

TOWNSHIP OF SILVER SPRING
Cumberland County, Pennsylvania

ORDINANCE NO. 7 of 2007

AN ORDINANCE OF THE TOWNSHIP OF SILVER SPRING,
CUMBERLAND COUNTY, PENNSYLVANIA, AMENDING,
MODIFYING AND CHANGING THE SILVER SPRING TOWNSHIP
SUBDIVISION AND LAND DEVELOPMENT ORDINANCE OF 2005

BE IT ORDAINED by the Board of Supervisors of the Township of Silver Spring, Cumberland County, Pennsylvania, as follows:

SECTION 1: The Silver Spring Township Subdivision and Land Development Ordinance of 2005 (the "Subdivision and Land Development Ordinance") is hereby amended as follows:

A. Section 203 of the Subdivision and Land Development Ordinance is amended by adding the following new terms:

Carbonate rock. Rock types that are affected by dissolution weathering process caused by slightly acidic groundwater. The most common types of rock that are categorized as carbonate rock are limestone (calcium carbonate and dolomite calcium magnesium carbonate.)

Cavern. Interconnected solution features within the bedrock surface.

Clay liner. Fine grained soil that is used in the construction of a liner that limits the rate of surface water intrusion into the subsurface.

Closed Depression. A bowl shaped depression in the land surface characterized by internal drainage. A ghost lake is a closed depression which has visible standing water after a heavy rainfall event.

Fault. A fracture in bedrock along which movement has taken place.

Fine Grained Soil. Materials that predominantly consist of silt and clay size particles.

Hazardous Materials (chemical or bio-hazard). As defined and regulated by the PADEP or EPA.

Impermeable Liners. A liner system that reasonably prohibits the infiltration or surface water into the subsurface.

Karst. The terrain that results from the dissolution of carbonate rock.

Karst Process. The dissolution of carbonate rock by slightly acidic groundwater. Dissolution weathering – the removal of soluble materials from intact carbonate rock by slightly acidic groundwater.

Lineaments. Linear topographic features that locate faults and fractures.

Residual Soil. Soils derived from the in-place weathering of the underlying bedrock.

Sinkhole. Localized land surface subsidence or collapse due to karst processes. Sinkholes are categorized as solution sinkholes, collapse sinkholes and subsidence sinkholes.

Spring. Where water flows naturally out of the bedrock or the overlying soil mantle on to the land surface.

Toxic and/or biological or Chemical Hazardous Materials. Biological species or chemical compounds which are deemed to be toxic or hazardous by the Pennsylvania Department of Environmental Protection.

B. Section 402.05 of the Subdivision and Land Development Ordinance is amended by adding the following new subsection:

402.05.11 Carbonate Assessment Report.

- a) All land developments and subdivisions required by this Ordinance to provide a Carbonate Assessment Report shall be evaluated by a Licensed Professional Civil Engineer with expertise in Geotechnical Engineering or a Licensed Professional Geologist. Each of said experts will be licensed in their field of expertise by the Commonwealth of Pennsylvania. A list of the engineers/geologist qualifications shall be submitted to the Township prior to the commencement of the site evaluation. The Township reserves the right to reject any report that in its opinion was authored by an individual or firm which does not possess the background to properly assess the site conditions as they relate to this ordinance. Further, the Carbonate Assessment Report submitted to the Township must be signed by the licensed professional civil engineer with expertise in geotechnical engineering and/or a licensed professional geologist.
- b) The format and content of the Carbonate Assessment Report shall include, but not be limited to the following:
 - i) Statement of Purpose: This section shall indicate those standards being addressed in the Report and whether the applicant is

attempting to demonstrate compliance, or justify noncompliance with those specific standards.

- ii) Description of Existing conditions: This section shall present a description of existing characteristics of the property with respect to geology, topography, ground and surface water hydrology, soils, vegetation, and existing improvements and uses of property.
 - iii) A map, at scale no smaller than 1 inch = 100 feet and a contour interval of two feet indicating the location of the property and all proposed improvements.
 - iv) The Developer / Applicant shall submit information for the effected properties indicating the presence of any of the following carbonate features: depressions, fissures, lineaments, faults, ghost lakes, bedrock, outcrops, sinkholes, seasonal high water levels, soil mottling, springs, surface drainage entering the ground, disappearing lakes or streams and caverns.
 - v) The professional shall prepare a map of the site showing all Karst features or feature indicators. The mapping shall indicate, but shall not be limited to, the following features: closed depressions, open sinkholes, seasonal high water table indicators, outcrops of bedrock, unplowed areas in plowed fields, surface drainage into ground, and ghost lakes after rainfall.
 - vi) A recommended plan for the repair or remediation of surface or subsurface features that may impact the proposed development as well as the adjacent improved or unimproved properties.
 - vii) The information requested above shall be based upon previously published data and field surveys which may include test boring, excavation of test pits, air-track probes, and geophysical methods.
- c) In addition to the Carbonate Assessment Report the developer shall also be required to provide the following information:
- i) A plan indicating the existing and proposed drainage conditions, locations of all proposed private and public sewage disposal systems, and the location of existing private and public water supplies on adjoining properties (within 1,000 ft. of applicant's property).
 - ii) Type, location and phasing of proposed site disturbance and construction, as well as proposed future ownership, utilization and maintenance of the property and the proposed improvements.

- iii) Proposed measures to control potential adverse environmental impacts on groundwater quality and stormwater management resulting from the development and utilization of the property.
 - iv) Plans describing the design and construction of the proposed stormwater management facilities proposed for the project. A description of the minimum requirements is outlined below.
- d) The Carbonate Assessment Report is recommended as part of the Concept Plan process, but shall be required as part of the Preliminary or Final Plan process. Four copies of the Report shall be submitted to the Township. The Report shall be reviewed by the Township Engineer and other consultants as designated by the Township. The Township may require additional information to be submitted if it concludes that such information would be instrumental in assessing the proposed development as it relates to this ordinance.

C. A new Section 617 is hereby added to the Subdivision and Land Development Ordinance, and shall read as follows:

SECTION 617 KARST AREAS

The following regulations shall apply to all land development or subdivision applications pertaining to commercial, governmental (except those owned by the Township), institutional and industrial / office structures, apartment complexes and residential developments.

- 617.01 Subdivisions of less than five (5) single family homes, and the alteration of single family homes to include detached structures such as garages, barns and swimming pools, shall be exempt from these regulations and are not required to provide a Carbonate Assessment Report.
- 617.02 Buildings, structures, impervious surfaces, and utilities shall not be located within one hundred (100) feet of the karst features identified pursuant to the Carbonate Assessment Report, unless (1) a recognized professional with competence in the field demonstrates that a minimal risk of structural damage due to sinkholes will exist, or (2) mitigating measures are taken to minimize the risk of structural damage. These mitigating measures shall be designed by a recognized professional with competence in the field.
- 617.03 Storm water management facilities, including but not limited to, detention basins, shall not be located within one hundred (100) feet of the karst features identified pursuant to the Carbonate Assessment Report unless (1) a recognized professional with competence in the field demonstrates that a minimal risk of damage due to sinkholes will exist, or (2) mitigating measures are taken to

minimize the risk of structural damage. These mitigating measures shall be designed by a recognized professional with competence in the field.

- 617.04 Outflow from a storm water management facility, or post development storm water flows shall not be directed to any of the following carbonate features: Sinkholes, closed depressions, lineaments, or caverns.
- 617.05 Lagoons containing substances defined as toxic and/or hazardous by the Pennsylvania Department of Environmental Protection are not permitted.
- 617.06 Storage and handling areas for hazardous materials must have impermeable surfaces designed to contain materials stores/handled from which they shall be directed to a predetermined collection point.
- 617.07 The Township Board of Supervisors shall not entertain requests for waivers from the requirements listed above until a Carbonate Assessment Report, as required by this ordinance, has been supplied to the Planning Commission and the Township Engineer for their review and comment.

SECTION 2: Any ordinances or parts of ordinances inconsistent herewith are hereby repealed.


SECTION 3: This Ordinance shall become effective five (5) days after enactment.

SECTION 4: If any section, paragraph, subsection, clause or provision of this Ordinance shall be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this Ordinance as whole, or any part thereof.

DULY ENACTED AND ORDAINED INTO LAW as Ordinance No. 7 of 2007 this 22nd day of August, 2007 by the Board of Supervisors of the Township of Silver Spring.

ATTEST:

BOARD OF SUPERVISORS
TOWNSHIP OF SILVER SPRING



Township Secretary



Chairman