

Article 3

Natural Resources Protection

Section 301 Natural Resources Protection

301.1. Purpose - The following natural resources protection standards are established to protect the public health, safety and general welfare by minimizing the adverse environmental impacts that can result from land disturbance and development activities within Drumore Township. These standards are intended to serve the following purposes.

1. Protect and preserve environmentally sensitive natural resources, including, but not limited to woodlands, hedgerows, steep slopes, streams and other water bodies, wetlands, floodplains, and other riparian areas, hydric soils, and seasonally high water table soils.
2. Establish resource protection standards to assist the Township in reducing the impact that land disturbance and development activities will have on the environment.
3. Conserve and protect valuable natural resources within the Township in accordance with the goals and objectives of the Solanco Regional Comprehensive Plan.

301.2. Applicability and General Provisions

1. Unless in accordance with the provisions of this Article, it shall be a violation of this Zoning Ordinance to grade, till, pipe, divert, channel, build upon, or otherwise alter or disturb a natural resource protected by this Article prior to the submission, review and approval of:
 - A. Applications for zoning or building permits
 - B. Conditional uses or special exceptions
 - C. Zoning variances

D. Submission of plans for subdivision or land development

- 2. Where disturbance of a natural resource is permitted, it shall not take place until it has been determined that such disturbance is consistent with the provisions of this Article and other applicable ordinance provisions.

Restrictions to the disturbance of resources shall apply before, during, and after construction on a site.

- 3. In the event that the provisions of this Article and the provisions of other applicable Township ordinance standards are in conflict, the more restrictive provisions shall apply.
- 4. In the event that two or more natural resource areas identified in this Article, overlap, the resources with the most restrictive standards (the least amount of permitted alteration, grading, clearing or building) shall apply to the area of overlap.
- 5. Plan information required by this Article shall be verified as correct by the Township Engineer or other qualified professionals as determined by the Township.

Section 302 Resource Protection Standards

302.1. Steep Slopes

- 1. Resource protection standards

Areas that are identified as being within the boundaries of the Steep Slope Conservation Zone shall not be graded, filled, built upon, channeled, or otherwise altered or disturbed except in conformance with Section 206, Steep Slope Conservation Zone, of this Ordinance.

- 2. Delineation

The applicant shall delineate the two categories of the Steep Slope Conservation Zone (precautionary slopes and prohibitive slopes) that are on the site in accordance with Section 206, Steep Slope Conservation Zone, of this Ordinance.

302.2. Floodplains

1. Resource protection standards

Areas that are identified as being within the boundaries of the Floodplain Zone shall not be graded, filled, built upon, channeled, or otherwise altered or disturbed except in conformance with Section 207, Floodplain Zone, of this Ordinance.

2. Delineation

The applicant shall delineate the limit of floodplains that are on the site, in accordance with Section 207.2 of this Ordinance.

302.3. Wetlands

1. Resource protection standards

A. Any applicant proposing a use, activity, or improvement which would entail the grading or placement of fill in wetlands shall provide the Township with proof that the Pennsylvania Department of Environmental Protection (Bureau of Dams and Waterway Safety and Bureau of Water Quality Management) and the U.S. Army Corps of Engineers have been contacted to determine the applicability of state and federal wetlands regulations. The applicant shall concurrently provide to the Township a copy of the application and any other wetlands information submitted to the Pennsylvania Department of Environmental Protection and the U S. Army Corps of Engineers.

B. Wetlands shall not be graded, filled, piped, diverted, channeled, built upon, or otherwise altered or disturbed except where state or federal permits have been obtained.

C. Existing wetlands shall not be used for stormwater management except where the wetlands are highly degraded and a mitigation program is provided.

2. Delineation

The applicant shall provide such information and delineate the limits of wetlands on the site in accordance with this Section.

- A. A full wetland delineation report, conducted by a qualified wetlands biologist, soil scientist or environmental professional of demonstrated qualifications, shall be submitted to the Township. If there is a question as to the accuracy of the wetland delineation report, the Township may hire, at the applicant's expense, a qualified consultant to review the delineation and recommend revisions.
- B. Such professional shall certify that the methods used correctly reflect the currently accepted technical concepts, including identification and analysis of wetland vegetation, hydric soils, and hydrologic indicators. Methods used in the delineation report shall be acceptable to the Township Engineer or other qualified consultant hired by the Township.
- C. The wetland report shall include a determination of whether wetlands are present on the site and a full delineation, area measurement (in square feet), and description of any wetlands determined to be present.

302.4. Wetland Buffers

1. Resource protection standards

- A. Except as noted below, no more than twenty percent (20%) of a wetland buffer shall be graded, filled, built upon, harvested for timber, per Section 302.4.C, below, or otherwise altered or disturbed, including woodland disturbance, as defined in Section 112 of this Ordinance. Nothing herein stated shall limit the creation of constructed wetlands within the wetland buffer in accordance with the guidelines and requirements contained within the PA Stormwater Best

Management Practices Manual December 2006, or subsequent edition. Constructed wetlands shall not be counted towards the 20% disturbance allowance.

B. The following uses or activities may be permitted in the wetland buffer, and shall, except as noted in paragraph (1), below, not be counted towards the twenty percent (20%) disturbance allowance:

- (1) Regulated activities permitted by the Commonwealth of Pennsylvania (i.e. permitted stream or wetland crossing, maximum five percent (5%) disturbance permitted, which shall count towards the twenty percent (20%) disturbance allowance).
- (2) Provision for unpaved trail access.
- (3) Selective removal of hazardous or invasive vegetative species.
- (4) Vegetation management in accordance with an approved landscape plan or open space management plan.
- (5) A soil or stream conservation project approved by the Lancaster County Conservation District.

C. Timber harvesting shall only be permitted within the twenty percent (20%) disturbance allowance and shall be restricted to selective cutting. Clear-cutting or grubbing of trees is prohibited within the wetland buffer. Permitted timber harvesting shall be undertaken in accordance with a logging plan consistent with the requirements of Section 427.2 of this Ordinance.

2. Delineation

The applicant shall delineate the limits of the wetland buffer on the site in accordance with the definition of wetland buffer in Section 112 of this Ordinance.

302.5. Watercourses/Riparian Buffers - Watercourses and their associated zone one and zone two riparian buffers as defined in Section 112 of this Ordinance, shall be protected in accordance with the standards of this Section 302.5. Nothing herein stated shall limit the restoration or creation of riparian buffers in accordance with the guidelines and requirements contained within the PA Stormwater Best Management Practices Manual December 2006, or subsequent edition. Restoration or creation of riparian buffers shall not be counted towards the 20% disturbance allowance within the zone two riparian buffer.

1. Resource protection standards

A. Zone one riparian buffer

- (1) Except as noted below, no woodland disturbance, timber harvesting, or other land disturbance shall be permitted within the zone one riparian buffer.
- (2) The following uses and activities shall be permitted with the zone one riparian buffer however any such permitted activity shall not occur more than every five (5) years, unless otherwise noted.
 - (a) Regulated activities permitted by the Commonwealth of Pennsylvania (i.e. permitted stream or wetland crossing, maximum five percent (5%) disturbance).
 - (b) Provision for unpaved trail access.
 - (c) Selective removal of hazardous or invasive vegetative species on an as needed basis.
 - (d) Vegetation management in accordance with an approved landscape plan or open space management plan.

- (e) A soil or stream conservation project, including reforestation and stream bank stabilization, approved by the Lancaster County Conservation District.

B. Zone two riparian buffer

- (1) Except as noted below, no more than twenty percent (20%) of a zone two riparian buffer shall be graded, filled, built upon, harvested for timber, per Section 302.5.E, below, or otherwise altered or disturbed, including woodland disturbance, as defined in Section 112 of this Ordinance.
- (2) The activities permitted in the zone one riparian buffer shall be permitted in the zone two riparian buffer and shall, except as noted in paragraph (a), below, not be counted towards the twenty percent (20%) disturbance allowance. Any such permitted activity shall not occur more than every five (5) years.
 - (a) A maximum disturbance of five percent (5%) is permitted for regulated activities permitted by the Commonwealth of Pennsylvania (i.e. permitted stream or wetland crossing) and shall count towards the twenty percent (20%) disturbance allowance.
 - (b) In no case shall the total riparian buffer width be reduced to less than seventy-five (75) feet in width, measured from the top of each stream or other water body bank.

- (c) The total buffer may be reduced to less than the one hundred (100) foot in width, provided the following measures are undertaken:
 - i. Conservation design techniques that minimize the amount of stormwater generated and maximize the use of pervious areas for infiltration of rainfall and stormwater.
 - ii. Comprehensive stormwater management practices to ensure that post-development conditions are consistent with the natural characteristics of the receiving stream, including stormwater quality BMP (Best Management Practices).
 - iii. Other BMP, such as level spreaders, meadow grass filter strips, or similar techniques to disperse overland flow prior to entering the protected buffer area where the width of the buffer is less than one hundred (100) feet.
- C. Where a subdivision or land development is proposed where there is no established vegetated or wooded buffer (such as in areas previously cultivated for agriculture) a one hundred (100) foot riparian buffer shall be established and maintained in accordance with the following guidelines:
 - (1) Forested and un-forested vegetation shall be established through natural succession.

Selective planting shall be incorporated on sites devoid of vegetation to stimulate the growth of native species and discourage invasive species.

- (2) Plant selection and planting shall be consistent with the Lancaster County Conservation District standards or USDA riparian forested buffer guidance. The applicant is encouraged to involve local volunteer groups in the buffer planting.

- D. An erosion and sedimentation control plan shall be required for any land disturbance proposed within five hundred (500) feet of any watercourse. Such erosion and sedimentation control plan shall be subject to the approval of the Lancaster County Conservation District and shall be consistent with The Pennsylvania Department of Environmental Protection Chapter 102 requirements.

- E. Timber harvesting shall only be permitted within the twenty percent (20%) disturbance allowance of the zone two riparian buffer, and shall be restricted to selective cutting. Clear cutting or grubbing of trees is prohibited within all riparian buffers. Permitted timber harvesting shall be undertaken in accordance with a timber harvesting plan consistent with the requirements of Section 427 of this Ordinance.

- F. A riparian buffer adjacent to high quality waters and exceptional value waters, designated under the Pennsylvania Department of Environmental Protection Chapter 93 Rules and Regulations shall be subject to the provisions of the Pennsylvania Department of Environmental Protection *Special Protection Waters Implementation Handbook*, its amendments, or successor documents.

2. Delineation

The applicant shall delineate watercourses and zone one and zone two riparian buffers located on the site in accordance with the definitions thereof in Section 112 of this Ordinance, and this Section 302.5.

302.6. Woodlands, Hedgerows, and Specimen Vegetation

1. Resource protection standards

A. Specimen vegetation, as defined in Section 112 of this Ordinance, shall not be removed from any lot or tract except where the applicant demonstrates to the satisfaction of the Board of Supervisors that such removal is essential to eliminate a hazardous condition(s). Where permitted, removal of specimen vegetation shall be minimized. These restrictions shall also apply to sites that contain species of special concern.

B. Disturbance allowance of woodlands and hedgerows

(1) Unless undertaken as an approved timber harvesting operation, as defined in Section 112 of this Ordinance, conducted in compliance with the required timber harvesting plan, no more than thirty percent (30%) of woodlands and hedgerows shall be graded, cleared, built upon, or otherwise altered or disturbed for residential uses and no more than forty percent (40%) of woodlands and hedgerows shall be graded, cleared, built upon or otherwise altered or disturbed for non-residential uses.

(2) Guidelines for determining permitted woodland disturbance

In determining where permitted woodland disturbance will occur, the following factors shall be considered:

- (a) The applicant shall consider the location(s) and benefits of conservation of healthy mature woodland stands.
 - (b) Each building or structure shall be constructed in such a manner as to provide only such disturbance as is necessary. Clear cutting shall be minimized and trees shall be selectively removed.
 - (c) Where possible, the remaining undisturbed woodlands and other vegetation shall interconnect with woodlands or wooded areas of adjacent properties to preserve continuous woodland corridors and allow for the normal movement, dispersion and migration of wildlife. The applicant shall consider the impacts, in terms of functions and values to wildlife, of separating, dividing, or encroaching on wildlife travel corridors or extensive habitat areas, especially woodlands exceeding ten (10) acres in area.
- (3) Protection of woodlands to remain on site

In order to prevent injury to those trees or other vegetation which have been designated for protection, a tree protection zone shall be established where such vegetation is to be retained. Woodlands, hedgerows, individual trees, and other vegetation that are to remain on the site shall be identified within the tree protection zone and protected in accordance with the following provisions:

- (a) Prior to construction, protective fencing shall be installed around the boundaries of the tree protection zone. Such fencing along the zone shall be maintained until construction and other work has been completed.
- (b) Grade changes and excavations shall not encroach upon the tree protection zone.
- (c) Trees being removed from the site shall not be felled, pushed or pulled into a tree protection zone.
- (d) No toxic materials shall be stored within one hundred (100) feet of a tree protection zone including petroleum based and derived products.
- (e) The area within the tree protection zone shall not be built upon, nor shall any materials be stored there either temporarily or permanently. Vehicles and equipment shall not be parked in the tree protection zone.
- (f) Sediment, retention, and detention basins shall not be located within the tree protection zone, nor shall they discharge into the tree protection zone.
- (g) Preserved woodlands, hedgerows and specimen vegetation may be used to provide the vegetative screens and buffers required by Section 414 of this Ordinance. Where necessary to meet the intent and minimum standards of Section 414, additional planting may be required to supplement existing vegetation.

2. Delineation

The applicant shall delineate or identify the limits of woodlands, hedgerows, specimen vegetation, or species of special concern on the site.

Where vegetation on the site is to be preserved, they shall be clearly delineated on the plan as areas to be protected.

Section 303

Application of Natural Resource Protection Standards

1. Plan Information and Delineation of Protected Resources

A. To ensure compliance with the natural resource protection standards of this Article, the following information shall be submitted by the applicant when applying for a zoning or building permit, conditional use or special exception approval, zoning variance, or subdivision and land development approval where land disturbance is contemplated.

- (1) A site plan which identifies the limits of each of the natural resources on the site, including but not limited to floodplain, wetlands, prohibitive and precautionary steep slopes, areas of woodlands or other vegetation to be preserved, and the proposed use of the site including any existing or proposed structures.
- (2) The limits of all encroachments and disturbances necessary to establish the proposed use or activity on the site, including a grading plan showing existing and proposed contours.
- (3) The minimum buildable area(s) and areas reserved for on-lot sewage systems.

- (4) Calculations indicating the area of the site with natural resources and the area of natural resources that would be disturbed or encroached upon. The calculations shall be shown on the plan and indicate the amount of land proposed to be disturbed and the maximum amount of permitted disturbance for each protected resource.
2. In those cases where only a limited amount of the natural resources on the site or tract will be subject to disturbance (i.e., 1,000 square feet or less), the Zoning Officer may determine the area of the site required to be delineated on the plan, and information provided, that will adequately demonstrate compliance with the natural resource protection standards of this Article. Where less than the entire site is to be shown on the plan, the application shall be accompanied by a written explanation from the applicant as to why it is not necessary to include the entire site with the plan information.
3. All earth disturbance activities, including agricultural activities, of five thousand (5,000) square feet or more in area, shall require a written erosion and sediment control plan which shall be approved by the Lancaster County Conservation District prior to the issuance of any Township permits.
4. NPDES permits for stormwater discharges associated with construction activities disturbing one (1) acre or more shall be required prior to the issuance of any Township permits