spot elevations to more appropriately identify proposed work may be required.
6. Plans shall show the extent and location of all wetlands and 100 year floodplain limits.
7. Plans shall contain a sequence of construction as well as a grading, drainage, and erosion control narrative that addresses all erosion and sedimentation control measures, techniques and maintenance that will be employed for the project.
8. Plans shall identify the location and extent of all soil types found on the property and include a brief description of each soil type and show all erosion and sedimentation control techniques and measures to be utilized and their specifications. Such details shall include, where applicable, but are not limited to, tire cleaning strip, silt barrier fence, sediment trap, sedimentation basin, rip-rap apron, riser details, spillway details, jute matting details, inlet protection details and stone filter berms.

C. The Application shall identify the present and proposed sources, storage and dispositions of all water being channeled and/or conveyed through and/or across and/or which runs off or will run off from the property, together with elevations, gradients and maximum flow rates and volumes.

D. 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 streams and existing drainage facilities located on or off the property, including, without limitation, those in public streets.

E. If load bearing fill is proposed, a soils investigation report shall be submitted along with the application which report shall consist of test borings, laboratory testing and an engineering analysis, to correlate surface and subsurface conditions with the proposed rating plan. The results of the investigation shall be presented in a report by the soils engineer which shall include data regarding the nature, distribution and supporting ability of existing soils and rock on the site. The soils report shall include conclusions and recommendations for grading requirements and erosion control and recommendations to ensure stable soil conditions and groundwater control.

F. The Borough may require such supplemental reports and data it deems necessary to evaluate the proper design, construction and functioning of drainage and stormwater management facilities. Recommendations included in such reports and approved by the Borough shall be incorporated in the Plans.

Section 5. Special Requirements for Permit.

A. Where determined to be necessary, by the Borough Engineer to meet the standards required for a Permit, the applicant shall submit, as part of the Application, a detailed drainage study prepared and sealed by a professional engineer or professional land surveyor or professional geologist qualified in hydrology. This drainage study shall be performed in substantial compliance with the requirements of the Avondale Stormwater Management Ordinance, as it may be amended from time to time, whether or not the proposed development, work and/or activity is otherwise required to comply with that Ordinance.

B. Any earth disturbance of one (1) acre or more will require submission to and approval by the Chester County Conservation District and the issuance of the requisite NPDES permit.

Section 6. Permit Fee.

The Application shall be accompanied by a fee of seventy-five dollars (\$75.00). If more than one acre of land is graded or disturbed as described in this Ordinance, an additional Application fee of seventy-five dollars (\$75.00) for each additional acre or part thereof to be graded and/or disturbed shall be paid at the time the Application is submitted to the Borough. In addition, each applicant will be required to pay all engineering review fees associated with the Application. These fees may be amended from time to time by Borough Council, by written

Resolution.

Section 7. Completion Security.

All applicants for a Permit involving an earth disturbance area in excess of one (1) acre shall, before any Permit is granted, post a bond or cash escrow with the Borough in an amount equal to 110% of the cost of the work necessary to comply with the Permit as determined by the Borough Engineer. Any such bond shall be with corporate surety approved by the Borough Solicitor. The conditions of the security shall be full and complete compliance with this Ordinance and all terms of the Permit.

Section 8. Issuance of Permit.

Upon the submission of a complete Application which conforms to the provisions of this Ordinance, the Borough Code Enforcement Officer (Building Inspector), after consultation with and approval of the Borough Engineer, as necessary, shall issue the Permit.

Section 9. Waiver of Permit.

The Building Inspector may waive the requirement to obtain a Permit under this Ordinance for the following activities. Any such waiver shall be authorized only in writing. A Permit will be required if the Borough Engineer determines that drainage and/or stormwater from the proposed activity poses or creates threat to the public health, safety or general welfare and/or would adversely impact on other property.

A. Agriculture when operated in accordance with a conservation plan or erosion and sedimentation control plan approved by the Chester County Conservation District.

B. Use of land for gardening and landscaping when the area so used and/or disturbed does not exceed 2500 square feet, provided that the existing flow of stormwater is not impeded, diverted, redirected, or blocked in a manner that might adversely affect the public health, safety and welfare or public or private property rights of others.

C. Resurfacing of existing paved surfaces provided that such resurfacing does not change the flow, rate and/or volume of stormwater runoff from that which existed prior to the resurfacing (e.g., diverting, redirecting, blocking or concentrating stormwater runoff).

D. Building additions of 200 square feet or less, with a maximum land disturbance area of 1,000 square feet (e.g., the area disturbed by grading), provided that the activity does not change prior stormwater runoff characteristics or pose a threat to public health, safety, or general welfare or adversely affect other property.

Section 10. Standards for and Conditions of Permit Approval.

A. It is the responsibility of the design professional who prepares the Plans to insure that all relevant information, both on and off the property, is identified and reflected in Plans and that the Plans, when implemented, will comply with all applicable regulations (not just this

Ordinance) and will not result in damage to other property. If the improvements and work, which are authorized by the Permit, do not function properly, in compliance with all applicable regulations, or cause damage to other property, the Borough may require the improvements and work to be redesigned and redone promptly to comply with all applicable regulations and to not damage other property, all at the permittee's expense.

B. Notwithstanding any provision of this Ordinance, the Plans or any condition of the Permit, the permittee is responsible for implementing the permitted activity and all associated work and improvements so that they do not violate any other applicable regulations, do not damage and/or interfere with the property of others and/or adversely affect the public health, safety or welfare.

C. No person, firm, partnership or corporation shall modify, fill, excavate or regrade land in any manner so close to a property line, right-of-way or easement as to endanger or damage any adjoining street, sidewalk, alley, utility or any other property. Other property shall be protected from settling, cracking, erosion, sediment, or other physical damage as a result of the proposed activity and/or work. The top or bottom edge of slopes shall be at least three (3) feet from property and right-of-way lines of streets in order to permit the normal and stable grading of the edge without encroaching on the abutting property.

D. No person, firm, partnership or corporation shall cause any debris or any other material whatsoever to be in any drainage ditch, swale, pipe or structure in such a manner as to obstruct the intended flow of stormwater.

E. The property owner(s) shall maintain, in good operating order, all drainage and stormwater management facilities (e.g., drainage ditches, swales, culverts, drainpipes, inlets drainage structures and basins), on the owner's(s') property, at all times.

F. The owner(s) of any property on which any work has been performed pursuant to a Permit shall continuously repair and maintain in good condition, at all times, all graded surfaces and anti-erosion devices, retaining walls, drainage structures and other protective devices, plantings and ground cover in compliance with the Permit and all applicable regulations.

G. All Plans, specifications and other information accompanying an Applications shall include provisions for both interim (temporary) and ultimate (permanent) erosion and sediment control. Such erosion and sediment controls shall comply with the following:

1. The design, installation and maintenance of erosion and sediment control measures shall be accomplished in accordance with such guidelines as may be established by the United States Department of Agriculture and as administered by the Chester County Conservation District and in accordance with the "Clean Streams Law" and the regulations established by the Pennsylvania Department of Environmental Protection, at 25 Pa. Code Chapter 102, as such regulations may be amended from time to time.
2. All graded surfaces shall be seeded, sodded and/or planted or otherwise protected from erosion as soon as practicable and shall be watered, tended and maintained

and, as necessary, re-seeded, re-sodded and/or replanted, until growth is well-established.

G. Natural and/or existing slopes exceeding four (4) horizontal to one (1) vertical shall be benched or continuously stepped into competent materials prior to placing all classes of fill. Cut slopes shall not exceed two (2) horizontal to one (1) vertical.

H. Fills toeing out on natural slopes steeper than three (3) horizontal to one (1) vertical shall not be made unless approved by the Borough after receipt of a report, deemed acceptable by the Borough Engineer, by a soils engineer certifying that he/she has investigated the property and made soil tests and that in his/her opinion such steeper slopes will support the proposed fill safely and that such fill will be stable.

I. Trees shall be preserved wherever possible and as such all grading activities shall be designed to mitigate possible interaction with trees and their root system. Where this is not possible all trees in areas of grade changes shall be removed unless protected with suitable tree wells (walls).

J. The following provisions apply to the design of stormwater management facilities:

1. All drainage facilities shall be designed, in the most practicable fashion, to carry surface water in such a manner as to prevent erosion, overflow or ponding.
2. The ponding of water, other than that associated with a public water supply, stormwater detention/retention basins, farm ponds or landscape ponds shall not be permitted. The ponding of water shall not be permitted above cut or fill slopes or on drainage terraces, nor shall grading, stormwater management facilities or other work cause water to be impounded on adjacent properties. Adequate drainage facilities shall be provided to prevent such ponding.
3. The concentration of stormwater runoff onto adjacent properties is strictly prohibited.
4. The blocking of the natural flow of stormwater runoff is strictly prohibited.
5. The applicant shall make adequate provisions to prevent any surface waters from damaging the face of any excavation or fill. All slopes shall be temporarily and permanently protected from surface water runoff from above by interceptor trenches, diversion berms or swales, and shall be sodded, seeded, planted and/or rip-rapped unless the Borough determines that such treatment is unnecessary and specifically waives this requirement in writing.
6. All drainage terraces, interceptor trenches, diversion berms and swales made from earth shall be designed and constructed with a 2.0% minimum slope and, when required by the Borough Engineer, shall be piped or paved or otherwise armored and/or improved to the Borough's satisfaction.

K. Adequate provisions shall be made to control dust and all such measures shall be subject to Borough approval.

L. When stormwater management facilities and/or drainage and/or erosion and sediment controls will cross parcels to be created by a subdivision, the Borough may require the property owner(s) to grant and record easements for access to and maintenance of drainage and stormwater management facilities, slopes and swales. When the Permit authorized stormwater to be conveyed onto or across the property of others, prior to any work pursuant to the Permit, the permittee shall record the easement rights to use the property of others as proposed. All such easements shall be subject to the prior review and approval of the Borough Solicitor.

Section 11. Inspections.

A. The permittee, with respect to any activity requiring a Permit and involving ten (10) or fewer single-family residences, shall request inspection by the Borough Engineer at the following intervals:

1. upon completion of stripping, the stockpiling of topsoil and disposal of all unsuitable material, but prior to beginning any other preparation of the ground;
2. upon completion of preparation of ground to receive fill but prior to beginning of any placement of fill;
3. upon completion of rough grading but prior to placing topsoil, permanent drainage or other site development improvements and ground covers; and
4. upon completion of final grading, permanent drainage and erosion control facilities, including establishment of ground covers and plantings, and all other work of the Permit.

B. The permittee, in all cases other than those referred to in Section 11.A, after commencing initial operations, shall request inspections by the Borough Engineer, at the following stages in the development of the site or of each subdivision as the case may be:

1. prior to commencement of grading operations, to determine suitability of all proposed fill materials;
2. upon completion of stripping, the stockpiling of topsoil and disposal of all unsuitable material, but prior to beginning of any other preparation of the ground;
3. upon completion of the preparation of the ground to receive fill, but prior to beginning or placement of fill, an inspection of proof rolling;
4. upon completion of structural fill placement, so that the following earthfill procedures can be verified:

- a. Prior to placing fill in any area, grading should be performed as required to provide for drainage. Ditching or filling around the area should be performed to intercept or divert all surface water. Within the area on which fill is to be placed, the ground should be graded so as to provide for unobstructed drainage from every point to some approved disposal point.
 - b. The area should be closely examined to determine whether excessive wetness, springs, or other seepage of water can be observed. If such conditions exist, drainage must be provided before placement of fill is undertaken. Under no circumstances shall fill be placed upon frozen ground or ground underlain by tree stumps, branches or other vegetative material subject to rot and decomposition.
 - c. When fill areas have been prepared as specified, the existing ground surface should be compacted by the specified method for compacting fill.
 - d. Filling should begin with the lowest area to be filled. Fill should be spread in six-inch layers prior to compaction. Each layer should be approximately horizontal, but small slopes are permitted when necessary to provide for surface water runoff as authorized by the Permit.
 - e. Each layer of fill should be inspected prior to compaction. All roots, vegetation or debris should be removed. Stones larger than six (6) inches in diameter should be removed or broken. The moisture content of each layer must be suitable for compaction.
 - f. The compaction of the fill should be done with a sheepsfoot roller, rubber-tired roller or a vibratory roller. Other compaction equipment should be used only after it has been demonstrated that such use will achieve satisfactory.
 - g. Each layer of compacted fill should be tested to determine its dry density as per ASTM D1556 including latest revisions. The density of each layer should be not less than ninety-five percent (95%) of maximum dry density as determined by ASTM D1557. The moisture content of the compacted layer should be not more than four percent (4%) less or two (2%) greater than the optimum moisture content as determined by ASTM D1557.
 - h. Only when the compacted layer has been shown to be as required should other layers of fill be placed above it.
 - i. Visual inspections of borrow material should be made periodically to assure that no variation in fill material has occurred.
5. upon completion of rough grading, but prior to placing topsoil, permanent drainage or other site development improvements and ground covers;
 6. upon completion of trench backfilling operations, so testing can be performed as

specified in Subsection B.4.g. above; and

7. upon completion of final grading, permanent drainage and erosion control facilities, including establishment of ground covers and planting, and all other work of the Permit.

Section 12. Inspection Costs.

All permittees shall bear all costs of Borough inspections required hereunder and, if deemed necessary by the Borough Code Enforcement Officer (Building Inspector), shall deposit with the Borough Treasurer such sum as the Borough Council shall determine necessary to guarantee payment of the Borough's costs of such inspections. The costs of inspections shall be at the rate charged to the Borough by the Borough Engineer.

Section 13. Violations and Penalties.

A. It shall be unlawful for any person, firm, partnership or corporation to violate, cause or assist in a violation of any provision of this Ordinance. Any work done in violation of this Ordinance shall be a public nuisance.

B. Any person, firm, partnership or corporation violating any provision of this Ordinance, or any person, firm, partnership or corporation who or which engages in unlawful conduct as defined in this Ordinance, shall, upon conviction thereof in a summary proceeding before a Magisterial District Judge, be sentenced to pay a fine of not more than \$1,000.00 and not less than \$100.00 and costs of prosecution. Each day that any violation of this Ordinance or unlawful conduct as defined in this Ordinance continues shall constitute a separate offense for which a separate fine or penalty may be imposed.

C. In addition to all other remedies, the Borough may institute and maintain appropriate actions at law or in equity to restrain, correct or abate a violation of this Ordinance or to restrain, correct or abate unlawful conduct or a public nuisance as defined in this Ordinance.

D. In addition to all other remedies, the Borough may, but is not obligated to, abate or remove any condition which is a violation of this Ordinance and a public nuisance. If the Borough abates or removes the public nuisance, after having given reasonable notice and opportunity to the permittee and property owner to do so, the Borough's costs and expenses of such work shall be a municipal lien against the property, and upon nonpayment, the Borough may collect the same as a municipal claim.

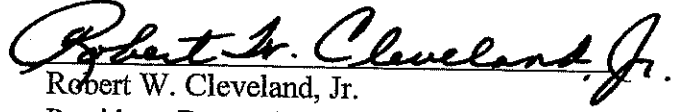
E. The penalties and remedies authorized by this Ordinance are concurrent. The existence or exercise of any remedy shall not prevent the Borough from exercising any other remedy authorized by this Ordinance or otherwise provided at law or equity.

Section 14. Severability.

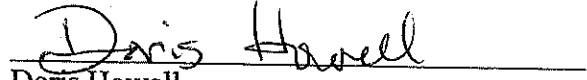
Should any section or provision of this Ordinance be held to be invalid, by the final unappealed Order of a court of competent jurisdiction, such Order shall not affect the validity

any other part of this Ordinance and such other parts shall remain in effect.

Passed by Borough Council, this 19 day of June, 2007.



Robert W. Cleveland, Jr.
President, Borough Council

Approved by the Mayor, this 19 day of June, 2007.


Doris Howell
Mayor

Enacted, this 19 day of June, 2007.

BOROUGH OF AVONDALE


Rebecca Brownback
Borough Secretary